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NGT™ VR Configurations	1
NGT™ VR Transceiver.....	1
NGT™ VR Mobile	2
NGT™ VR Base	3
NGT™ VR Options	4
NGT™ VR Transceiver Accessories.....	5
NGT™ VR Mobile Accessories.....	7
NGT™ VR Base Accessories	8
NGT™ SRx Configurations.....	9
NGT™ SRx Transceiver	9
NGT™ SRx Mobile.....	10
NGT™ SRx Base	11
NGT™ SRx Options.....	12
NGT™ SRx Transceiver Accessories	14
NGT™ SRx Mobile Accessories	15
NGT™ SRx Base Accessories.....	17
NGT™ SR Configurations.....	18
NGT™ SR Transceiver	18
NGT™ SR Mobile	19
NGT™ SR Base.....	20
NGT™ SR Options.....	21
NGT™ SR Transceiver Accessories	23
NGT™ SR Mobile Accessories	25
NGT™ SR Base Accessories	27
NGT™ ASR Configurations	28
NGT™ ASR Transceiver	28
NGT™ ASR Mobile	29
NGT™ ASR Base.....	30
NGT™ ASR Options	31
NGT™ ASR Transceiver Accessories.....	33
NGT™ ASR Mobile Accessories.....	35
NGT™ ASR Base Accessories	37
Data & Email.....	39
UUPlus™ Email for HF Server Software	39
UUPlus™ Email for HF Client Software.....	40
HF Express™ and Stanag 5066 Stack	41
3012 HF Data Modem (No Cables).....	42
3012 HF Data Modem for NGT™ with 2 m RS232 Cable.....	43
3012 HF Data Modem for NGT™ with 6 m RS232 Cable.....	44
3012 Accessories.....	45
3212 HF Data Modem (No Cables).....	46
3212 HF Data Modem for NGT™ with 2 m RS232 Cable.....	47
3212 HF Data Modem for NGT™ with 6 m RS232 Cable.....	48
3212 Accessories.....	49
3112 HF Data Modem (No Cables).....	51
3112 HF Data Modem for NGT™ with 2 m Ethernet Cable.....	52
3112 HF Data Modem for NGT™ with 10 m Ethernet Cable	53
3112 HF Data Modem for NGT™ with 2 m Synchronous Cable	54
3112 Accessories.....	55
Hal Fax.....	57

High Power Amplifiers.....	59
3061 500 W Power Amplifier	59
3061 Accessories.....	60
3062 1 kW Power Amplifier	61
3062 Accessories.....	62
Crosspatch™/Phone/GPS Solutions	63
Crosspatch™ for NGT™	63
Crosspatch™ Accessories	63
3033 Telephone Interconnect.....	64
3033 Accessories.....	65
GPS Tracking Software	66
GPS Accessories.....	66
Transceiver Supplies.....	67
3020 Transceiver Supply	67
3020 Accessories.....	68
DC-DC Voltage Converter	68
Solar Power Supplies	69
Solar Power Supply Accessories.....	69
Batteries.....	70
Antennas	71
9350 Automatic Tuning Whip (No Cables).....	71
9350 Automatic Tuning Whip Antenna with 6 m Cables	72
9350 Accessories.....	73
3040 Automatic Tuning Whip (No Cables).....	74
3040 Automatic Tuning Whip Antenna with 6 m Cables	75
3040 Accessories.....	76
Base Whip Antenna	77
Base Whip Accessories.....	77
Travelling Wave Dipole Antenna	78
Delta Antenna	79
Semi-delta Antenna.....	80
2-wire Broadband Dipole Antenna.....	80
3-wire Broadband Dipole Antenna.....	81
Tuned Long Wire Antenna.....	81
Tuners.....	82
Tuner Accessories	82
Antenna Masts	83
Coaxial Cables Type RG58	85
Coaxial Cables Type RG213.....	85
Lightning Protection.....	86
Remote Control	87
NGT™ Remote Control Equipment — 2-wire Interface.....	87
NGT™ Remote Control Accessories	88
TIP100 NGT™ IP Remote Control (Voice Only).....	89
TIP100 NGT™ IP Remote Control (Voice & Data).....	90
NGT™ Split-site Equipment — 2-wire Interface	91
NGT™ Split-site Equipment — 4-wire Interface	93
Split-site Accessories	95



19" Racks & Accessories	97
Standard Rack Configurations	97
19" Rack Cabinets	99
19" Rack Mount System Trays	99
19" Rack Mount Blanking Panels	100
19" Rack Mount Accessories	100
2110 Transceiver Configurations.....	101
2110v & 2110 Transceiver Kits	101
Patrol Configuration	102
Explorer Configuration	103
Homeland Security Configuration.....	105
2110 Transceiver	107
Transceiver Units	107
Options.....	108
Accessories.....	110
Data & Email for 2110	113
UUPlus™ <i>Email for HF Server Software</i>	113
UUPlus™ <i>Email for HF Client Software</i>	114
HF Express™ and Stanag 5066 Stack	115
3012 HF Data Modem (No Cables)	116
3012 HF Data Modem for 2110 with 6 m RS232 Cable	117
3012 Accessories.....	118
3212 HF Data Modem (No Cables)	119
3212 HF Data Modem for 2110 with 2 m RS232 Cable	120
3212 HF Data Modem for 2110 with 6 m RS232 Cable	121
3212 Accessories.....	122
3112 HF Data Modem (No Cables)	124
3112 HF Data Modem for 2110 with 10 m Ethernet Cable	125
3112 Accessories.....	126
Crosspatch™ for 2110	127
Crosspatch™ Accessories	127
Antenna Accessories	129
Long Wire & Dipoles	129
Whip Antennas.....	130
Earthing.....	130
Battery & Charger Accessories.....	131
Batteries.....	131
DC-DC Voltage Converter	131
Chargers.....	132
Charger Modules	133
Charger Output Cables	134
Charger Input Cables AC	135
Charger Input Cables DC.....	135
Backpack & Mounting Accessories	137
Backpacks	137
Mounting Accessories.....	138



Table of Contents

Language Support	141
English Manuals.....	141
French Manuals.....	144
Spanish Manuals	145
Arabic Manuals	146
Portuguese Manuals	146
Shipping Weights	147
Standard Packing Dimensions	159
Standard Terms & Conditions of Supply.....	161
International Product Warranty.....	169
Battery Cell Warranty.....	170
Payment Terms (International Sales).....	171
Conditions for Irrevocable Documentary Letter of Credit.....	173

NGT™ VR TRANSCEIVER

PRODUCT	PART NO.	DESCRIPTION
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NGT-VR-TCVR



NGT™ VR Transceiver

The NGT™ VR Transceiver is the ideal solution to meet your voice communication needs for base and mobile applications — all in a single cost effective unit. It's easy to use with an innovative, user-friendly handset and one-button shortcuts. Plus Codan's *Easitalk™* provides clearer communications by reducing background noise.

The VR comes with an RF unit, handset, speaker, cables, and mounting accessories for easy installation. It provides quick and reliable Emergency and Selective calling, along with excellent options including Automatic Link Establishment (ALE), voice encryption, phone calling features, remote diagnostics/configuration, and additional mounting accessories.

The standard transceiver consists of the parts listed below. The following pages detail the parts required for NGT™ VR Mobile and Base configurations.

COMPRISING:

08-05628-004
08-05629-002
15-00129
15-00649
08-06022-001
30-11208-000
15-04127-##

- NGT™ VR 2011 RF Unit
- NGT™ VR 2020 Handset
- NGT™ Handset Cradle Kit
- External Speaker with 4 m Lead
- NGT™ Control Cable, 6 m
- Self Adhesive Rubber Feet (x4)
- NGT™ Transceiver Getting Started Guide, includes Reference Manual on CDROM (see page 141, *Language Support* for translations of this guide)

STANDARD FEATURES:

- 20 channels, 1.6–30 MHz, 3 networks
- Scanning of multiple networks
- 125 W PEP, 12 V DC, USB/LSB/AM
- In-built *Easitalk™* speech noise reduction
- Meets MIL-STD-810F for shock, vibration and dust

AVAILABLE OPTIONS & ACCESSORIES:

See pages 4 and 5 for NGT™ VR Options and Transceiver Accessories.

NGT™ VR MOBILE		
PRODUCT	PART NO.	DESCRIPTION
NGT-VR-MOB		NGT™ VR Mobile Configuration
		The NGT™ VR Mobile Configuration consists of an NGT™ VR Transceiver, a 9350 Automatic Tuning Whip Antenna and cables, and vehicle installation hardware kit.
		COMPRISING:
		NGT™ VR Transceiver
		<ul style="list-style-type: none"> • NGT™ VR 2011 RF Unit • NGT™ VR 2020 Handset • NGT™ Handset Cradle Kit • External Speaker with 4 m Lead • NGT™ Control Cable, 6 m • NGT™ Transceiver Getting Started Guide, includes Reference Manual on CDROM (see page 141, <i>Language Support</i> for translations of this guide)
		9350 Automatic Tuning Whip Antenna and Cables
		The 9350 consists of the following parts. See page 73 for additional 9350 accessories.
	08-05628-004 08-05629-002 15-00129 15-00649 08-06022-001 15-04127-##	
	08-05063-001 08-05627-006 08-01503-006 08-05140-001 78-23007-003 78-23025 15-04142-##	9350 Main Assembly 9350 to NGT™ Control Cable, 6 m Coaxial Assembly Cable RG58, 6 m 9350 Spring 9350 Fibreglass Whip, 1.6 m 9350 Tapered Stainless Steel Whip, 1.2 m Automatic Tuning Whip Antenna 9350 Installation Handbook (see page 141, <i>Language Support</i> for translations of this handbook)
	15-00130	NGT™ RF Cradle & Battery Cable Includes mounting cradle, fuse holder and fuse, earth wire and battery cable.
	15-00112	Complete Vehicle Installation Hardware Kit Includes assorted screws, cable ties and grommets.
		AVAILABLE OPTIONS & ACCESSORIES:
		See pages 4 and 7 for <i>NGT™ VR Options</i> and <i>Mobile Accessories</i> .

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NGT™ VR Configurations

NGT™ VR BASE		
PRODUCT	PART NO.	DESCRIPTION
NGT-VR-BASE		NGT™ VR Base Station Configuration
		The NGT™ VR Base Station Configuration consists of an NGT™ VR Transceiver, a Multi-wire Broadband Dipole Antenna, 3020 Heavy Duty Transceiver Supply, and cables.
		COMPRISING:
		NGT™ VR Transceiver
		<ul style="list-style-type: none"> • NGT™ VR 2011 RF Unit • NGT™ VR 2020 Handset • NGT Desk Console • Self Adhesive Rubber Feet (x4) • NGT™ Transceiver Getting Started Guide, includes Reference Manual on CDROM (see page 141, <i>Language Support</i> for translations of this guide)
	08-05628-004 08-05629-002 15-00766 30-11208-000 15-04127-##	
	15-00463-001	Multi-wire Broadband Dipole Antenna
		The antenna can be mounted horizontally between two support systems, or as an inverted "V" using a single central support mast.
		NOTE:
		Mast is not included. For masts, see page 83, <i>Antenna Masts</i> .
	08-01503-030	Coaxial Cable Assembly RG58, 30 m
	78-20022	3020 Transceiver Supply
	67-9030#	Power IEC Cable, 2 m
		For cable options, see page 68, <i>3020 Accessories</i> .
	05-06374	Earth Braid, 1.5 m







AVAILABLE OPTIONS & ACCESSORIES:

See pages 4 and 8 for *NGT™ VR Options and Base Accessories*.

denotes the cable variant depending upon country of use
denotes language version

NGT™ VR OPTIONS		
PRODUCT	PART NO.	DESCRIPTION
	15-10479	Opt FED-STD-1045 ALE/CALM™ Fully compatible with FED-STD-1045 ALE capabilities and enhanced with Codan Automated Link Management (CALM™). Includes facilities for Selective Calls, All Calls, Phone Calls, Text Messaging and GPS Position Calls.
	15-10482	Opt Diagnostic A remote capability where diagnostic information, such as signal strength, battery voltage, output power, temperature and antenna health can be retrieved from a remote station.
	15-10483	Opt Phone Call Enables telephone calls to be made from mobile and base stations equipped with a telephone interconnect.
	15-10513-000	Opt 100 W Reduces maximum transceiver output power to 100 W.
	15-10481-000	Opt TxD, Tx Program Disabled Disables front panel programming of new transmit frequencies. For use in countries where front panel programming is prohibited by regulatory authorities, e.g. USA and Australia.
	15-10491-000	Opt TxP, Tx Program Prohibited Prohibits front panel programming of new transmit and receive frequencies.
	15-10507-000	Opt Voice Encryptor (Factory Fit) High grade Voice Encryptor Module for NGT™ series Transceivers. Provides high grade voice security with exceptional recovered audio quality. NOTE: <ul style="list-style-type: none"> • This option is also available as a retro fit kit (part number 15-10507). • This option is subject to Australian Defence Export Controls. A signed End-User Declaration must be provided for supply of this option.
	15-10523-000	Opt Transcrypt SC20-455 Scrambler (Factory Fit) Voice scrambling module for use with NGT™ series Transceivers. NOTE: <ul style="list-style-type: none"> • This option is also available as a retro fit kit (part number 15-10523). • This option is subject to Australian Defence Export Controls. A signed End-User Declaration must be provided for supply of this option.

NGT™ VR TRANSCEIVER ACCESSORIES

PRODUCT	PART NO.	DESCRIPTION
	08-03255	Cable, Battery, 6 m
	08-04515-001	Earth Wire, 0.5 m
	05-06374	Earth Braid, 1.5 m
	15-04164-EN	NSP Software CD Package Software used to program NGT™ series Transceivers. NSP interface cable (part number 08-05123-001) needs to be ordered separately.
	08-05123-001	Cable, NSP Interface Interface cable to program NGT™ series Transceivers from a PC.
	78-01031	Adaptor, USB to DB-9, Serial Port USB V1.1 compliant and supports Microsoft Windows™ 2000/XP/Vista/WIN7. Not recommended for use when upgrading transceiver firmware.

Continued on the next page






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NGT™ VR Configurations

NGT™ VR TRANSCEIVER ACCESSORIES cont.

PRODUCT	PART NO.	DESCRIPTION
	15-04143-EN	Repair Guide, NGT™ Transceiver (English) Printed Repair Guide for the NGT™ series Transceiver.
	15-02063-CD	Technical Service Manual, NGT™ Transceiver System, on CDROM (English) Includes all NGT™ series Transceivers and accessories.
	15-04127-##	Getting Started Guide, NGT™ Transceiver, includes Reference Manual on CDROM Printed Getting Started Guide for the NGT™ Transceiver. See page 141, <i>Language Support</i> for translations of this guide.

denotes language version



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NGT™ VR Configurations

NGT™ VR MOBILE ACCESSORIES		
PRODUCT	PART NO.	DESCRIPTION
	15-00704	Vehicle Interference Suppression Kit Comprises of interference filters, copper braid, earth strap and fitting instructions.
	15-00508	Voltage Regulator (24 V to 12 V operation 20 A) Enables the operation of NGT™ series Transceivers in 24/26 V based systems. Protected from faults such as voltage spikes, overload, short circuits and low voltage input. The unit automatically resets once a fault is removed
	15-00130	NGT™ RF Cradle & Battery Cable Includes mounting cradle, fuse holder and fuse, earth wire and battery cable.
	15-00112	Complete Vehicle Installation Hardware Kit Includes assorted screws, cable ties and grommets.
	15-00136	Cradle, NGT™ RF Unit Mounting
	15-00129	Cradle Kit, NGT™ Handset
	08-03255	Cable, Battery, 6 m
	15-00711	Fuse Holder with 32 A Fuse
	15-00712	Fuse, 32 A
	08-04515-001	Earth Wire, 0.5 m






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NGT™ VR Configurations

NGT™ VR BASE ACCESSORIES

PRODUCT	PART NO.	DESCRIPTION
	15-00766	NGT™ VR Desk Console An optional NGT™ Desk Console for the NGT™ Transceiver, incorporating an in-built speaker, hand PTT switch, gooseneck microphone, in-built headphone output, and a 2 m transceiver interface cable. NOTE: When the transceiver is ordered with an optional desk console (part number 15-00766), an NGT™ handset cradle (part number 15-00129), external speaker (part number 15-00649) and NGT™ Control cable (part number 08-06022-001) are not included.
	15-00602	Headphones Headphones suitable for the NGT™ VR Desk Console.
	15-00702	Cable Kit for Float Charge Cable kit for float charging lead-acid storage battery for uninterrupted supply. For batteries, see page 70, <i>Batteries</i> .

NGT™ SRx TRANSCEIVER

PRODUCT	PART NO.	DESCRIPTION
<p>NGT-SRX-TCVR</p> 	<p>NGT™ SRx Transceiver</p> <p>The NGT™ SRx Transceiver, capable of voice, email, fax, GPS tracking, telephone interconnection and high power communications, is the ideal solution to meet your modern HF needs — all in a single cost effective unit.</p> <p>The SRx comes with an RF unit, handset, speaker, cables, and mounting accessories for easy installation.</p> <p>The transceiver incorporates the exceptional features renowned in all Codan NGT™ Transceivers, plus advanced calling capabilities including Emergency call, Selective call, Phone call, Message call, Diagnostics, Remote disable and Remote configuration.</p> <p>Excellent options are available including Automatic Link Establishment (ALE) capabilities, voice encryption, and GPS, plus additional mounting accessories.</p> <p>The standard transceiver consists of the parts listed below. The following pages detail the parts required for NGT™ SRx Mobile and Base configurations.</p> <p>COMPRISING:</p> <ul style="list-style-type: none"> • NGT™ SRx 2012 RF Unit • NGT™ SRx 2020 Handset • NGT™ Handset Cradle Kit • External Speaker with 4 m Lead • NGT™ Control Cable, 6 m • Self Adhesive Rubber Feet (x4) • NGT™ SRx Transceiver Getting Started Guide, includes Reference Manual on CDROM (see page 141, <i>Language Support</i> for translations of this guide) <p>STANDARD FEATURES:</p> <ul style="list-style-type: none"> • General Purpose Interface Port (GPIO) • 400 channels, 1.6–30 MHz, 10 networks • Scanning of multiple networks • 125 W PEP, 12 V DC, USB/LSB/AM • In-built <i>Easitalk™</i> speech noise reduction • Morse capability • Meets MIL-STD-810F for shock, vibration and dust <p>AVAILABLE OPTIONS & ACCESSORIES:</p> <p>See pages 12 and 14 for <i>NGT™ SRx Options and Transceiver Accessories</i>.</p>	

denotes language version

NGT™ SRx MOBILE

PRODUCT	PART NO.	DESCRIPTION
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NGT-SRX-MOB

NGT™ SRx Mobile Configuration

The NGT™ SRx Mobile Configuration consists of an NGT™ SRx Transceiver, a 9350 Automatic Tuning Whip Antenna and cables, and vehicle installation hardware kit.

COMPRISING:

NGT™ SRx Transceiver

- NGT™ SRx 2012 RF Unit
- NGT™ SRx 2020 Handset
- NGT™ Handset Cradle Kit
- External Speaker with 4 m Lead
- NGT™ Control Cable, 6 m
- NGT™ SRx Transceiver Getting Started Guide, includes Reference Manual on CDROM (see page 141, *Language Support* for translations of this guide)

9350 Automatic Tuning Whip Antenna and Cables

The 9350 consists of the following parts. See page 73 for additional 9350 accessories.

- 9350 Main Assembly
- 9350 to NGT™ Control Cable, 6 m
- Coaxial Assembly Cable RG58, 6 m
- 9350 Spring
- 9350 Fibreglass Whip, 1.6 m
- 9350 Tapered Stainless Steel Whip, 1.2 m
- Automatic Tuning Whip Antenna 9350 Installation Handbook (see page 141, *Language Support* for translations of this handbook)

NGT™ RF Cradle & Battery Cable

Includes mounting cradle, fuse holder and fuse, earth wire and battery cable.

Complete Vehicle Installation Hardware Kit

Includes assorted screws, cable ties and grommets.

AVAILABLE OPTIONS & ACCESSORIES:

See pages 12 and 15 for NGT™ SRx *Options* and *Mobile Accessories*.



08-05628-009
08-05629-009
15-00129
15-00649
08-06022-001
15-04140-##



08-05063-001
08-05627-006
08-01503-006
08-05140-001
78-23007-003
78-23025
15-04142-##



15-00130



15-00112



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NGT™ SRx Configurations

NGT™ SRx BASE

PRODUCT	PART NO.	DESCRIPTION
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NGT-SRX-BASE



08-05628-009
08-05629-009
15-00766
30-11208-000
15-04140-##

NGT™ SRx Base Station Configuration

The NGT™ SRx Base Station Configuration consists of an NGT™ SRx Transceiver, a Multi-wire Broadband Dipole Antenna, 3020 Heavy Duty Transceiver Supply, and cables.

COMPRISING:

NGT™ SRx Transceiver

- NGT™ SRx 2012 RF Unit
- NGT™ SRx 2020 Handset
- NGT Desk Console
- Self Adhesive Rubber Feet (x4)
- NGT™ SRx Transceiver Getting Started Guide, includes Reference Manual on CDROM (see page 141, *Language Support* for translations of this guide)



15-00463-001

Multi-wire Broadband Dipole Antenna

The antenna can be mounted horizontally between two support systems, or as an inverted "V" using a single central support mast.

NOTE:

Mast is not included. For masts, see page 83, *Antenna Masts*.



08-01503-030

Coaxial Cable Assembly RG58, 30 m



78-20022

3020 Transceiver Supply



67-9030#

Power IEC Cable, 2 m

For cable options, see page 68, *3020 Accessories*.



05-06374

Earth Braid, 1.5 m

AVAILABLE OPTIONS & ACCESSORIES:

See pages 12 and 17 for *NGT™ SRx Options and Base Accessories*.


denotes the cable variant depending upon country of use
denotes language version



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NGT™ SRx Configurations

NGT™ SRx OPTIONS		
PRODUCT	PART NO.	DESCRIPTION
<input checked="" type="checkbox"/>	15-10479	<p>Opt FED-STD-1045 ALE/CALM™</p> <p>Fully compatible with FED-STD-1045 ALE capabilities and enhanced with Codan Automated Link Management (CALM™). Includes facilities for Selective Calls, All Calls, Phone Calls, Text Messaging and GPS Position Calls.</p>
<input checked="" type="checkbox"/>	15-10486	<p>Opt GPS Tracking Enable</p> <p>Enables GPS tracking.</p> <p>NOTE:</p> <p>This feature is compatible with GPS receivers providing NMEA 0183 V2.0 (or later) output format. A GPS receiver is not supplied.</p> <p>For a description of the GPS receiver available from Codan, see page 15, <i>NGT™ SRx Mobile Accessories</i>.</p>
<input checked="" type="checkbox"/>	15-10504-000	<p>Opt External ALC</p> <p>Required when using an NGT™ high power system.</p> <p>NOTE:</p> <ul style="list-style-type: none"> This option is also available as a retro fit kit (part number 15-10504).
<input checked="" type="checkbox"/>	15-10513-000	<p>Opt 100 W</p> <p>Reduces transceiver output power to 100 W.</p>
<input checked="" type="checkbox"/>	15-10481-000	<p>Opt TxD, Tx Program Disabled</p> <p>Disables front panel programming of new transmit frequencies. For use in countries where front panel programming is prohibited by regulatory authorities, e.g. USA and Australia.</p>
<input checked="" type="checkbox"/>	15-10491-000	<p>Opt TxP, Tx Program Prohibited</p> <p>Prohibits front panel programming of new transmit and receive frequencies.</p>
<input checked="" type="checkbox"/>	15-10541-000	<p>Opt High Speed Data (Factory Fit)</p> <p>Hardware modification required for use with Codan HF Data Modems using high speed waveforms (3112, 3212).</p>
	15-10469-000	<p>Opt Fan (Factory Fit)</p> <p>Fan unit for continuous data transmission for NGT™ series Transceivers.</p> <p>NOTE:</p> <p>This option is also available as a retro fit kit (part number 15-10469).</p>

Continued on the next page

NGT™ SRx OPTIONS cont.

PRODUCT	PART NO.	DESCRIPTION
	15-10507-000	<p>Opt Voice Encryptor (Factory Fit) High grade Voice Encryptor Module for NGT™ series Transceivers. Provides high grade voice security with exceptional recovered audio quality.</p> <p>NOTE:</p> <ul style="list-style-type: none"> • This option is also available as a retro fit kit (part number 15-10507). • This option is subject to Australian Defence Export Controls. A signed End-User Declaration must be provided for supply of this option.
	15-10523-000	<p>Opt Transcrypt SC20-455 Scrambler (Factory Fit) Voice scrambling module for use with NGT™ series Transceivers.</p> <p>NOTE:</p> <ul style="list-style-type: none"> • This option is also available as a retro fit kit (part number 15-10523). • This option is subject to Australian Defence Export Controls. A signed End-User Declaration must be provided for supply of this option.
	15-10506-000	<p>Opt 500 Hz BW Filter (Factory Fit) 500 Hz narrow band filter. Recommended for use with CW (morse code).</p>
	15-10514-000	<p>Opt 2.7 kHz BW Second Filter (Factory Fit) 2.7 kHz wide band filter. Required for use with Codan 3112 and RM50e HF Data Modems.</p>

NGT™ SRx TRANSCEIVER ACCESSORIES		
PRODUCT	PART NO.	DESCRIPTION
	08-03255	Cable, Battery, 6 m
	08-04515-001	Earth Wire, 0.5 m
	05-06374	Earth Braid, 1.5 m
	15-04164-EN	NSP Software CD Package Software used to program NGT™ series Transceivers. NSP interface cable (part number 08-05123-001) needs to be ordered separately.
	08-05123-001	Cable, NSP Interface Interface cable to program NGT™ series Transceivers from a PC.
	78-01031	Adaptor, USB to DB-9, Serial Port USB V1.1 compliant and supports Microsoft Windows™ 2000/XP/Vista/WIN7. Not recommended for use when upgrading transceiver firmware.
	15-04143-EN	Repair Guide, NGT™ Transceiver (English) Printed Repair Guide for the NGT™ series Transceiver.
	15-02063-CD	Technical Service Manual, NGT™ Transceiver System, on CDROM (English) Includes all NGT™ series Transceivers and accessories.
	15-04127-##	Getting Started Guide, NGT™ Transceiver, includes Reference Manual on CDROM Printed Getting Started Guide for the NGT™ Transceiver. See page 141, <i>Language Support</i> for translations of this guide.

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NGT™ SRx Configurations

NGT™ SRx MOBILE ACCESSORIES		
PRODUCT	PART NO.	DESCRIPTION
	15-00765	GPS Receiver/Antenna Includes: <ul style="list-style-type: none"> • Receiver/antenna • Magnetic mounting bracket • NGT™ Transceiver interconnecting cables Features: <ul style="list-style-type: none"> • Integrated antenna and GPS receiver • Tracking up to 12 satellites
	15-00704	Vehicle Interference Suppression Kit Comprises of interference filters, copper braid, earth strap and fitting instructions.
	15-00508	Voltage Regulator (24 V to 12 V operation 20 A) Enables the operation of NGT™ series Transceivers in 24/26 V based systems. Protected from faults such as voltage spikes, overload, short circuits and low voltage input. The unit automatically resets once a fault is removed.
	15-00130	NGT™ RF Cradle & Battery Cable Includes mounting cradle, fuse holder and fuse, earth wire and battery cable.
	15-00112	Complete Vehicle Installation Hardware Kit Includes assorted screws, cable ties and grommets.
	15-00136	Cradle, NGT™ RF Unit Mounting
	15-00129	Cradle Kit, NGT™ Handset
	08-03255	Cable, Battery, 6 m

Continued on the next page






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NGT™ SRx Configurations

NGT™ SRx MOBILE ACCESSORIES cont.

PRODUCT	PART NO.	DESCRIPTION
	15-00711	Fuse Holder with 32 A Fuse
	15-00712	Fuse, 32 A
	08-04515-001	Earth Wire, 0.5 m

NGT™ SRx BASE ACCESSORIES

PRODUCT	PART NO.	DESCRIPTION
	15-00766	<p>NGT™ SRx Desk Console</p> <p>An optional NGT™ Desk Console for the NGT™ SRx Transceiver, incorporating an in-built speaker, hand PTT switch, goose-neck microphone, in-built headphone output, and a 2 m transceiver interface cable.</p> <p>NOTE:</p> <p>When the transceiver is ordered with an optional desk console (part number 15-00766), an NGT™ handset cradle (part number 15-00129), external speaker (part number 15-00649) and NGT™ Control cable (part number 08-06022-001) are not included.</p>
	15-00602	<p>Headphones</p> <p>Headphones suitable for the NGT™ SRx Desk Console.</p>
	15-00702	<p>Cable Kit for Float Charge</p> <p>Cable kit for float charging lead-acid storage battery for uninterrupted supply.</p> <p>For batteries, see page 70, <i>Batteries</i>.</p>
	08-06380-001	<p>Cable, Serial 6-way to D9F</p> <p>Interface cable for computer control via CICS or GPS Tracking software on the NGT™ SRx Transceiver.</p>
	15-00662	<p>Morse Key for NGT™</p> <p>Morse Key to suit NGT™ for desktop operation.</p>

NGT™ SR TRANSCEIVER

PRODUCT	PART NO.	DESCRIPTION
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NGT-SR-TCVR



NGT™ SR Transceiver

The NGT™ SR Transceiver is the ideal solution to meet all your advanced system requirements, including remote control, split-site, high power communications, or base and mobile applications. It also accommodates the use of multiple control points for simultaneous connection of peripheral equipment like data modems and telephone interconnects.

The NGT™ SR comes with an RF unit, junction box, handset, speaker, cables, and mounting accessories for easy installation.

The transceiver incorporates the exceptional features renowned in all Codan NGT™ Transceivers, plus advanced calling capabilities including Emergency call, Selective call, Phone call, Message call, Diagnostics, Remote disable and Remote configuration.

Excellent options are available including Automatic Link Establishment (ALE) capabilities, voice encryption, and GPS, plus additional mounting accessories for multiple control points.

The standard transceiver consists of the parts listed below. The following pages detail the parts required for NGT™ SR Mobile and Base configurations.

COMPRISING:

08-05628-001
08-05629-001
08-05630-001
15-00129
15-00649
08-05610-006
30-11208-000
15-04127-##

- NGT™ SR 2010 RF Unit
- NGT™ SR 2020 Handset
- NGT™ SR 2030 Junction Box
- NGT™ Handset Cradle Kit
- External Speaker with 4 m Lead
- CIB Interface Cable, 6 m
- Self Adhesive Rubber Feet (x4)
- NGT™ Transceiver Getting Started Guide, includes Reference Manual on CDRom (see page 141, *Language Support* for translations of this guide)

STANDARD FEATURES:

- 400 channels, 1.6–30 MHz, 10 networks
- Scanning of multiple networks
- 125 W PEP, 12 V DC, USB/LSB/AM
- In-built *Easitalk™* speech noise reduction
- Meets MIL-STD-810F for shock, vibration and dust

AVAILABLE OPTIONS & ACCESSORIES:

See pages 21 and 23 for NGT™ SR *Options* and *Transceiver Accessories*.

NGT™ SR MOBILE		
PRODUCT	PART NO.	DESCRIPTION
NGT-SR-MOB		NGT™ SR Mobile Configuration The NGT™ SR Mobile Configuration consists of an NGT™ SR Transceiver, a 9350 Automatic Tuning Whip Antenna and cables, and vehicle installation hardware kit.
	08-05628-001 08-05629-001 08-05630-001 15-00129 15-00649 08-05610-006 15-04127-##	COMPRISING: NGT™ SR Transceiver <ul style="list-style-type: none"> • NGT™ SR 2010 RF Unit • NGT™ SR 2020 Handset • NGT™ SR 2030 Junction Box • NGT™ Handset Cradle Kit • External Speaker with 4 m Lead • CIB Interface Cable, 6 m • NGT™ Transceiver Getting Started Guide, includes Reference Manual on CDROM (see page 141, <i>Language Support</i> for translations of this guide)
	08-05063-001 08-05627-006 08-01503-006 08-05140-001 78-23007-003 78-23025 15-04142-##	9350 Automatic Tuning Whip Antenna and Cables The 9350 consists of the following parts. See page 73 for additional 9350 accessories. 9350 Main Assembly 9350 to NGT™ Control Cable, 6 m Coaxial Assembly Cable RG58, 6 m 9350 Spring 9350 Fibreglass Whip, 1.6 m 9350 Tapered Stainless Steel Whip, 1.2 m Automatic Tuning Whip Antenna 9350 Installation Handbook (see page 141, <i>Language Support</i> for translations of this handbook)
	15-00130	NGT™ RF Cradle & Battery Cable Includes mounting cradle, fuse holder and fuse, earth wire and battery cable.
	15-00112	Complete Vehicle Installation Hardware Kit Includes assorted screws, cable ties and grommets.

AVAILABLE OPTIONS & ACCESSORIES:

See pages 21 and 25 for *NGT™ SR Options and Mobile Accessories*.

denotes language version



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NGT™ SR Configurations

NGT™ SR BASE		
PRODUCT	PART NO.	DESCRIPTION

NGT-SR-BASE

NGT™ SR Base Station Configuration

The NGT™ SR Base Station Configuration consists of an NGT™ SR Transceiver, a Multi-wire Broadband Dipole Antenna, 3020 Heavy Duty Transceiver Supply, desk console, and cables.

COMPRISING:

NGT™ SR Transceiver

- NGT™ SR 2010 RF Unit
- NGT™ SR 2020 Handset
- NGT™ SR 2030 Junction Box
- NGT™ SR Desk Console
- CIB Interface Cable, 6 m
- Self Adhesive Rubber Feet (x4)
- NGT™ Transceiver Getting Started Guide, includes Reference Manual on CDROM (see page 141, *Language Support* for translations of this guide)

Multi-wire Broadband Dipole Antenna

The antenna can be mounted horizontally between two support systems, or as an inverted “V” using a single central support mast.

NOTE:

Mast is not included. For masts, see page 83, *Antenna Masts*.



08-05628-001
 08-05629-001
 08-05630-001
 15-10471-000
 08-05610-006
 30-11208-000
 15-04127-##



15-00463-001



08-01503-030

Coaxial Cable Assembly RG58, 30 m



78-20022

3020 Transceiver Supply



67-9030#

Power IEC Cable, 2 m

For cable options, see page 68, *3020 Accessories*.




05-06374

Earth Braid, 1.5 m

AVAILABLE OPTIONS & ACCESSORIES:





See pages 21 and 27 for NGT™ SR Options and Base Accessories.

denotes the cable variant depending upon country of use
denotes language version







NGT™ SR OPTIONS		
PRODUCT	PART NO.	DESCRIPTION
<input checked="" type="checkbox"/>	15-10479	<p>Opt FED-STD-1045 ALE/CALM™ Fully compatible with FED-STD-1045 ALE capabilities and enhanced with Codan Automated Link Management (CALM™). Includes facilities for Selective Calls, All Calls, Phone Calls, Text Messaging and GPS Position Calls.</p>
<input checked="" type="checkbox"/>	15-10486	<p>Opt GPS Tracking Enable Enables GPS tracking.</p> <p>NOTE: This feature is compatible with GPS receivers providing NMEA 0183 V2.0 (or later) output format. A GPS receiver is not supplied.</p> <p>For a description of the GPS receiver available from Codan, see page 25, <i>NGT™ SR Mobile Accessories</i>.</p>
<input checked="" type="checkbox"/>	15-10504-000	<p>Opt External ALC Required when using an NGT™ high power system.</p> <p>NOTE: This option is also available as a retro fit kit (part number 15-10504).</p>
<input checked="" type="checkbox"/>	15-10513-000	<p>Opt 100 W Reduces maximum transceiver output power to 100 W.</p>
<input checked="" type="checkbox"/>	15-10481-000	<p>Opt TxD, Tx Program Disabled Disables front panel programming of new transmit frequencies. For use in countries where front panel programming is prohibited by regulatory authorities, e.g. USA and Australia.</p>
<input checked="" type="checkbox"/>	15-10491-000	<p>Opt TxP, Tx Program Prohibited Prohibits front panel programming of new transmit and receive frequencies.</p>
<input checked="" type="checkbox"/>	15-10541-000	<p>Opt High Speed Data (Factory Fit) Hardware modification required for use with Codan HF Data Modems using high speed waveforms (3112, 3212).</p>
	15-10469-000	<p>Opt Fan (Factory Fit) Fan unit for continuous data transmission for NGT™ series Transceivers.</p> <p>NOTE: This option is also available as a retro fit kit (part number 15-10469).</p>

Continued on the next page

NGT™ SR OPTIONS cont.

PRODUCT	PART NO.	DESCRIPTION
	15-10507-000	<p>Opt Voice Encryptor (Factory Fit) High grade Voice Encryptor Module for NGT™ series Transceivers. Provides high grade voice security with exceptional recovered audio quality.</p> <p>NOTE:</p> <ul style="list-style-type: none"> • This option is also available as a retro fit kit (part number 15-10507). • This option is subject to Australian Defence Export Controls. A signed End-User Declaration must be provided for supply of this option.
	15-10523-000	<p>Opt Transcript SC20-455 Scrambler (Factory Fit) Voice scrambling module for use with NGT™ series Transceivers.</p> <p>NOTE:</p> <ul style="list-style-type: none"> • This option is also available as a retro fit kit (part number 15-10523). • This option is subject to Australian Defence Export Controls. A signed End-User Declaration must be provided for supply of this option.
	15-10506-000	<p>Opt 500 Hz BW Filter (Factory Fit) 500 Hz narrow band filter. Recommended for use with CW (morse code).</p>
	15-10514-000	<p>Opt 2.7 kHz BW Second Filter (Factory Fit) 2.7 kHz wide band filter. Required for use with Codan 3112 and RM50e HF Data Modems.</p>

NGT™ SR TRANSCEIVER ACCESSORIES

PRODUCT	PART NO.	DESCRIPTION
	08-05610-001	Cable, CIB Interface, 0.5 m
	08-05610-002	Cable, CIB Interface, 2 m
	08-05610-006	Cable, CIB Interface, 6 m
	08-05610-030	Cable, CIB Interface, 30 m
	08-03255	Cable, Battery, 6 m
	08-04515-001	Earth Wire, 0.5 m
	05-06374	Earth Braid, 1.5 m
	15-04164-EN	<p>NSP Software CD Package</p> <p>Software used to program NGT™ series Transceivers. NSP interface cable (part number 08-05123-001) needs to be ordered separately.</p>
	08-05123-001	<p>Cable, NSP Interface</p> <p>Interface cable to program NGT™ series Transceivers from a PC.</p>
	78-01031	<p>Adaptor, USB to DB-9, Serial Port</p> <p>USB V1.1 compliant and supports Microsoft Windows™ 2000/XP/Vista/WIN7.</p> <p>Not recommended for use when upgrading transceiver firmware.</p>
	15-00662	<p>Morse Key for NGT™</p> <p>Morse Key to suit NGT™ for desktop operation.</p>

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NGT™ SR Configurations

NGT™ SR TRANSCEIVER ACCESSORIES cont.

PRODUCT	PART NO.	DESCRIPTION
	15-04143-EN	Repair Guide, NGT™ Transceiver (English) Printed Repair Guide for the NGT™ series Transceiver.
	15-02063-CD	Technical Service Manual, NGT™ Transceiver System on CDROM (English) Includes all NGT™ series Transceivers and accessories.
	15-04127-##	Getting Started Guide, NGT™ Transceiver, includes Reference Manual on CDROM Printed Getting Started Guide for the NGT™ Transceiver. See page 141, <i>Language Support</i> for translations of this guide.

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NGT™ SR Configurations

NGT™ SR MOBILE ACCESSORIES		
PRODUCT	PART NO.	DESCRIPTION
	15-00771	<p>GPS Receiver/Antenna</p> <p>Includes:</p> <ul style="list-style-type: none"> • Receiver/antenna • Magnetic mounting bracket • NGT™ Transceiver interconnecting cables to suit 15 pin NGT™ Junction Box connector <p>Features:</p> <ul style="list-style-type: none"> • Integrated antenna and GPS receiver • Tracking up to 12 satellites
	08-05847-001	<p>Interface Adaptor</p> <p>Interface adaptor to enable simultaneous connection of a GPS receiver and a 3012 HF Data Modem to the NGT™ SR Transceiver.</p>
	15-00704	<p>Vehicle Interference Suppression Kit</p> <p>Comprises of interference filters, copper braid, earth strap and fitting instructions.</p>
	15-00508	<p>Voltage Regulator (24 V to 12 V operation 20 A)</p> <p>Enables the operation of NGT™ series Transceivers in 24/26 V based systems. Protected from faults such as voltage spikes, overload, short circuits and low voltage input. The unit automatically resets once a fault is removed</p>
	15-00130	<p>NGT™ RF Cradle & Battery Cable</p> <p>Includes mounting cradle, fuse holder and fuse, earth wire and battery cable.</p>
	15-00112	<p>Complete Vehicle Installation Hardware Kit</p> <p>Includes assorted screws, cable ties and grommets.</p>
	15-00136	<p>Cradle, NGT™ RF Unit Mounting</p>

Continued on the next page



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NGT™ SR Configurations

NGT™ SR MOBILE ACCESSORIES cont.

PRODUCT	PART NO.	DESCRIPTION
	15-00129	Cradle Kit, NGT™ Handset
	08-03255	Cable, Battery, 6 m
	15-00711	Fuse Holder with 32 A Fuse
	15-00712	Fuse, 32 A
	08-04515-001	Earth Wire, 0.5 m




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NGT™ SR Configurations

NGT™ SR BASE ACCESSORIES

PRODUCT	PART NO.	DESCRIPTION
	15-10471	<p>NGT™ SR Desk Console</p> <p>An optional NGT™ Desk Console for the NGT™ SR Transceiver, incorporating an in-built speaker, hand PTT switch, goose-neck microphone, and in-built headphone output.</p> <p>NOTE:</p> <p>When an SR Transceiver is ordered with a desk console, part number 15-10471-000 should be used for the console so that the junction box will be fitted to the console at the factory.</p>
	CONTROL-POINT-SR-6M	<p>NGT™ SR Control Point Kit</p> <p>An additional control point incorporating the following parts.</p> <p>COMPRISING:</p> <ul style="list-style-type: none"> 08-05629-001 NGT™ SR 2020 Handset 08-05630-001 NGT™ SR 2030 Junction Box 15-00129 NGT™ Handset Cradle Kit 15-00649 External Speaker with 4 m Lead 08-05610-006 CIB Interface Cable, 6 m
	15-00602	<p>Headphones</p> <p>Headphones suitable for the NGT™ SR Desk Console.</p>
	15-00702	<p>Cable Kit for Float Charge</p> <p>Cable kit for float charging lead-acid storage battery for uninterrupted supply.</p> <p>For batteries, see page 70, <i>Batteries</i>.</p>



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NGT™ ASR Configurations

NGT™ ASR TRANSCIVER

PRODUCT	PART NO.	DESCRIPTION
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NGT-ASR-TCVR



NGT™ ASR Transceiver

The NGT™ ASR Transceiver is specifically designed for interoperability with non-Codan HF transceiver systems. The NGT™ ASR supports MIL-STD-188-141B advanced Automatic Link Establishment, which has been certified for interoperability by the US Joint Interoperability Test Command (JITC). It is suitable for advanced system configurations in base and mobile applications, and supports HF data modems using advanced military waveforms.

The NGT™ ASR comes with an RF unit, junction box, handset, speaker, cables, and mounting accessories for easy installation. It incorporates the exceptional features renowned in all Codan NGT™ Transceivers, plus GPS, high power, encryption, and advanced calling capabilities.

The standard transceiver consists of the parts listed below. The following pages detail the parts required for NGT™ ASR Mobile and Base configurations.

COMPRISING:

- 08-05628-007
- 08-05629-007
- 08-05630-007
- 15-00129
- 15-00649
- 08-05610-006
- 30-11208-000
- 15-10486
- 15-10514-000
- 15-10541-000
- 15-04137-EN

- NGT™ ASR 2010 RF Unit
- NGT™ ASR 2020 Handset
- NGT™ ASR 2030 Junction Box
- NGT™ Handset Cradle Kit
- External Speaker with 4 m Lead
- CIB Interface Cable, 6 m
- Self Adhesive Rubber Feet (x4)
- Opt GPS Tracking Enable
- Opt 2.7 kHz BW Second Filter (Factory Fit)
- Opt High Speed Data (Factory Fit)
- NGT™ ASR Transceiver Getting Started Guide, includes Reference Manual on CDROM (English)

STANDARD FEATURES:

- US FCC and NTIA approved
- MIL-STD-188-141B ALE included
- Last Heard Log and manual sounding
- 600 channels, 1.6–30 MHz, 20 networks
- Scanning of multiple networks
- 125 W PEP, 12 V DC, USB/LSB/AM
- In-built *Easitalk*™ speech noise reduction
- Meets MIL-STD-810F for shock, vibration and dust

AVAILABLE OPTIONS & ACCESSORIES:

See pages 31 and 33 for *NGT™ ASR Options and Transceiver Accessories*.



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NGT™ ASR Configurations

NGT™ ASR MOBILE

PRODUCT	PART NO.	DESCRIPTION
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NGT-ASR-MOB

NGT™ ASR Mobile Configuration

The NGT™ ASR Mobile Configuration consists of an NGT™ ASR Transceiver, a 9350 Automatic Tuning Whip Antenna and cables, and vehicle installation hardware kit.

COMPRISING:

NGT™ ASR Transceiver

- NGT™ ASR 2010 RF Unit
- NGT™ ASR 2020 Handset
- NGT™ ASR 2030 Junction Box
- NGT™ Handset Cradle Kit
- External Speaker with 4 m Lead
- CIB Interface Cable, 6 m
- Opt GPS Tracking Enable
- Opt 2.7 kHz BW Second Filter (Factory Fit)
- Opt High Speed Data (Factory Fit)
- NGT™ ASR Transceiver Getting Started Guide, includes Reference Manual on CDROM (English)

9350 Automatic Tuning Whip Antenna and Cables

The 9350 consists of the following parts. See page 73 for additional 9350 accessories.

- 9350 Main Assembly
- 9350 to NGT™ Control Cable, 6 m
- Coaxial Assembly Cable RG58, 6 m
- 9350 Spring
- 9350 Fibreglass Whip, 1.6 m
- 9350 Tapered Stainless Steel Whip, 1.2 m
- Automatic Tuning Whip Antenna 9350 Installation Handbook (see page 141, *Language Support* for translations of this handbook)

NGT™ RF Cradle & Battery Cable

Includes mounting cradle, fuse holder and fuse, earth wire and battery cable.

Complete Vehicle Installation Hardware Kit

Includes assorted screws, cable ties and grommets.

AVAILABLE OPTIONS & ACCESSORIES:

See pages 31 and 35 for *NGT™ ASR Options and Mobile Accessories*.



- 08-05628-007
- 08-05629-007
- 08-05630-007
- 15-00129
- 15-00649
- 08-05610-006
- 15-10486
- 15-10514-000
- 15-10541-000
- 15-04137-EN



- 08-05063-001
- 08-05627-006
- 08-01503-006
- 08-05140-001
- 78-23007-003
- 78-23025
- 15-04142-##



- 15-00130



- 15-00112

denotes language version



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NGT™ ASR Configurations

NGT™ ASR BASE

PRODUCT	PART NO.	DESCRIPTION
NGT-ASR-BASE		NGT™ ASR Base Station Configuration
		The NGT™ ASR Base Station Configuration consists of an NGT™ ASR Transceiver, a Multi-wire Broadband Dipole Antenna, 3020 Heavy Duty Transceiver Supply, desk console, and cables.
		COMPRISING:
		NGT™ ASR Transceiver
	08-05628-007 08-05629-007 08-05630-007 15-10471-000 08-05610-006 30-11208-000 15-10486 15-10514-000 15-10541-000 15-04137-EN	<ul style="list-style-type: none"> • NGT™ ASR 2010 RF Unit • NGT™ ASR 2020 Handset • NGT™ ASR 2030 Junction Box • NGT™ ASR Desk Console • CIB Interface Cable, 6 m • Self Adhesive Rubber Feet (x4) • Opt GPS Tracking Enable • Opt 2.7 kHz BW Second Filter (Factory Fit) • Opt High Speed Data (Factory Fit) • NGT™ ASR Transceiver Getting Started Guide, includes Reference Manual on CDROM (English)
	15-00463-001	Multi-wire Broadband Dipole Antenna The antenna can be mounted horizontally between two support systems, or as an inverted “V” using a single central support mast.
	08-01503-030	Coaxial Cable Assembly RG58, 30 m
	78-20022	3020 Transceiver Supply
	67-9030#	Power IEC Cable, 2 m For cable options, see page 68, <i>3020 Accessories</i> .
	05-06374	Earth Braid, 1.5 m

AVAILABLE OPTIONS & ACCESSORIES:




See pages 31 and 37 for NGT™ ASR Options and Base Accessories.

denotes the cable variant depending upon country of use

NGT™ ASR OPTIONS		
PRODUCT	PART NO.	DESCRIPTION
	15-10504-000	<p>Opt External ALC Required when using an NGT™ high power system.</p> <p>NOTE: This option is also available as a retro fit kit (part number 15-10504).</p>
	15-10513-000	<p>Opt 100 W Reduces maximum transceiver output power to 100 W.</p>
	15-10481-000	<p>Opt TxD, Tx Program Disabled Disables front panel programming of new transmit frequencies. For use in countries where front panel programming is prohibited by regulatory authorities, e.g. USA and Australia.</p>
	15-10491-000	<p>Opt TxP, Tx Program Prohibited Prohibits front panel programming of new transmit and receive frequencies.</p>
	15-10541-000	<p>Opt High Speed Data (Factory Fit) Hardware modification required for use with Codan HF Data Modems using high speed waveforms (3112, 3212).</p>
	15-10469-000	<p>Opt Fan (Factory Fit) Fan unit for continuous data transmission for NGT™ series Transceivers.</p> <p>NOTE: This option is also available as a retro fit kit (part number 15-10469).</p>
	15-10507-000	<p>Opt Voice Encryptor (Factory Fit) High grade Voice Encryptor Module for NGT™ series Transceivers. Provides high grade voice security with exceptional recovered audio quality.</p> <p>NOTE:</p> <ul style="list-style-type: none"> • This option is also available as a retro fit kit (part number 15-10507). • This option is subject to Australian Defence Export Controls. A signed End-User Declaration must be provided for supply of this option.

Continued on the next page

NGT™ ASR OPTIONS cont.

PRODUCT	PART NO.	DESCRIPTION
	15-10523-000	<p>Opt Transcript SC20-455 Scrambler (Factory Fit) Voice scrambling module for use with NGT™ series Transceivers.</p> <p>NOTE:</p> <ul style="list-style-type: none"> • This option is also available as a retro fit kit (part number 15-10523). • This option is subject to Australian Defence Export Controls. A signed End-User Declaration must be provided for supply of this option.
	15-10506-000	<p>Opt 500 Hz BW Filter (Factory Fit) 500 Hz narrow band filter. Recommended for use with CW (morse code).</p>
	15-10514-000	<p>Opt 2.7 kHz BW Second Filter (Factory Fit) 2.7 kHz wide band filter. Required for use with Codan 3112 and RM50e HF Data Modems.</p>





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NGT™ ASR Configurations

NGT™ ASR TRANSCEIVER ACCESSORIES

PRODUCT	PART NO.	DESCRIPTION
	08-05610-001	Cable, CIB Interface, 0.5 m
	08-05610-002	Cable, CIB Interface, 2 m
	08-05610-006	Cable, CIB Interface, 6 m
	08-05610-030	Cable, CIB Interface, 30 m
	08-06213-001	Cable, VP-116 Interface Interface cable for connecting a VP-116 Voice Privacy Unit to an NGT™ ASR VP-116 Junction Box.
	08-06222-001	Junction Box, NGT™ ASR VP-116 NGT™ ASR Junction Box suitable for interfacing with a VP-116 Voice Privacy Unit. Replaces the standard NGT™ ASR Junction Box.
	08-06330-001	Cable, NGT™ to Q9600 Modem, 1 m Interface cable for an NGT™ ASR Junction Box to a Rockwell-Collins Q9600 Modem.
	08-03255	Cable, Battery, 6 m
	08-04515-001	Earth Wire, 0.5 m
	05-06374	Earth Braid, 1.5 m
	15-04164-EN	NSP Software CD Package Software used to program NGT™ series Transceivers. NSP interface cable (part number 08-05123-001) needs to be ordered separately.
	08-05123-001	Cable, NSP Interface Interface cable to program NGT™ series Transceivers from a PC.

NGT™ ASR TRANSCEIVER ACCESSORIES cont.

PRODUCT	PART NO.	DESCRIPTION
	78-01031	Adaptor, USB to DB-9, Serial Port USB V1.1 compliant and supports Microsoft Windows™ 2000/XP/Vista/WIN7. Not recommended to be used when upgrading transceiver firmware.
	15-00662	Morse Key for NGT™ Morse Key to suit NGT™ for desktop operation.
	15-04143-EN	Repair Guide, NGT™ Transceiver (English) Printed Repair Guide for the NGT™ series Transceiver.
	15-04143-CD	Repair Guide, NGT™ Transceiver, on CDROM (English)
	15-04137-##	Getting Started Guide, NGT™ ASR Transceiver, includes Reference Manual on CDROM Printed Getting Started Guide for the NGT™ Transceiver. See page 141, <i>Language Support</i> for translations of this guide.

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NGT™ ASR Configurations

NGT™ ASR MOBILE ACCESSORIES

PRODUCT	PART NO.	DESCRIPTION
	15-00771	<p>GPS Receiver/Antenna</p> <p>Includes:</p> <ul style="list-style-type: none"> • Receiver/antenna • Magnetic mounting bracket • NGT™ Transceiver interconnecting cables to suit 15 pin NGT™ Junction Box connector <p>Features:</p> <ul style="list-style-type: none"> • Integrated antenna and GPS receiver • Tracking up to 12 satellites
	08-06454-001	<p>NGT™ to MICOM Interface Box</p> <p>Enables NGT™ series Transceivers to interface with a MICOM tuner.</p>
	08-05847-001	<p>Interface Adaptor</p> <p>Interface adaptor to enable simultaneous connection of a GPS receiver and a 3012 HF Data Modem to the NGT™ ASR Transceiver.</p>
	15-00704	<p>Vehicle Interference Suppression Kit</p> <p>Comprises of interference filters, copper braid, earth strap and fitting instructions.</p>
	15-00508	<p>Voltage Regulator (24 V to 12 V operation 20 A)</p> <p>Enables the operation of NGT™ series Transceivers in 24/26 V based systems. Protected from faults such as voltage spikes, overload, short circuits and low voltage input. The unit automatically resets once a fault is removed</p>
	15-00130	<p>NGT™ RF Cradle & Battery Cable</p> <p>Includes mounting cradle, fuse holder and fuse, earth wire and battery cable.</p>
	15-00112	<p>Complete Vehicle Installation Hardware Kit</p> <p>Includes assorted screws, cable ties and grommets.</p>

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NGT™ ASR Configurations

NGT™ ASR MOBILE ACCESSORIES cont.

PRODUCT	PART NO.	DESCRIPTION
	15-00136	Cradle, NGT™ RF Unit Mounting
	15-00129	Cradle Kit, NGT™ Handset
	08-03255	Cable, Battery, 6 m
	15-00711	Fuse Holder with 32 A Fuse
	15-00712	Fuse, 32 A
	08-04515-001	Earth Wire, 0.5 m

NGT™ ASR BASE ACCESSORIES

PRODUCT	PART NO.	DESCRIPTION
CONTROL-POINT-ASR-6M		
	08-05629-007	NGT™ ASR Control Point Kit An additional control point incorporating the following parts.
	08-05630-007	COMPRISING: NGT™ ASR 2020 Handset
	15-00129	NGT™ ASR 2030 Junction Box
	15-00649	NGT™ Handset Cradle Kit
	08-05610-006	External Speaker with 4 m Lead CIB Interface Cable, 6 m
	15-10471	Desk Console, NGT™ ASR An optional NGT™ Desk Console for the NGT™ ASR Transceiver, incorporating an in-built speaker, hand PTT switch, goose-neck microphone, and in-built headphone output.
		NOTE: When an ASR Transceiver is ordered with a desk console, part number 15-10471-000 should be used for the console so that the junction box will be fitted to the console at the factory.
	15-00602	Headphones Headphones suitable for the NGT™ ASR Desk Console.
	15-00702	Cable Kit for Float Charge Cable kit for float charging lead-acid storage battery for uninterrupted supply.
		For batteries, see page 70, <i>Batteries</i> .



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NGT™ ASR Configurations

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UUPLUS™ SOFTWARE

PRODUCT	PART NO.	DESCRIPTION
	08-05981-001	<p>UUPlus™ Email for HF Server Software</p> <p>Provides HF and Internet email access for up to 25 users. It works in conjunction with UUPlus™ Email for HF Codan Client software, used by each remote station. It has been specifically designed for use with Codan's HF equipment.</p> <p>NOTE:</p> <ul style="list-style-type: none">• One copy of UUPlus™ Codan Client is required for each user that is to connect to UUPlus™ Codan Server.• A UUPlus™ Codan Server cannot communicate directly to other UUPlus™ Codan Server stations. <p>COMPRISING:</p> <ul style="list-style-type: none">• CD-ROM with UUPlus™ Codan Server software and documentation• Single user licence for installation on one machine <p>STANDARD FEATURES:</p> <ul style="list-style-type: none">• Simple to install and maintain• Works with POP3/SMTP PC email clients such as Outlook Express™, Eudora™, Netscape™ and Pegasus Mail™• Reduces connection time by compressing and combining messages• Automatically resumes interrupted file transfers• Capable of automatically calling the remote user at preset times to deliver mail and collect outgoing mail, or enables the user to check mail manually <p>SYSTEM REQUIREMENTS:</p> <ul style="list-style-type: none">• Codan HF SSB Transceiver• Microsoft Windows™ 2000/XP/Vista/WIN7• Internet email client with support of POP3 and SMTP protocols• Serial port for connecting the HF modem to the PC• Optional LAN, dialup networking card or line modem for connecting local email clients and server to the internet• Codan 3012 or 3212 HF Data Modem

Continued on the next page



UUPLUS™ SOFTWARE cont.

PRODUCT	PART NO.	DESCRIPTION
	08-05980-001	<p>UUPlus™ Email for HF Client Software</p> <p>Simple and reliable solution for sending email over HF from remote areas. It works in conjunction with UUPlus™ Codan Server software and has been specifically designed for use with Codan's HF equipment.</p> <p>COMPRISING:</p> <ul style="list-style-type: none">• CD-ROM with UUPlus™ Codan Client software and documentation• Single user licence for installation on one machine <p>STANDARD FEATURES:</p> <ul style="list-style-type: none">• Simple to install and maintain• Works with POP3/SMTP PC email clients such as Outlook Express™, Eudora™, Netscape™ and Pegasus Mail™• Reduces connection time by compressing and combining messages• Automatically resumes interrupted file transfers• Capable of automatically answering calls from the server to exchange mail at preset times, or enables the user to check for mail manually• Able to send files directly to other stations <p>SYSTEM REQUIREMENTS:</p> <ul style="list-style-type: none">• Codan HF SSB Transceiver• Microsoft Windows™ 2000/XP/Vista/WIN7• Internet email client with support of POP3 and SMTP protocols• Codan 3012 or 3212 HF Data Modem• Serial port for connecting the HF modem to the PC



HF EXPRESS™ AND STANAG 5066 STACK

PRODUCT	PART NO.	DESCRIPTION
---------	----------	-------------



15-04155-EN

Codan HF Express™ and STANAG 5066 Stack

A simple means of providing HF Chat and file transfer between users without needing to set up email. Send images, files and interactive chat simultaneously using your Codan NGT™ Transceiver and get connected anywhere, any time, any place.

Codan HF Express™ and STANAG 5066 works in conjunction with the Codan 3112 High Speed HF Data Modem, which has excellent on-air performance in extreme conditions. With up to 9600 bps on-air data rates over HF without using compression, users don't need to modify files to ensure delivery; they simply send and forget.



COMPRISING:

- CDROM including HF Express™ and STANAG 5066 software and all documentation
- Single user license for installation upon one computer

STANDARD FEATURES:

- Easy to install and maintain
- Simple to use
- Instantaneous interactive communication
- Fully integrated HF Chat and file transfer solution
- Fully interoperable with other HF Chat solutions, i.e. NATO Chat
- Automatic repeat request (ARQ)
- Automatic Data Rate Change to match changing channel conditions
- Robust high integrity modem waveforms
- Excellent on-air performance under extreme conditions

SYSTEM REQUIREMENTS:

- Codan 3112 HF Data Modem
- Codan NGT™ Transceiver fitted with:
 - Opt High Speed Data (Factory Fit), part number 15-10541-000
 - Opt 2.7 kHz BW Second Filter (Factory Fit), part number 15-10514-000
 - Opt Fan (Factory Fit), part number 15-10469-000
- Desktop PC or laptop with Microsoft Windows™ 2000/XP/Vista/WIN7 installed and an Ethernet or spare RS232 serial port

NOTE:

For encrypted data communications, the 3112 Data Modem for NGT™ with synchronous card and cable (MODEM-3112-NGT-SYNC-2M), and an external data encryptor are recommended for desktop PC applications.



3012 HF DATA MODEM (NO CABLES)

PRODUCT	PART NO.	DESCRIPTION
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MODEM-3012-NC



08-05877-004
 08-04515-001
 30-11208-000
 15-04104-CD

3012 HF Data Modem (No Cables)

The 3012 HF Data Modem provides reliable and cost-effective computer text and data communication capabilities for organisations operating in remote areas with little or no telecommunications infrastructure.

COMPRISING:

- 3012 HF Data Modem
- Earth Wire, 0.5 m
- Self Adhesive Rubber Feet (x4)
- 3012 HF Data Modem User Guide on CDROM (English)

STANDARD FEATURES:

- Up to 6000 bps, error-free data transmission with compression
- In-built data compression
- Backwards compatible with the Codan 9001/9002 HF Data Modems
- Data scrambled for security
- In-built serial port optical isolator
- Easy to use AT command interface

AVAILABLE OPTIONS:

- Support for UUPlus™ *Email for HF* Client or Server software, see page 39, *UUPlus Software*.



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3012 HF DATA MODEM FOR NGT™ WITH 2 M RS232 CABLE


PRODUCT	PART NO.	DESCRIPTION
MODEM-3012-NGT-2M		3012 HF Data Modem for NGT™ with 2 m RS232 Cable
		This configuration consists of a 3012 HF Data Modem, 2 m Data Interface Cable, and 1 m NGT™ Junction Box to 3012 Modem Cable.
		NOTE: This configuration replaces previous part number 08-05877-001.
		COMPRISING:
	08-05877-004	3012 HF Data Modem
	08-04515-001	Earth Wire, 0.5 m
	30-11208-000	Self Adhesive Rubber Feet (x4)
	15-04104-CD	3012 HF Data Modem User Guide on CDROM (English)
	08-05086-001	Data Interface Cable, 2 m
	08-05712-001	NGT™ to 3012 Modem Cable, 1 m



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3012 HF DATA MODEM FOR NGT™ WITH 6 M RS232 CABLE

PRODUCT	PART NO.	DESCRIPTION
MODEM-3012-NGT-6M		3012 HF Data Modem for NGT™ with 6 m RS232 Cable
		This configuration consists of a 3012 HF Data Modem, 6 m Data Interface Cable, and 1 m NGT™ Junction Box to 3012 Modem Cable.
		NOTE: This configuration replaces previous part number 08-05877-002.
		COMPRISING:
	08-05877-004	3012 HF Data Modem
	08-04515-001	Earth Wire, 0.5 m
	30-11208-000	Self Adhesive Rubber Feet (x4)
	15-04104-CD	3012 HF Data Modem User Guide on CDROM (English)
	08-05086-006	Data Interface Cable, 6 m
	08-05712-001	NGT™ to 3012 Modem Cable, 1 m



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3012 ACCESSORIES

PRODUCT	PART NO.	DESCRIPTION
	15-00136	Cradle, HF Data Modem Vehicle Mounting
	78-01031	Adaptor, USB to DB-9, Serial USB V1.1 compliant and supports Microsoft Windows™ 2000/XP/Vista/WIN7.
	60-00098-590	Adaptor, 9-pin D Plug to 25-pin D Socket
	08-05086-001	Cable, Data Interface, 2 m
	08-05086-006	Cable, Data Interface, 6 m
	08-05712-001	Cable, NGT™ to 3012 Modem, 1 m
	08-05712-006	Cable, NGT™ to 3012 Modem, 6 m
	15-04104-##	User Guide, HF Data Modem 3012 Printed User Guide for the 3012 HF Data Modem. See page 141, <i>Language Support</i> for translations of this guide.
	08-05980-001	UUPlus™ <i>Email for HF Client Software</i> Single user access to UUPlus™ <i>Email for HF Server Software</i> . For use with the 3012 and 3212 HF Data Modems.
	08-05981-001	UUPlus™ <i>Email for HF Server Software</i> Email server with support for up to 25 remote or local users and Internet email access. For use with the 3012 and 3212 HF Data Modems.

denotes language version

3212 HF DATA MODEM (NO CABLES)

PRODUCT	PART NO.	DESCRIPTION
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MODEM-3212-NC



08-06274-001
08-04515-001
30-11208-000
15-04146-CD

3212 HF Data Modem (No Cables)

The 3212 HF Data Modem provides reliable and cost-effective computer text and data communication capabilities for organisations operating in remote areas with little or no telecommunications infrastructure.

The 3212 HF Data Modem uses waveforms derived from Military Standard (MIL-STD) waveforms, which are based on STANAG 4539 and modified to provide optimal performance over commercial channel bandwidths.

COMPRISING:

- 3212 HF Data Modem
- Earth Wire, 0.5 m
- Self Adhesive Rubber Feet (x4)
- 3212 HF Data Modem User Guide on CDROM (English)

STANDARD FEATURES:

- Up to 7200 bps error free on-air data rate without compression
- Backwards compatible with Codan 3012 HF Data Modem
- Designed to operate on standard bandwidth commercial HF channels
- In-built DC isolation on all available ports
- Modem control via RS232 or ethernet port

SYSTEM REQUIREMENTS:

The following NGT™ Transceiver Options are required for operation with the 3212 HF Data Modem:

- | | |
|--------------|-----------------------------------|
| 15-10541-000 | Opt High Speed Data (Factory Fit) |
| 15-10469-000 | Opt Fan (Factory Fit) |

NOTE:


2.7 kHz Filter is *not* required for the 3212 HF Data Modem.

AVAILABLE OPTIONS:

- Support for UUPlus™ *Email for HF* Client or Server software, see page 39, *UUPlus™ Software*.



3212 HF DATA MODEM FOR NGT™ WITH 2 M RS232 CABLE

PRODUCT	PART NO.	DESCRIPTION
MODEM-3212-NGT-2M		3212 HF Data Modem for NGT™ with 2 m RS232 Cable
		This configuration consists of a 3212 HF Data Modem, 2 m Serial Cable, and 1 m Transceiver to 3112/3212 Modem Cable.
		The 3212 HF Data Modem uses waveforms derived from Military Standard (MIL-STD) waveforms, which are based on STANAG 4539 and modified to provide optimal performance over commercial channel bandwidths.
		See page 46, <i>3212 System Requirements</i> for the NGT™ Transceiver Options that are required for operation with the 3212 HF Data Modem.
		COMPRISING:
	08-06274-001	3212 HF Data Modem
	08-04515-001	Earth Wire, 0.5 m
	30-11208-000	Self Adhesive Rubber Feet (x4)
	15-04146-CD	3212 HF Data Modem User Guide on CDROM (English)
	08-06359-002	Serial D9M-D9F Isol Shield Cable, 2 m
	08-06356-001	NGT™ to 3112/3212 Modem Cable, 1 m



3212 HF DATA MODEM FOR NGT™ WITH 6 M RS232 CABLE

PRODUCT	PART NO.	DESCRIPTION
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MODEM-3212-NGT-6M



3212 HF Data Modem for NGT™ with 6 m RS232 Cable

This configuration consists of a 3212 HF Data Modem, 6 m Serial Cable, and 1 m NGT™ to 3112/3212 Modem Cable.

The 3212 HF Data Modem uses waveforms derived from Military Standard (MIL-STD) waveforms, which are based on STANAG 4539 and modified to provide optimal performance over commercial channel bandwidths.

See page 46, *3212 System Requirements* for the NGT™ Transceiver Options that are required for operation with the 3212 HF Data Modem.

COMPRISING:

- 08-06274-001 3212 HF Data Modem
- 08-04515-001 Earth Wire, 0.5 m
- 30-11208-000 Self Adhesive Rubber Feet (x4)
- 15-04146-CD 3212 HF Data Modem User Guide on CDROM (English)









- 08-06359-006 **Serial D9M-D9F Isol Shield Cable, 6 m**



- 08-06356-006 **NGT™ to 3112/3212 Modem Cable, 6 m**

3212 ACCESSORIES

PRODUCT	PART NO.	DESCRIPTION
	15-00136	Cradle, HF Data Modem Vehicle Mounting
	78-01031	Adaptor, USB to DB-9, Serial USB V1.1 compliant and supports Microsoft Windows™ 2000/ XP/Vista/WIN7.
	60-00098-590	Adaptor, 9-pin D Plug to 25-pin D Socket
	39-79150-080	Ferrite Bead Clamp
	08-06359-002	Cable, Serial D9M-D9F Isol Shield, 2 m
	08-06359-006	Cable, Serial D9M-D9F Isol Shield, 6 m
	67-90800	Cable, Ethernet Crossover CAT-5E, 2 m Red
	67-90801	Cable, Ethernet Crossover CAT-5E, 10 m Red

Continued on the next page






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3212 ACCESSORIES cont.

PRODUCT	PART NO.	DESCRIPTION
	67-90802 67-90803	Cable, Ethernet Straight CAT-5E, 2 m Blue Cable, Ethernet Straight CAT-5E, 10 m Blue
	08-06356-001 08-06356-006	Cable, NGT™ to 3112/3212 Modem, 1 m Cable, NGT™ to 3112/3212 Modem, 6 m
	15-04146-EN	User Guide, 3212 HF Data Modem (English) Printed User Guide for the 3212 HF Data Modem.

3112 HF DATA MODEM (NO CABLES)

PRODUCT	PART NO.	DESCRIPTION
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MODEM-3112-NC



- 08-06270-001
- 08-04515-001
- 30-11208-000
- 15-04147-CD

3112 HF Data Modem (No Cables)

The 3112 HF Data Modem provides reliable and cost-effective HF data communications for organisations operating in remote areas with little or no telecommunication infrastructure.

The 3112 HF Data Modem operates using the most highly advanced Military Standard (MIL-STD) and STANAG waveforms with error-free uncompressed data rates up to 9600 bps.

COMPRISING:

- 3112 HF Data Modem
- Earth Wire, 0.5 m
- Self Adhesive Rubber Feet (x4)
- 3112 HF Data Modem User Guide on CDROM (English)

STANDARD FEATURES:

- Up to 9600 bps error free on-air data rate without compression
- Compatible with MIL-STD-188-110A/B, STANAG 4415, STANAG 4539 & 39 tone parallel modem waveforms
- In-built Automatic Forward Error Correction (FEC)
- Fully programmable via front panel
- Choice of either Ethernet, asynchronous serial port or synchronous serial port for connection to PC
- In-built isolation on all available ports
- Same form factor as Codan NGT™ Transceiver for easy installation and mounting
- Encryption compatible via synchronous serial port

SYSTEM REQUIREMENTS:

The following NGT™ Transceiver Options are required for operation with the 3112 HF Data Modem:

- 15-10541-000 Opt High Speed Data (Factory Fit)
- 15-10514-000 Opt 2.7 kHz BW Second Filter (Factory Fit)
- 15-10469-000 Opt Fan (Factory Fit)

AVAILABLE OPTIONS:

- Support for HF Express™ and STANAG 5066 software, see page 41, *HF Express™ and STANAG 5066 Stack*.

3112 HF DATA MODEM FOR NGT™ WITH 2 M ETHERNET

PRODUCT	PART NO.	DESCRIPTION
MODEM-3112-NGT-ETH-2M		<p>3112 HF Data Modem for NGT™ with 2 m Ethernet Cable</p> <p>This configuration consists of a 3112 HF Data Modem, Ferrite Bead Clamp, 2 m Ethernet Cables, 1 m NGT™ Junction Box to 3112 Modem Cable, and Codan HF Express™ including STANAG 5066 Stack.</p> <p>The 3112 HF Data Modem operates using the most highly advanced Military Standard (MIL-STD) and STANAG waveforms with error-free uncompressed data rates up to 9600 bps.</p> <p>See page 51, <i>3112 System Requirements</i> for the NGT™ Transceiver Options that are required for operation with the 3112 HF Data Modem.</p> <p>COMPRISING:</p> <p>08-06270-001 3112 HF Data Modem 08-04515-001 Earth Wire, 0.5 m 30-11208-000 Self Adhesive Rubber Feet (x4) 15-04147-CD 3112 HF Data Modem User Guide on CDROM (English)</p> <p>39-79150-080 Ferrite Bead Clamp</p> <p>67-90800 Ethernet Crossover CAT-5E Cable, 2 m Red</p> <p>67-90802 Ethernet Straight CAT-5E Cable, 2 m Blue</p> <p>08-06356-001 NGT™ to 3112/3212 Modem Cable, 1 m</p> <p>15-04155-EN Codan HF Express™ and STANAG 5066 Stack (English)</p>
		
		
		
		
		
		



3112 HF DATA MODEM FOR NGT™ WITH 10 M ETHERNET

PRODUCT	PART NO.	DESCRIPTION
		<p>3112 HF Data Modem for NGT™ with 10 m Ethernet Cable</p> <p>This configuration consists of a 3112 HF Data Modem, Ferrite Bead Clamp, 10 m Ethernet Crossover and Straight CAT-5E Cables, 6 m NGT™ Junction Box to 3112 Modem Cable, and Codan HF Express including STANAG 5066 Stack.</p> <p>The 3112 HF Data Modem operates using the most highly advanced Military Standard (MIL-STD) and STANAG waveforms with error-free uncompressed data rates up to 9600 bps.</p> <p>See page 51, <i>3112 System Requirements</i> for the NGT™ Transceiver Options that are required for operation with the 3112 HF Data Modem.</p> <p>COMPRISING:</p>
	08-06270-001	3112 HF Data Modem
	08-04515-001	Earth Wire, 0.5 m
	30-11208-000	Self Adhesive Rubber Feet (x4)
	15-04147-CD	3112 HF Data Modem User Guide on CDROM (English)
	39-79150-080	Ferrite Bead Clamp
		
67-90801	Ethernet Crossover CAT-5E Cable, 10 m Red	
		
67-90803	Ethernet Straight CAT-5E Cable, 10 m Blue	
		
08-06356-006	NGT™ to 3112/3212 Modem Cable, 6 m	
		
15-04155-EN	Codan HF Express™ and STANAG 5066 Stack (English)	
		



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3112 HF DATA MODEM FOR NGT™ WITH 2 M SYNCHRONOUS

PRODUCT	PART NO.	DESCRIPTION
		<p>3112 HF Data Modem for NGT™ with 2 m Synchronous Cable</p> <p>This configuration consists of a 3112 HF Data Modem, Sealevel PCI Synchronous Serial Card, 2 m 25-way to 25-way Serial Cable, 2 m 9-way to 9-way Crossover Cable, 1 m NGT™ Junction Box to 3112 Modem Cable, and Codan HF Express™ including STANAG 5066 Stack.</p> <p>The 3112 HF Data Modem operates using the most highly advanced Military Standard (MIL-STD) and STANAG waveforms with error-free uncompressed data rates up to 9600 bps.</p> <p>See page 51, <i>3112 System Requirements</i> for the NGT™ Transceiver Options that are required for operation with the 3112 HF Data Modem.</p> <p>COMPRISING:</p> <ul style="list-style-type: none"> 3112 HF Data Modem Earth Wire, 0.5 m Self Adhesive Rubber Feet (x4) 3112 HF Data Modem User Guide on CDROM (English) <p>Sealevel PCI Synchronous Serial Card</p>
	08-06270-001	3112 HF Data Modem
	08-04515-001	Earth Wire, 0.5 m
	30-11208-000	Self Adhesive Rubber Feet (x4)
	15-04147-CD	3112 HF Data Modem User Guide on CDROM (English)
	78-16042	Sealevel PCI Synchronous Serial Card
		
	08-06361-002	Serial 25-way to 25-way Cable, 2 m
		
	08-06360-002	9-way to 9-way Serial Cable, 2 m
		
	08-06356-001	NGT™ to 3112/3212 Modem Cable, 1 m
		
	15-04155-EN	Codan HF Express™ and STANAG 5066 Stack (English)
		



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3112 ACCESSORIES

PRODUCT	PART NO.	DESCRIPTION
	15-00136	Cradle, HF Data Modem Vehicle Mounting
	78-01031	Adaptor, USB to DB-9, Serial USB V1.1 compliant and supports Microsoft Windows™ 2000/ XP/Vista/WIN7.
	60-00098-590	Adaptor, 9-pin D Plug to 25-pin D Socket
	39-79150-080	Ferrite Bead Clamp
	78-16042	Sealevel PCI Synchronous Serial Card
	08-06360-002	Cable, 9-way to 9-way Serial, 2 m
	08-06360-006	Cable, 9-way to 9-way Serial, 6 m
	08-06361-002	Cable, Serial 25-way to 25-way, 2 m
	08-06361-006	Cable, Serial 25-way to 25-way, 6 m
	67-90800	Cable, Ethernet Crossover CAT-5E, 2 m Red
	67-90801	Cable, Ethernet Crossover CAT-5E, 10 m Red

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3112 ACCESSORIES cont.

PRODUCT	PART NO.	DESCRIPTION
	67-90802	Cable, Ethernet Straight CAT-5E, 2 m Blue
	67-90803	Cable, Ethernet Straight CAT-5E, 10 m Blue
	08-06356-001	Cable, NGT™ to 3112/3212 Modem, 1 m
	08-06356-006	Cable, NGT™ to 3112/3212 Modem, 6 m
	15-04147-EN	User Guide, HF Data Modem 3112(English) Printed User Guide for the 3112 HF Data Modem.



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HAL FAX

PRODUCT	PART NO.	DESCRIPTION
	15-00770	<p>HAL FAX</p> <p>The HAL FAX sends facsimiles without the need for telephone or satellite communications. You can connect the HAL FAX directly to your Codan NGT™ Transceiver to send faxes. Faxes can be sent to other remote stations at the press of a few buttons. A page of business correspondence can be sent in approximately 2 to 10 minutes depending on HF channel conditions.</p> <p>COMPRISING:</p> <ul style="list-style-type: none">• Interface cables to PC and NGT™ Transceiver• Installation Instructions <p>STANDARD FEATURES:</p> <ul style="list-style-type: none">• Automatic Group 3 fax operation• Does not involve the use of a computer• Robust error-free data transmission with forward error correction• 12 V DC operation <p>NOTE:</p> <p>The HAL FAX-4100 is designed to operate with a standard Group 3 fax machine, however due to technical variations among manufacturers, Codan cannot guarantee correct operation with ALL fax machines.</p>



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High Power Amplifiers

3061 500 W POWER AMPLIFIER

PRODUCT	PART NO.	DESCRIPTION
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HIGH-PWR-500



- 08-05974-001
- 08-06067-001
- 15-10504
- 05-06374
- 08-01503-002
- 08-05956-001
- 15-04131-EN

- 67-90308

3061 500 W Power Amplifier

A reliable and affordable high power solution for voice and data communication.

COMPRISING:

- 3061 500 W Power Amplifier
- 3061 500 W Power Supply Unit
- Opt External ALC (Retro Fit)
- Earth Braid, 1.5 m
- Coaxial Assembly Cable, 2 m
- High Power Amplifier Controller Cable
- High Power Amplifiers 3061/3062 Reference Manual (see page 141, *Language Support* for translations of this guide)
- Power IEC Cable, 2 m (for cable options, see page 60, *3061 Accessories*)

NOTE:

- Specify the mains cable (AU, EU, UK or US) at the time of ordering the 3061 Power Amplifier and Power Supply Unit.
- The 3061 Power Amplifier is suitable for use with NGT™ SR, SRx, ASR and MR systems.
- Order Option External ALC (Factory Fit), part number 15-10504-000, when purchasing the power amplifier with an NGT™ Transceiver.
- Ensure the antenna used is suitable for 500 W operation.
- The Power Amplifier and Power Supply Unit are each 5RU in height and will fit a standard 19" wide rack with depth of 400 mm or greater.

STANDARD FEATURES:

- 500 W PEP/300 W average output power
- 100% continuous mode
- 100–270 V AC 50/60 Hz supply voltage
- Fully protected against all load conditions
- Fan forced cooling with thermostatically controlled fans
- 125 W PEP in bypass mode
- 19" rack mount (5RU + 5RU)
- Interface cables for NGT™ Transceiver (coaxial and control cables)



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High Power Amplifiers

3061 ACCESSORIES

PRODUCT	PART NO.	DESCRIPTION
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Standard Rack Configurations

Standard rack configurations are 27RU free standing 19" rack cabinets. They are supplied preassembled and fitted with a range of mounting trays and panels to suit the equipment as indicated.

Radio equipment is packed separately to the rack unit to prevent damage in transit.

For rack options, see pages 97 and 98, *Standard Rack Configurations*.

NOTE:

This is a typical high power rack configuration. For illustrative purposes only.



67-90305

Cable, 3C Blk Mld IEC AUS, 2 m



67-90306

Cable, 3C Blk Mld IEC UK, 2 m



67-90307

Cable, 3C Blk Mld IEC US, 2 m



67-90308

Cable, 3C Blk Mld IEC EU, 2 m



08-05920-001

Cable, DC Extension, 1 m

NOTE:

Required for the transceiver when it is rack mounted.



05-06374

Earth Braid, 1.5 m



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High Power Amplifiers

3062 1 kW POWER AMPLIFIER

PRODUCT	PART NO.	DESCRIPTION
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HIGH-PWR-1000



- 08-05975-001
- 08-06102-001
- 15-10504
- 05-06374
- 08-01503-002
- 08-05956-001
- 15-04131-EN

- 67-90309

3062 1 kW Power Amplifier

A reliable and affordable high power solution for voice and data communication.

COMPRISING:

- 3062 1 kW Power Amplifier
- 3062 1 kW Power Supply Unit
- Opt External ALC (Retro Fit)
- Earth Braid, 1.5 m
- Coaxial Assembly Cable, 2 m
- High Power Amplifier Controller Cable
- High Power Amplifiers 3061/3062 Reference Manual (see page 141, *Language Support* for translations of this guide)
- Power IEC 320 Cable, 2 m (for cable options, see page 62, *3062 Accessories*)

NOTE:

- Specify the mains cable (AU, EU, UK or US) at the time of ordering the 3062 Power Amplifier and Power Supply Unit.
- The 3062 Power Amplifier is suitable for use with NGT™ SR, SRx, ASR and MR systems.
- Order Option External ALC (Factory Fit), part number 15-10504-000, when purchasing the power amplifier with an NGT™ Transceiver.
- Ensure the antenna used is suitable for 1 kW operation.
- The Power Amplifier and Power Supply Unit are each 5RU in height and will fit a standard 19" wide rack with depth of 400 mm or greater.

STANDARD FEATURES:

- 1 kW PEP/600 W average output power
- 100% continuous mode
- 100–270 V AC 50/60 Hz supply voltage
- Fully protected against all load conditions
- Fan forced cooling with thermostatically controlled fans
- 125 W PEP in bypass mode
- 19" rack mount (5RU + 5RU)
- Interface cables for NGT™ Transceiver (coaxial and control cables)



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HF RADIO COMMUNICATIONS

High Power Amplifiers

3062 ACCESSORIES

PRODUCT	PART NO.	DESCRIPTION
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Standard Rack Configurations

Standard rack configurations are 27RU free standing 19" rack cabinets. They are supplied preassembled and fitted with a range of mounting trays and panels to suit the equipment as indicated.

Radio equipment is packed separately to the rack unit to prevent damage in transit.

For rack options, see pages 97 and 98, *Standard Rack Configurations*.

NOTE:

This is a typical high power rack configuration. For illustrative purposes only.



67-90309

Cable, 3C Blk Mld IEC 320-UK, 2 m

NOTE:

This is the only mains cable available for use with the 3062 1 kW Power Amplifier. If required for use in countries other than the UK, the cable will need to be reterminated accordingly.



08-05920-001

Cable, DC Extension, 1 m

NOTE:


Required for the transceiver when it is rack mounted.






05-06374

Earth Braid, 1.5 m

CROSSPATCH™ FOR NGT™

PRODUCT	PART NO.	DESCRIPTION
XPATCH-NGT 		3031 Crosspatch™ for NGT™ Codan's leading edge 3031 Crosspatch™ enables you to carry 'HF on your belt' using a VHF/UHF radio and a Codan NGT™ Transceiver. It is the practical, effective and affordable solution for any organisation that needs to extend their current HF or VHF/UHF networks.
	08-06730-001 08-06766-001 15-04148-CD 06-02489-EN 15-00145	COMPRISING: <ul style="list-style-type: none"> • 3031 VHF/UHF to HF Crosspatch™ for NGT™ • 3031 to VHF/UHF Transceiver Generic Cable, 2 m • Crosspatch™ 3031 CD Package (English) • Crosspatch™ 3031 Quick Reference Cards, English (x2) • Crosspatch™ 3031 Installation Kit

CROSSPATCH™ ACCESSORIES

PRODUCT	PART NO.	DESCRIPTION
	08-06766-001	Cable, 3031 to VHF/UHF Transceiver Generic
	06-02489-EN	Quick Reference Card, Crosspatch™ 3031
	15-04148-EN	User Guide, Crosspatch™ 3031 (English) Printed User Guide for the 3031 Crosspatch™.

3033 TELEPHONE INTERCONNECT

PRODUCT	PART NO.	DESCRIPTION
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RTI-3033-NGT



3033 Radio Telephone Interconnect

Codan's telephone interconnect equipment can link into the telephone system enabling you to make or receive telephone calls on your HF transceiver.

Comes with all cables and Reference Manual.

08-06797-001
08-06820-001
08-06819-001
15-04156-CD

COMPRISING:

- 3033 Radio Telephone Interconnect
- 3033 to NGT™ Interface Cable
- 3033 to 3020 Power Supply Cable
- 3033 Radio Telephone Interconnect Reference Manual on CD (English)

STANDARD FEATURES:

- Fully automated and intuitive operation
- Multilingual voice prompts
- Flexible configuration and remote management
- Worldwide compliance (Telephone and EMC)
- Radio user can access public telephone network
- Telephone users can contact radio users
- Designed for extreme conditions


ADDITIONAL FEATURES AVAILABLE THROUGH ATTACHED NGT™ TRANSCEIVER:

- Choice of pre-programmed telephone numbers or free dialling
- Accessible for user with only selective calling capability (non-telcall users)
- Access control to restrict access to individual users, groups of users, and the number of digits that can be dialled



3033 ACCESSORIES

PRODUCT	PART NO.	DESCRIPTION
	08-04146-001	Cable, 6-way Phone
	08-04515-001	Earth Wire, 0.5 m
	67-90800	Cable, Ethernet Crossover CAT-5E, 2 m Red
	67-90801	Cable, Ethernet Crossover CAT-5E, 10 m Red
	67-90802	Cable, Ethernet Straight CAT-5E, 2 m Blue
	67-90803	Cable, Ethernet Straight CAT-5E, 10 m Blue
	15-04156-EN	Reference Manual, 3033 Radio Telephone Interconnect (English) Printed Reference Manual for the 3033 Radio Telephone Interconnect.

GPS TRACKING SOFTWARE

PRODUCT	PART NO.	DESCRIPTION
	78-07003-990	The InterNav-CHF GPS Tracking Software is a computerised map positioning system for up to 100 users. It requires a Windows™ 2000/XP/Vista/WIN7 operating system.
	78-07003-010	Includes: software, user manual and hardware security dongle
	78-07003-025	NOTE:
	78-07003-050	Interface cable must be ordered separately.
	78-07003-100	InterNav-CHF™ GPS Tracking Software – 1 User (Dealer)
		InterNav-CHF™ GPS Tracking Software – 10 User
		InterNav-CHF™ GPS Tracking Software – 25 User
		InterNav-CHF™ GPS Tracking Software – 50 User
		InterNav-CHF™ GPS Tracking Software – 100 User
		Setup
		Three day on-site installation, commissioning and training visit by a Codan engineer.
	78-07004	GPS, Map scanning per A4 page
		Includes: Scanning and registration of maps, chart purchase and copyright fee
		SPECIFY:
		<ul style="list-style-type: none"> • Geographic areas to be mapped • Scale(s) required

GPS ACCESSORIES

PRODUCT	PART NO.	DESCRIPTION
	08-05086-001	Cable, Data Interface, 2 m
		Interface cable for computer control via CICS or GPS Tracking software, and NGT™ Transceivers that have a junction box.
		Cable connects to 9 pin serial port on NGT™ Junction Box.
	08-06380-001	Cable, Serial 6-way to D9F
		Interface cable for computer control via CICS or GPS Tracking software on the NGT™ SRx Transceiver.
		Cable connects to 6 pin serial port on NGT™ RF Unit.




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Transceiver Supplies

3020 TRANSCEIVER SUPPLY

PRODUCT	PART NO.	DESCRIPTION
	78-20022	<p>3020 Transceiver Supply</p> <p>Designed for environments with unreliable and fluctuating mains systems. Suitable for use with either voice or data stations.</p> <p>Nominal input: 100–240 V AC \pm10% (50/60 Hz) Nominal output: 13.8 V DC, 16 A continuous, 20 A peak Mains connection: IEC socket on rear of unit</p>









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HF RADIO COMMUNICATIONS

Transceiver Supplies

3020 ACCESSORIES

PRODUCT	PART NO.	DESCRIPTION
	15-00702	Cable Kit for Float Charge Cable kit for float charging lead-acid storage battery for uninterrupted supply.
	15-00175	3RU Rack-mounting Frame for 3020 NOTE: For additional racking accessories, see page 97, <i>19" Racks & Accessories</i> .
	67-90305	Cable, 3C Blk Mld IEC AUS, 2 m
	67-90306	Cable, 3C Blk Mld IEC UK, 2 m
	67-90307	Cable, 3C Blk Mld IEC US, 2 m
	67-90308	Cable, 3C Blk Mld IEC EU, 2 m

DC-DC VOLTAGE CONVERTER



PRODUCT	PART NO.	DESCRIPTION
	15-00508	Voltage Regulator (24 V to 12 V operation 20 A) Enables the operation of NGT™ series Transceivers in 24/26 V based systems. Protected from faults such as voltage spikes, overload, short circuits and low voltage input. The unit automatically resets once a fault is removed Nominal Input: 24 V DC Nominal Output: 12 V @20 A Efficiency: Greater than 90% at full load



SOLAR POWER SUPPLIES

PRODUCT	PART NO.	DESCRIPTION
	15-00531	<p>Solar Power Supply 40 W</p> <p>Recommended for voice (light duty).</p> <p>COMPRISING:</p> <ul style="list-style-type: none"> • Single 40 W solar panel • Mounting frame complete with anti-bird spikes • Solar battery regulator • Heavy duty twin core cable • Battery lugs
	15-00532	<p>Solar Power Supply 80 W</p> <p>Recommended for voice (heavy duty).</p> <p>COMPRISING:</p> <ul style="list-style-type: none"> • Single 80 W solar panel • Mounting frame complete with anti-bird spikes • Solar battery regulator • Heavy duty twin core cable • Battery lugs
	15-00533	<p>Solar Power Supply 240 W</p> <p>Recommended for fax and data (heavy duty).</p> <p>COMPRISING:</p> <ul style="list-style-type: none"> • Three 80 W solar panels • Mounting frame complete with anti-bird spikes • Solar battery regulator • Heavy duty twin core cable • Battery lugs

SOLAR POWER SUPPLY ACCESSORIES

PRODUCT	PART NO.	DESCRIPTION
	08-05399-001	Cable, Battery Paralleling (+ve)
	08-05399-002	Cable, Battery Paralleling (-ve)






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Transceiver Supplies

BATTERIES

PRODUCT	PART NO.	DESCRIPTION
	65-72000-012	Battery, Lead acid 12 V 90Ah (supplied dry charged) NOTE: This battery is classified as dangerous goods and requires a special permit to air freight.
	65-72003	Battery, 12 V 100Ah Gelcell NOTE: This battery can be air freighted without a permit.
	65-72004	Battery, 12 V 185Ah Gelcell NOTE: This battery can be air freighted without a permit.



9350 AUTOMATIC TUNING WHIP

PRODUCT	PART NO.	DESCRIPTION
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ANT-9350-NC

**9350 Automatic Tuning Whip (No Cables)**

A robust antenna designed for mobile installations requiring flexible, high performance HF communications. It provides fast automated tuning over the entire HF frequency range.

The 9350 is easy to install, and meets MIL-STD-810F for shock and vibration.

COMPRISING:

08-05063-001
08-05140-001
78-23007-003
78-23025
15-04142-EN

- 9350 Main Assembly
- 9350 Spring
- 9350 Fibreglass Whip, 1.6 m
- 9350 Tapered Stainless Steel Whip, 1.2 m
- Automatic Tuning Whip Antenna 9350 Installation Handbook (see page 141, *Language Support* for translations of this handbook)

STANDARD FEATURES:

- 125 W PEP voice or data
- Tuning time typically 2 seconds
- Transmit frequency range 2–30 MHz depending on antenna
- Receive frequency range 250 kHz–30 MHz

AVAILABLE ACCESSORIES:

See page 73, *9350 Accessories* for cables to connect the 9350 Antenna to an NGT™ Transceiver.



9350 AUTOMATIC TUNING WHIP WITH 6 M CABLES

PRODUCT	PART NO.	DESCRIPTION
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ANT-9350-6M



9350 Automatic Tuning Whip with 6 m Cables

A robust antenna designed for mobile installations requiring flexible, high performance HF communications. It provides fast automated tuning over the HF range.

The 9350 is easy to install, and meets MIL-STD-810F for shock and vibration.

NOTE:

Supplied with 6 m cables to connect the 9350 Antenna to an NGT™ Transceiver, see page 73 for additional 9350 accessories.

COMPRISING:

- | | |
|---|---|
| <ul style="list-style-type: none"> 08-05063-001 08-05627-006 08-01503-006 08-05140-001 78-23007-003 78-23025 15-04142-## | <ul style="list-style-type: none"> • 9350 Main Assembly • 9350 to NGT™ Control Cable, 6 m • Coaxial Assembly Cable RG58, 6 m • 9350 Spring • 9350 Fibreglass Whip, 1.6 m • 9350 Tapered Stainless Steel Whip, 1.2 m • Automatic Tuning Whip Antenna 9350 Installation Handbook (see page 141, <i>Language Support</i> for translations of this handbook) |
|---|---|

STANDARD FEATURES:

- 125 W PEP voice or data
- Tuning typically 2 seconds
- Transmit frequency range 2–30 MHz depending on antenna
- Receive frequency range 250 kHz–30 MHz

denotes language version



9350 ACCESSORIES

PRODUCT	PART NO.	DESCRIPTION
	08-05140-001	9350 Spring Strain relief for 9350 Fibreglass Whip.
	78-23007-003	9350 Fibreglass Whip, 1.6 m This is the primary whip normally supplied with the 9350. It is a copper wire encased in a polyurethane covered fibreglass rod. The whip is designed to withstand substantial flexing and rugged conditions. It operates over the transmit frequency range of 2–30 MHz. NOTE: Must be used with the spring (part number 08-05140-001).
	78-23056	9350 Tapered Stainless Steel Whip, 1.65 m This whip enables use over the transmit frequency range of 2–30 MHz and provides a more flexible and less visible alternative to the fibreglass whip. NOTE: Can be used without the spring (part number 08-05140-001).
	78-23025	9350 Tapered Stainless Steel Whip, 1.2 m This whip is designed as an emergency backup to the primary whip (part number 78-23007-003) in case of damage. It is only suitable for operation over a transmit frequency range of 2.5–30 MHz and is less efficient than the primary whip. NOTE: Can be used without the spring (part number 08-05140-001).
	15-00323	NVIS Kit Suits the 9350 Automatic Tuning Whip Antenna for improved short range (0–500 km) near vertical incidence skywave (NVIS) communications over frequency range 2–12 MHz. Includes: two piece whip antenna, angle adaptor, extension riser, tie down cord kit and fitting instructions in a canvas bag
	08-05627-006	Cable, 9350 to NGT™ Control, 6 m
	08-05627-008	Cable, 9350 to NGT™ Control, 8 m
	08-05627-030	Cable, 9350 to NGT™ Control, 30 m
	08-01503-006	Coaxial Assembly Cable RG58, 6 m
	08-01503-008	Coaxial Assembly Cable RG58, 8 m
	08-01503-030	Coaxial Assembly Cable RG58, 30 m



3040 AUTOMATIC TUNING WHIP

PRODUCT	PART NO.	DESCRIPTION
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ANT-3040-NC



3040 Automatic Tuning Whip (No Cables)

The 3040 Automatic Whip Antenna is a low profile, rugged, lightweight unit designed for mobile installations. It provides fast automated tuning across the HF band.

The 3040 is easy to install and meets MIL-STD-810F for shock, immersion, dust and vibration.

- 08-07007-001
- 08-07148-001
- 78-18058
- 78-23085
- 78-23086
- 15-60012

COMPRISING:

- 3040 Main Assembly
- 3040 Spring
- Riser, Fibreglass
- 3040 Fibreglass Whip, 1.6 m
- 3040 Stainless Steel Whip
- 3040 Installation Handbook, c/w antenna connector sealing kit

STANDARD FEATURES:

- 2.5 – 30MHz
- 125W PEP voice or data
- Fast tuning typically < 1sec
- Tune from memory

AVAILABLE ACCESSORIES:

See page 76, *3040 Accessories* for cables and other parts used with the 3040.



3040 AUTOMATIC TUNING WHIP WITH 6 M CABLES

PRODUCT	PART NO.	DESCRIPTION
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ANT-3040-6M



- 08-07007-001
- 08-05627-006
- 08-01503-006
- 08-07148-001
- 78-18058
- 78-23085
- 78-23086
- 15-60012

3040 Automatic Tuning Whip with 6 m Cables

The 3040 Automatic Whip Antenna is a low profile, rugged, lightweight unit designed for mobile installations. It provides fast automated tuning across the HF band.

The 3040 is easy to install and meets MIL-STD-810F for shock, immersion, dust and vibration.

NOTE:

Supplied with 6 m cables to connect the 3040 Antenna to an NGT™ Transceiver. See page 76, *3040 Accessories* for additional 3040 accessories.

COMPRISING:

- 3040 Main Assembly
- 3040 to NGT™ Control Cable, 6 m
- Coaxial Cable RG58, 6 m
- 3040 Spring
- Riser, Fibreglass
- 3040 Fibreglass Whip, 1.6 m
- 3040 Stainless Steel Whip
- 3040 Installation Handbook, c/w antenna connector sealing kit

STANDARD FEATURES:

- 2.5 – 30 MHz
- 125 W PEP voice or data
- Fast tuning typically < 1sec
- Tune from memory


AVAILABLE ACCESSORIES:

See page 76, *3040 Accessories* for cables and other parts used with the 3040.

3040 ACCESSORIES


PRODUCT	PART NO.	DESCRIPTION
	08-07148-001	3040 Spring Flexible mounting for whip antennas.
	78-23086	3040 Stainless Steel Whip A stainless steel whip offered as a more flexible and less visually obstructive alternative to the fibreglass version. The whip is 1.65 m in length.
	78-23085	3040 Fibreglass Whip This is a 1.6 m fibreglass whip and is recommended to be used with the spring and the riser section. In this configuration the antenna will operate over a transmit frequency range of 2.5–30 MHz.
	78-18058	Riser, Fibreglass A 0.85 m fibreglass section used to extend the overall length of the antenna element when using the 1.6 m fibreglass or stainless steel whips to achieve maximum possible frequency range (2.5–30 MHz) and radiation performance.
	78-14010	3040 NVIS Kit Suits the 3040 Automatic Tuning Whip Antenna for improved short range (0–500 km) near vertical incidence skywave communications mode over frequency range 2–15 MHz. Includes: NVIS riser, extension section, NVIS angle adaptor, tie down cord kit, canvas storage bag and fitting instruction card. Rigid mounting adaptor also included for optional full vertical assembly — <i>not</i> for mobile use. NOTE: Whip is not included. Stainless steel whip <i>not</i> recommended for use with NVIS kit.
	08-05627-006	Cable, 9350/3040 to NGT™ Control, 6 m
	08-05627-008	Cable, 9350/3040 to NGT™ Control, 8 m
	08-05627-030	Cable, 9350/3040 to NGT™ Control, 30 m
	08-01503-006	Coaxial Assembly Cable RG58, 6 m
	08-01503-008	Coaxial Assembly Cable RG58, 8 m
	08-01503-030	Coaxial Assembly Cable RG58, 30 m



BASE WHIP		
PRODUCT	PART NO.	DESCRIPTION
		<p>The Base Whip Antenna is 9.5 m (31 ft) in height, and requires an automatic antenna tuner. It is mounted vertically on a suitable ground plane or metal roof. An earth mat may be required where a suitable ground plane cannot be found.</p> <p>This antenna may be used where space is restricted and omnidirectional coverage is required.</p> <p>Antenna rated to 500 W PEP. See page 82, <i>Tuners</i> for available tuner options.</p>
	15-00406-001	<p>Ant, Base Whip, Ground Mounting (9.5 m/31 ft Unloaded) Comes complete with ground plate base.</p> <p>NOTE:</p> <ul style="list-style-type: none"> • Coaxial cable and tuner are not supplied. • Requires earth mat for ground installations.
	15-00406-002	<p>Ant, Base Whip, Roof Mounting (9.5 m/31 ft Unloaded) Comes complete with roof plate base.</p> <p>NOTE:</p> <ul style="list-style-type: none"> • Coaxial cable and tuner are not supplied. • Requires radial ground plane for roof installations. • Lightning protection is recommended for fixed base station installations, see page 86, <i>Lightning Protection</i>.

BASE WHIP ACCESSORIES		
PRODUCT	PART NO.	DESCRIPTION
Image Not Available	15-00158	Earth Mat for Base Whip Antenna, Ground Installations
Image Not Available	15-00159	Radial Ground Plane for Base Whip Antenna, Roof Installations



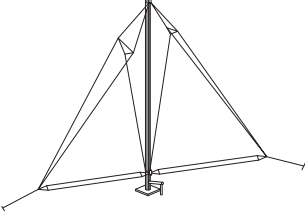
TRAVELLING WAVE DIPOLE		
PRODUCT	PART NO.	DESCRIPTION
		<p>The Travelling Wave Dipole Antenna is efficient for short to medium distance communications. Its radiation patterns are generally omni-directional, resulting in a consistent coverage over the frequency range. Designed for 100% duty cycle voice and data operation at the rated power level.</p> <p>This antenna requires a substantial cleared area at ground level for installation, and is more suitable for permanent fixed site installations. Refer to the antenna data sheet for more details.</p> <p>Includes: pulleys, halyards and installation hardware</p> <p>NOTE:</p> <ul style="list-style-type: none">• Coaxial cable and mast not supplied. For coaxial cables, see page 85, <i>Coaxial Cables</i>. For masts, see page 83, <i>Antenna Masts</i>.• Lightning protection is recommended for fixed base station installations, see page 86, <i>Lightning Protection</i>.
	78-01248	Ant, Travelling Wave Dipole (2–30 MHz, 125 W PEP)
	78-01249	Ant, Travelling Wave Dipole (3–30 MHz, 125 W PEP)
	78-01250	Ant, Travelling Wave Dipole (2–30 MHz, 1000 W PEP)
	78-01251	Ant, Travelling Wave Dipole (3–30 MHz, 1000 W PEP)



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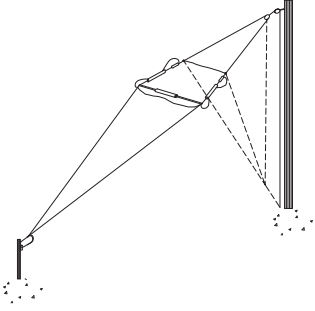
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Antennas

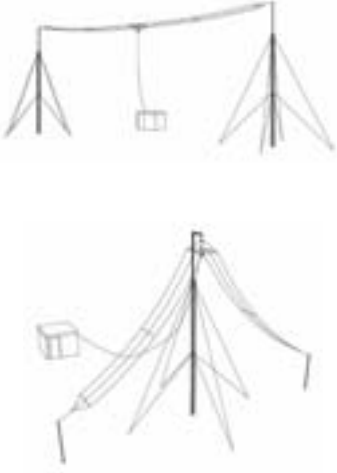
DELTA		
PRODUCT	PART NO.	DESCRIPTION
		<p>The Delta Antenna is a high performance, omnidirectional broadband antenna that performs well over very short to medium distances. Designed for 100% duty cycle voice and data operation at the rated power level.</p> <p>This antenna requires a substantial cleared area at ground level for installation, and is more suitable for permanent fixed site installations. Refer to the antenna data sheet for more details.</p>
	78-01022	<p>Ant, Delta (2–30 MHz, 125 W)</p> <p>NOTE:</p> <ul style="list-style-type: none">• Coaxial cable, mast and gibbet not supplied. For coaxial cables, see page 85, <i>Coaxial Cables</i>. For masts, see page 83, <i>Antenna Masts</i>.• Lightning protection is recommended for fixed base station installations, see page 86, <i>Lightning Protection</i>.
	78-01247	<p>Ant, Delta (2–30 MHz, 1000 W PEP)</p> <p>NOTE:</p> <ul style="list-style-type: none">• Coaxial cable, mast and gibbet not supplied. For coaxial cables, see page 85, <i>Coaxial Cables</i>. For masts, see page 83, <i>Antenna Masts</i>.• Lightning protection is recommended for fixed base station installations, see page 86, <i>Lightning Protection</i>.



SEMI-DELTA

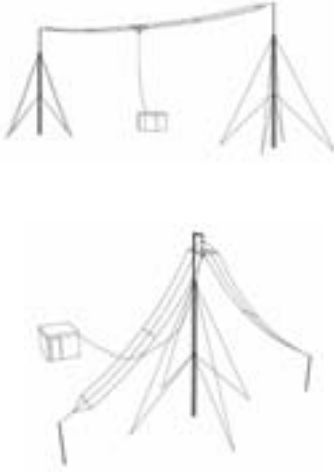
PRODUCT	PART NO.	DESCRIPTION
		<p>The Semi-delta Antenna is a high performance, omnidirectional broadband antenna that performs well over short to medium distances.</p> <p>This antenna requires a large cleared area at ground level for installation, and is more suitable for permanent fixed site installations.</p> <p>NOTE:</p> <ul style="list-style-type: none"> • Pay attention to antenna counterpoise, especially when mounted on rooftop locations or at ground level where the soil conditions are poor. • Where soil conditions are very poor, an additional counterpoise kit may be required. • Coaxial cable and mast not supplied. For coaxial cables, see page 85, <i>Coaxial Cables</i>. For masts, see page 83, <i>Antenna Masts</i>. • Lightning protection is recommended for fixed base station installations, see page 86, <i>Lightning Protection</i>.
	78-01012	Ant, Semi-delta (2–30 MHz, 125 W PEP) Includes: pulleys, halyards, basic counterpoise and installation hardware
	78-01246	Ant, Semi-delta (2–30 MHz, 1000 W PEP)

2-WIRE BROADBAND DIPOLE


PRODUCT	PART NO.	DESCRIPTION
		<p>The 2-wire Broadband Dipole Antenna is a 2-wire terminated folded dipole antenna designed for broadband operation. Designed for 100% duty cycle voice and data operation at the rated power level.</p> <p>The antenna is easy to install and can be mounted horizontally between two support systems, or as an inverted “V” using a single central support mast. A large cleared area at ground level is required for installation. Refer to the antenna data sheet for more details.</p> <p>Includes: mounting arm for inverted “V” configuration, stainless steel antenna wiring, pulleys, rope, halyard, UHF coaxial connector and detailed erection details</p> <p>NOTE:</p> <ul style="list-style-type: none"> • Coaxial cable and mast not supplied. For coaxial cables, see page 85, <i>Coaxial Cables</i>. For masts, see page 83, <i>Antenna Masts</i>. • Lightning protection is recommended for fixed base station installations, see page 86, <i>Lightning Protection</i>.
		15-00411-005
	15-00411-010	Ant, Terminated Folded Dipole (2–30 MHz, 1000 W PEP)





3-WIRE BROADBAND DIPOLE

PRODUCT	PART NO.	DESCRIPTION
	15-00463-001	<p>The 3-wire Broadband Dipole Antenna is a 3-wire terminated folded dipole antenna designed for broadband operation. Designed for 100% duty cycle voice and data operation at the rated power level.</p> <p>The antenna is easy to install and can be mounted horizontally between two support systems, or as an inverted "V" using a single central support mast. A large cleared area at ground level is required for installation. Refer to the antenna data sheet for more details.</p> <p>Includes: mounting arm for inverted "V" configuration, stainless steel antenna wiring, pulleys, rope, halyard, UHF coaxial connector and detailed erection details</p> <p>NOTE:</p> <ul style="list-style-type: none"> • Coaxial cable and mast not supplied. For coaxial cables, see page 85, <i>Coaxial Cables</i>. For masts, see page 83, <i>Antenna Masts</i>. • Lightning protection is recommended for fixed base station installations, see page 86, <i>Lightning Protection</i>.
		Ant, Multi-wire Broadband Dipole (2–30 MHz, 125 W PEP)

TUNED LONG WIRE

PRODUCT	PART NO.	DESCRIPTION
	15-00403	<p>Ant, Tuned Long Wire (2–30 MHz)</p> <p>This antenna exhibits a good combination of space efficiency and broadband capability. It is designed to be used with an antenna tuner.</p> <p>A suitable antenna where space is limited.</p> <p>NOTE:</p> <ul style="list-style-type: none"> • Automatic antenna tuner is required, see page 82, <i>Tuners</i>. • Coaxial cable and support mast not supplied. For coaxial cables, see page 85, <i>Coaxial Cables</i>. For masts, see page 83, <i>Antenna Masts</i>. • Lightning protection is recommended for fixed base station installations, see page 86, <i>Lightning Protection</i>.

TUNERS


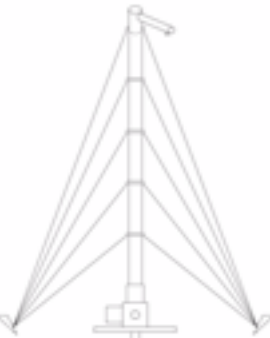
PRODUCT	PART NO.	DESCRIPTION
	08-04835-013	<p>Tuner, 9103 Automatic Antenna with 10 m Cables Designed to suit NGT™ series Transceivers. Rated to 150 W PEP voice or data.</p> <p>Includes: mounting bracket, control cable (10 m) to suit NGT™ Transceiver, coaxial cable (10 m) and installation/operation handbook</p>
	08-04835-015	<p>Tuner, 9103 Automatic Antenna with 30 m Cables Designed to suit NGT™ series Transceivers. Rated to 150 W PEP voice or data.</p> <p>Includes: mounting bracket, control cable (30 m) to suit NGT™ Transceiver, coaxial cable (30 m) and installation/operation handbook</p>
	08-06739-001	<p>Tuner, SG235C 500 W PEP Designed to suit 500 W high power NGT™ systems for voice and data.</p> <p>Includes: mounting bracket and installation/operation handbook</p> <p>NOTE:</p> <ul style="list-style-type: none"> • Maximum power input in data mode 300 W average. • Control and coaxial cables are <i>not</i> supplied. For the control cable, see <i>Tuner Accessories</i> below. For coaxial cables, see page 85, <i>Coaxial Cables</i>.

TUNER ACCESSORIES

PRODUCT	PART NO.	DESCRIPTION
	30-37601-002	<p>Copper Earth Strip 50 mm x 0.46 mm (26 gauge) supplied in units of 1 m</p>
	08-06740-030	<p>Cable, SG235C Control, 30 m</p>
	08-01503-030	<p>Cable, Coaxial Assembly Fitted with UHF Type Weatherproof Connectors</p> <p>NOTE: For coaxial cables, see page 85, <i>Coaxial Cables</i>.</p>



ANTENNA MASTS

PRODUCT	PART NO.	DESCRIPTION
	15-00422-012	Mast, Guyed 12 m with Erection Kit Four section 12 m mast. Suitable for supporting Travelling Wave Dipole, Semi-delta, Full Delta, Tuned Long Wire, and 2-wire and 3-wire Broadband Dipole antennas. Guyed tubular aluminium mast with ground plate, halyard pulley, RF transparent guy kit, full erection kit, mast head gibbet and erection instructions. Designed to withstand wind speeds up to 144 kph (40 m/s) in clear air with head loads up to 12 kg, subject to ground anchoring. NOTE: Mast suitable for air freight.
	15-00422-015	Mast, Guyed 15 m with Erection Kit Five section 15 m mast. Suitable for supporting Travelling Wave Dipole, Semi-delta, Full Delta, Tuned Long Wire, and 2-wire and 3-wire Broadband Dipole antennas. Guyed tubular aluminium mast with ground plate, halyard pulley, RF transparent guy kit, full erection kit, mast head gibbet and erection instructions. Designed to withstand wind speeds up to 144 kph (40 m/s) in clear air with head loads up to 12 kg, subject to ground anchoring. NOTE: Mast suitable for air freight.

NOTE: Pictures for illustrative purposes only.



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Antennas

ANTENNA MASTS

PRODUCT	PART NO.	DESCRIPTION
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15-60013

Mast, Guyed 10 m, Lightweight Mast

Lightweight guyed aluminium mast, supplied with mast head gibbet, halyard, and all hardware for ground mounting.



Suitable for use with 2-wire (Code 411) and 3-wire (Code 463) Broadband Dipole antennas.



NOTE: Pictures for illustrative purposes only.



COAXIAL CABLES TYPE RG58

PRODUCT	PART NO.	DESCRIPTION
	08-01503-002	Cable, Coaxial Assembly (RG58) Fitted with UHF Type Weatherproof Connectors, 2 m
	08-01503-006	Cable, Coaxial Assembly (RG58) Fitted with UHF Type Weatherproof Connectors, 6 m
	08-01503-008	Cable, Coaxial Assembly (RG58) Fitted with UHF Type Weatherproof Connectors, 8 m
	08-01503-030	Cable, Coaxial Assembly (RG58) Fitted with UHF Type Weatherproof Connectors, 30 m
	60-11163-221	Plug, UHF (RG58) W/proof Free

COAXIAL CABLES TYPE RG213

PRODUCT	PART NO.	DESCRIPTION
	08-04971-010	Cable, Coaxial Assembly (RG213) Fitted with UHF Type Weatherproof Connectors, 10 m
	08-04971-030	Cable, Coaxial Assembly (RG213) Fitted with UHF Type Weatherproof Connectors, 30 m
	08-04971-050	Cable, Coaxial Assembly (RG213) Fitted with UHF Type Weatherproof Connectors, 50 m
	08-04971-100	Cable, Coaxial Assembly (RG213) Fitted with UHF Type Weatherproof Connectors, 100 m
	08-01233	Strain Relief Reduces strain on connector when supporting RG213 cable assemblies.
	30-38000-002	Shackle Used to attach strain relief to the antenna.
	60-11163-204	Plug, UHF (RG213) W/proof Free






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Antennas

LIGHTNING PROTECTION

PRODUCT	PART NO.	DESCRIPTION
	15-00464	Lightning Arrestor Self-resetting spark gap arrestor. Requires a good earth to divert energy from a nearby lightning strike. NOTE: Extra length of coaxial cable or extra UHF plug may need to be ordered to fit lightning arrestor into RF feed system.
	30-37601-002	Copper Earth Strip 50 mm x 0.46 mm (26 gauge) supplied in units of 1 m
	15-00163	Earth Stake 1.8 m long x 13 mm with clamp for earth wire/strip.



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HF RADIO COMMUNICATIONS

Remote Control

NGT™ REMOTE CONTROL EQUIPMENT—2-WIRE

PRODUCT	PART NO.	DESCRIPTION
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NGT™ Remote 2-wire Interface

An NGT™ Remote Control System is the smart and easy way to achieve clear and reliable communications when your transceiver site is located in an area affected by electrical interference. The NGT™ HF transceiver is relocated to a 'quiet' area, while the transceiver is fully operated from a convenient location, such as an office or communication centre.

To create a remote control system, an NGT™ Base Station configuration is extended with a 3030 NGT™ Remote Interface (NRI), which converts both audio and control into RS232 signals. A line modem is required for 2-wire leased line operation.

NOTE:

- Remote control configurations can only be used with NGT™ SR and ASR Transceivers.
- Only used with the 3012 HF Data Modem.
- Two NRIs are required for a complete remote control system.
- Specify the mains connector type (AU, EU, UK or US), see page 88, *NGT™ Remote Control Accessories*.

COMPRISING:

Control Site

- 3030 NGT™ Remote Interface
- NGT™ Remote Control Earth Kit for the Control Site
- Leased Line Modem
- Power Supply Unit, 90 to 264 V AC
- 6-way Modular Wall Mounting Socket
- 6-way Phone Cable
- NRI to Line Modem Cable
- NRI to Line Modem Power Cable
- 2C IEC C7 Cable, 2 m (for cable options, see page 88, *NGT™ Remote Control Accessories*)
- Self Adhesive Rubber Feet (x4)
- Remote Control NGT™ Systems Reference Manual (see page 141, *Language Support* for translations of this manual)

Transceiver Site

- 3030 NGT™ Remote Interface
- NGT™ Remote Control Earth Kit for the Remote Site
- Leased Line Modem
- 6-way Modular Wall Mounting Socket
- CIB Interface Cable, 0.5 m
- 6-way Phone Cable
- NRI to Line Modem Cable
- Power Cable to RF Unit and NRI
- NRI to Line Modem Power Cable
- Self Adhesive Rubber Feet (x4)

REMOTE-NRI-CTRL-2W



- 08-05864-001
- 15-00135
- 78-13016
- 78-16019
- 60-00063-501
- 08-04146-001
- 08-05858-001
- 08-05859-001
- 67-90203

- 30-11208-000
- 15-04102-EN

REMOTE-NRI-TCVR-2W



- 08-05864-001
- 15-00134
- 78-13016
- 60-00063-501
- 08-05610-001
- 08-04146-001
- 08-05858-001
- 08-05868-001
- 08-05859-001
- 30-11208-000



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HF RADIO COMMUNICATIONS

Remote Control

NGT™ REMOTE CONTROL ACCESSORIES

PRODUCT	PART NO.	DESCRIPTION
	08-05920-001	Cable, DC Extension, 1 m The extra length this cable provides may be needed to connect the power supply to the RF Unit in rack configurations.
	08-05610-001	Cable, CIB Interface, 0.5 m
	08-05610-002	Cable, CIB Interface, 2 m
	08-05610-006	Cable, CIB Interface, 6 m
	08-05610-030	Cable, CIB Interface, 30 m
	08-05086-001	Cable, Data Interface, 2 m
	08-05086-006	Cable, Data Interface, 6 m
	67-90200	Cable, 2C IEC C7 AUS, 2 m
	67-90201	Cable, 2C IEC C7 UK, 2 m
	67-90202	Cable, 2C IEC C7 US, 2 m
	67-90203	Cable, 2C IEC C7 EU, 2 m
	15-00172-001	NGT™ Universal 19" Rack-mounting Tray 3RU with Blank Front Panel Suitable for a 3030 NRI.

**TIP100 NGT™ IP REMOTE CONTROL (VOICE ONLY)**

PRODUCT	PART NO.	DESCRIPTION
TIP100-VOICE		TIP100 Remote System (Voice Only)
		<p>The TIP100 device enables any model of NGT™ Transceiver to be controlled remotely via IP based connection e.g. LAN, WAN or Internet.</p> <p>A TIP100 unit is located at each end of the link and creates a virtual connection between the transceiver handset and RF unit or junction box.</p> <p>This version does not support connection of an external HF data modem.</p> <p>COMPRISING:</p> <ul style="list-style-type: none">• TIP100 Handset Kit• TIP100 Transceiver Kit <p>STANDARD FEATURES:</p> <ul style="list-style-type: none">• Full support of transceiver handset controls• Easy configuration using integrated web server and voice announcements• Standard RJ45 10/100 Mbit Ethernet (Auto-detect) interface• 12 V DC operation
	78-20043 78-20044	



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Remote Control

TIP100 NGT™ IP REMOTE CONTROL (VOICE & DATA)

PRODUCT	PART NO.	DESCRIPTION
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TIP100-VOICE-DATA



78-20045

78-20046

TIP100 Remote System (Voice & Data)

The TIP100 device enables any model of NGT™ Transceiver to be controlled remotely via IP based connection e.g. LAN, WAN or Internet.

A TIP100 unit is located at each end of the link and creates a virtual connection between the transceiver handset and RF unit or junction box.

This version supports the connection of an external HF data modem at the RF Unit and a PC connection at the Handset location.

COMPRISING:

- TIP100 Handset Kit with data
- TIP100 Transceiver Kit with data

STANDARD FEATURES:

- Full support of transceiver handset controls
- Supports connection of external Codan HF data modems – contact Codan for advice about specific models that are supported
- Easy configuration using integrated web server and voice announcements
- Standard RJ45 10/100 Mbit Ethernet (Auto-detect) interface
- 12 V DC operation

NGT™ SPLIT-SITE EQUIPMENT — 2-WIRE

PRODUCT	PART NO.	DESCRIPTION
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NGT™ Split-site System — 2-wire Interface

An NGT™ Split-site Remote System consists of two or three sites. Each site consists of the split-site equipment listed below, in addition to the transceiver equipment.

An NGT™ Split-site Remote System can be used to split control, transmit and receive functions of an NGT™ SR or ASR Transceiver system into one of the following basic configurations:

- NGT™ remote transmitter and remote receiver system (3 sites)
- NGT™ remote transceiver system (2 sites)
- NGT™ local transmitter, remote receiver system (2 sites)

The system operates with a standard 2-wire interface.

Contact Codan for detailed system configurations.

NOTE:

- Split-site configurations can only be used with NGT™ SR and ASR Transceivers, and requires one transceiver at each site.
- All NGT™ SR and ASR Transceiver functions available.
- Existing transceivers may require modifications for use in split-site configurations. Contact Codan for details.
- Suitable for use with the 3012 HF Data Modem.

COMPRISING:

Control Site

- Split-site Interface Control Junction Box
- 8571 NGT™ Remote Control Interface
- Earth Wire, 0.5 m (x5)
- CIB Interface Cable, 0.5 m
- Split-site Power Adaptor Cable
- 8571 NGT™ Interface Controller Cable
- Opt 2 W, 2-wire (Factory Fit) (x2)
- NGT™ Audio Mute Modification
- Split-site Remote Control NGT™ Systems Reference Manual (English)

NOTE:

Control Site can only be used for transmitting.

Continued on the next page

REMOTE-SPLIT-CTRL-8571-2W



- 08-05630-005
- 08-05994-001
- 08-04515-001
- 08-05610-001
- 08-05989-001
- 08-05990-001
- 15-10509-000
- 15-30067
- 15-04125-EN



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Remote Control

NGT™ SPLIT-SITE EQUIPMENT—2-WIRE cont.

PRODUCT	PART NO.	DESCRIPTION
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REMOTE-SPLIT-RX-8571-2W



- 08-05630-005
- 08-05994-001
- 08-04515-001
- 08-05610-001
- 08-05989-001
- 08-05990-001
- 15-10509-000
- 15-30068

Receive Site

COMPRISING

- Split-site Interface Control Junction Box
- 8571 NGT™ Remote Control Interface
- Earth Wire, 0.5 m (x5)
- CIB Interface Cable, 0.5 m
- Split-site Power Adaptor Cable
- 8571 NGT™ Interface Controller Cable
- Opt 2 W, 2-wire (Factory Fit)
- NGT™ Disable PA Modification

NOTE:

Receive Site can only be used for receiving, transmitter is disabled.

REMOTE-SPLIT-TX-8571-2W



- 08-05630-005
- 08-05994-001
- 08-04515-001
- 08-05610-001
- 08-05989-001
- 08-05990-001
- 15-10509-000

Transmit Site

COMPRISING

- Split-site Interface Control Junction Box
- 8571 NGT™ Remote Control Interface
- Earth Wire, 0.5 m (x5)
- CIB Interface Cable, 0.5 m
- Split-site Power Adaptor Cable
- 8571 NGT™ Interface Controller Cable
- Opt 2 W, 2-wire (Factory Fit)

NOTE:

Transmit Site is configured for transmitting only but can be switched to either receive, or transmit and receive.

REMOTE-SPLIT-TXRX-8571-2W



- 08-05630-005
- 08-05994-001
- 08-04515-001
- 08-05610-001
- 08-05989-001
- 08-05990-001
- 15-10509-000

Transmit & Receive Site

COMPRISING

- Split-site Interface Control Junction Box
- 8571 NGT™ Remote Control Interface
- Earth Wire, 0.5 m (x5)
- CIB Interface Cable, 0.5 m
- Split-site Power Adaptor Cable
- 8571 NGT™ Interface Controller Cable
- Opt 2 W, 2-wire (Factory Fit)

NOTE:

Transmit and Receive Site is configured for transmitting and receiving but can be switched to either receive or transmit only.



NGT™ SPLIT-SITE EQUIPMENT — 4-WIRE

PRODUCT	PART NO.	DESCRIPTION
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NGT™ Split-site System — 4-wire Interface

An NGT™ Split-site Remote System consists of two or three sites. Each site consists of the split-site equipment listed below, in addition to the transceiver equipment.

An NGT™ Split-site Remote System can be used to split control, transmit and receive functions of an NGT™ SR or ASR Transceiver system into one of the following basic configurations:

- NGT™ remote transmitter and remote receiver system (3 sites)
- NGT™ remote transceiver system (2 sites)
- NGT™ local transmitter, remote receiver system (2 sites)

The system operates with a standard 4-wire interface.

Contact Codan for detailed system configurations.

NOTE:

- Split-site configurations can only be used with NGT™ SR and ASR Transceivers, and requires one transceiver at each site.
- All NGT™ SR and ASR Transceiver functions available.
- Existing transceivers may require modifications for use in split-site configurations. Contact Codan for details.
- Suitable for use with the 3012 HF Data Modem.

REMOTE-SPLIT-CTRL-8571-4W



- 08-05630-005
- 08-05994-001
- 08-04515-001
- 08-05610-001
- 08-05989-001
- 08-05990-001
- 15-10510-002
- 15-30067
- 15-04125-EN

Control Site

COMPRISING:

- Split-site Interface Control Junction Box
- 8571 NGT™ Remote Control Interface
- Earth Wire, 0.5 m (x5)
- CIB Interface Cable, 0.5 m
- Split-site Power Adaptor Cable
- 8571 NGT™ Interface Controller Cable
- Opt 4 W, 4-wire Interface Master Site (x2)
- NGT™ Audio Mute Modification
- Split-site Remote Control NGT™ Systems Reference Manual (English)

Continued on the next page



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Remote Control

NGT™ SPLIT-SITE EQUIPMENT—4-WIRE cont.

PRODUCT	PART NO.	DESCRIPTION
REMOTE-SPLIT-RX-8571-4W		Receive Site
	08-05630-005	COMPRISING: <ul style="list-style-type: none"> • Split-site Interface Control Junction Box • 8571 NGT™ Remote Control Interface • Earth Wire, 0.5 m (x5) • CIB Interface Cable, 0.5 m • Split-site Power Adaptor Cable • 8571 NGT™ Interface Controller Cable • Opt 4 W, 4-wire Interface Slave Receive Site • NGT™ Disable PA Modification
	08-05994-001	
	08-04515-001	
	08-05610-001	
	08-05989-001	
	08-05990-001	
	15-10510-004	
	15-30068	
REMOTE-SPLIT-TX-8571-4W		Transmit Site
	08-05630-005	COMPRISING: <ul style="list-style-type: none"> • Split-site Interface Control Junction Box • 8571 NGT™ Remote Control Interface • Earth Wire, 0.5 m (x5) • CIB Interface Cable, 0.5 m • Split-site Power Adaptor Cable • 8571 NGT™ Interface Controller Cable • Opt 4 W, 4-wire Interface Slave Transmit Site
	08-05994-001	
	08-04515-001	
	08-05610-001	
	08-05989-001	
	08-05990-001	
	15-10510-003	
REMOTE-SPLIT-TXRX-8571-4W		Transmit & Receive Site
	08-05630-005	COMPRISING <ul style="list-style-type: none"> • Split-site Interface Control Junction Box • 8571 NGT™ Remote Control Interface • Earth Wire, 0.5 m (x5) • CIB Interface Cable, 0.5 m • Split-site Power Adaptor Cable • 8571 NGT™ Interface Controller Cable • Opt 4 W, 4-wire Interface Slave Transmit Site
	08-05994-001	
	08-04515-001	
	08-05610-001	
	08-05989-001	
	08-05990-001	
	15-10510-003	
		NOTE: Transmit and Receive Site is configured for transmitting and receiving but can be switched to either receive or transmit only.

SPLIT-SITE ACCESSORIES

PRODUCT	PART NO.	DESCRIPTION
	15-00164-010	19" Rack-mounting Frame for 8571 Split-site Remote Interface
	08-04146-001	Cable, 6-way Phone
	08-04284	Cable, Phone Plug Adaptor Modular to 604 Plug
	08-05610-001 08-05610-002 08-05610-006 08-05610-030	Cable, CIB Interface, 0.5 m Cable, CIB Interface, 2 m Cable, CIB Interface, 6 m Cable, CIB Interface, 30 m
	08-05086-001 08-05086-006	Cable, Data Interface, 2 m Cable, Data Interface, 6 m
	15-10509	Opt 2 W, 2-wire (Retro Fit)
Image Not Available	15-10510	Opt 4 W, 4-wire (Retro Fit)



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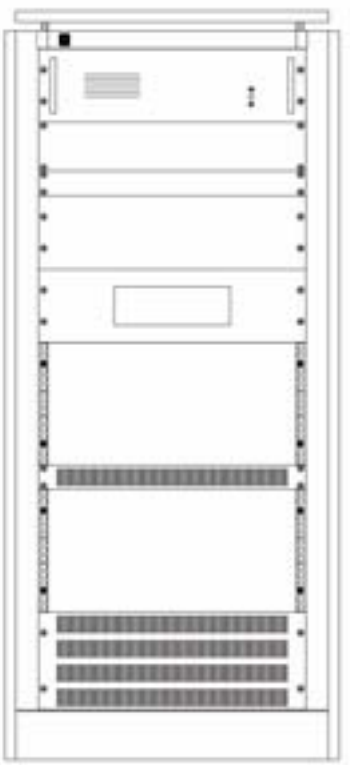
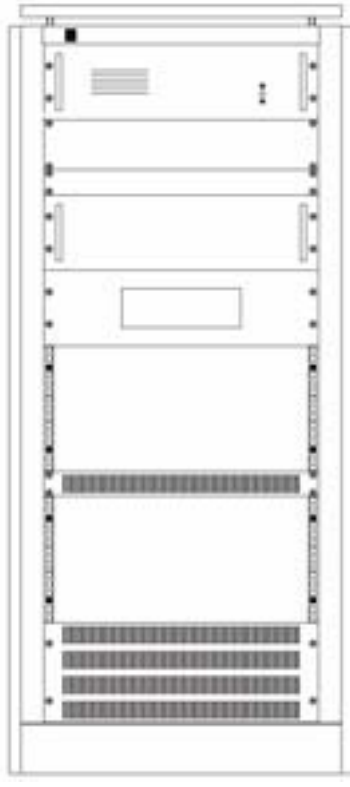
Remote Control

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19" Racks & Accessories

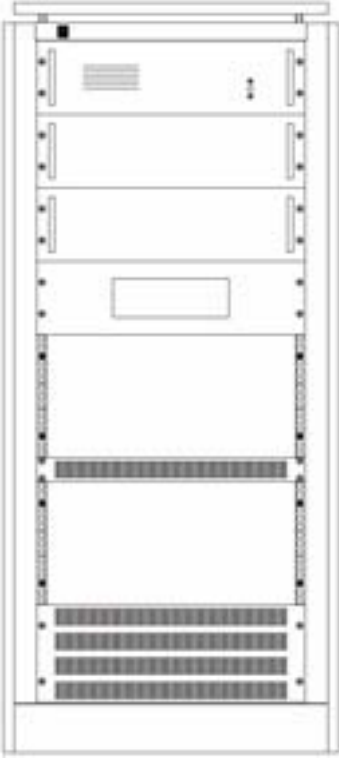
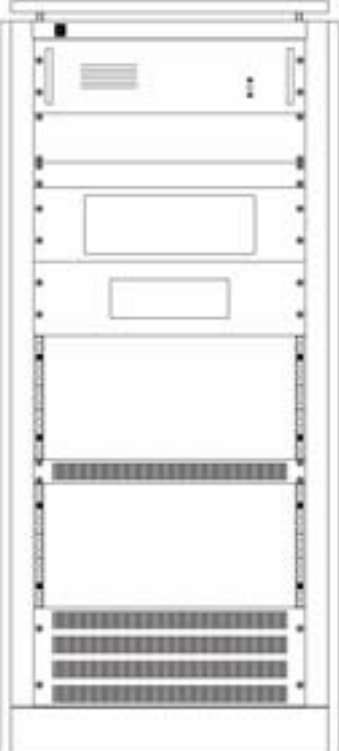
STANDARD RACK CONFIGURATIONS

PRODUCT	PART NO.	DESCRIPTION
	<p>08-06130-001</p>	<p>Basic High Power Rack Configuration</p> <p>Designed to rack mount a basic NGT™ High Power 500 W/ 1000 W system.</p> <p>COMPRISING:</p> <ul style="list-style-type: none"> • 19" 27RU rack complete with rear door, vented top and side panels • NGT™ universal rack mount tray for a NGT™ Transceiver • NGT™ rack mount tray for 3020 Transceiver Supply • Rack mount blanking panels 1RU, 2RU and 3RU supplied • Rack mount vent panels 1RU and 4RU supplied • Pre-fitted equipment rails • Assorted cable ties, screws, washers and cage nuts <p>NOTE:</p> <ul style="list-style-type: none"> • Rack comes pre-assembled ready for a NGT™ Transceiver and high power amplifier to be mounted. • 6RU of space available for additional equipment. • NGT™ Transceiver, power amplifier and power supply units are ordered separately. • Does not include a 1 m DC Extension Cable for the NGT™ Transceiver.
	<p>08-06130-002</p>	<p>Remote Control, High Power Rack Configuration</p> <p>Designed to rack mount a NGT™ High Power Remote Control system.</p> <p>COMPRISING:</p> <ul style="list-style-type: none"> • 19" 27RU rack complete with rear door, vented top and side panels • NGT™ universal rack mount tray for a NGT™ Transceiver • NGT™ universal rack mount tray for NGT™ Remote Interface (NRI) remote control • NGT™ rack mount tray for a 3020 Heavy Duty Transceiver Supply • Rack mount blanking panels 1RU and 2RU supplied • Rack mount vent panels 1RU and 4RU supplied • Pre-fitted equipment rails • Assorted cable ties, screws, washers and cage nuts <p>NOTE:</p> <ul style="list-style-type: none"> • Rack comes pre-assembled ready for a NGT™ Transceiver and high power amplifier to be mounted. • 3RU of space available for additional equipment. • NGT™ Transceiver, NRI remote control, high power amplifier and power supply units are ordered separately. • Does not include a 1 m DC Extension Cable for the NGT™ Transceiver.



19" Racks & Accessories

STANDARD RACK CONFIGURATIONS

PRODUCT	PART NO.	DESCRIPTION
	08-06130-003	<p>Remote Control and Data Modem High Power Rack Configuration</p> <p>Designed to rack mount a NGT™ High Power Remote Control Data system.</p> <p>COMPRISING:</p> <ul style="list-style-type: none"> • 19" 27RU rack complete with rear door, vented top and side panels • NGT™ universal rack mount tray for a NGT™ Transceiver • NGT™ universal rack mount system tray for NRI remote control • NGT™ universal rack mount system tray for a HF data modem • NGT™ rack mount tray for a 3020 Heavy Duty Transceiver Supply • Rack mount vent panels 1RU and 4RU supplied • Pre-fitted equipment rails • Assorted cable ties, screws, washers and cage nuts <p>NOTE:</p> <ul style="list-style-type: none"> • Rack comes pre-assembled ready for a NGT™ Transceiver and high power amplifier to be mounted. • No space available for additional equipment. • NGT™ Transceiver, NRI remote control, high power amplifier and power supply units are ordered separately. • Does not include a 1 m DC Extension Cable for the NGT™ Transceiver.
	08-06130-004	<p>Split-site Remote Control High Power Rack Configuration</p> <p>Designed to rack mount a NGT™ High Power Split-Site Remote Control system.</p> <p>COMPRISING:</p> <ul style="list-style-type: none"> • 19" 27RU rack complete with rear door, vented top and side panels • NGT™ universal rack mount tray for a NGT™ Transceiver • NGT™ rack mount tray for a 3020 Power supply • Rack mount blanking panels 1RU and 2RU supplied • Rack mount vent panels 1RU and 4RU supplied • Pre-fitted equipment rails • Assorted cable ties, screws, washers and cage nuts <p>NOTE:</p> <ul style="list-style-type: none"> • Rack comes pre-assembled ready for a NGT™ Transceiver and high power amplifier to be mounted. • 3RU space available for additional equipment. • NGT™ Transceiver, NRI remote control, high power amplifier and power supply units are ordered separately. • Does not include a 1 m DC Extension Cable for the NGT™ Transceiver.

19" Racks & Accessories

19" RACK CABINETS

PRODUCT	PART NO.	DESCRIPTION
Image Not Available	08-05288-009	Rack Cabinet, 9RU High, 19" Format, 500 mm Deep
Image Not Available	08-05288-012	Rack Cabinet, 12RU High, 19" Format, 500 mm Deep
Image Not Available	08-05288-018	Rack Cabinet, 18RU High, 19" Format, 500 mm Deep

19" RACK MOUNT SYSTEM TRAYS

PRODUCT	PART NO.	DESCRIPTION
	15-00172-001	<p>NGT™ Universal 19" Rack-mounting Tray 3RU with Blank Front Panel</p> <p>Suitable for NGT™ RF units, 3030 NGT™ Remote Interface.</p>
	15-00172-002	<p>NGT™ Universal 19" Rack-mounting Tray 3RU, Front Panel with Speaker Grill and Mounting Holes</p> <p>Suitable for NGT™ RF unit. Speaker can be mounted behind grill and handset can be mounted on front panel using cradle.</p> <p>NOTE: Speaker and handset cradle not included.</p>
	15-00176	<p>19" Rack-mounting Frame suitable for 3020 Transceiver Supply, and 3012, 3112 or 3212 HF Data Modems</p>
	15-00164-010	<p>19" Rack-mounting Frame for 8571 Split-site Remote Interface</p>



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19" Racks & Accessories

19" RACK MOUNT BLANKING PANELS

PRODUCT	PART NO.	DESCRIPTION
	15-00173	Set of 1RU + 2RU Blank Front Panels Suitable for covering gaps or holes in rack facia.
	30-35002-019	19" 4RU Vent Panel
	30-35002-006	19" 1RU Vent Panel

19" RACK MOUNT ACCESSORIES

PRODUCT	PART NO.	DESCRIPTION
	30-35002-020	Fixed Equipment Rail, 457 mm Long NOTE: Suitable for 27RU rack cabinet only.
	08-05920-001	Cable, DC Extension, 1 m NOTE: Required for the transceiver when it is rack mounted.
	05-06374	Earth Braid, 1.5 m

catalogue



CODAN

MANPACK PRODUCTS

product



2110 SERIES TRANSCEIVER KIT

PRODUCT	PART NO.	DESCRIPTION
2110-TCVR		2110 series Transceiver Kit
		<p>The 2110 series Transceivers are ideal for your long distance portable communications. They are designed to meet the most demanding mission and user requirements. Available in two versions, the 2110v is for basic voice only operations and the 2110 has additional interface and interoperability capabilities.</p> <p>A 2110 series Transceiver Kit consists of a transceiver unit and standard accessories listed below. The following pages detail the parts required for a fully operational manpack system.</p> <p>TRANSCEIVER UNITS:</p> <ul style="list-style-type: none"> • 2110 SSB Transceiver Unit (1.5 ppm) — std frequency stability • 2110 SSB Transceiver Unit (0.5 ppm) — high frequency stability • 2110v SSB Transceiver Unit (1.5 ppm) — std frequency stability <p>STANDARD ACCESSORIES</p> <ul style="list-style-type: none"> • H-250/U Telephone Handset • Earth wire with clip • Counterpoise 4-wire kit • 2110 series Manpack Transceiver Getting Started Guide, includes Reference Manual on CDROM (see page 141, <i>Language Support</i> for translations of this guide) <p>STANDARD FEATURES:</p> <ul style="list-style-type: none"> • 1.6–30 MHz, 400 channels, 10 networks • 25 W/5 W (PEP) selectable output power • 12 V DC, USB/LSB/AM • Internal automatic antenna tuner • Multi-net scanning • In-built <i>Easitalk™</i> speech noise reduction • Comprehensive calling capabilities, including emergency call, phone call, selective call, message call, remote diagnostics • Call logging • Up to 65 hours use on a single charge (17Ah battery) • Selectable output power • Computer interface (RS232) for PC control • Front panel programming (where permitted) • Extensive Built-In-Test functions • Meets MIL-STD-810F for shock, vibration, immersion and dust <p>AVAILABLE OPTIONS & ACCESSORIES:</p> <p>See pages 108 and 110 for <i>2110 Options and Accessories</i>.</p>
	08-06155-001	• 2110 SSB Transceiver Unit (1.5 ppm) — std frequency stability
	08-06155-002	• 2110 SSB Transceiver Unit (0.5 ppm) — high frequency stability
	08-06155-003	• 2110v SSB Transceiver Unit (1.5 ppm) — std frequency stability
	78-08000	• H-250/U Telephone Handset
	08-06259-001	• Earth wire with clip
	15-00446	• Counterpoise 4-wire kit
	15-04136-##	• 2110 series Manpack Transceiver Getting Started Guide, includes Reference Manual on CDROM (see page 141, <i>Language Support</i> for translations of this guide)

NET WEIGHT: 3.28 kg (7.23 lbs)

denotes language version

PATROL CONFIGURATION		
PRODUCT	PART NO.	DESCRIPTION
2110-TCVR-PATROL		The Patrol Configuration provides the bare essentials for basic manpack operation.
		NOTE: An appropriate battery charger needs to be ordered separately.
		COMPRISING:
	08-06155-###	2110 series Transceiver Kit
NET WEIGHT: 3.72 kg (8.2 lbs)	78-08000	• Transceiver Unit (see page 107, <i>2110 Transceiver Units</i> for descriptions of the transceiver units)
	08-06259-001	• H-250/U Telephone Handset
	15-00446	• Earth wire with clip
	15-04136-##	• Counterpoise 4-wire kit
		• 2110 series Manpack Transceiver Getting Started Guide, includes Reference Manual on CDROM (see page 141, <i>Language Support</i> for translations of this guide)
	15-00452	Collapsible Whip Antenna 3 m (10')
NET WEIGHT: 0.4 kg (0.88 lbs)		Extremely quick-to-erect whip antenna for use while stationary. Comes with a goose neck base to adjust the antenna angle.
	15-00454	Long Wire Antenna and Adaptor (1.6–30 MHz)
NET WEIGHT: 0.44 kg (0.97 lbs)		Kevlar reinforced tactical wire antenna with throw rope and accessories.
	08-06185-001	Battery Pack 12 V 8Ah NiMH
NET WEIGHT: 2.1 kg (4.63 lbs)		Lightweight, robust and waterproof battery pack. Provides for up to 30 hours of continuous operation (Rx/Tx 9:1).
	15-00218	Softpack Backpack
NET WEIGHT: 1.23 kg (2.71 lbs)		Ultra-lightweight economy backpack with extra pockets for transceiver accessories.

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denotes the type of transceiver unit

AVAILABLE OPTIONS & ACCESSORIES:

See pages 108 and 110 for *2110 Options and Accessories*.

2110 Transceiver Configurations

EXPLORER CONFIGURATION		
PRODUCT	PART NO.	DESCRIPTION
2110-TCVR-EXP		The Explorer Configuration provides all the requirements for a complete stand-alone HF communications system suitable for a range of uses.
	08-06155-### 78-08000 08-06259-001 15-00446 15-04136-##	2110 series Transceiver Kit <ul style="list-style-type: none"> • Transceiver Unit (see page 107, <i>2110 Transceiver Units</i> for descriptions of the transceiver units) • H-250/U Telephone Handset • Earth wire with clip • Counterpoise 4-wire kit • 2110 series Manpack Transceiver Getting Started Guide, includes Reference Manual on CDROM (see page 141, <i>Language Support</i> for translations of this guide)
NET WEIGHT: 3.72 kg (8.2 lbs)		
	15-10525-000	Opt GPS Receiver (Factory Fit) Enables GPS location and tracking capabilities in the 2110 series Transceivers.
NET WEIGHT: 0.02 kg (0.04 lbs)		
	15-00459	Knock Over Whip Antenna 1.5 m (5') Robust short whip antenna suitable for communications while on foot.
NET WEIGHT: 0.28 kg (0.62 lbs)		
	15-00452	Collapsible Whip Antenna 3 m (10') Extremely quick-to-erect whip antenna for use while stationary. Comes with a goose neck base to adjust the antenna angle.
NET WEIGHT: 0.4 kg (0.88 lbs)		
	15-00454	Long Wire Antenna and Adaptor Kevlar reinforced tactical wire antenna with throw rope and accessories.
NET WEIGHT: 0.44 kg (0.97 lbs)		
	08-06185-001	Battery Pack 12 V 8Ah NiMH Lightweight, robust and waterproof battery pack. Provides for up to 30 hours of continuous operation (Rx/Tx 9:1).
NET WEIGHT: 2.1 kg (4.63 lbs)		

Continued on the next page

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2110 Transceiver Configurations

EXPLORER CONFIGURATION cont.

PRODUCT	PART NO.	DESCRIPTION
 NET WEIGHT: 0.37 kg (0.82 lbs)	78-02007	2110 Battery Charger AC 1 A Used to charge the 2110 battery via the front panel or directly. Supplied with one AC mains cable. NOTE: When ordering, please specify the required AC input cable (AUS, UK, USA or EU), see page 135, <i>Charger Input Cables AC</i> .
 NET WEIGHT: 0.08 kg (0.18 lbs)	08-06215-001	19-way battery charger output cable for 2110 Used to charge the 2110 series Transceivers via the front panel.
 NET WEIGHT: 0.08 kg (0.18 lbs)	08-06214-001	6-way battery charger output cable Used to charge the battery directly.
 NET WEIGHT: 4.3 kg (9.48 lbs)	15-00216-001	External Frame Backpack

AVAILABLE OPTIONS & ACCESSORIES:

See pages 108 and 110 for *2110 Options and Accessories*.

2110 Transceiver Configurations

HOMELAND SECURITY CONFIGURATION

PRODUCT	PART NO.	DESCRIPTION
2110-TCVR-HS		The Homeland Security Configuration provides the complete package for a quick deploy communications solution. It features comprehensive interoperability, GPS location and tracking, and extra long battery life.
	08-06155-002 78-08000 08-06259-001 15-00446 15-04136-##	COMPRISING: 2110 series Transceiver Kit <ul style="list-style-type: none"> • Transceiver Unit • H-250/U Telephone Handset • Earth wire with clip • Counterpoise 4-wire kit • 2110 series Manpack Transceiver Getting Started Guide, includes Reference Manual on CDROM (see page 141, <i>Language Support</i> for translations of this guide)
NET WEIGHT: 3.72 kg (8.2 lbs)		
	15-10532	Opt MIL-STD-188-141B ALE Comprehensive ALE interoperability, fully compliant with MIL-STD-188-141B ALE and JITC certified. Includes the features of FED-STD-1045 ALE available in option 15-10479.
	15-10525-000	Opt GPS Receiver (Factory Fit) Enables GPS location and tracking capabilities in the 2110 series Transceivers.
NET WEIGHT: 0.02 kg (0.04 lbs)		
	15-00452	Collapsible Whip Antenna 3 m (10') Extremely quick-to-erect whip antenna for use while stationary. Comes with a goose neck base to adjust the antenna angle.
NET WEIGHT: 0.4 kg (0.88 lbs)		
	15-00454	Long Wire Antenna and Adaptor Kevlar reinforced tactical wire antenna with throw rope and accessories.
NET WEIGHT: 0.44 kg (0.97 lbs)		
	08-06186-001	Battery Pack 12 V 13Ah NiMH Heavy duty, waterproof battery pack. Provides for up to 50 hours of continuous operation (Rx/Tx 9:1).
NET WEIGHT: 2.9 kg (6.39 lbs)		

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2110 Transceiver Configurations

HOMELAND SECURITY CONFIGURATION cont.

PRODUCT	PART NO.	DESCRIPTION
 NET WEIGHT: 0.37 kg (0.82 lbs)	78-02007	2110 Battery Charger AC 1 A Used to charge the 2110 battery via the front panel or directly. Supplied with one AC mains cable. NOTE: When ordering, please specify the required AC input cable (AUS, UK, USA or EU), see page 135, <i>Charger Input Cables AC</i> .
 NET WEIGHT: 0.08 kg (0.18 lbs)	08-06215-001	19-way battery charger output cable Used to charge the 2110 series Transceivers via the front panel.
 NET WEIGHT: 0.08 kg (0.18 lbs)	08-06214-001	6-way battery charger output cable Used to charge the battery directly.
 NET WEIGHT: 4.3 kg (9.48 lbs)	15-00216-001	External Frame Backpack

AVAILABLE OPTIONS & ACCESSORIES:

See pages 108 and 110 for *2110 Options and Accessories*.



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2110 Transceiver

2110 TRANSCEIVER UNITS

PRODUCT	PART NO.	DESCRIPTION
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NOTE:

Options and accessories for the manpack transceivers need to be ordered separately.



NET WEIGHT: 2.5 kg (5.51 lbs)

08-06155-001

2110 SSB Tcwr Unit (1.5 ppm)

The 2110 has additional interface and interoperability capabilities, and is fitted with a 19-way expansion connector for a range of external accessories. It is fully interoperable with Codan's NGT™ series Transceivers and other commercial and military transceivers.



NET WEIGHT: 2.5 kg (5.51 lbs)

08-06155-002

2110 SSB Tcwr Unit (0.5 ppm)

This transceiver is similar to 08-06155-001 except it is fitted with a 0.5 ppm high stability reference oscillator. This version of the 2110 Transceiver is required to meet full MIL-STD-188-141B ALE requirements.



NET WEIGHT: 2.5 kg (5.51 lbs)

08-06155-003

2110v SSB Tcwr Unit (1.5 ppm)

This transceiver is similar to 08-06155-001 except it is not fitted with the 19-way external expansion port. The 2110v is a voice-only manpack transceiver. It is fully interoperable with Codan's NGT™ series Transceivers and other commercial transceivers.

STANDARD FEATURES:

- 1.6–30 MHz, 400 channels, 10 networks
- 25 W/5 W (PEP) selectable output power
- 12 V DC, USB/LSB/AM
- 1.5 ppm (parts per million) standard frequency stability
- Internal automatic antenna tuner
- Multi-net scanning
- In-built *Easitalk*™ speech noise reduction
- Comprehensive calling capabilities, including emergency call, phone call, selective call, message call, remote diagnostics
- Call logging
- Selectable output power
- RS232 interface for PC programming
- Front panel programming
- Extensive Built-In-Test functions
- Meets MIL-STD-810F for shock, vibration, immersion and dust

2110 OPTIONS		
PRODUCT	PART NO.	DESCRIPTION
 NET WEIGHT: 0.02 kg (0.04 lbs)	15-10525-000	Opt GPS Receiver (Factory Fit) Internally fitted 16-channel GPS receiver module, which enables use with GPS location tracking systems and shows remote locations with distance and bearing.
 NET WEIGHT: 0.01 kg (0.02 lbs)	15-10530-000	Opt 500 Hz Filter (Factory Fit) (2110 only) 500 Hz narrow IF filter that improves performance with morse (CW) and narrow FSK data modems like Pactor-II. NOTE: This filter is fitted in addition to the standard 2 kHz filter. Only one filter in addition to the standard filter is possible.
 NET WEIGHT: 0.01 kg (0.02 lbs)	15-10529-000	Opt 2.7 kHz BW Filter (Factory Fit) (2110 only) 2.7 kHz wide band filter. NOTE: This filter is fitted in addition to the standard 2 kHz filter. Only one filter in addition to the standard filter is possible.
 NET WEIGHT: 0.04 kg (0.09 lbs)	15-10531-000	Opt Voice Encryptor (Factory Fit) High grade Voice Encryptor Module that provides high grade voice security with exceptional recovered audio quality. NOTE: <ul style="list-style-type: none"> • This option is subject to Australian Government Export Controls. • A signed End-User Declaration must be provided for supply of this option.
<input checked="" type="checkbox"/>	15-10479	Opt FED-STD-1045 ALE/CALM™ Fully compatible with FED-STD-1045 ALE capabilities and enhanced with Codan Automated Link Management (CALM™). Includes facilities for Selective Calls, All Calls, Phone Calls, Text Messaging and GPS Position Calls.
<input checked="" type="checkbox"/>	15-10532	Opt MIL-STD-188-141B ALE (2110 only) Only available for the 2110 Transceiver, this option provides full FED-STD-1045 and MIL-STD-188-141B ALE capabilities, including NET call, ALL call, ANY call, Group Call, Wildcard Call, advanced ALE beacon, in-link AMD messaging and a Last Heard station log. With this option the transceiver has 20 networks and 600 available channels.

Continued on the next page



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2110 Transceiver

2110 OPTIONS cont.

PRODUCT	PART NO.	DESCRIPTION
<input checked="" type="checkbox"/>	15-10518	Opt Amateur Mode Enables transmit capability with free dial frequencies within Amateur frequency bands. For use by licensed operators only.
<input checked="" type="checkbox"/>	15-10481-000	Opt TxD, Tx Program Disable Disables front panel programming of new transmit frequencies. For use in countries where front panel programming is prohibited by regulatory authorities, e.g. USA and Australia.



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2110 Transceiver

2110 ACCESSORIES

PRODUCT	PART NO.	DESCRIPTION
 NET WEIGHT: 0.35 kg (0.77 lbs)	78-08000	Handset H-250/U Lightweight military handset with noise cancelling microphone and push-to-talk switch. Includes a coiled cord with a standard H-229 military audio connector.
 NET WEIGHT: 0.09 kg (0.2 lbs)	15-04164-EN	System Programmer CD Programming software to program 2110 and NGT™ series Transceivers. Programmer interface cable (part number 08-06237-001) needs to be ordered separately.
 NET WEIGHT: 0.12 kg (0.26 lbs)	08-06237-001	Cable, 2110 Prog 19way MIL-D9F RS232 interface cable to control or program the 2110 Transceiver from a PC.
 NET WEIGHT: 0.13 kg (0.29 lbs)	08-06737-001	Cable, 2110v Prog 5way MIL-D9F RS232 interface cable used to program the 2110v Transceiver from a PC.
 NET WEIGHT: 0.2 kg (0.44 lbs)	78-01031	Adaptor, USB to DB-9, Serial Port USB V1.1 compliant and supports Microsoft Windows™ 2000/XP/Vista/WIN7.
 NET WEIGHT: 0.26 kg (0.57 lbs)	08-06213-001	Cable, VP-116 Interface Interface cable connecting the VP-116 Voice Privacy Unit to the 2110 Transceiver.

Continued on the next page






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2110 Transceiver

2110 ACCESSORIES cont.

PRODUCT	PART NO.	DESCRIPTION
 NET WEIGHT: 0.22 kg (0.49 lbs)	15-04136-##	Getting Started Guide, 2110 series Manpack Transceiver, includes Reference Manual on CDROM Printed Getting Started Guide for the 2110 Transceiver. See page 141, <i>Language Support</i> for translations of this guide.
 NET WEIGHT: 2.4 kg (5.29 lbs)	15-04139-EN	Repair Guide, Manpack Transceiver 2110 series Printed Repair Guide for the 2110 series.
	15-04139-CD	Repair Guide, Manpack Transceiver 2110 series, on CDROM

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2110 Transceiver


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UUPLUS™ SOFTWARE

PRODUCT	PART NO.	DESCRIPTION
	08-05981-001	<p>UUPlus™ Email for HF Server Software</p> <p>Provides HF and Internet email access for up to 25 users. It works in conjunction with UUPlus™ Email for HF Codan Client software, used by each remote station. It has been specifically designed for use with Codan's HF equipment.</p> <p>NOTE:</p> <ul style="list-style-type: none"> • One copy of UUPlus™ Codan Client is required for each user that is to connect to UUPlus™ Codan Server. • A UUPlus™ Codan Server cannot communicate directly to other UUPlus™ Codan Server stations. <p>COMPRISING:</p> <ul style="list-style-type: none"> • CD-ROM with UUPlus™ Codan Server software and documentation • Single user licence for installation on one machine <p>STANDARD FEATURES:</p> <ul style="list-style-type: none"> • Works with POP3/SMTP PC email clients such as Outlook Express™, Eudora™, Netscape™ and Pegasus Mail™ • Capable of interfacing with an Internet Service Provider or Mail Server • Reduces connection time by compressing and combining messages • Automatically resumes interrupted file transfers • Capable of automatically calling the remote user at preset times to deliver mail and collect outgoing mail, or enables the user to check mail manually <p>SYSTEM REQUIREMENTS:</p> <ul style="list-style-type: none"> • Codan HF SSB Transceiver • 3012 or 3212 HF Data Modem • Microsoft Windows™ 2000/XP/Vista/WIN7 • Internet email client with support of POP3 and SMTP protocols • Serial port for connecting the HF modem to the PC • Optional LAN, dialup networking card or line modem for connecting local email clients and server to the internet

Continued on the next page

UUPLUS™ SOFTWARE cont.

PRODUCT	PART NO.	DESCRIPTION
	<p>08-05980-001</p>	<p>UUPlus™ Email for HF Client Software</p> <p>Simple and reliable solution for sending email over HF from remote areas. It works in conjunction with UUPlus™ Codan Server software and has been specifically designed for use with Codan's HF equipment.</p> <p>COMPRISING:</p> <ul style="list-style-type: none"> • CD-ROM with UUPlus™ Codan Client software and documentation • Single user licence for installation on one machine <p>STANDARD FEATURES:</p> <ul style="list-style-type: none"> • Works with POP3/SMTP PC email clients such as Outlook Express™, Eudora™, Netscape™ and Pegasus Mail™ • Reduces connection time by compressing and combining messages • Automatically resumes interrupted file transfers • Capable of automatically answering calls from the server to exchange mail at preset times, or enables the user to check for mail manually • Able to send files directly to other stations <p>SYSTEM REQUIREMENTS:</p> <ul style="list-style-type: none"> • Codan HF SSB Transceiver • Codan 3012 or 3212 HF Data Modem • Microsoft Windows™ 2000/XP/Vista/WIN7 • Internet email client with support of POP3 and SMTP protocols • Serial port for connecting the HF modem to the PC

HF EXPRESS™ AND STANAG 5066 STACK

PRODUCT	PART NO.	DESCRIPTION
	<p>15-04155-EN</p>	<p>Codan HF Express™ and STANAG 5066 Stack</p> <p>A simple and hassle free means of providing HF Chat and file transfer between users without needing to set up email. Send images, files and interactive chat simultaneously using your Codan NGT™ Transceiver and get connected any where, any time, any place.</p> <p>Codan HF Express™ and STANAG 5066 works in conjunction with the Codan 3112 High Speed Data Modem, which has unsurpassed on-air performance in extreme conditions. With up to 9600 bps on-air data rates over HF without using compression, users don't need to modify files to ensure delivery; they simply send and forget.</p> <p>COMPRISING:</p> <ul style="list-style-type: none"> • CDROM including HF Express™ and STANAG 5066 software and all documentation • Single user license for installation upon one computer <p>STANDARD FEATURES:</p> <ul style="list-style-type: none"> • Easy to install and maintain • Simple to use • Instantaneous interactive communication • Fully integrated HF Chat and file transfer solution • Fully interoperable with other HF Chat solutions, i.e. NATO Chat • Automatic repeat request (ARQ) • Automatic Data Rate Change to match changing channel conditions • Robust high integrity modem waveforms • Unsurpassed on-air performance under extreme conditions <p>SYSTEM REQUIREMENTS:</p> <ul style="list-style-type: none"> • Codan 3112 High Speed HF Data Modem • Codan 2110 Manpack Transceiver fitted with: <ul style="list-style-type: none"> • Opt 2.7 kHz BW Second Filter (Factory Fit), part number 15-10529-000 • Desktop PC or laptop with Microsoft Windows™ 2000/XP/Vista/WIN7 installed and an Ethernet or spare RS232 serial port



3012 HF DATA MODEM (NO CABLES)

PRODUCT	PART NO.	DESCRIPTION
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MODEM-3012-NC



08-05877-004
 08-04515-001
 30-11208-000
 15-04104-CD

3012 HF Data Modem (No Cables)

The 3012 HF Data Modem provides reliable and cost-effective computer text and data communication capabilities for organisations operating in remote areas with little or no telecommunications infrastructure.

COMPRISING:

- 3012 HF Data Modem
- Earth Wire, 0.5 m
- Self Adhesive Rubber Feet (x4)
- 3012 HF Data Modem User Guide on CDROM (English)

STANDARD FEATURES:

- Up to 6000 bps, error-free data transmission with compression
- In-built data compression
- Backwards compatible with the Codan 9001/9002 HF Data Modems
- Data scrambled for security
- In-built serial port optical isolator
- Easy to use AT command interface

AVAILABLE OPTIONS:

- Support for UUPlus™ *Email for HF* Client or Server software, see page 113, *UUPlus™ Software*.

3012 HF DATA MODEM FOR 2110 WITH 6 M RS232 CABLE

PRODUCT	PART NO.	DESCRIPTION
MODEM-3012-2110-6M		3012 HF Data Modem for 2110 with 6 m RS232 Cable
		This configuration consists of a 3012 HF Data Modem, 6 m Data Interface Cable, and 1 m 2110 Manpack to 3012 Modem Cable.
		COMPRISING:
	08-05877-004	3012 HF Data Modem
	08-04515-001	Earth Wire, 0.5 m
	30-11208-000	Self Adhesive Rubber Feet(x4)
	15-04104-CD	3012 HF Data Modem User Guide on CDROM (English)
	08-05086-006	Data Interface Cable, 6 m
	08-06422-001	2110 Manpack to 3012 Modem Cable, 1 m

3012 ACCESSORIES

PRODUCT	PART NO.	DESCRIPTION
	15-00136	Cradle, HF Data Modem Vehicle Mounting
	78-01031	Adaptor, USB to DB-9, Serial USB V1.1 compliant and supports Microsoft Windows™ 2000/XP/Vista/WIN7.
	60-00098-590	Adaptor, 9-pin D Plug to 25-pin D Socket
	08-05086-001	Cable, Data Interface, 2 m
	08-05086-006	Cable, Data Interface, 6 m
	08-06422-001	Cable, 2110 Manpack to 3012 Modem, 1 m
	15-04104-##	User Guide, HF Data Modem 3012 Printed User Guide for the 3012 HF Data Modem. See page 141, <i>Language Support</i> for translations of this guide.
	08-05980-001	UUPlus™ <i>Email for HF Client Software</i> Single user access to UUPlus™ <i>Email for HF Server Software</i> . For use with the 3012 or 3212 HF Data Modems.
	08-05981-001	UUPlus™ <i>Email for HF Server Software</i> Email server with support for up to 25 remote or local users and Internet email access. For use with the 3012 or 3212 HF Data Modems.

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3212 HF DATA MODEM (NO CABLES)

PRODUCT	PART NO.	DESCRIPTION
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MODEM-3212-NC



08-06274-001
08-04515-001
30-11208-000
15-04146-CD

3212 HF Data Modem (No Cables)

The 3212 HF Data Modem provides reliable and cost-effective computer text and data communication capabilities for organisations operating in remote areas with little or no telecommunications infrastructure.

The 3212 HF Data Modem uses waveforms derived from Military Standard (MIL-STD) waveforms, which are based on STANAG 4539 and modified to provide optimal performance over commercial channel bandwidths.

COMPRISING:

- 3212 HF Data Modem
- Earth Wire, 0.5 m
- Self Adhesive Rubber Feet (x4)
- 3212 HF Data Modem User Guide on CDROM (English)

STANDARD FEATURES:

- Up to 7200 bps error free on-air data rate without compression
- Backwards compatible with Codan 3012 HF Data Modem
- Designed to operate on standard bandwidth commercial HF channels
- In-built DC isolation on all available ports
- Modem control via RS232 or ethernet port

AVAILABLE OPTIONS:

- Support for UUPlus™ *Email for HF* Client or Server software, see page 113, *UUPlus™ Software*.



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Data & Email for 2110

3212 HF DATA MODEM FOR 2110 WITH 2 M RS232 CABLE

PRODUCT	PART NO.	DESCRIPTION
MODEM-3212-2110-2M		3212 HF Data Modem for 2110 with 2 m RS232 Cable
		This configuration consists of a 3212 HF Data Modem, 2 m Serial Cable, and 1 m 2110 Manpack to 3112/3212 Modem Cable.
		The 3212 HF Data Modem uses waveforms derived from Military Standard (MIL-STD) waveforms, which are based on STANAG 4539 and modified to provide optimal performance over commercial channel bandwidths.
		COMPRISING:
	08-06274-001	3212 HF Data Modem
	08-04515-001	Earth Wire, 0.5 m
	30-11208-000	Self Adhesive Rubber Feet (x4)
	15-04146-CD	3212 HF Data Modem User Guide on CDROM (English)
	08-06359-002	Serial D9M-D9F Isol Shield Cable, 2 m
	08-06786-001	2110 Manpack to 3112/3212 Modem Cable, 1 m

3212 HF DATA MODEM FOR 2110 WITH 6 M RS232 CABLE

PRODUCT	PART NO.	DESCRIPTION
MODEM-3212-2110-6M		3212 HF Data Modem for 2110 with 6 m RS232 Cable
		This configuration consists of a 3212 HF Data Modem, 6 m Serial Cable, and 1 m 2110 Manpack to 3112/3212 Modem Cable.
		The 3212 HF Data Modem uses waveforms derived from Military Standard (MIL-STD) waveforms, which are based on STANAG 4539 and modified to provide optimal performance over commercial channel bandwidths.
		COMPRISING:
	08-06274-001	3212 HF Data Modem
	08-04515-001	Earth Wire, 0.5 m
	30-11208-000	Self Adhesive Rubber Feet (x4)
	15-04146-CD	3212 HF Data Modem User Guide on CDROM (English)
	08-06359-006	Serial D9M-D9F Isol Shield Cable, 6 m
	08-06786-001	2110 Manpack to 3112/3212 Modem Cable, 1 m









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Data & Email for 2110

3212 ACCESSORIES

PRODUCT	PART NO.	DESCRIPTION
	15-00136	Cradle, HF Data Modem Vehicle Mounting
	78-01031	Adaptor, USB to DB-9, Serial USB V1.1 compliant and supports Microsoft Windows™ 2000/ XP/Vista/WIN7.
	60-00098-590	Adaptor, 9-pin D Plug to 25-pin D Socket
	39-79150-080	Ferrite Bead Clamp
	08-06359-002	Cable, Serial D9M-D9F Isol Shield, 2 m
	08-06359-006	Cable, Serial D9M-D9F Isol Shield, 6 m
	67-90800	Cable, Ethernet Crossover CAT-5E, 2 m Red
	67-90801	Cable, Ethernet Crossover CAT-5E, 10 m Red

Continued on the next page






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Data & Email for 2110

3212 ACCESSORIES cont.

PRODUCT	PART NO.	DESCRIPTION
	67-90802 67-90803	Cable, Ethernet Straight CAT-5E, 2 m Blue Cable, Ethernet Straight CAT-5E, 10 m Blue
	08-06786-001	Cable, 2110 Manpack to 3112/3212 Modem, 1 m
	15-04146-EN	User Guide, 3212 HF Data Modem (English) Printed User Guide for the 3212 HF Data Modem.

3112 HF DATA MODEM (NO CABLES)

PRODUCT	PART NO.	DESCRIPTION
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MODEM-3112-NC



08-06270-001
08-04515-001
30-11208-000
15-04147-CD

3112 HF Data Modem (No Cables)

The 3112 HF Data Modem provides reliable and cost-effective HF data communications for organisations operating in remote areas with little or no telecommunication infrastructure.

COMPRISING:

- 3112 HF Data Modem
- Earth Wire, 0.5 m
- Self Adhesive Rubber Feet (x4)
- 3112 HF Data Modem User Guide on CDROM (English)

STANDARD FEATURES:

- Up to 9600 bps error free on-air data rate without compression
- Compatible with MIL-STD-188-110A/B, STANAG 4415, STANAG 4539 & 39 tone parallel modem waveforms
- In-built Automatic Forward Error Correction (FEC)
- Fully programmable via front panel
- Choice of either Ethernet, asynchronous serial port or synchronous serial port for connection to PC
- In-built isolation on all available ports
- Same form factor as Codan NGT™ Transceiver for easy installation and mounting
- Encryption compatible via synchronous serial port

SYSTEM REQUIREMENTS:

The following 2110 Manpack Transceiver Options are required for operation with the 3112 HF Data Modem:

15-10529-000 Opt 2.7 kHz BW Second Filter (Factory Fit)

AVAILABLE OPTIONS:

- Support for HF Express™ and STANAG 5066 software, see page 115, *HF Express™ and STANAG 5066*.


3112 HF DATA MODEM FOR 2110 WITH 10 M ETHERNET

PRODUCT	PART NO.	DESCRIPTION
MODEM-3112-2110-ETH-10M		<p>3112 HF Data Modem for 2110 with 10 m Ethernet Cable</p> <p>This configuration consists of a 3112 HF Data Modem, Ferrite Bead Clamp, 10 m Ethernet Crossover and Straight CAT 5-E Cables, 2110 Manpack to 3112 Modem Cable, and Codan HF Express™ including STANAG 5066 Stack.</p> <p>See page 124, <i>3112 System Requirements</i> for the 2110 Manpack Transceiver Options that are required for operation with the 3112 HF Data Modem.</p> <p>COMPRISING:</p> <ul style="list-style-type: none"> 3112 HF Data Modem Earth Wire, 0.5 m Self Adhesive Rubber Feet (x4) 3112 HF Data Modem User Guide on CDROM (English)
	08-06270-001 08-04515-001 30-11208-000 15-04147-CD	
	39-79150-080	Ferrite Bead Clamp
	67-90801	Ethernet Crossover CAT-5E Cable, 10 m Red
	67-90803	Ethernet Straight CAT-5E Cable, 10 m Blue
	08-06786-001	2110 Manpack to 3112/3212 Modem Cable, 1 m
	15-04155-EN	Codan HF Express™ and STANAG 5066 Stack (English)




3112 ACCESSORIES

PRODUCT	PART NO.	DESCRIPTION
	15-00136	Cradle, HF Data Modem Vehicle Mounting
	78-01031	Adaptor, USB to DB-9, Serial USB V1.1 compliant and supports Microsoft Windows™ 2000/XP/Vista/WIN7.
	60-00098-590	Adaptor, 9-pin D Plug to 25-pin D Socket
	39-79150-080	Ferrite Bead Clamp
	08-06360-002	Cable, 9-way to 9-way Serial, 2 m
	08-06360-006	Cable, 9-way to 9-way Serial, 6 m
	67-90800	Cable, Ethernet Crossover CAT-5E, 2 m Red
	67-90801	Cable, Ethernet Crossover CAT-5E, 10 m Red
	67-90802	Cable, Ethernet Straight CAT-5E, 2 m Blue
	67-90803	Cable, Ethernet Straight CAT-5E, 10 m Blue
	08-06786-001	2110 Manpack to 3112/3212 Modem Cable, 1 m
	15-04147-EN	User Guide, HF Data Modem 3112(English) Printed User Guide for the 3112 HF Data Modem.

CROSSPATCH™ FOR 2110

PRODUCT	PART NO.	DESCRIPTION
XPATCH-2110 		3031 Crosspatch™ for 2110 Codan's leading edge 3031 Crosspatch™ enables you to carry 'HF on your belt' using a VHF/UHF radio and a Codan NGT™ Transceiver. It is the practical, effective and affordable solution for any organisation that needs to extend their current HF or VHF/UHF networks.
	08-06730-002 08-06766-001 15-04148-CD 06-02489-EN 15-00145	COMPRISING: <ul style="list-style-type: none"> • 3031 VHF/UHF to HF Crosspatch™ for 2110 • 3031 to VHF/UHF Transceiver Generic Cable, 2 m • Crosspatch™ 3031 CD Package (English) • Crosspatch™ 3031 Quick Reference Cards, English (x2) • Crosspatch™ 3031 Installation Kit

CROSSPATCH™ ACCESSORIES

PRODUCT	PART NO.	DESCRIPTION
	08-06766-001	Cable, 3031 to VHF/UHF Transceiver Generic
	06-02489-EN	Quick Reference Card, Crosspatch™ 3031 (English)
	15-04148-EN	User Guide, Crosspatch™ 3031 (English) Printed User Guide for the 3031 Crosspatch.



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Crosspatch™ for 2110

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LONG WIRE & DIPOLES

PRODUCT	PART NO.	DESCRIPTION
 <p>NET WEIGHT: 0.44 kg (0.97 lbs)</p>	15-00454	<p>Ant, Long Wire and Adaptor 25 W PEP (1.6–30 MHz) Lightweight Kevlar reinforced Tactical Long Wire antenna.</p> <p>Includes: throw rope, antenna adaptor, winding spool, anchor peg and antenna deployment quick reference card.</p>
 <p>NET WEIGHT: 1.1 kg (2.43 lbs)</p>	15-00458	<p>Ant, End-fed Broadband 25 W PEP (3–30 MHz) Lightweight Kevlar reinforced End-fed Broadband Dipole Antenna.</p> <p>Includes: 3 m (10') coaxial feeding cable terminated with BNC connectors with protective caps, broadband antenna balun, throw rope, counterpoise kit, winding spool, anchor peg and antenna deployment quick reference card.</p>
 <p>NET WEIGHT: 2.6 kg (5.73 lbs)</p>	15-00456	<p>Ant, Broadband Dipole 25 W PEP (3–30 MHz) Lightweight Kevlar reinforced Tactical Broadband Dipole Antenna.</p> <p>Includes: 10 m (30') coaxial feeding cable terminated with BNC connectors with protective caps, broadband antenna balun, two lots of termination resistors, throw ropes, counterpoise kits, winding spools, anchor pegs and antenna deployment quick reference card.</p>
 <p>NET WEIGHT: 2.7 kg (5.95 lbs)</p>	15-00455	<p>Ant, Wire Dipole 25 W PEP (3–30 MHz) Lightweight Kevlar reinforced Tactical Dipole Antenna with tactile length markings.</p> <p>Includes: 10 m (30') coaxial feeding cable terminated with BNC connectors with protective caps, dipole antenna balun, throw rope, antenna adaptor, winding spools, anchor peg and antenna deployment quick reference card.</p>
 <p>NET WEIGHT: 3.3 kg (7.28 lbs)</p>	15-00457	<p>Ant, Dipole and Broadband kit 25 W PEP (2–30 MHz) Lightweight Kevlar reinforced Universal HF Dipole and HF Broadband Dipole Antenna kit.</p> <p>Includes: 10 m (30') coaxial feeding cable terminated with BNC connectors with protective caps, broadband antenna balun, dipole antenna balun, two lots of termination resistors, throw ropes, counterpoise kits, winding spools, anchor pegs and antenna deployment quick reference cards.</p>






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Antenna Accessories

WHIP ANTENNAS

PRODUCT	PART NO.	DESCRIPTION
 NET WEIGHT: 0.4 kg (0.88 lbs)	15-00452	Ant, 3 m (10') Collapsible Whip 25 W Lightweight collapsible 6 section whip antenna with flexible gooseneck.
 NET WEIGHT: 0.25 kg (0.55 lbs)	15-00453	Ant, 1.5 m (5') Tape Whip 25 W Foldable tape whip antenna with flexible gooseneck.
 NET WEIGHT: 0.28 kg (0.62 lbs)	15-00459	Ant, 1.5 m (5') Knock Over Whip 25 W Lightweight collapsible 3 section knock over whip antenna with flexible gooseneck.

EARTHING

PRODUCT	PART NO.	DESCRIPTION
 NET WEIGHT: 0.16 kg (0.35 lbs)	15-00446	Counterpoise 4-wire kit Lightweight counterpoise and earthing kit.
 NET WEIGHT: 0.08 kg (0.18 lbs)	15-00462	Anchor peg Used in antenna kits to anchor the antenna wires.
 NET WEIGHT: 0.05 kg (0.11 lbs)	08-06259-001	Earth Wire with Clip Earthing wire 1 m (3') with spring clip.




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Battery & Charger Accessories

BATTERIES		
PRODUCT	PART NO.	DESCRIPTION
 NET WEIGHT: 2.1 kg (4.63 lbs)	08-06185-001	Battery Pack 12 V 8Ah NiMH Waterproof 2110 Transceiver battery pack with 12 V, 8Ah rechargeable Nickel Metal Hydride battery and battery management controller. Recharges: ~500 (80% capacity) Useable hours: ~30 hrs (using Rx/Tx 9:1)
 NET WEIGHT: 2.9 kg (6.39 lbs)	08-06186-001	Battery Pack 12 V 13Ah NiMH Waterproof 2110 Transceiver battery pack with 12 V, 13Ah rechargeable Nickel Metal Hydride battery and battery management controller. Recharges: ~500 (80% capacity) Useable hours: ~50 hrs (using Rx/Tx 9:1)
 NET WEIGHT: 3.2 kg (7.05 lbs)	08-06188-001	Battery Pack 12 V 7Ah SLA Waterproof 2110 Transceiver battery pack with 12 V, 7Ah rechargeable Sealed Lead Acid battery and battery management controller. Recharges: ~200 (60% capacity) Useable hours: ~15 hrs (using Rx/Tx 9:1)
 NET WEIGHT: 2.5 kg (5.5 lbs)	08-07009-001	Battery Pack 12 V 17 Ah LiFePO4 Waterproof 2110 Transceiver battery pack with 12 V, 17 Ah rechargeable battery using lithium iron phosphate chemistry that is safe and has excellent shelf life. Recharges: 2000 (80% capacity) Useable hours: 65 hrs (using Rx/Tx 9:1)



DC-DC VOLTAGE CONVERTER		
PRODUCT	PART NO.	DESCRIPTION
	15-00576	Voltage Regulator (24 V to 12 V operation 7 A) Enables the operation of 2110 series Transceivers in 24/26 V based systems. Protected from faults such as voltage spikes, overload, short circuits and low voltage input. The unit automatically resets once a fault is removed. Nominal Input: 24 V DC Nominal Output: 12 V @ 7 A Efficiency: Greater than 90% at full load NOTE: The voltage regulator is not waterproof.



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Battery & Charger Accessories

CHARGERS		
PRODUCT	PART NO.	DESCRIPTION
 NET WEIGHT: 3.7 kg (8.16 lbs)	15-00578	2110 Hand-powered Battery Charger A portable hand-powered battery charger that is compact and lightweight, and encased in a robust and waterproof aluminium housing. The charger comes with easy to use accessories for simple operation, and a convenient carrying case. A suitable charger output cable must be ordered separately, see page 134, <i>Charger Output Cables</i> .
 NET WEIGHT: 1 kg (2.2 lbs)	15-00577	2110 Solar Battery Charger A portable solar-powered 15 W battery charger that uses solid state, thin film solar technology to meet your mobile power needs. It is lightweight, weatherproof and UV resistant, and durable with a tough rip-stop nylon backing. A suitable charger output cable must be ordered separately, see page 134, <i>Charger Output Cables</i> .






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Battery & Charger Accessories

CHARGER MODULES

PRODUCT	PART NO.	DESCRIPTION
 NET WEIGHT: 0.25 kg (0.55 lbs)	78-02007	Battery Charger AC-DC 3121 Low noise 2110 battery charger (90–240 V AC input, 15.5 V @ 1 A output). Suitable for charging while operating the transceiver. NOTE: Suitable AC input cable (with AUS, UK, USA or EU plug) and output cable for AC-DC 3121 charger module must be ordered separately.
 NET WEIGHT: 0.4 kg (0.88 lbs)	78-02012	Battery Charger AC-DC 3123 Fast 2110 battery pack charger (90–240 V AC input, 15.5 V @ 3 A output) with output cable. Suitable for direct connection to the battery pack only. NOTE: Suitable AC input cable (with AUS, UK, USA or EU plug) must be ordered separately.
 NET WEIGHT: 0.24 kg (0.53 lbs)	78-02008	Battery Charger DC-DC 3122 Low noise 2110 battery charger (12–60 V DC input, 15.5 V @ 1 A output). Suitable for charging while operating the transceiver. NOTE: Suitable DC input cable (with vehicle lighter plug or spring clips adaptor) and output cable for DC-DC 3122 charger module must be ordered separately.






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Battery & Charger Accessories

CHARGER OUTPUT CABLES

PRODUCT	PART NO.	DESCRIPTION
	08-06215-001	Cable, charger O/P, 19way Used to charge the 2110 series Transceivers via the front panel. Can be used with 3121 and 3122 Battery Chargers, and handcrank and solar chargers.
NET WEIGHT: 0.08 kg (0.18 lbs)		
	08-06738-001	Cable, charger O/P, 5way Used to charge the 2110v transceiver via the front panel. Can be used with 3121 and 3122 Battery Chargers, and handcrank and solar chargers.
NET WEIGHT: 0.08 kg (0.18 lbs)		
	08-06214-001	Cable, Charger O/P, 6way Used to charge the battery directly. Can be used with 3121 and 3122 Battery Chargers, and handcrank and solar chargers.
NET WEIGHT: 0.08 kg (0.18 lbs)		



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Battery & Charger Accessories

CHARGER INPUT CABLES AC

PRODUCT	PART NO.	DESCRIPTION
 NET WEIGHT: 0.1 kg (0.22 lbs)	67-90200	Cable, 2C AUS IEC C7 2 m IEC 2-wire mains cable with AUS plug.
 NET WEIGHT: 0.13 kg (0.29 lbs)	67-90201	Cable, 2C UK IEC C7 2 m IEC 2-wire mains cable with UK plug.
 NET WEIGHT: 0.16 kg (0.35 lbs)	67-90202	Cable, 2C USA IEC C7 2 m IEC 2-wire mains cable with USA plug.
 NET WEIGHT: 0.09 kg (0.198 lbs)	67-90203	Cable, 2C EU IEC C7 2 m IEC 2-wire mains cable with EU plug.

CHARGER INPUT CABLES DC

PRODUCT	PART NO.	DESCRIPTION
 NET WEIGHT: 0.11 kg (0.24 lbs)	08-06216-001	Cable, DC Charger I/P, Lighter Adaptor DC input cable to connect an in-vehicle lighter socket to DC-DC 3122 charger module.
 NET WEIGHT: 0.15 kg (0.33 lbs)	08-06217-001	Cable, DC Charger I/P, Clips Adaptor DC input cable with spring clips to connect DC power source to DC-DC 3122 charger module.





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Battery & Charger Accessories



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Backpack & Mounting Accessories

BACKPACKS		
PRODUCT	PART NO.	DESCRIPTION
 <p>NET WEIGHT: 4.3 kg (9.48 lbs)</p>	15-00216-001	<p>Backpack, External Frame</p> <p>Heavy duty backpack with external frame and ergonomic shoulder harness with ventilation panel for comfort. It has side, bottom and front pockets for transceiver accessories, reference materials, and personal items. The modular external frame allows for additional loads of up to 50 kg.</p> <p>Made from 1000 Denier Black bulked filament nylon, black co-polymer frame.</p>
 <p>NET WEIGHT: 1.23 kg (2.71 lbs)</p>	15-00218	<p>Backpack, Softpack</p> <p>Lightweight, compact and comfortable backpack providing storage for transceiver, all accessories as well as personal items.</p> <p>Made from Black Cordura.</p>

MOUNTING ACCESSORIES		
PRODUCT	PART NO.	DESCRIPTION
 <p>NET WEIGHT: 1.7 kg (3.75 lbs)</p>	15-00139	<p>Cradle, 2110/2110v with Screws</p> <p>Heavy duty docking cradle used to secure the 2110 or 2110v transceiver in a vehicle. With quick release latches and screw kit, the radio can be easily docked with the battery pack attached.</p>
 <p>NET WEIGHT: 2.5 kg (5.51 lbs)</p>	15-00140	<p>Cradle, 2110 with Interface Adaptor</p> <p>Transceiver cradle (part number 15-00139) plus an interface adaptor for external antenna, GPS, data interfaces, and DC battery charger. Includes a speaker amplifier and external speaker, and can be adapted to interface with a VP-116 Voice Privacy Unit via an NGT™ VP-116 Interface cable (part number 08-06213-001).</p> <p>NOTE: Cannot be used with the 2110v Transceiver.</p>
 <p>NET WEIGHT: 1.9 kg (4.19 lbs)</p>	15-00141	<p>Cradle, 2110 with 9350 Interface</p> <p>Suitable for interfacing with the 9350 Automatic Tuning Whip Antenna and a DC battery charger. For 9350 ordering details, see page 71, <i>9350 Automatic Tuning Whip Antenna</i>.</p> <p>NOTE: Cannot be used with the 2110v Transceiver.</p>
 <p>NET WEIGHT: 0.3 kg (0.66 lbs)</p>	15-00143	<p>2110 External DC for Cradle</p> <p>Backpanel for the transceiver cradle that provides DC connection for the transceiver directly to the vehicle battery.</p> <p>NOTE:</p> <ul style="list-style-type: none"> The transceiver cradle is only shown for illustration purposes. Voltage regulator (part number 15-00576) is available for 24 V vehicle operation. See page 131, <i>DC-DC Voltage Converter</i>.
 <p>NET WEIGHT: 1.7 kg (3.75 lbs)</p>	15-00144	<p>2110 External DC Vehicle Kit</p> <p>Complete vehicle installation kit incorporating the external DC backpanel (part number 15-00143). It provides DC connection for the transceiver directly to the vehicle battery.</p> <p>NOTE: Voltage regulator (part number 15-00576) is available for 24 V vehicle operation. See page 131, <i>DC-DC Voltage Converter</i>.</p>

MOUNTING ACCESSORIES cont.

PRODUCT	PART NO.	DESCRIPTION
	<p>08-07010-006</p>	<p>Antenna Tuner Control Cable, 6 m Interface cable for direct connection of antenna tuner to 19 pin front panel connector on 2110 (<i>not</i> suitable for 2110v).</p>
	<p>08-06357-001</p>	<p>BNC to UHF Coaxial Cable, 1 m Used to adapt BNC connector on 2110/2110v to UHF socket. Requires additional coaxial cable length for connection to antenna, see page 85, <i>Coaxial Cables</i>.</p>



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Backpack & Mounting Accessories

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product

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Добро

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Bien

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مرحبا

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Selamat Datang di CODAN

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Chào mừng đến với CODAN

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Bienvenue à CODAN

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CODANへようこそ

CODAN을 찾아주세요

Welcome to CODAN

Bem vindo à CODAN

Добро пожаловать на

Bienvenido a CODAN

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ENGLISH MANUALS		
PRODUCT	PART NO.	DESCRIPTION
	15-04127-EN	Getting Started Guide, NGT™ Transceiver, includes Reference Manual on CDROM
	15-04140-EN	Getting Started Guide, NGT™ SRx Transceiver, includes Reference Manual on CDROM
	15-04137-EN	Getting Started Guide, NGT™ ASR Transceiver, includes Reference Manual on CDROM
	15-04136-EN	Getting Started Guide, 2110 series Manpack Transceiver, includes Reference Manual on CDROM
	15-04104-EN	User Guide, HF Data Modem 3012
	15-04104-CD	User Guide, HF Data Modem 3012, on CDROM
	15-04147-EN	User Guide, HF Data Modem 3112
	15-04147-CD	User Guide, HF Data Modem 3112, on CDROM

Continued on the next page

ENGLISH MANUALS cont.

PRODUCT	PART NO.	DESCRIPTION
	15-04146-EN	User Guide, 3212 HF Data Modem
	15-04146-CD	User Guide, 3212 HF Data Modem, on CDROM
	15-04148-EN	User Guide, Crosspatch™ 3031
	15-04148-CD	User Guide, Crosspatch™ 3031, on CDROM
	15-04131-EN	Reference Manual, High Power Amplifiers 3061/3062
	15-04156-EN	Reference Manual, 3033 Radio Telephone Interconnect
	15-04156-CD	Reference Manual, 3033 Radio Telephone Interconnect, on CDROM
	15-04102-EN	Reference Manual, Remote Control NGT™ Systems

Continued on the next page

ENGLISH MANUALS cont.

PRODUCT	PART NO.	DESCRIPTION
	15-04125-EN	Reference Manual, Split-site Remote Control NGT™ Systems
	15-04142-EN	Installation Handbook, Automatic Tuning Whip Antenna 9350
	15-04143-EN	Repair Guide, NGT™ Transceiver
	15-04143-CD	Repair Guide, NGT™ Transceiver, on CDROM
	15-04139-EN	Repair Guide, Manpack Transceiver 2110 series
	15-04139-CD	Repair Guide, Manpack Transceiver 2110 series on CDROM
	15-60012	Installation Handbook, 3040, c/w antenna connector sealing kit



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Language Support

FRENCH MANUALS

PRODUCT	PART NO.	DESCRIPTION
	15-04127-FR	Getting Started Guide, NGT™ Transceiver, includes Reference Manual on CDROM
	15-04140-FR	Getting Started Guide, NGT™ SRx Transceiver, includes Reference Manual on CDROM
	15-04136-FR	Getting Started Guide, 2110 series Manpack Transceiver, includes Reference Manual on CDROM
	15-04104-FR	User Guide, HF Data Modem 3012
	15-04147-FR	User Guide, HF Data Modem 3112
	15-04102-FR	Reference Manual, Remote Control NGT™ Systems
	15-04142-FR	Installation Handbook, Automatic Tuning Whip Antenna 9350

SPANISH MANUALS

PRODUCT	PART NO.	DESCRIPTION
	15-04127-ES	Getting Started Guide, NGT™ Transceiver, includes Reference Manual on CDROM
	15-04137-ES	Getting Started Guide, NGT™ ASR Transceiver, includes Reference Manual on CDROM
	15-04140-ES	Getting Started Guide, NGT™ SRx Transceiver, includes Reference Manual on CDROM
	15-04136-ES	Getting Started Guide, 2110 series Manpack Transceiver, includes Reference Manual on CDROM
	15-04131-ES	Reference Manual, High Power Amplifiers 3061/3062
	15-04142-ES	Installation Handbook, Automatic Tuning Whip Antenna 9350





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Language Support

ARABIC MANUALS

PRODUCT	PART NO.	DESCRIPTION
	15-04140-AR	Getting Started Guide, NGT™ SRx Transceiver, includes Reference Manual on CDROM
	15-04136-AR	Getting Started Guide, 2110 series Manpack Transceiver, includes Reference Manual on CDROM

PORTUGUESE MANUALS

PRODUCT	PART NO.	DESCRIPTION
	15-04140-PT	Getting Started Guide, NGT™ SRx Transceiver, includes Reference Manual on CDROM



Shipping Weights

SHIPPING WEIGHTS			
PART NO.	DESCRIPTION	BOX TYPE	PACKED WGHT (kg)
2110-TCVR	2110 SSB Transceiver Kit	B2	5.0
2110-TCVR-PATROL	2110 Patrol Configuration	CMR	11.0
2110-TCVR-EXP	2110 Explorer Configuration	AA + BPK	14.5
2110-TCVR-HS	2110 Homeland Security Configuration	AA + BPK	16.0
ANT-9350-NC	9350 Automatic Tuning Whip (No Cables)	D	8.6
ANT-9350-6M	9350 Automatic Tuning Whip with 6 m Cables	D	9.28
CONTROL-POINT-ASR-6M	NGT™ ASR Control Point Kit	B	2.5
CONTROL-POINT-SR-6M	NGT™ SR Control Point Kit	B	2.5
HIGH-PWR-500	3061 500 W Power Amplifier	HPPA1, HPPA2	35.0
HIGH-PWR-1000	3062 1 kW Power Amplifier	HPPA1, HPPA2	47.0
MODEM-3012-NC	3012 HF Data Modem (No Cables)	PSU	2.99
MODEM-3012-NGT-2M	3012 HF Data Modem for NGT™ with 2 m RS232 Cable	PSU	3.37
MODEM-3012-NGT-6M	3012 HF Data Modem for NGT™ with 6 m RS232 Cable	PSU	3.59
MODEM-3012-2110-6M	3012 HF Data Modem for 2110 with 6 m RS232 Cable	PSU	3.56
MODEM-3112-NC	3112 HF Data Modem (No Cables)	B	4.39
MODEM-3112-NGT-ETH-2M	3112 HF Data Modem for NGT™ with 2 m Ethernet Cable	B	4.74
MODEM-3112-NGT-ETH-10M	3112 HF Data Modem for NGT™ with 10 m Ethernet Cable	B	5.58
MODEM-3112-NGT-SYNC-2M	3112 HF Data Modem for NGT™ with 2 m Synchronous Cable	B	5.0
MODEM-3112-2110-ETH-10M	3112 HF Data Modem for 2110 with 10 m Ethernet Cable	B	5.25
MODEM-3212-NC	3212 HF Data Modem (No Cables)	B	3.0
MODEM-3212-NGT-2M	3212 HF Data Modem for NGT™ with 2 m RS232 Cable	B	4.39
MODEM-3212-NGT-6M	3212 HF Data Modem for NGT™ with 6 m RS232 Cable	B	5.74
MODEM-3212-2110-2M	3212 HF Data Modem for 2110 with 2 m RS232 Cable	B	4.74
MODEM-3212-2110-6M	3212 HF Data Modem for 2110 with 6 m RS232 Cable	B	5.74



SHIPPING WEIGHTS			
PART NO.	DESCRIPTION	BOX TYPE	PACKED WGHT (kg)
NGT-ASR-BASE	NGT™ ASR Base Station Configuration	A, PSU, T463	20.0
NGT-ASR-MOB	NGT™ ASR Mobile Configuration	B, D	18.0
NGT-ASR-TCVR	NGT™ ASR Transceiver	B	7.0
NGT-SR-BASE	NGT™ SR Base Station Configuration	A, PSU, T463	20.0
NGT-SR-MOB	NGT™ SR Mobile Configuration	B, D	18.0
NGT-SR-TCVR	NGT™ SR Transceiver	B	7.0
NGT-SRX-BASE	NGT™ SRx Base Station Configuration	A, PSU, T463	20.0
NGT-SRX-MOB	NGT™ SRx Mobile Configuration	B, D	18.0
NGT-SRX-TCVR	NGT™ SRx Transceiver	B	7.0
NGT-VR-BASE	NGT™ VR Base Station Configuration	A, PSU, T463	20.0
NGT-VR-MOB	NGT™ VR Mobile Configuration	B, D	18.0
NGT-VR-TCVR	NGT™ VR Transceiver	B	7.0
REMOTE-NRI-CTRL-2W	NGT™ Remote Interface Control Site - 2 Wire Interface	B	4.63
REMOTE-NRI-TCVR-2W	NGT™ Remote Interface Transceiver Site - 2 Wire Interface	B	4.16
REMOTE-SPLIT-CTRL-8571-2W	NGT™ Split-site Control Site - 2 Wire Interface	B	6.99
REMOTE-SPLIT-RX-8571-2W	NGT™ Split-site Receive Site - 2 Wire Interface	B	6.49
REMOTE-SPLIT-TX-8571-2W	NGT™ Split-site Transmit Site - 2 Wire Interface	B	6.39
REMOTE-SPLIT-TXRX-8571-2W	NGT™ Split-site Transmit & Receive - 2 Wire Interface	B.B	13.0
REMOTE-SPLIT-CTRL-8571-4W	NGT™ Split-site Control Site - 4 Wire Interface	B	6.91
REMOTE-SPLIT-RX-8571-4W	NGT™ Split-site Receive Site - 4 Wire Interface	B	6.41
REMOTE-SPLIT-TX-8571-4W	NGT™ Split-site Transmit Site - 4 Wire Interface	B	6.31
REMOTE-SPLIT-TXRX-8571-4W	NGT™ Split-site Transmit & Receive Site - 4 Wire Interface	B.B	13.0
RTI-3033-NGT	3033 Radio Telephone Interconnect	HPA	10.0



SHIPPING WEIGHTS			
PART NO.	DESCRIPTION	BOX TYPE	PACKED WGHT (kg)
TIP100-VOICE	TIP100 Remote System (Voice Only)	1/2B	2.0
TIP100-VOICE-DATA	TIP100 Remote System (Voice & Data)	1/2B	2.0
XPATCH-NGT	3031 Crosspatch™ for NGT™	L	0.84
XPATCH-2110	3031 Crosspatch™ for 2110	L	0.84
05-06374	Earth Braid, 1.5 m	M	0.5
06-02489-EN	Quick Reference Card, Crosspatch 3031 (English)	L	0.32
08-01233	Strain Relief	L	0.5
08-01503-002	Cable, Coaxial Assembly (RG58) Fitted with UHF Type Weatherproof Connectors, 2 m	M	0.5
08-01503-006	Cable, Coaxial Assembly (RG58) Fitted with UHF Type Weatherproof Connectors, 6 m	L	0.5
08-01503-008	Cable, Coaxial Assembly (RG58) Fitted with UHF Type Weatherproof Connectors, 8 m	L	0.5
08-01503-030	Cable, Coaxial Assembly (RG58) Fitted with UHF Type Weatherproof Connectors, 30 m	B	3.0
08-03255	Cable, Battery, 6 m	L	0.5
08-04146-001	Cable, 6-way Phone	M	0.5
08-04284	Cable, Phone Plug Adaptor Modular to 604 Plug	M	0.5
08-04515-001	Earth Wire, 0.5 m	M	0.5
08-04835-013	Tuner, 9103 Automatic Antenna with 10 m Cables	B	4.0
08-04835-015	Tuner, 9103 Automatic Antenna with 30 m Cables	B	4.0
08-04971-010	Cable, Coaxial Assembly (RG213) Fitted with UHF Type Weatherproof Connectors, 10 m	A	2.0
08-04971-030	Cable, Coaxial Assembly (RG213) Fitted with UHF Type Weatherproof Connectors, 30 m	A	5.0
08-04971-050	Cable, Coaxial Assembly (RG213) Fitted with UHF Type Weatherproof Connectors, 50 m	A	7.0
08-04971-100	Cable, Coaxial Assembly (RG213) Fitted with UHF Type Weatherproof Connectors, 100 m	A	20.0
08-05063-001	9350 Main Assembly	D	7.0
08-05086-001	Cable, Data Interface, 2 m	L	0.5
08-05086-006	Cable, Data Interface, 6 m	L	0.5
08-05123-001	Cable, NSP Interface	M	0.5



SHIPPING WEIGHTS			
PART NO.	DESCRIPTION	BOX TYPE	PACKED WGHT (kg)
08-05140-001	9350 Spring	L	1.0
08-05288-009	Rack Cabinet, 9RU High, 19" Format, 500 mm Deep	R	23.4
08-05288-012	Rack Cabinet, 12RU High, 19" Format, 500 mm Deep	R	22.0
08-05288-018	Rack Cabinet, 18RU High, 19" Format, 500 mm Deep	H	24.0
08-05399-001	Cable, Battery Paralleling (+ve)	M	0.5
08-05399-002	Cable, Battery Paralleling (-ve)	M	0.5
08-05610-001	Cable, CIB Interface, 0.5 m	M	0.5
08-05610-002	Cable, CIB Interface, 2 m	M	0.5
08-05610-006	Cable, CIB Interface, 6 m	P4	0.5
08-05610-030	Cable, CIB Interface, 30 m	1/2B	3.0
08-05627-006	Cable, 9350/3040 to NGT™ Control, 6 m	L	0.5
08-05627-008	Cable, 9350/3040 to NGT™ Control, 8 m	L	0.5
08-05627-030	Cable, 9350/3040 to NGT™ Control, 30 m	B	3.0
08-05628-001	NGT™ SR 2010 RF Unit	B	5.0
08-05628-004	NGT™ VR 2011 RF Unit	B	5.0
08-05628-007	NGT™ ASR 2010 RF Unit	B	5.0
08-05628-009	NGT™ SRx 2012 RF Unit	B	5.0
08-05629-001	NGT™ SR 2020 Handset	L	0.3
08-05629-002	NGT™ VR 2020 Handset	L	0.3
08-05629-007	NGT™ ASR 2020 Handset	L	0.3
08-05629-009	NGT™ SRx 2020 Handset	L	0.3
08-05630-001	NGT™ SR 2030 Junction Box	1/2B	0.5
08-05630-005	Split-site Interface Control Junction Box	1/2B	0.5
08-05630-007	NGT™ ASR 2030 Junction Box	1/2B	0.5
08-05712-001	Cable, NGT™ to 3012 Modem, 1 m	L	0.5
08-05712-006	Cable, NGT™ to 3012 Modem, 6 m	L	0.72
08-05847-001	Interface Adaptor	M	0.2
08-05858-001	Cable, NRI to Line Modem	M	0.5
08-05859-001	Cable, Power NRI to Line Modem	M	0.5



SHIPPING WEIGHTS			
PART NO.	DESCRIPTION	BOX TYPE	PACKED WGHT (kg)
08-05864-001	3030 NGT™ Remote Interface Unit	B	2.0
08-05868-001	Cable, Power to RF Unit and NRI	M	0.5
08-05877-004	3012 HF Data Modem	B	2.74
08-05920-001	Cable, DC Extension, 1 m	M	0.2
08-05956-001	Cable, High Power Amplifier Controller	L	0.5
08-05974-001	3061 500 W Power Amplifier	HPPA1	20.0
08-05975-001	3062 1 kW Power Amplifier	HPPA1	27.0
08-05980-001	UUPlus™ <i>Email for HF</i> Client Software	1/2B	0.5
08-05981-001	UUPlus™ <i>Email for HF</i> Server Software	1/2B	0.5
08-05989-001	Cable, Power Adaptor, Split-site	M	0.5
08-05990-001	Cable, 8571 Split-site Remote Interface to NGT™	M	0.5
08-05994-001	8571 NGT™ Remote Control Interface	B	2.0
08-06022-001	Cable, NGT™ Control, 6 m	M	1.0
08-06067-001	3061 500 W Power Supply Unit	HPPA2	14.0
08-06102-001	3062 1 kW Power Supply Unit	HPPA2	17.0
08-06130-001	Basic High Power Rack Configuration	H	90
08-06130-002	Remote Control, High Power Rack Configuration	H	90
08-06130-003	Remote Control and Data Modem High Power Rack Configuration	H	90
08-06130-004	Split-site Remote Control High Power Rack Configuration	H	90
08-06155-001	2110 SSB Tcvr Unit (1.5 ppm)	PSU	3.5
08-06155-002	2110 SSB Tcvr Unit (0.5 ppm)	PSU	3.5
08-06155-003	2110v SSB Tcvr Unit (1.5 ppm)	PSU	3.5
08-06185-001	Battery Pack 12 V 8Ah NiMH	1/2B	2.6
08-06186-001	Battery Pack 12 V 13Ah NiMH	1/2B	3.4
08-06188-001	Battery Pack 12 V 7Ah SLA	1/2B	3.7
08-06213-001	Cable, VP-116 Interface	M	0.5
08-06214-001	Cable, Charger O/P, 6way	M	0.3



SHIPPING WEIGHTS			
PART NO.	DESCRIPTION	BOX TYPE	PACKED WGHT (kg)
08-06215-001	Cable, charger O/P, 19way	M	0.3
08-06216-001	Cable, DC Charger I/P, Lighter Adaptor	M	0.4
08-06217-001	Cable, DC Charger I/P, Clips Adaptor	M	0.4
08-06222-001	NGT™ ASR VP-116 Junction Box	1/2B	0.5
08-06237-001	Cable, 2110 Prog 19way MIL-D9F	M	0.5
08-06259-001	Earth Wire with Clip	M	0.3
08-06270-001	3112 HF Data Modem	B	4.34
08-06274-001	3212 HF Data Modem	B	4.34
08-06330-001	Cable, NGT™ to Q9600 Modem, 1 m	M	0.5
08-06356-001	Cable, NGT™ to 3112 Modem, 1 m	L	0.42
08-06356-006	Cable, NGT™ to 3112 Modem, 6 m	L	0.76
08-06357	Cable, BNC to UHF Coaxial, 1 m	M	0.2
08-06359-002	Cable, Serial D9M-D9F Isol Shield Cable, 2 m	M	0.4
08-06359-006	Cable, Serial D9M-D9F Isol Shield Cable, 6 m	L	0.1
08-06360-002	Cable, 9-way to 9-way Serial, 2 m	L	0.42
08-06360-006	Cable, 9-way to 9-way Serial, 6 m	L	0.55
08-06361-002	Cable, Serial 25-way to 25-way, 2 m	L	0.55
08-06361-006	Cable, Serial 25-way to 25-way, 6 m	L	0.83
08-06380-001	Cable, Serial 6-way to D9F	M	0.5
08-06422-001	Cable, 2110 Manpack to 3012 Modem, 1 m	L	0.46
08-06454-001	NGT™ to MICOM Interface Box	L	0.49
08-06730-001	3031 VHF/UHF to HF Crosspatch™ for NGT™	L	0.54
08-06730-002	3031 VHF/UHF to HF Crosspatch™ for 2110	L	0.59
08-06737-001	Cable, 2110v Prog 5way MIL-D9F	M	0.5
08-06738-001	Cable, charger O/P, 5way	M	0.3
08-06739-001	Tuner, SG235C 500 W PEP	B	3.5
08-06740-030	Cable, SG235C Control, 30 m	1/2B	3.0
08-06766-001	Cable, 3031 to VHF/UHF Transceiver Generic, 2 m	L	0.5
08-06786-001	Cable, 2110 Manpack to 3112 Modem, 1 m	L	0.44



SHIPPING WEIGHTS			
PART NO.	DESCRIPTION	BOX TYPE	PACKED WGHT (kg)
08-07007-001	3040 Main Assembly	B	5.0
08-07148-001	3040 Spring	L	1.0
08-07009-001	Battery Pack 12 V 17Ah LiFePO4	PSU	3.0
08-07010-006	Antenna Tuner Control Cable, 6 m	L	1.0
15-00112	Complete Vehicle Installation Kit	B	2.5
15-00129	NGT™ Handset Cradle Kit	M	0.5
15-00134	NGT™ Remote Control Earth Kit for the Remote Site	L	0.5
15-00135	NGT™ Remote Control Earth Kit for the Control Site	L	0.1
15-00136	Cradle, NGT™ RF Unit Mounting/3012 HF Data Modem	B	2.3
15-00139	Cradle, 2110/2110v with Screws	B	2.5
15-00140	Cradle, 2110 with Interface Adaptor	B	3.5
15-00141	Cradle, 2110 with 9350 Interface	B	2.6
15-00143	2110 External DC for Cradle	L	0.3
15-00144	2110 External DC Vehicle Kit	1/2B	2.1
15-00145	Crosspatch™ 3031 Installation Kit	P1	0.12
15-00158	Earth Mat for Base Whip Antenna, Ground Installations	406A	3.0
15-00159	Radial Ground Plane for Base Whip Antenna, Roof Installations	B	6.0
15-00163	Earth Stake	C	2.0
15-00164-010	19" Rack-mounting Frame for 8571 Split-site Remote Interface	A	2.0
15-00172-001	NGT™ Universal 19" Rack-mounting Tray 3RU with Blank Front Panel	F	2.0
15-00172-002	NGT™ Universal 19" Rack-mounting Tray 3RU, Front Panel with Speaker Grill and Mounting Holes	F	2.5
15-00173	Set of 1RU + 2RU Blank Front Panels	B	0.6
15-00176	19" Rack-mounting Frame suitable for 3020 Transceiver Supply, and 3012, 3112 or 3212 HF Data Modems	T	2.39
15-00216	Backpack, External Frame	BPK	5.5
15-00218	Backpack, Softpack	B2	2.5



SHIPPING WEIGHTS			
PART NO.	DESCRIPTION	BOX TYPE	PACKED WGHT (kg)
15-00323	NVIS Kit	C	2.0
15-00403	Ant, Tuned Long Wire (2–30 MHz)	B	1.0
15-00406-001	Ant, Base Whip, Ground Mounting (9.5 m/31 ft Unloaded)	406	7.0
15-00406-002	Ant, Base Whip, Roof Mounting (9.5 m/31 ft Unloaded)	406A	7.0
15-00411-005	Ant, Terminated Folded Dipole (2–30 MHz, 150 W PEP)	T	7.0
15-00411-010	Ant, Terminated Folded Dipole (2–30 MHz, 1000 W PEP)	T	8.0
15-00422-012	Mast, Guyed 12 m with Erection Kit	M1, M2	47.0
15-00422-015	Mast, Guyed 15 m with Erection Kit	M3, M4	51.0
15-00446	Counterpoise 4-wire kit	M	0.5
15-00452	Ant, 3 m (10') Collapsible Whip 25 W	1/2C	1.4
15-00453	Ant, 1.5 m (5') Tape Whip 25 W	1/2C	1.3
15-00454	Ant, Long Wire and Adaptor 25 W PEP (1.6–30 MHz)	L	0.8
15-00455	Ant, Wire Dipole 25 W PEP (3–30 MHz)	1/2B	3.2
15-00456	Ant, Broadband Dipole 25 W PEP (3–30 MHz)	1/2B	3.1
15-00457	Ant, Dipole and Broadband kit 25 W PEP (2–30 MHz)	1/2B	3.8
15-00458	Ant, End-fed Broadband 25 W PEP (3–30 MHz)	1/2B	1.6
15-00459	Ant, 1.5 m (5') Knock Over Whip 25 W	1/2C	1.3
15-00462	Anchor peg	L	0.4
15-00463-001	Ant, Multi-wire Broadband Dipole (2–30 MHz, 125 W PEP)	T463	6.0
15-00464	Lightning Arrestor	M	0.5
15-00508	Voltage Regulator (24 V to 12 V operation 20 A)	B	1.2
15-00531	Solar Power Supply 40 W	SOLA	9.0
15-00532	Solar Power Supply 80 W	SOLA	18.0
15-00533	Solar Power Supply 240 W	533A, C	44.0
15-00573	2110 Battery Charger AC 1 A	L	0.7
15-00576	2110 Voltage Regulator (24 V to 12 V operation 7 A)	L	0.98
15-00577	2110 Solar Battery Charger	1/2B	3.0
15-00578	2110 Hand-powered Battery Charger	F	5.0



SHIPPING WEIGHTS			
PART NO.	DESCRIPTION	BOX TYPE	PACKED WGHT (kg)
15-00602	Headphones	B	1.0
15-00649	External Speaker with 4 m Lead	1/2B	0.5
15-00652	Morse Key for NGT™	L	0.5
15-00702	Cable Kit for Float Charge	L	2.0
15-00704	Vehicle Interference Suppression Kit	L	1.0
15-00711	Fuse Holder with 32 A Fuse	L	0.5
15-00712	Fuse, 32 A	M	0.5
15-00765	GPS Receiver/Antenna for VR and SRx	L	0.67
15-00766	NGT™ (VR and SRx) Desk Console	1/2B	1.5
15-00770	HAL FAX	PSU	4.1
15-00771	GPS Receiver/Antenna for ASR	L	0.67
15-02063-CD	NGT™ Transceiver System Technical Service Manual on CDROM (English)	M	0.25
15-04102-##	Reference Manual, Remote Control NGT™ Systems	L	0.5
15-04104-##	User Guide, HF Data Modem 3012	L	0.5
15-04104-CD	User Guide, HF Data Modem 3012 (English)	M	0.25
15-04125-EN	Reference Manual, Split-site Remote Control NGT™ Systems (English)	L	0.5
15-04127-##	Getting Started Guide, NGT™ Transceiver, includes Reference Manual on CDROM	L	0.5
15-04164-EN	NSP Software CD Package	M	0.25
15-04131-##	Reference Manual, High Power Amplifiers 3061/3062	L	0.5
15-04136-##	Getting Started Guide, 2110 series Manpack Transceiver, includes Reference Manual on CDROM	M	0.5
15-04137-EN	Getting Started Guide, NGT™ ASR Transceiver, includes Reference Manual on CDROM (English)	L	0.5
15-04140-##	Getting Started Guide, NGT™ SRx Transceiver, includes Reference Manual on CDROM	L	0.5
15-04142-##	Installation Handbook, Automatic Tuning Whip Antenna 9350	L	0.5

denotes language version, see page 141, *Language Support*



SHIPPING WEIGHTS			
PART NO.	DESCRIPTION	BOX TYPE	PACKED WGHT (kg)
15-04146-CD	User Guide, HF Data Modem 3212 on CDROM	P4	0.3
15-04146-EN	User Guide, 3212 HF Data Modem (English)	P4	0.3
15-04147-CD	User Guide, HF Data Modem 3112 on CDROM (English)	M	0.25
15-04147-EN	User Guide, HF Data Modem 3112(English)	L	0.48
15-04148-CD	User Guide, Crosspatch™ 3031 on CDROM (English)	M	0.25
15-04148-EN	User Guide, Crosspatch™ 3031 (English)	L	0.5
15-04155-EN	Codan HF Express™ and STANAG 5066 Stack (English)	P1	0.14
15-60012	3040 Installation Handbook	P4	0.2
15-10469	Opt Fan (Retro Fit)	1/2B	0.5
15-10471	NGT™ (SR and ASR) Desk Console (Retro Fit)	1/2B	1.0
15-10507	Opt Voice Encryptor (Retro Fit)	1/2B	0.5
15-10509	Opt 2 W, 2-wire (Retro Fit)	1/2B	0.5
15-10510	Opt 4 W, 4-wire (Retro Fit)	1/2B	0.5
30-35002-006	19" 1RU Vent Panel	406A	1.0
30-35002-019	19" 4RU Vent Panel	406A	2.0
30-35002-020	Fixed Equipment Rail, 457 mm Long	406A	0.5
30-37601-002	Copper Earth Strip	M	0.5
30-38000-002	Shackle	L	0.1
39-79150-080	Ferrite Bead Clamp	P1	0.13
60-00063-501	6-way Modular Wall Mounting Socket	L	0.1
60-00098-590	Adaptor, 9-pin D Plug to 25-pin D Socket	P1	0.13
60-11163-204	Plug, UHF (RG213) W/proof Free	P1	0.1
60-11163-221	Plug, UHF (RG58) W/proof Free	P1	0.1
65-72000-012	Battery, Lead acid 12 V 90Ah (supplied dry charged)	–	18.0
65-72003	Battery, 12 V 100Ah Gelcell	–	39.0
65-72004	Battery, 12 V 185Ah Gelcell	–	65.0
67-90200	Cable, 2C IEC C7 AUS, 2 m	L	0.5
67-90201	Cable, 2C IEC C7 UK, 2 m	L	0.5
67-90202	Cable, 2C IEC C7 US, 2 m	L	0.5



SHIPPING WEIGHTS			
PART NO.	DESCRIPTION	BOX TYPE	PACKED WGHT (kg)
67-90203	Cable, 2C IEC C7 EU, 2 m	L	0.5
67-90305	Cable, 3C Blk Mld IEC AUS, 2 m	L	0.5
67-90306	Cable, 3C Blk Mld IEC UK, 2 m	L	0.5
67-90307	Cable, 3C Blk Mld IEC US, 2 m	L	0.5
67-90308	Cable, 3C Blk Mld IEC EU, 2 m	L	0.5
67-90309	Cable, 3C Blk Mld IEC 320-UK, 2 m	L	0.5
67-90800	Cable, Ethernet Crossover CAT-5E, 2 m Red	L	0.38
67-90801	Cable, Ethernet Crossover CAT-5E, 10 m Red	L	0.64
67-90802	Ethernet Straight CAT-5E Cable, 2 m Blue	L	0.38
67-90803	Ethernet Straight CAT-5E Cable, 10 m Blue	L	0.64
78-01012	Ant, Semi-delta (2–30 MHz, 125 W PEP)	T	6.0
78-01022	Ant, Delta (2–30 MHz, 125 W)	1022	30.0
78-01031	Adaptor, USB to DB-9, Serial	M	0.5
78-02007	Battery Charger AC-DC 3121	M	0.5
78-02008	Battery Charger DC-DC 3122	M	0.5
78-02012	Battery Charger AC-DC 3123	M	0.5
78-07003-010	InterNav-CHF™ GPS Tracking Software–10 User	1/2B	1.0
78-07003-025	InterNav-CHF™ GPS Tracking Software–25 User	1/2B	1.0
78-07003-050	InterNav-CHF™ GPS Tracking Software–50 User	1/2B	1.0
78-07003-100	InterNav-CHF™ GPS Tracking Software–100 User	1/2B	1.0
78-07003-990	InterNav-CHF™ GPS Tracking Software–1 User (Dealer)	1/2B	1.0
78-08000	Handset H-250/U	L	0.7
78-13016	Modem, Leased Line	1/2B	1.0
78-14010	3040 NVIS Kit	TUBE	2.6
78-16019	Power Supply Unit, 90 to 264 V AC	L	0.2
78-16042	Sealevel PCI Synchronous Serial Card	L	0.39
78-18058	Riser, fibreglass	TUBE	2.0
78-20043	TIP100 Handset Kit	L	1.0



Shipping Weights

SHIPPING WEIGHTS			
PART NO.	DESCRIPTION	BOX TYPE	PACKED WGHT (kg)
78-20044	TIP100 Transceiver Kit	L	1.0
78-23007-003	9350 Fibreglass Whip, 1.6 m	NV	0.5
78-23025	9350 Tapered Stainless Steel Whip, 1.2 m	NV	0.2
78-23056	9350 Tapered Stainless Steel Whip, 1.65 m	NV	0.2
78-23085	3040 Fibreglass Whip, 1.6 m	TUBE	1.5
78-23086	3040 Stainless Steel Whip	TUBE	1.5



NOTE 1: All weights shown are **net packed weights** calculated to the nearest 0.5 kg.

NOTE 2: In a number of instances accessories will be packed together or with the main equipment resulting in a reduction of the total published weight.

NOTE 3: Where applicable, the standard pack reference code has been given as a general guide to the overall dimensions of the carton/crate used to pack main equipment and some selected accessories. It should be noted, however, that the dimensions shown might vary from time-to-time depending on the consignment circumstances.

STANDARD PACKING DIMENSIONS

REF CODE	DIMENSIONS	APPROXIMATE VOLUME (m ³)
A	510 x 510 x 280 mm	0.07
AA	510 x 510 x 280 mm	0.07
B	510 x 340 x 280 mm	0.05
B1	510 x 340 x 280 mm	0.05
B2	510 x 340 x 280 mm	0.04
BPK	590 x 410 x 200 mm	0.05
C	2200 x 130 x 90 mm	0.03
CMR	660 x 330 x 330 mm	0.07
D	1700 x 200 x 180 mm	0.06
E	1940 x 480 x 190 mm	0.18
F	600 x 600 x 350 mm	0.13
H	790 x 710 x 1670 mm	0.94
HPPA1	680 x 640 x 420 mm	0.18
HPPA2	680 x 640 x 420 mm	0.18
L	300 x 200 x 100 mm	0.01
M	230 x 210 x 105 mm	0.01
M1	3150 x 160 x 160 mm	0.08
M2	930 x 230 x 200 mm	0.04
M3	3150 x 160 x 160 mm	0.08
M4	930 x 230 x 200 mm	0.04
N	780 x 530 x 80 mm	0.03
NV	2200 x 125 x 90 mm	0.02
O	1200 x 530 x 80 mm	0.05
P1	150 x 220 x 0 mm	0.0
P4	240 x 370 x 0 mm	0.0
PSU	400 x 300 x 190 mm	0.02



STANDARD PACKING DIMENSIONS cont.

REF CODE	DIMENSIONS	APPROXIMATE VOLUME (m ³)
R	600 x 600 x 550 mm	0.20
S	170 x 170 x 70 mm	0.01
SD1	1750 x 6.0 x 6.0 mm	0.0
SD2	770 x 360 x 100 mm	0.02
SOLA	1000 x 550 x 200 mm	0.11
SYST	1040 x 520 x 300 mm	0.16
SYS1	1030 x 520 x 300 mm	0.16
SYS2	1030 x 520 x 300 mm	0.16
SYS3	1030 x 520 x 300 mm	0.16
T	800 x 300 x 250 mm	0.06
TW	600 x 550 x 400 mm	0.13
019A	1900 x 460 x 185 mm	0.16
023A	1260 x 830 x 440 mm	0.46
023B	1100 x 1110 x 390 mm	0.48
023C	4500 x 1570 x 140 mm	0.99
024A	960 x 630 x 270 mm	0.16
024B	1100 x 1110 x 390 mm	0.48
024C	4500 x 1570 x 140 mm	0.99
1/2B	311 x 231 x 243 mm	0.02
1/2C	950 x 130 x 90 mm	0.01
40W	660 x 360 x 620 mm	0.15
406	2270 x 120 x 120 mm	0.03
406A	602 x 230 x 50 mm	0.006
408L1	660 x 410 x 160 mm	0.04
408L2	1960 x 180 x 180	0.06
420/14	5200 x 260 x 260 mm	0.35
420/23	7800 x 260 x 260 mm	0.52
533A	1200 x 530 x 300 mm	0.19
1021	1260 x 830 x 470 mm	0.49
1022	910 x 285 x 205 mm	0.05

Dictionary

In the Standard Terms and Conditions of Supply, the words below have the following meanings:

\$ means AUD, unless specifically otherwise specified;

ACDC means the Australian Commercial Dispute Centre Limited A.C.N. 003 042

840 of Level 6, 50 Park Street, Sydney, NSW, 2000, Australia;

Agreement means the contract between Codan and The Purchaser as described in clauses 1.3 and 1.4;

AUD means Australian dollars;

Business Day means any day except a Saturday, Sunday or public holiday in South Australia;

Calendar Day means a calendar day with periods expressed in Calendar Days subject to extension if necessary to allow for public holidays in South Australia and/or the location where the Product (if imported) is sourced as the case may be;

Catalogue means any and all catalogues of Codan products published and distributed by Codan in hard copy and electronically to its actual and prospective customers, setting out product details and current prices, as updated and replaced by Codan from time to time in its discretion;

Codan or Company means Codan Limited A.C.N. 007 590 605 of 81 Graves Street, Newton, South Australia, 5074, Australia;

Confidential Information means all information disclosed by Codan or The Purchaser and includes:

- (a) the fact that the parties will have, or are having, discussions, and the substance of those discussions;
- (b) financial information and other trade secrets and confidential know-how;
- (c) information regarding each party's business; and
- (d) all information generated by the parties which is based on the information referred to in these paragraphs (a) to (c) inclusive,

but excludes information that:

- (e) the parties create or develop (whether alone or jointly with any person) independently of the Confidential Information;
- (f) is public knowledge (otherwise than as a result of a breach of confidentiality by either party or any person to whom it has disclosed the information);
- (g) is rightfully known to, or in the possession or control of either party or any of its personnel and not subject to an obligation of confidentiality in accordance with the terms of this Agreement; or
- (h) becomes available to either party from a source other than the parties and which source has the right to use and disclose and is not bound by any obligation of confidentiality in respect of the same;

Credit Limit means the AUD value of any credit facility extended by Codan to The Purchaser;

Duties means any stamp, transaction or registration duty or similar charge imposed by any Government Agency and includes, but is not limited to, any interest, fine, penalty, charge or other amount imposed but excludes any income tax;

EUR or € means the euro (the official currency of the Eurozone);

Force Majeure Event means anything outside a party's reasonable control including, without limitation, shortages of materials, fire, storm, flood, earthquake, explosion, accident, enemy acts, war, rebellion, insurrection, sabotage, epidemic, quarantine restriction, labour dispute, labour shortage, transportation embargo or failure or delay in transportation;

Government Agency means any government or governmental, semi governmental, administrative, fiscal or judicial body, department, commission, authority, tribunal, agency or entity;

GST has the meaning it does in section 195-1 of the GST Act;

GST Act means A New Tax System (Goods and Services Tax) Act 1999 (Cth), as amended, varied or replaced from time to time;

Insolvency Event, in relation to The Purchaser, means any of the following events:

- (a) The Purchaser is unable to pay its creditors (or any class of them) in the ordinary course of business;
- (b) a receiver, receiver and manager, administrator, liquidator or similar officer is appointed to The Purchaser or any of its assets;
- (c) The Purchaser enters into, or resolves to enter into, a scheme of arrangement, compromise or composition with any class of creditors;
- (d) a resolution is passed or an application to a court is taken for the winding up, dissolution, official management or administration of The Purchaser; or
- (e) anything having a substantially similar effect to any of the events specified above happens under the law of any applicable jurisdiction;

Intellectual Property Rights means any and all intellectual and industrial property rights anywhere in the world, including but not limited to the rights comprised in any patent, copyright, design, trade mark, eligible layout or similar right whether at common law or conferred by statute, rights to apply for registration under a statute in respect of those or like rights and rights to protect trade secrets and know how, throughout the world for the full period of the rights and all renewals and extensions;

International Product Warranty means the warranty set out in the document attached as Annexure A, which is incorporated into and forms part of these Standard Terms and Conditions;

Order means an order for Products created as the result of The Purchaser's issue of a formal purchase order to Codan in hard copy or electronically (in a form agreed by Codan). Issuance of an Order (whether or not a Quotation is first issued by Codan) is deemed to constitute acceptance of these Standard Terms and Conditions by The Purchaser. In the event that a Quotation is issued by Codan, issuance of an Order is also deemed to constitute acceptance of the Quotation by The Purchaser;

Order Acknowledgement means Codan's written confirmation that an Order has been received from The Purchaser, and the Agreement brought into existence;

Order Value means the total price charged by Codan to The Purchaser for any Order, and including any amounts payable by The Purchaser and charged by Codan in accordance with clause 3.1;

Products means the products to be manufactured and/or imported by Codan for The Purchaser as listed in the Order;

Quotation or Quote means the quote, if any, issued by Codan to The Purchaser in respect of the Products to which these Standard Terms and Conditions of Supply are attached;

Supply has the same meaning it does in section 9-10 of the GST Act and excludes any "GST-free supplies" and "input taxed supplies" as those terms are defined in section 195-1 of the GST Act;

Tax or Taxes means any tax, levy, charge, impost, fee, deduction, compulsory loan or withholding (including corporate tax, personal income tax, fringe benefits tax, payroll tax, withholding tax, excise and import duties, GST, consumption tax, value added tax or any other taxes, levies or charges), which is assessed, levied, imposed or collected by any Government Agency, and includes any interest, fine, penalty, charge, fee or any other amount imposed on or in respect of any such amounts;

The Purchaser means the entity requesting that Products be supplied and sold to it by Codan by the issuance of an Order, as listed in the Quotation (if applicable); and

USD means US dollars.

1. Catalogue Offers, Quotations and Agreement

- 1.1 The Purchaser acknowledges and agrees:
 - (a) that the Catalogue constitutes an offer by Codan to sell the Products to The Purchaser on the terms and conditions set out in these Standard Terms and Conditions of Supply, at the prices stated in the Catalogue which are current on the date The Purchaser submits an Order (subject always to clause 2.1 below) (**Catalogue Offer**); and
 - (b) that the Catalogue Offer may be accepted by The Purchaser at any time by submitting an Order with Codan.
- 1.2 In addition to the Catalogue Offer, Codan may, in its discretion and following a request by The Purchaser, make an offer to The Purchaser for the sale of Products by issuing a Quotation. Unless otherwise specified in the Quotation issued by Codan to The Purchaser (if any) or agreed to in writing by Codan, all Quotations issued by Codan are valid for 30 days from the date of issue (Acceptance Period). The Purchaser must accept a Quotation by submitting an Order with Codan during the Acceptance Period. Any Quotation not accepted by The Purchaser during the Acceptance Period will lapse.
- 1.3 A contract between Codan and The Purchaser for the supply by Codan, and the purchase by The Purchaser, of the Products will come into existence:
 - (a) in cases where a Quotation is issued by Codan, on the date The Purchaser accepts the Quotation by submitting a valid Order with Codan within the Acceptance Period; and
 - (b) in all other cases, on the date that The Purchaser submits a valid Order with Codan, in response to the Catalogue Offer.
- 1.4 The contract will comprise:
 - (a) these Standard Terms and Conditions of Supply;
 - (b) the Quotation issued by Codan, if any; and
 - (c) the Product details listed in the Order to the exclusion of any other terms and conditions (including but not limited to any variations to either these Standard Terms and Conditions or the terms of the Quotation or the Catalogue Offer (as applicable) purported to be made by The Purchaser in the Order). Codan may (but is not obliged to) issue an Order Acknowledgement to The Purchaser, confirming the terms of the contract.
- 1.5 In the event of an inconsistency between any of the documents listed in clause 1.4 above, the terms of these Standard Terms and Conditions will prevail to the extent of the inconsistency, with the terms of the Quotation (if any) prevailing thereafter.

2. Prices

- 2.1 Prices specified by Codan for the Products in the Quotation or the Catalogue, as applicable, are based upon the prevailing currency exchange rates generated by the Codan system. Subject to Codan deciding in its sole discretion that it would be fair and reasonable in the circumstances to do so, Codan may pass on any variation in currency exchange rates to The Purchaser in any invoice issued in accordance with clause 3.1.
- 2.2 If a Quotation has been issued by Codan, the Purchaser acknowledges that it has been prepared by Codan on the basis of, and in reliance upon, the information provided by The Purchaser, and further acknowledges that the provision of incomplete or misleading information by The Purchaser, unforeseen circumstances, misinterpretations, variations and similar events may result in charges additional to those set out in the Quotation being payable by The Purchaser for the Products. The Purchaser agrees to pay any such additional amounts to Codan, in full.
- 2.3 Unless otherwise expressly specified by Codan (whether in the Quotation or the Catalogue), all prices stated are exclusive of Product delivery costs and freight charges.

3. Payment

- 3.1 The Purchaser is solely responsible for payment of all freight, insurance, delivery costs, Taxes and other charges levied or payable in respect of the Products, unless otherwise agreed by the parties in writing.
- 3.2 Codan will invoice The Purchaser for the Order Value of the Order at any time following receipt of such Order.
- 3.3 Unless otherwise stated in the Quotation the due date for payment by The Purchaser to Codan for the Order (Due Date) is as follows:
 - (a) 30 days from the date on which the invoice was issued, if the following conditions are satisfied at the time that the Order was submitted to Codan (i) The Purchaser has a pre-approved credit facility with Codan and (ii) the Order Value, combined with any outstanding payments due to Codan by The Purchaser at the time of the Order, fall within The Purchaser's approved Credit Limit; and
 - (b) in all other cases, payment is immediately due at the time that The Purchaser places the Order with Codan.
- 3.4 If The Purchaser fails to make any payment by the Due Date, then, without prejudice to any other right or remedy available to Codan, Codan may, in its sole discretion elect to:
 - (a) suspend any further deliveries to The Purchaser arising from the Order;
 - (b) cancel the Order for Products not yet supplied to The Purchaser in whole or in part by Codan;
 - (c) enter the property of The Purchaser in order to repossess the Products;
 - (d) charge The Purchaser interest (both before and after any judgement) on the unpaid amount at the rate of 10% per annum until payment is made in full; and/or
 - (e) withdraw any Credit Limits or credit facilities previously approved and extended to The Purchaser.

4. Delivery

- 4.1 Unless otherwise stated in any Order Acknowledgement issued by Codan to The Purchaser, Codan will deliver the Products to The Purchaser in the manner (i) specified in the Order or (ii) if a Quotation has been issued, in the manner specified in the Quotation, regardless of what is stated in the Order submitted by The Purchaser.
- 4.2 Codan will use its reasonable endeavours to deliver the Products described in the Order on the delivery date requested by The Purchaser.
- 4.3 Risk of damage to or destruction or loss of the Products will pass to The Purchaser at the time of delivery to The Purchaser or its nominated carrier, as appropriate.
- 4.4 Notwithstanding delivery and the passing of risk in the Products, the parties acknowledge and agree that the property and ownership of the Products supplied under this Agreement will not pass to The Purchaser until Codan has received, in cleared funds, payment in full for the Products and any other sums which are or may become due to Codan under this Agreement or any other agreement or arrangement between the parties.
- 4.5 Until such time as full property and ownership of the Products passes to The Purchaser in accordance with clause 4.4, and while the Products remain in The Purchaser's full control and possession:
 - (a) The Purchaser must hold the Products as Codan's fiduciary agent and bailee;
 - (b) The Purchaser must keep the Products properly stored, protected and insured;
 - (c) Codan may at any time after payment is overdue require The Purchaser to deliver up the Products to Codan and, if The Purchaser fails to deliver up the Products immediately, Codan may enter the premises of The Purchaser or any third party where the Products are stored and repossess them; and
 - (d) The Purchaser must not pledge or in any way charge by way of security for any indebtedness, any of the Products which remain the property of Codan. If The Purchaser does pledge or in any way charge by way of security for any indebtedness any of the Products for which property and ownership has not passed to The Purchaser, all moneys owing by The Purchaser to Codan will (without prejudice to any other right or remedy of Codan) immediately become due and payable to Codan.

5. The Purchaser's Obligations

- 5.1 Codan and The Purchaser agree that The Purchaser:
- (a) is solely responsible for consideration and validation of Product designs and Product functionality, to confirm suitability for particular applications, as desired by The Purchaser;
 - (b) must advise Codan of all statutory, regulatory and other official standards and/or requirements which the Product must comply with, at the time of submitting the Order to Codan and immediately upon becoming aware of these at any other time; and
 - (c) must provide Codan with any other information which Codan may request in respect of the intended application/use of the Products.

6. Warranty

- 6.1 Codan agrees to provide the International Product Warranty in respect of the Products.
- 6.2 The International Product Warranty will not apply in the event of termination of this Agreement by Codan pursuant to clauses 11.4, 12.4 or 14.3.

7. Exclusion and Limitations of Liability

- 7.1 The Purchaser acknowledges and agrees that notwithstanding clause 4.2, any delivery dates quoted by Codan for delivery of the Products are approximate only, and will not be binding upon Codan.
- 7.2 Codan does not exclude or limit the application of any provision of any applicable statute, legislation or other regulation (including the *Competition and Consumer Act 2010*) where to do so would contravene that statute, legislation or regulation or cause any part of this clause to be void.
- 7.3 Subject to clause 7.2, Codan excludes from this Agreement:
- (a) all conditions, warranties and terms implied by statute, general law, international convention or custom, except any implied condition or warranty the exclusion of which would contravene any statute or cause this clause to be void (**Non-excludable Condition**);
 - (b) all liability to The Purchaser for consequential or indirect damages arising out of or in connection with this Agreement even if Codan knew they were possible, or they were otherwise reasonably foreseeable, and including without limitation, loss of profits and damage suffered as a result of claims by any third person, such as a customer of The Purchaser; and
 - (c) all liability to The Purchaser in negligence for acts or omissions of Codan, its employees, agents and contractors arising out of or in connection with this Agreement.
- 7.4 Codan will not be responsible for any consequences of any modification to the Products (whether or not authorised) or for any loss, damage or claim arising from such actions. The Purchaser agrees to indemnify, defend and hold harmless Codan against any and all claims, demands, suits, causes of action, damages and legal fees (on a solicitor-own client basis) or expenses or costs whatsoever arising, directly or indirectly, from any modification of the Products, and unconditionally frees, releases and discharges Codan and its officers, agents, contractors and employees from any claim or cause of action arising in connection with such matters.
- 7.5 Codan will not be liable or otherwise responsible for any loss, accident, damage or injury arising in connection with The Products, or any failure of the Products to operate in the manner required by The Purchaser, whether or not caused by a defect or fault in the Products or due to Codan's negligence. The Purchaser unconditionally frees, releases and discharges Codan and its officers, agents, contractors and employees from any claim or cause of action arising in connection with the use of the Products by The Purchaser.
- 7.6 Codan's liability to The Purchaser for breach of any Non-excludable Condition (other than may be implied by provisions of the *Competition and Consumer Act 2010*) is limited to any one of, at Codan's option, repairing or replacing the Products in respect of which the breach occurred, supplying equivalent products, or refunding any amount paid by The Purchaser for the relevant Products.
- 7.7 Notwithstanding anything to the contrary in this Agreement, and to the extent permitted by law, Codan's maximum liability to The Purchaser for any cause of action or claim in connection with the Products or this Agreement shall be limited to a total aggregate amount equal to the Order Value of the Order in connection with which the cause of action or claim arose.

8. Intellectual Property

- 8.1 The Purchaser expressly acknowledges and agrees that Codan is the sole proprietor and owner of all existing and future Intellectual Property Rights associated with the Products (including all modifications and improvements), and that this Agreement does not grant or transfer to it any rights to the Intellectual Property Rights associated with the Products.
- 8.2 The Purchaser must not copy, reverse engineer, improve, enhance, develop, refine, modify or otherwise alter any aspect of the Products or any Intellectual Property Rights associated with the Products, or permit or assist a third party to undertake any of these actions.

- 8.3 Notwithstanding anything to the contrary in this Agreement, The Purchaser acknowledges and agrees that Codan will own all rights in any improvements, enhancements developments, modifications or refinements to the Products or associated Intellectual Property Rights developed or created by The Purchaser, and The Purchaser will have no claim to such materials. The Purchaser agrees that it will execute, procure and deliver to Codan all assignments required to give effect to this clause 8.3, and hereby waives any and all rights to any such improvements, developments, enhancements modifications or refinements.

9. Confidentiality

- 9.1 Each party:
- (a) may use Confidential Information of the other party solely for the purposes of this Agreement;
 - (b) must keep confidential all Confidential Information of the other party; and
 - (c) may disclose Confidential Information of the other party only to (i) employees and contractors who (A) are aware and agree that the Confidential Information of the other party must be kept confidential and (B) either have a need to know (and only to the extent that each has a need to know), or have been specifically approved by the other party, or (ii) as required by law or stock exchange regulation.
- 9.2 Each party must notify the other party immediately once it becomes aware of any breach of confidentiality and must take all reasonable steps necessary to prevent further unauthorised use or disclosure of the Confidential Information.

10. Taxes and Government Charges

- 10.1 The amounts payable by The Purchaser to Codan for, or in connection with this Agreement do not include any amounts on account of Taxes and Duties. The Purchaser shall be solely liable for and shall pay, when due and payable, all Taxes and Duties which may be imposed in relation to the Products, or which is assessed or chargeable in respect of this Agreement and any associated documents or transactions.
- 10.2 The Purchaser agrees to indemnify Codan in respect of any liability for Taxes and Duties, and shall pay any Taxes and Duties notified to it by Codan immediately upon request. The Purchaser must provide Codan with all necessary tax invoices, receipts and other documentation as required by Codan in accordance with applicable laws, legislation and regulations.
- 10.3 In the case of GST payable in Australia, if applicable, The Purchaser must pay to Codan an additional amount on account of GST equal to the amounts payable by The Purchaser for the Supply multiplied by the prevailing GST rate. Notwithstanding anything to the contrary in this clause, The Purchaser is not required to pay any additional GST amount until such time as The Purchaser has been provided with a tax invoice by Codan, which is in an approved form for GST purposes.
- 10.4 The additional amounts due to Codan on account of Taxes and Duties are payable at the same time and in the same manner as the price and any other amounts payable by The Purchaser are required to be paid to Codan under this Agreement.

11. Government Approvals

- 11.1 Codan agrees, at its cost, to use its reasonable endeavours to obtain all necessary export licences, clearances and other consents and approvals from Government Agencies which are necessary for the sale and supply/export of the Products to The Purchaser. The Purchaser agrees to complete and provide to Codan any documentation required by Codan to obtain any required approvals and consents.
- 11.2 The parties agree that Codan's obligations under this Agreement are conditional upon Codan being issued all necessary export licences, clearances and other consents and approvals by the relevant Government Agencies. In the event that Codan is unable to secure all necessary licences, clearances, permits, approvals and other necessary consents from appropriate Government Agencies, Codan shall be entitled to immediately terminate this Agreement by written notice, and Codan shall not be required to supply the Products to The Purchaser. In no circumstances shall Codan be liable to The Purchaser or any other person for any loss or damage (including without limitation indirect or consequential loss or loss of profits) arising in connection with Codan's failure to obtain any necessary documentation from Government Agencies required for the sale and supply/export of the Products to The Purchaser, or the termination of this Agreement pursuant to this clause 11.2, and The Purchaser unconditionally frees, releases and discharges Codan and its officers, agents, contractors and employees from any claim or cause of action arising in connection with Codan's failure to obtain any export licence, clearances and other necessary consents and approvals from appropriate Government Agencies.
- 11.3 The Purchaser is solely responsible, at its sole cost and expense, for ensuring that the Products meet the requirements of any country into which they are imported, and must obtain and maintain any necessary import licences and permits, and all other clearances and consents from Government Agencies required for the acquisition and use of the Products by The Purchaser (including but not limited to customs approvals and clearances). Codan shall supply The Purchaser will any documents reasonably requested by The Purchaser for the purposes of complying with its obligations under this clause 11.3.

- 11.4 Codan may at any time require that The Purchaser supply it with copies of licences, permits, clearances and approvals issued by Government Agencies and obtained by The Purchaser as required by clause 11.3, and The Purchaser agrees to immediately comply with any such request. If at any time Codan becomes aware that The Purchaser has failed to comply with its obligations under clause 11.3, it may immediately terminate this Agreement by written notice, and all outstanding amounts shall become immediately due and payable by The Purchaser. The Purchaser agrees to indemnify, defend and hold harmless Codan against any and all claims, demands, suits, causes of action, damages and legal fees (on a solicitor own client basis) or expenses or costs whatsoever arising, directly or indirectly, from any failure by The Purchaser to comply with its obligations under clauses 11.3 or 11.4.

12. Terrorism, Bribery and Corruption

- 12.1 The parties agree to each comply with international sanction regulations issued by the United Nations, Commonwealth Government of Australia, government of the United States, and governing bodies of the European Union (including but not limited to international sanction regulations which are related to terrorism), and international anti-corruption regulations issued by the United Nations, Commonwealth Government of Australia, government of the United States, and governing bodies of the European Union.
- 12.2 Codan will not engage in any transaction which involves any person or organisation that is sanctioned, or is connected or associated with (directly or indirectly) any person or organisation that is sanctioned, or any foreign officials, representatives, political parties or holders of public office being offered, promised or paid any money, remuneration, or things of value, directly or indirectly, in connection with obtaining or maintaining contracts of business.
- 12.3 If The Purchaser becomes aware of any act or conduct which does not comply with clause 12.2, it must immediately notify Codan.
- 12.4 If Codan become aware of any act or conduct which does not comply with clause 12.2, whether by notification or otherwise, Codan may immediately terminate this Agreement by written notice to The Purchaser. Codan will not be responsible or liable for any loss or damages whatsoever arising from or in connection with this clause 12.

13. Insurance

- 13.1 The Purchaser must take out and maintain at all times, with reputable insurers, valid and enforceable insurance policies in respect of the following:
- (a) product and public liability insurance, for an amount not less than \$10 million per incident or event;
 - (b) all necessary statutory workers compensation insurance; and
 - (c) such other risks that a reasonable, prudent person carrying on the business of The Purchaser would be likely to insure against.

14. Termination

- 14.1 Codan may terminate this Agreement with immediate effect by written notice to The Purchaser if:
- (a) The Purchaser is the subject of an Insolvency Event; or
 - (b) at the time of termination, a Force Majeure Event has persisted for greater than 40 Business Days.
- 14.2 The Purchaser may terminate this Agreement with immediate effect by written notice to Codan if Codan breaches any material term of this Agreement, which is capable of remedy, and fails to remedy the breach within 20 Business Days after receiving a notice requiring it to do so.
- 14.3 Without limiting Codan's other rights under this Agreement, Codan may terminate this Agreement with immediate effect by written notice to The Purchaser if:
- (a) The Purchaser breaches any term of this Agreement, which is capable of remedy, and fails to remedy the breach within 20 Business Days after receiving a notice requiring it to do so;
 - (b) The Purchaser breaches any term of this Agreement and such breach is not capable of remedy; or
 - (c) The Purchaser repeatedly breaches any term of this Agreement and, within 20 Business Days after receiving a notice requiring it to do so, fails to satisfy Codan that a breach of that term will not recur.
- 14.4 Termination of this Agreement will not affect any accrued rights or remedies a party may have as at the date of termination, unless explicitly stated otherwise in this Agreement.

15. Dispute Resolution

- 15.1 A party will not commence arbitration or court proceedings (except proceedings seeking interlocutory relief) in respect of a dispute **arising** out of this Agreement (**Dispute**) unless it has complied with this clause.
- 15.2 A party claiming that a Dispute has arisen will notify the other party of the Dispute in writing.
- 15.3 Each party to the Dispute will ensure that during the 30 Calendar Day period after a notice is given under clause 15.2 (or a longer period agreed between the parties) the chief executive officers (or equivalents) of the parties will use their best reasonable endeavours to resolve the dispute in good faith.
- 15.4 If after fourteen (14) days the parties are unable to resolve the Dispute under clause 15.3, the parties will attempt to settle the dispute by mediation conducted in accordance with the Commercial Mediation Guidelines of the ACDC.
- 15.5 The parties shall attempt to agree on the appointment of a mediator for the purposes of mediation of the Dispute pursuant to clause 15.4, and if the parties cannot agree on the identity of a mediator within seven (7) Calendar Days, the mediator will be appointed by ACDC within seven (7) Calendar Days thereafter. Mediation will be held within seven (7) Calendar Days of the appointment of the mediator.
- 15.6 Each party will bear its own costs of resolving a Dispute under this clause 15, and will bear equally the costs of any mediator required to be engaged.
- 15.7 If mediation does not proceed within the timetable set out in clauses 15.4 and 15.5, or is not successful in resolving the Dispute, the parties will be entitled to terminate the Dispute resolution process by giving notice in writing to all other parties and commence arbitration or court proceedings in respect of the Dispute. Nothing in this clause 15 prevents a party from seeking urgent interlocutory relief.

16. Miscellaneous

- 16.1 *Interpretation* – In these Standard Terms and Conditions of Supply:
- (a) the singular includes the plural and vice versa;
 - (b) the word person includes a firm, a body corporate, an unincorporated association, body or organisation established pursuant to international treaty, intergovernmental body, or government authority and other official authority;
 - (c) a reference to a person includes a reference to the person's executors, administrators, successors, substitutes (including, but not limited to, persons taking by novation) and permitted assigns; and
 - (d) headings are inserted for convenience and do not affect the interpretation of these Standard Terms and Conditions of Supply.
- 16.2 *Survival* – The provisions of clauses 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 15 and 16 of these Standard Terms and Conditions of Supply survive the expiry or termination of this Agreement.
- 16.3 *Force Majeure* – If a Force Majeure Event precludes Codan from partially or wholly complying with its obligations under this Agreement then:
- (a) as soon as reasonably practicable after that Force Majeure Event arises, Codan must notify The Purchaser of the Force Majeure Event, and Codan's obligation to perform in accordance with this Agreement will be suspended for the duration of the actual delay arising directly out of the Force Majeure Event or 40 Business Days, whichever is shorter, provided that Codan does everything reasonably possible to mitigate the effects of the Force Majeure Event.
 - (b) If a Force Majeure Event persists for greater than 40 Business Days, Codan shall be entitled to terminate this Agreement in accordance with clause 14.1(b).
- 16.4 *Governing Law* – This Agreement will be governed by and construed in accordance with the laws applicable in South Australia. The parties submit to the exclusive jurisdiction of the courts of South Australia in respect of matters arising out of or in connection with this Agreement (including Disputes). The parties agree that the *United Nations Convention on Contracts for the International Sale of Goods* (adopted at Vienna, Austria on 10 April 1980) (including as incorporated into South Australian law by the *Sale of Goods (Vienna Convention) Act 1986 (SA)*) will not apply to this Agreement.
- 16.5 *No Assignment* – The Purchaser must not assign or otherwise deal with its rights and obligations under this Agreement without the prior written approval of Codan, to be provided by Codan in its reasonable discretion.
- 16.6 *Further Action* – Each party must (a) do all acts necessary or desirable to give full effect to this Agreement, and (b) refrain from doing anything which might prevent full effect being given to this Agreement.
- 16.7 *Variation* – A variation or modification of this Agreement must be in writing and signed by an authorised representative of each party.
- 16.8 *Severability* – If any provision of this Agreement is held by any competent authority to be invalid or unenforceable in whole or in part the validity of the other provisions of this Agreement and the remainder of the provision in question will not be affected.



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Standard Terms & Conditions of Supply

- 16.9 *No Waiver* – No waiver by a party of any breach of this Agreement by another party shall be considered as a waiver of any subsequent breach of the same or any other provisions.
- 16.10 *Entire Agreement* – This Agreement constitutes the entire agreement between the parties about its subject matter and supersedes all previous representations, understandings and agreements in connection with that subject matter. This Agreement overrides any terms for the sale and supply of Products tendered to Codan by The Purchaser, irrespective of whether such terms are tendered before or subsequent to the date of the Order.
- 16.11 *Relationship* – The relationship between the parties is and will remain that of independent contractors, and nothing in this document constitutes the parties as partners or joint venturers or constitutes any party as the agent of another party or gives rise to any other form of fiduciary relationship between the parties.
- 16.12 *Notices* – Notices by a party must be delivered by (i) prepaid post (ii) facsimile or (iii) hand, and sent to the address of the receiving party specified in the Order. Notices shall be deemed to have been received by hand upon delivery, by post within two (2) Business Days of sending and by facsimile upon receipt of a successful transmission report.

International Product Warranty

1. In this document:
 - (a) **Codan** means Codan Limited A.C.N. 007 590 605 of 81 Graves Street, Newton, South Australia, 5074, Australia;
 - (b) **Codan Products** means products manufactured by Codan at its factory;
 - (c) **Material** means a material or component used by Codan in the manufacture of Codan Products;
 - (d) **Warranty Period** means a period of three (3) years from the date of shipment of Codan Products from Codan's factory; and
 - (e) **Workmanship** means the handling, assembly and manufacturing processes performed by Codan in order to manufacture Codan Products.
2. **Codan warrants that for the duration of the Warranty Period, all Codan Products will be free of faults arising from defects in design, Workmanship or Materials, on the terms and conditions set out in this document.**
3. Should any fault due to bad design, Workmanship or Materials be proven in Codan Products acquired by the purchaser at any time within the prescribed Warranty Period, Codan will, subject to the terms of this document as set out below, remedy such fault free of charge provided the Codan Products are returned to Codan or to a service centre authorised by Codan. The purchaser is responsible for all freight, insurance, taxes, duties and any costs of returning the Codan Products to Codan or a service centre authorised by Codan for warranty repairs. Codan is only responsible for the freight costs of returning the repaired Codan Products to the purchaser.
4. All Codan Products returned for warranty repair must have a valid Return Material Authorisation (**RMA**) number issued by Codan or a Codan authorised service centre prior to return by the purchaser. This RMA number must be clearly indicated and marked on all documentation and packaging by the purchaser when returning the Codan Products in accordance with item 2 of this document.
5. This express warranty shall not extend to damage of Codan Products during transit or transportation, or any abuse, accident or improper installation, connection, adjustment, repair or use of goods otherwise than in accordance with instructions issued by Codan. This express warranty does not apply to any Codan Products in respect of which the serial number has been altered, defaced or removed.
6. This express warranty is incorporated into, and forms part of, Codan's Standard Terms and Conditions of Supply. Accordingly, it is subject to the terms of Codan's Standard Terms and Conditions of Supply, including but not limited to clauses 7.2 – 7.7.
7. Subject to the matters set out in this express warranty, no liability (whether expressed or implied) of any nature whatsoever, is accepted by Codan for any consequential loss, damage or injury arising as a result of any fault in the Codan Products.
8. This express warranty does not extend to goods supplied by Codan, which are not designed or manufactured by it. Some goods supplied but not manufactured by Codan, or Materials manufactured by third parties which are used in Codan Products benefit from specific warranties provided by their manufacturers. Codan will make reasonable endeavours to ensure that the purchaser receives the full benefit of any warranty given by the manufacturer in respect of goods supplied but not manufactured by Codan, and Materials manufactured by third parties which are used by Codan in Codan Products. Such action will be the sole remedy available to the purchaser in respect of any faulty or defective goods or Materials not manufactured by Codan.
9. This express warranty is valid for Codan Products purchased from Codan anywhere in the world. Warranty service will be provided in accordance with this express warranty in any country of the world where there is a service centre authorised by Codan.
10. The benefits conferred by this express warranty are in addition to all other non-excludable rights and remedies which the consumer may have under the Australian *Competition and Consumer Act 2010* and any similar laws in Australia or elsewhere. To the extent permitted by law, Codan's liability for any non-excludable condition or warranty is limited to (at Codan's option):
 - (a) In the case of goods – repairing, replacing or supplying equivalent goods, or paying the cost of any of those remedies to the purchaser; or
 - (b) In the case of services – supplying the services again or paying the cost of having the services supplied again.

Battery Cell Warranty

Codan Limited ('Codan') warrants that all batteries supplied by Codan will be free of faults arising from defects in design, workmanship or materials in accordance with this express warranty.

In addition to Codan's International Product Warranty period and conditions, the following conditions apply to battery cells supplied by Codan.

Codan warrants the Nickel Metal Hydride (NiMH) battery cells to be free from defects in material and workmanship for a period of three (3) years after shipment from the factory.

Codan warrants the Lithium Iron Phosphate (LiFePO4) battery cells to be free from defects in material and workmanship for a period of three (3) years after shipment from the factory.

Codan warrants the Sealed Lead Acid (SLA) battery cells to be free from defects in material and workmanship for a period of one (1) year after shipment from the factory.

The liability of Codan under this warranty shall be limited to the repair or replacement free of charge of NiMH battery cells, LiFePO4 battery cells, or SLA battery cells provided notification of such failures or defect is given to Codan immediately upon the same becoming apparent.

This warranty does not extend to cover defects in the battery cells that are due to fair wear and tear, negligent use, tampering, improper handling, improper use, improper operation, improper storage, improper battery management or where the batteries have not been charged, discharged or serviced as per Codan's instructions.

Note that battery cell capacity reduces through time and usage and that this is normal. The degree of reduction depends upon the battery cell type. This warranty will be rendered void if a battery pack has been disassembled unless such disassembly has been agreed to by Codan. The warranty is not transferable to third parties.

Prices

- (a) The prices are quoted in Australian Dollars (AUD) unless otherwise specified.
- (b) All prices are list prices and do not include Australian GST, Freight, Insurance and any Taxes, Duties and Surcharges.
- (c) Quotations in other major international currencies can be provided upon request.

Payment Terms

Codan Limited means Codan Limited ABN 77 007 590 605, 81 Graves Street Newton, South Australia, 5074.

Codan Limited offers payment terms to pre-approved Buyers.

Dealers/Customers can arrange to have pre-approved credit facilities with Codan by completing our Credit Application Form and providing a copy of their financials for the previous two years. Please ask your Sales Representative for the necessary Credit Application Form.

Alternately, if the Dealer/Customer does not have a pre-approved credit facility with Codan, the Dealer/Customer must remit payment at the time of placing the order. Our payment instructions will be stated on the quotation/proforma invoice/order acknowledgement provided.

Please note that ownership of the goods will only pass to the Dealer/Customer when Codan Limited has received full payment of the Purchase Price.

Shipping Terms & Point of Delivery

Codan Limited complies with the latest INCOTERMS published by the ICC.

Codan can deliver goods throughout the world, and we would be happy to provide a freight quote for your orders. Generally, our goods are shipped via Airfreight or Small Parcel service, but we are able to provide quotes for Sea freight.

If you choose to purchase on EXW terms, please provide full contact details of your Freight Forwarder (name, address, phone number, email, etc.) so that Codan Limited can liaise to have your goods collected in a prompt and efficient manner.

Risk in the goods (including insurance) will pass to the Dealer/Customer as determined by the appropriate INCOTERM.

Packing

Our export packing is designed to International Export Standards to ensure safe delivery under normal international airfreight handling conditions.

Special packaging requirements (labelling, banding, palletizing, waterproofing, crating, etc.) can be arranged at additional cost.



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Payment Terms (International Sales)

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Conditions for Irrevocable Documentary Letter of Credit

Beneficiary:	Codan Limited 81 Graves Street Newton, South Australia, 5074
Beneficiaries Bankers: (for Letters of Credit)	Australia and New Zealand Banking Group Limited, Adelaide (Swift:ANZBAU5A), Commonwealth Bank of Australia, Adelaide (Swift:CTBAU2S) or HSBC Bank Australia Limited, Adelaide (Swift:HKBAU2SADL), or your Main Australian Correspondent Bank in South Australia
Please establish by:	Swift
Expiry date:	12 weeks from establishment of LC
Place of expiry:	Australia
Latest shipment:	8 weeks from Establishment of LC
Confirmation:	Confirmation allowed Confirmation charges are for the account of Beneficiary
Available with/by:	Freely negotiable by any Australian Bank
Payment terms:	Irrevocable Confirmed Letter of Credit 100% payable at sight Subject to latest UCP for Documentary Credits
Partial shipments:	Allowed
Transshipment:	Allowed
Shipment from:	Any Australian Airport
For transportation to:	Insert destination Airport/Port
Documents available:	Commercial Invoice Packing List Air Waybill/Bill of Lading (If EXW terms, Freight Forwarder Receipt Only) Other Documents – available by negotiation
Shipping terms:	Latest Incoterms (as per proforma invoice)
Additional conditions:	Documents to be presented within 21 days from date of issuance of Air Waybill/Bill of Lading.
Charges:	All other Bank charges outside the applicant's country, including confirmation charges are for the account of the Beneficiary, excluding establishing Bank charges.



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Conditions for Irrevocable Documentary Letter of Credit

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