

T03-00119-XAAA

TP8100 Hirose Accessory Adapter

Installation Instructions



Caution The radio produces a specific audio level at the maximum rated power. It is the sole responsibility of the end user to ensure applicability and compliance with the relevant legal regulations defining the noise level that an individual can be subjected to.

Use a Hirose accessory adapter (T03-00119-XAAA) to connect the audio accessories listed in Table 1 to a TP8100 radio.

Table 1 Compatible Hirose accessories

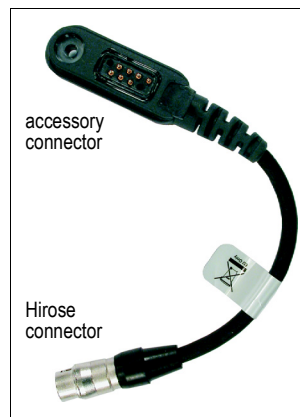
Description	Product code
Headset, light-duty, behind-the-head	TPA-AA-211
Headset, heavy-duty, behind-the-head	TPA-AA-212
Headset, light-weight, over-the-head	T03-00120-CBBA
Headset, heavy-duty, over-the-head	T03-00120-EEBA
Surveillance kit, 2-wire, black	TPA-AA-221
Surveillance kit, 3-wire, beige	TPA-AA-213
Throat microphone	T03-00120-AFEA
Skull microphone	T03-00120-KGAA

Before Connecting an Accessory

Before connecting an accessory to the Hirose adapter, make sure that the accessory:

- is compatible with the Hirose accessory adapter, see “Interface Specification” below
- meets these specifications:
 - speaker impedance: 32Ω (16Ω minimum)
 - speaker power: $0.25 W_{rms}$ (minimum)
 - speaker configuration: single-ended
 - microphone: electret, approximately $1 k\Omega$

Notice In addition, the PTT switch on the accessory **must not be in series** with the microphone on the accessory. The PTT must be a separate signal and be made available separately at the connector. The PTT must not be multiplexed on any other signal.



The speaker in the radio is not muted when you connect the Hirose adapter to the radio. The speaker is only muted once you have connected an accessory to the adapter.

Interface Specification

Figure 1 shows the pins and signals used in the interface between the Hirose adapter and the accessory connector on the TP8100 portable. Table 2 describes the signals.

Figure 1 Hirose accessory adapter – pinout and circuit diagram

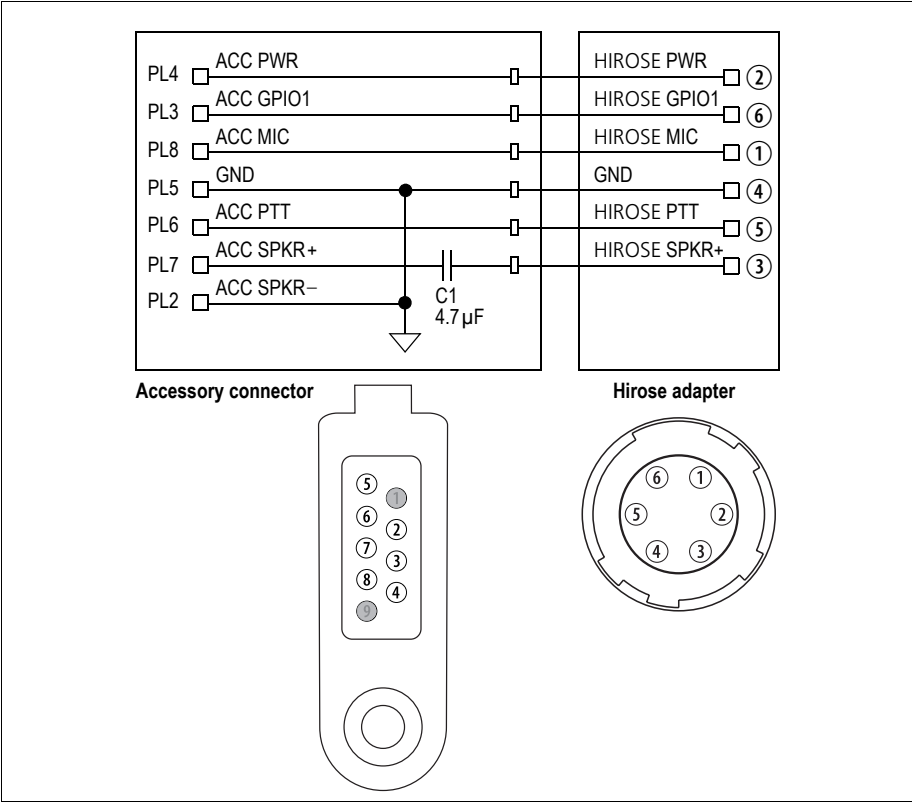


Table 2 Hirose accessory adapter – pins and signals

Signal name	Pin	Description	Signal type	Signal level	Output impedance/ current	Input impedance
HIROSE PWR	2	Accessory power	DC supply	7.5 V nominal	50mA (max)	–
HIROSE GPIO1	6	Accessory sense (internal speaker disable)	3V3 CMOS	high=1 low=0	1 mA (max)	–
HIROSE MIC	1	External microphone input (electret) Dynamic microphones are not supported.	Analog audio	7.5mV _{rms} for 60% modulation at 1kHz, DC-coupled	–	2.2kΩ
GND	4	Analog ground	Ground	–	–	–
HIROSE PTT	5	External press-to-talk input	Analog DC	0 to 2.5V, PTT=0	–	27kΩ
HIROSE SPKR+	3	External speaker output	Analog audio	+6.5V _{pp}	To drive 16Ω	–