Installation Manual

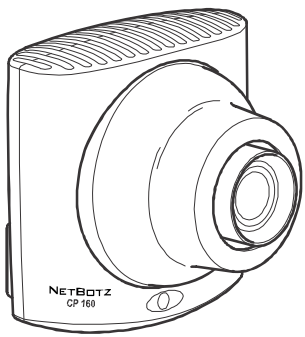
NetBotz®

Camera Pod 160

NBPD0160/NBPD0160A

990-3290C-001

Publication Date: August 2017



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Introduction

Product description

The APC by Schneider Electric® NetBotz® Camera Pod 160 is a motion-sensitive camera capable of sending image data through a USB connection to a Rack Monitor 450, 550, or 570, or Room Monitor 455. The NetBotz 160 can be triggered remotely by the appliance in response to a number of environmental alarms or events, such as a temperature spike or the action of opening a door. The NetBotz 160 can also provide constant surveillance of an area or entrance.

NOTE: NBPD0160A is only compatible with BotzWare v4.6.1 and newer.

The NetBotz 160 includes the following features:

- Image processor that generates images up to 1280 x 1024 resolution, 24-bit color, and up to 30 frames per second.

  The maximum frame rate describes the maximum number of images that the camera imager is capable of producing each second. The actual frame rate is dependent on the amount of available bandwidth and current resolution.
- Image Size: 7.7 mm x 6.1 mm (9.82 mm diagonal = 0.387 in).
- Field of View: 64º (H) x 53º (V) for all resolutions.
- User adjustable and switchable industry-standard CS-mount lens. CS-mount permits access to hundreds of different general purpose and special purpose lenses.
- Microphone jack (standard 3.5-mm miniplug), which provides the ability to monitor and capture monophonic audio from the location in which the NetBotz 160 is installed.
- Speaker/headphone jack (standard 3.5-mm stereo miniplug) that can be used with unpowered headphones or powered speakers to provide monophonic audio output.
- An optional door switch sensor (NBES0302 or NBES0303) can be used to trigger image capture when someone opens a monitored entryway or other door, such as a cabinet or closet.

The imager of the NetBotz 160 supports two imaging modes: **Wide Screen** mode and **Pan and Scan** mode.

- In **Wide Screen** mode, all images that are captured are based on the entire 1280 x 1024 frame. The NetBotz 160 then reduces the total 1280 x 1024 frame to the appropriate resolution or mode, resulting in a smaller image that includes the entire field of view supported by the NetBotz 160. However, in reducing the image to smaller sizes some image detail will be lost.
- In **Pan and Scan** mode, a portion of the total 1280 x 1024 field of view supported by the NetBotz 160 is selected as the window of interest within the frame. This selected window is then used to determine what portion of the total field of view to include in image captures and in the Camera view when resolutions lower than 1280 x 1024 are needed. 1280 x 1024 images still contain the entire field of view, but lower image resolution modes use only a portion of the frame, determined by a user-specified 640 x 480 window of interest.

Attention: THE EQUIPMENT CONTAINS, AND THE SOFTWARE ENABLES, VISUAL RECORDING CAPABILITIES, THE IMPROPER USE OF WHICH MAY SUBJECT YOU TO CIVIL AND CRIMINAL PENALTIES. APPLICABLE LAWS REGARDING THE USE OF SUCH CAPABILITIES VARY BETWEEN JURISDICTIONS AND MAY REQUIRE AMONG OTHER THINGS EXPRESS WRITTEN CONSENT FROM RECORDED SUBJECTS. YOU ARE SOLELY RESPONSIBLE FOR INSURING STRICT COMPLIANCE WITH SUCH LAWS AND FOR STRICT ADHERENCE TO ANY/ALL RIGHTS OF PRIVACY AND PERSONALTY. USE OF THIS SOFTWARE FOR ILLEGAL SURVEILLANCE OR MONITORING SHALL BE DEEMED UNAUTHORIZED USE IN VIOLATION OF THE END USER SOFTWARE AGREEMENT AND RESULT IN THE IMMEDIATE TERMINATION OF YOUR LICENSE RIGHTS THEREUNDER.

Document overview

The *NetBotz Camera Pod 160 Installation Manual* describes how to install the NetBotz 160. For details on connecting the NetBotz 160 to your appliance, see the installation and quick configuration manual included with your appliance.

Additional documentation

Unless otherwise noted, the following documentation is available on the applicable product page on the APC Web site, **www.apc.com**. To quickly find a product page, enter the product name or part number in the Search field.

NetBotz Appliance User's Guide – Includes all details for using, managing, and configuring a NetBotz system with one of the following appliances: NetBotz Room Monitor 355 (NBWL0355/NBWL0355A, NBWL0356), NetBotz Rack Monitor 450 (NBRK0450), NetBotz Room Monitor 455 (NBWL0455/NBWL0455A, NBWL0456), NetBotz Rack Monitor 550 (NBRK0550), or NetBotz Rack Monitor 570 (NBRK0570).

Additional options

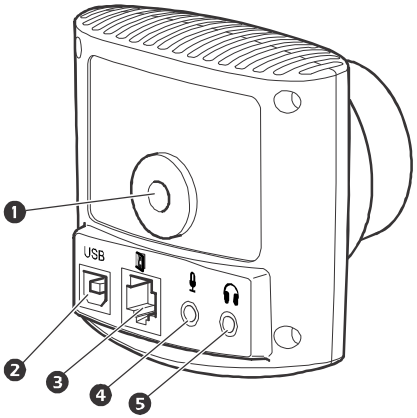
The following options are available for the NetBotz 160. For more information about any of the options, contact your APC representative or the distributor from whom you purchased your APC by Schneider Electric product.

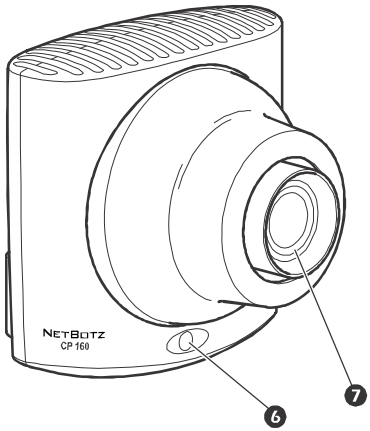
- Door Switch Sensor for APC by Schneider Electric Racks (NBES0303)
- Door Switch Sensor for Rooms of Third-Party Racks (NBES0302)

StruxureWare-certified

This product is certified for use in APC by Schneider Electric StruxureWare® systems.

Physical Description





	Item	Description
1	Wall mount	Used to attach the wall mounting swivel arm.
2	USB Type B	Used to connect the NetBotz 160 to a NetBotz appliance with a standard USB cable.
3	Door switch sensor port	RJ-45 port used to connect a door switch sensor.
4	Microphone jack	3.5-mm stereo miniplug jack used to connect an external microphone. Maximum length of microphone cable: 3 m (9.8 ft).
5	Speaker jack	3.5-mm stereo miniplug jack used to connect headphones or powered speakers. Maximum length of speaker cable: 3 m (9.8 ft).
6	Activity LED	When the NetBotz 160 is receiving power this LED blinks slowly and steadily (one second on, one second off), indicating that the Camera Pod 160 is currently active, and capturing video images, but is **not** recording audio. When the NetBotz 160 is capturing and recording audio, using an external microphone connected to the External Microphone jack, this LED blinks 5 times per second to indicate that audio recording is in progress.
7	Lens housing	This housing can be removed to change the focus of the integrated camera.

Inventory

Inspect the contents of the package to ensure that the parts included match those shown below. Report missing or damaged contents to APC or your APC reseller. However, if damage was due to shipping, immediately report the damage to the shipping agent.

The shipping and packaging materials are recyclable. Please save them for later use or dispose of them appropriately.

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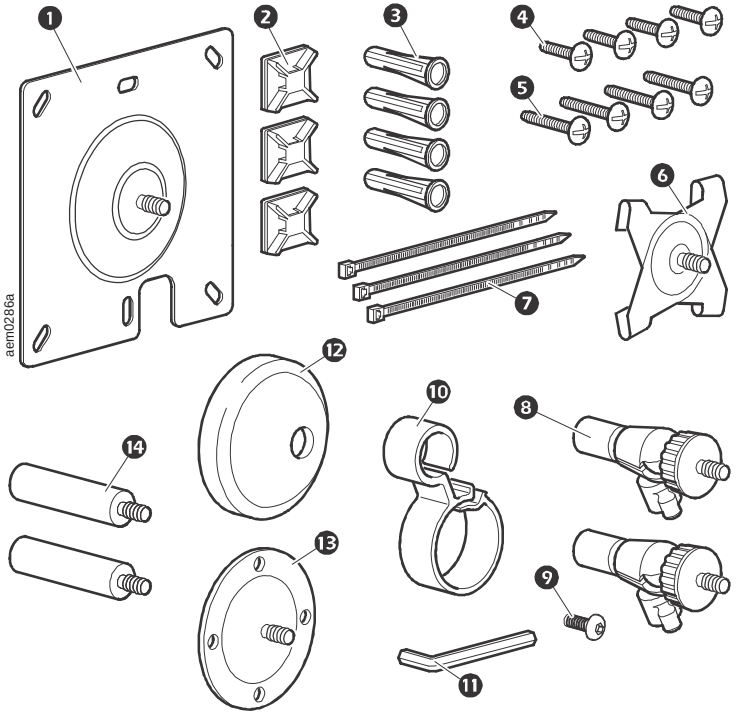


Item	Description
	NetBotz Camera Pod 160—not shown
❶	Bracket mounting plate for electrical boxes
❷	Adhesive cable tie holders
❸	Mounting screw wall anchors
❹	13-mm (0.5-in) machine screws (for electrical box)
❺	19-mm (0.75-in) sheet metal screws (for wall or enclosure)
❻	T-bar mounting plate

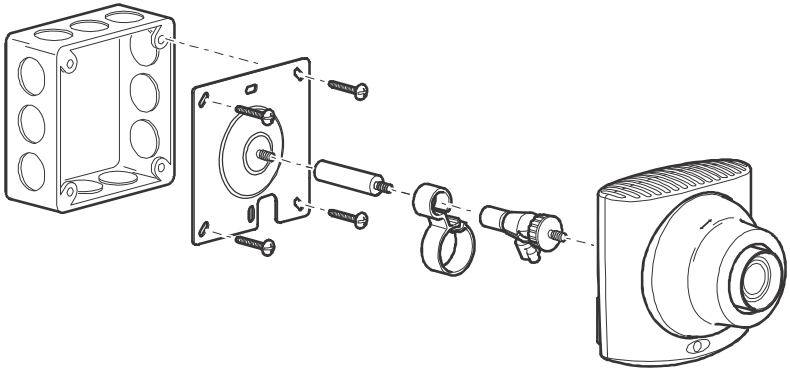
Item	Description
❼	203-mm (8-in) wire ties
❽	Ball-joint adjuster arm
❾	Extender arm set screw
❿	Cable retainer
⓫	Allen wrench
⓬	Rubber bracket cover
⓭	Mounting plate
⓮	Extender arms
	5-m (16.4-ft) USB cable—not shown

Install the NetBotz 160

Choose an installation option that meets your needs. Once installed, use the 5-m (16.4-ft) USB cable to connect the NetBotz 160 to your NetBotz Rack Monitor 450, 550, or 570, or NetBotz Room Monitor 455.

NOTE: Mounting the NetBotz 160 inside a rack requires the Rack Mounting Kit (NBES0302).

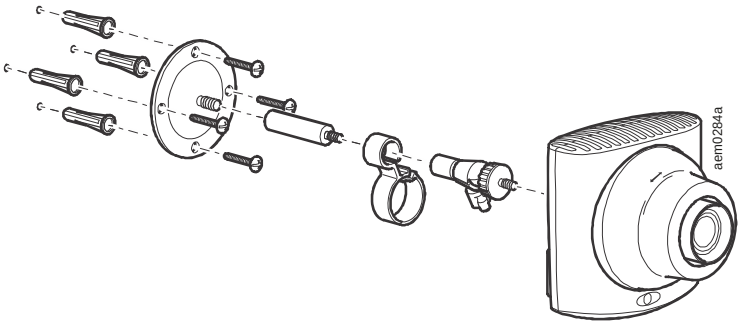
Electrical box



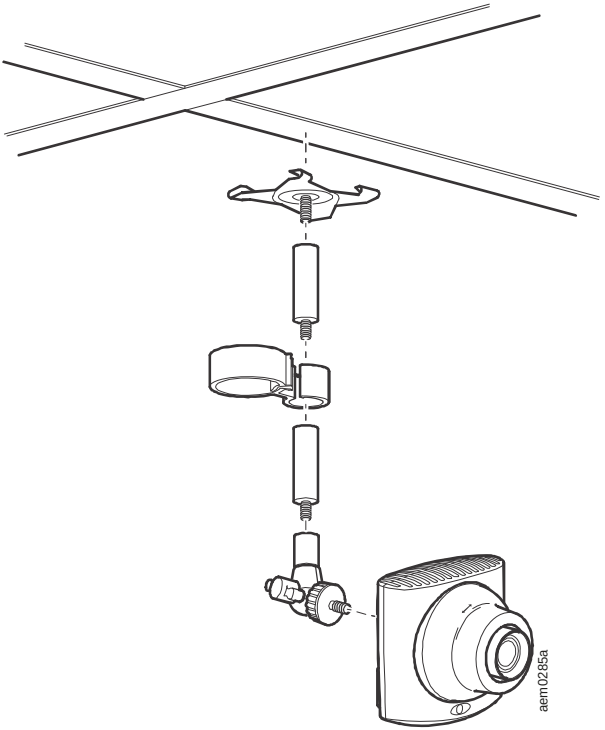
Wall

NOTE: Drill 4.76-mm (3/16-in) pilot holes for wall anchors.

IMPORTANT: Do not overtighten the screws.

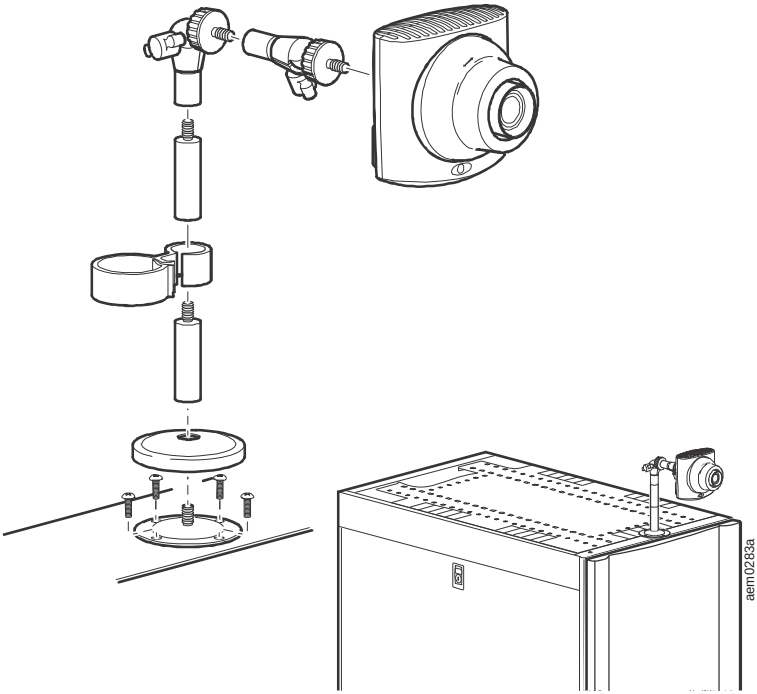


Ceiling



Enclosure

NOTE: Use a #32 drill to make four 2.94-mm (0.116-in) pilot holes.



Connect Optional Devices

As applicable, install the options listed below, then connect them to the back of the NetBotz 160.

- Door Switch Sensor for APC by Schneider Electric Racks (NBES0303) or Door Switch Sensor for Rooms of Third-Party Racks (NBES0302)
- External microphone
- Set of speakers

If the cable of a Door Switch Sensor for APC by Schneider Electric Racks is not long enough, use an RJ-45 coupling provided with the sensor to extend the cable up to 15 m (50 ft).

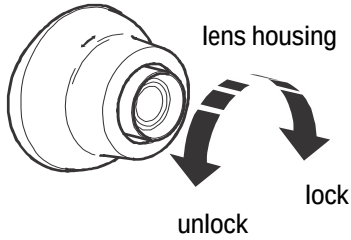
Adjust the Lens

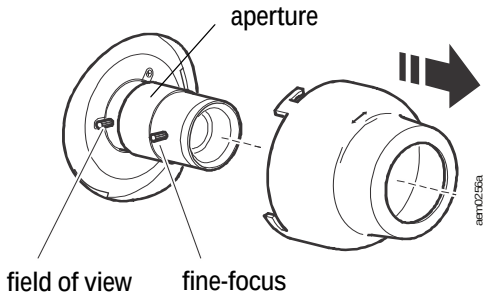
View the camera feed during the adjustment of the camera in order to correctly adjust the focus of the feed and field of view settings.

To access the adjustment screws, remove the lens housing by turning the lens housing counter-clockwise until the latches disengage.

To reattach the lens housing, engage the latches and rotate the housing clockwise until a click is heard.

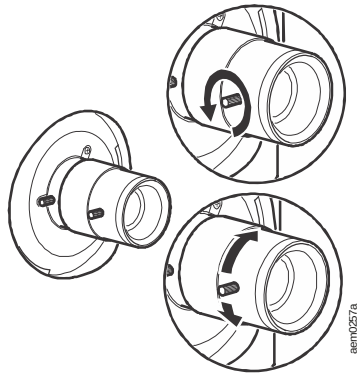
To adjust the aperture of the lens, rotate the aperture ring clockwise to increase the aperture or counter-clockwise to reduce the aperture.





To adjust the focus and field of view settings:

1. Loosen the adjustment screw by turning it counter-clockwise.
2. Rotate the lens rings to the desired position.
3. Tighten the adjustment screw by turning it clockwise.



Clean the NetBotz 160

To clean the device, gently wipe surfaces with a clean, dry cloth.

Specifications

Electrical	
Input voltage, nominal	5 VDC
Maximum power consumption	2 W

Physical	
Dimensions (H x W x D)	102 x 100 x 78 mm (4.00 x 3.93 x 3.09 in)
Weight	0.2 kg (0.4 lb)
Shipping weight	1.4 kg (3.00 lb)
Shipping dimensions (H x W x D)	260 x 286 x 165 mm (10.25 x 11.25 x 6.50 in)

Environmental	
Elevation (above MSL)	
Operating	0 to 3000 m (0 to 10,000 ft)
Storage	0 to 15 000 m (0 to 50,000 ft)
Temperature	
Operating	0 to 45ºC (32 to 113°F)
Storage	-15 to 65°C (5 to 149°F)
Relative Humidity	
Operating	10 to 90%, non-condensing
Storage	10 to 90%, non-condensing

Compliance	
Immunity/Emissions	CE, FCC Part 15 Class A, ICES-003 Class A, VCCI Class A, EN 55022 Class A, EN 55024, AS/NZS CISPR 22

Two-Year Factory Warranty

This warranty applies only to the products you purchase for your use in accordance with this manual.

Terms of warranty

APC warrants its products to be free from defects in materials and workmanship for a period of two years from the date of purchase. APC will repair or replace defective products covered by this warranty. This warranty does not apply to equipment that has been damaged by accident, negligence or misapplication or has been altered or modified in any way. Repair or replacement of a defective product or part thereof does not extend the original warranty period. Any parts furnished under this warranty may be new or factory-remanufactured.

Non-transferable warranty

This warranty extends only to the original purchaser who must have properly registered the product. The product may be registered at the APC Web site, **www.apc.com**.

Exclusions

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Warranty claims

Customers with warranty claims issues may access the customer support network through the Support page of the APC Web site, **www.apc.com/support**. Select your country from the country selection pull-down menu at the top of the Web page. Select the Support tab to obtain contact information for customer support in your region.

Radio Frequency Interference

Changes or modifications to this unit not expressly approved by the party responsible for compliance could void the user's authority to operate this equipment.

USA—FCC

This equipment has been tested and found to comply with the limits for a Class A digital device, pursuant to part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference when the equipment is operated in a commercial environment. This equipment generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with this user manual, may cause harmful interference to radio communications. Operation of this equipment in a residential area is likely to cause harmful interference. The user will bear sole responsibility for correcting such interference.

After an electrostatic discharge (ESD) event, the appliance may require up to 2 minutes to restart services that are necessary for normal operation. During this time, the Web interface of the appliance will be unavailable. If any necessary services or devices external to the appliance, such as a DHCP server, were affected by the ESD event, these devices also need to restart properly.

Canada—ICES

This Class A digital apparatus complies with Canadian ICES-003.

Cet appareil numérique de la classe A est conforme à la norme NMB-003 du Canada.

Japan—VCCI

This is a Class A product based on the standard of the Voluntary Control Council for Interference by Information Technology Equipment (VCCI). If this equipment is used in a domestic environment, radio disturbance may occur, in which case, the user may be required to take corrective actions.

この装置は、情報処理装置等電波障害自主規制協議会（VCCI）の基準に基づくクラス A 情報技術装置です。この装置を家庭環境で使用すると、電波妨害を引き起こすことがあります。この場合には、使用者が適切な対策を講ずるように要求されることがあります。

Taiwan—BSMI

警告使用者：
這是甲類的資訊產品，在居住的環境中使用時，可能會造成射頻干擾，在這種情況下，使用者會被要求採取某些適當的對策。

Australia and New Zealand

Attention: This is a Class A product. In a domestic environment this product may cause radio interference in which case the user may be required to take adequate measures.

European Union

This product is in conformity with the protection requirements of EU Council Directive 2004/108/EC on the approximation of the laws of the Member States relating to electromagnetic compatibility. APC cannot accept responsibility for any failure to satisfy the protection requirements resulting from an unapproved modification of the product.

This product has been tested and found to comply with the limits for Class A Information Technology Equipment according to CISPR 22/European Standard EN 55022. The limits for Class A equipment were derived for commercial and industrial environments to provide a reasonable protection against interference with licensed communication equipment.

Attention: This is a Class A product. In a domestic environment this product may cause radio interference in which case the user may be required to take adequate measures.

Worldwide Customer Support

Customer support for this or any other APC by Schneider Electric product is available at no charge in any of the following ways:

- Visit the APC Web site to access documents in the Knowledge Base and to submit customer support requests.
  - **www.apc.com** (Corporate Headquarters)
    Connect to localized APC Web sites for specific countries, each of which provides customer support information.
  - **www.apc.com/support/**
    Global support searching APC Knowledge Base and using e-support.
- Contact the APC Customer Support Center by telephone or e-mail.
  - Local, country-specific centers: go to **www.apc.com/support/contact** for contact information.

For information on how to obtain local customer support, contact the APC representative or other distributors from whom you purchased your product.

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