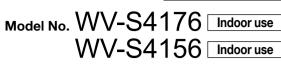
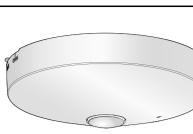


Installation Guide

Included Installation Instructions

Network Camera For professional use only





WV-S4176

S

XC

 Product documentation is composed of the following documents. Installation Guide (this document): Provides information about "Precautions", "Precautions for installation" and the installation method. Basic Information (in the following manual website): Provides information about 	
"Precautions for installation" and the installation method. • Basic Information (in the following manual website): Provides information about	
"Precautions for use" and "Detail specifications".	é
• Operating Instructions (in the following manual website): Explains how to perform the settings and how to operate this camera.	52
https://i-pro.com/global/en/surveillance/documentation_database	

"<Control No.: C****>" used in these documents should be used to search for information on our support website (https://i-pro.com/global/en/surveillance/training_support/support/ technical_information) and will guide you to the right information.

- · Before attempting to connect or operate this product, please read these instructions
- carefully and save this manual for future use. • SDXC/ SDHC/ SD memory card is described as SD memory card.
- The external appearance and other parts shown in this manual may differ from the actual product within the scope that will not interfere with normal use due to improvement of the product.

For U.S. and Canada:

i-PRO Americas Inc. https://www.i-pro.com/

i-PRO Co., Ltd. Fukuoka, Japan https://www.i-pro.com/

For Europe and other countries:



expressly approved by the party responsible for com-

pliance could void the user's authority to operate the

Supplier's Declaration of conformity

Support Contact : 1-800-513-5417

Model No. : WV-S4176 / WV-S4156

8550 Fallbrook Drive, Suite 200 Houston,

This device complies with part 15 of the FCC Rules.

Operation is subject to the following two conditions:

(1) This device may not cause harmful interference,

and (2) this device must accept any interference

received, including interference that may cause

© i-PRO Co., Ltd. 2022

* PGQX 2 4 8 8 YA * Cs0921-1042 Printed in China

Disposal of Old Equipment and Batteries Only for European Union and countries with recycling systems

- These symbols on the products, packaging, and/or accompanying documents mean that used
- electrical and electronic products and batteries must not be mixed with general household waste. For proper treatment, recovery and recycling of old products and used batteries, please take them to
- applicable collection points in accordance with your national legislation. By disposing of them correctly, you will help to save valuable resources and prevent any potential negative effects on human health and the environment
- For more information about collection and recycling, please contact your local authority. Penalties may be applicable for incorrect disposal of this waste, in accordance with national legislation.

equipment.

Trade name : i-PRO

Responsible Party

i-PRO Americas Inc.

undesired operation.

Texas 77064

For U.S.A.

- Note for the battery symbol (bottom symbol)
- This symbol might be used in combination with a chemical symbol. In this case it complies with the requirement set by the Directive for the chemical involved.

—For U.S.A.

NOTE: This equipment has been tested and found to FCC CAUTION: Changes or modifications not 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 the instruction manual, may cause harmful interference to radio communications.

Operation of this equipment in a residential area is likely to cause harmful interference in which case the user will be required to correct the interference at his own expense.

For U.S.A.

The model number and serial number of this product may be found on the surface of the unit. You should note the model number and serial number of this unit in the space provided and retain this book as a permanent record of your purchase to aid identification in the event of theft. Model No.

Serial No.

-For Canada CAN ICES-3(A)/NMB-3(A)

Méthode d'installation	Vis de fixation recommandée	La capacité de traction minimale requise
Quand la caméra vidéo est directement installée au plafond ou sur le mur.	M4 x 16 mm {5/8 pouces} / 4 él.*	196 N {44 lbf}

* La longueur de la vis est un exemple lors de l'installation de la caméra au plafond ou sur un mur robuste d'une épaisseur de 20 mm {25/32 pouces} ou plus.

Caution:

- The DC power supply connected to the camera must This product is not suitable for use in locations where be in the same building
- The network camera is only intended for a connection to an ethernet or PoE network without routing to the outside plant.
- This product has no power switch. Be sure to install disconnect devices such as a circuit breaker to shut down the main power of power supplying equipment to this product.
- Only connect 12 V DC Class 2 power supply (UL 1310/CSA 223) or limited power source (IEC/EN/UL/ CSA 60950-1,IEC/EN/UL/CSA 62368-1 Annex Q) or
- product, please read these instructions carefully.

Precautions

Do not insert any foreign objects.

Fire or electrical shock may be caused if water or any foreign objects, such as metal objects, enter inside the unit.

Turn the power off immediately and contact qualified service personnel for service.

■ Do not use this product in an inflammable atmosphere.

Failure to observe this may cause an explosion resulting in injury.

Avoid installing this product in the locations where salt damage occurs or corrosive gas is produced.

Otherwise, the mounting portions will deteriorate and injury or accidents due to a fall of the product may occur. Do not strike or give a strong shock to this product.

Failure to observe this may cause injury or fire.

■ Keep SD memory cards away from infants and children.

Otherwise, they may swallow the cards by mistake. In this case, consult a doctor immediately

Do not hang down from this product or use this product as a pedestal. Failure to observe this may cause injury or accidents.

■ Do not damage the power cable.

Do not damage, fabricate, twist, stretch, bundle, or forcibly bend the power cable. Do not place heavy objects on it, and keep it away from heat sources.

Use of a damaged power cable may cause electric shock, short circuit, or fire.

Consult the dealer for repair.

Do not attempt to disassemble or modify this product.

Failure to observe this may cause fire or electric shock. Consult the dealer for the repair or inspections. ■ Do not install or clean the camera, or touch this product the power cable or the connected cables during thunder storms.

Failure to observe this may cause electric shock

Refer installation work to the dealer.

Installation work requires technique and experience. Failure to observe this may cause fire, electric shock, injury, or damage to the product. Be sure to consult the dealer.

Stop the operation immediately when something is wrong with this product.

When smoke goes up from the product, the smell of smoke comes from the product, or the exterior of the product has deteriorated, continued use will cause a fire or fall of the product resulting in injury, or damage to the product. In this case, turn the power off immediately and contact qualified service personnel for service.

Select an installation area that can support the total weight.

Selecting an inappropriate installation surface may cause this product to fall down or topple over, resulting in injury or accidents. Installation work shall be started after sufficient reinforcement.

Periodic inspections shall be conducted.

Rust on the metal parts or screws may cause a fall of the product resulting in injury or accidents. Consult the dealer for the inspections.

The exclusively designed mount bracket shall be used.

Failure to observe this may cause a drop resulting in injury or accidents.

Use the exclusively designed mount bracket for installation.

The screws and bolts must be tightened to the specified torque. Failure to observe this may cause a drop resulting in injury or accidents.

Turn the power off when do wiring of this product.

Failure to observe this may cause electric shock. In addition, short circuit or wrong wiring may cause fire.

■ Install this product in a location high enough to avoid people and objects from bumping the

product. Failure to observe this may cause injury.

■ The measures of protection against a fall of this product shall be taken. (in the case of installing without using attachment plate (accessory)).

Failure to observe this may cause a drop resulting in injury or accidents. Be sure to install the safety wire.

■ Do not install this product in locations subject to vibration. Loosening of mounting screws or bolts may cause a fall of the product resulting in injury or accidents.

Correctly perform all wiring.

Short circuits in the wiring or incorrect wiring may cause fire or electrical shock.

- Install the product securely on a wall or a ceiling in accordance with the installation instructions.
- Failure to observe this may cause injury or accidents.
- Do not rub the edges of metal parts with your hand.
- Failure to observe this may cause injury.
- Do not touch the metal part of the bottom side of the product.

The metal part of the bottom side may become hot while the product is in use. Direct skin contact with hightemperature parts of the product may cause burns.

Turn the power off when cleaning this product.

Failure to observe this may cause injury.

About notations

The following notations are used when describing the functions limited for specified models The functions without the notations are supported by all models.

- S4176 The functions with this notation are available when using the model WV-S4176 (9-megapixel model).
- \$4156 The functions with this notation are available when using the model WV-S4156 (5-megapixel model).

- children are likely to be present • Do not install this product in locations where ordinary
- persons can easily reach. • This product is a professional equipment.
- For information about screws and other parts required for installation, refer to the corresponding section of this document.

: Direct current symbol ---

Notice:

IEC/EN/UL/CSA 62368-1 PS2.

Before attempting to connect or operate this

Open Source Software

• This product contains open source software licensed under GPL (GNU General Public License), LGPL (GNU Lesser General Public License), etc.

• Customers can duplicate, distribute and modify the source code of the software under license of GPL and/or LGPL. • For details concerning licensing and source code of open source software, click "Click here for OSS information" on "Support" page of the setup menu of this product and read the displayed content.

• Please note that we shall not respond to any inquiries regarding the contents of the source code.

Copyright

other countries.

Except for open source software licensed under GPL/LGPL and so on, distributing, copying, disassembling, reverse compiling and reverse engineering of the software provided with this product are all expressly prohibited. In addition. exporting any software provided with this product violating export laws is prohibited.

Trademarks and registered trademarks

• Microsoft, Windows, Windows Media, Internet Explorer, Microsoft Edge, and ActiveX are either registered trademarks or trademarks of Microsoft Corporation in the United States and/or other countries. Intel and Intel Core are trademarks of Intel Corporation or its subsidiaries in the U.S. and/or other countries. • Adobe, Acrobat, and Reader are either registered trademarks or trademarks of Adobe in the United States and/or

• SDXC Logo is a trademark of SD-3C, LLC.

• iPad and iPhone are trademarks of Apple Inc., registered in the U.S. and other countries.

• Android and Google Chrome are trademark of Google LLC.

• Firefox is a trademark of the Mozilla Foundation in the US and other countries.

• The word "QR Code" is a registered trademark of DENSO WAVE INCORPORATED in Japan and other countries. • All other trademarks identified herein are the property of their respective owners.

Precautions for installation

i-PRO Co., Ltd. assumes no responsibility for injuries or property damage resulting from failures arising out of mproper installation or operation inconsistent with this documentation

In order to prevent injury, the product must be securely mounted to a ceiling or wall according to Installation Guide.

Installation area for this product

Select an appropriate place for the installation area (such as a strong wall or ceiling) in your particular environment. • Make sure that the installation area is strong enough to hold this product, such as a concrete ceiling.

• Install the camera in the foundation area of the architecture or where sufficient strength is assured. • Do not mount the product on a plaster board or a wooden section because they are too weak. If the product is

unavoidably mounted on such a section, the section shall be sufficiently reinforced.

This camera is designed to be used indoors

This product is not operable outdoors. Do not expose this camera to direct sunlight for hours and do not install the product near a heater or an air conditioner. Otherwise, it may cause deformation, discoloration and malfunction. Keep this camera away from water and moisture.

■ Do not place this product in the following places

• Locations where a chemical agent is used such as a swimming pool

Locations subject to moisture or oil smoke such as a kitchen

. Locations that have a specific environment that is subject to an inflammable atmosphere or solvents

• Locations where a radiation, an X-ray, a strong radio wave or a strong magnetic field is generated

• Locations near coasts directly subjected to sea breezes, or locations subject to corrosive gases such as from hot springs, volcanic regions, etc.

• Locations where the temperature is not within the specified range

- Locations subject to vibrations, such as on vehicles, marine vessels, or above product lines (This product is not designed for on-vehicle use.)
- Locations where it may get directly wet from rain or water splash (including under the eaves, etc.)

Locations subject to moisture or dust

• Locations subject to sudden changes in temperature such as near air discharge vents of air conditioners or air circulation inlet doors

• Locations near rubber products (packing, rubber feet, etc.)

Screw tightening

Do not use an impact driver. Use of an impact driver may damage the screws or cause tightening excessively. About reflection of light from outside or IR light

A ghost may appear on the screen depending on the incident angle of external light.

In the case of using the IR light, installation of a camera near a wall may cause reflection of infrared rays resulting in a part of the screen or the entire screen turning whitish.

Refer to our support website <Control No.: C0109> for image examples and measures to take.

Protection from lightning

When cables are used outdoors, there is a chance that they may be affected by lightning. In such a case, install a lightning arrestor close to the camera, and make the length of the network cable between the camera and lightning arrestor as short as possible to prevent the camera from being affected by lightning.

When noise disturbance may happen

Noise may appear in video or audio near a strong electric field from a TV or radio antenna, motors and transformers, or a strong electric field/magnetic field from a power line (lamp line) of AC100 V or more. Conduct the power distribution work to keep 1 m {3.28 feet} away from them or conduct the electric conduit work using metal pipes.

(Be sure to make ground connection of the metal pipes.)

Make sure to remove this product if it will no longer be used.

■ This product has no power switch.

When turning off the power, disconnect the power supply from the 12 V DC power supply or the PoE device.

About the battery

A battery is installed inside the camera. Do not leave the battery exposed in environments of excessive heat as a result of sunlight or fire.

Equipment classification and power source indication label

Refer to the indication label on the bottom side of this unit for the equipment classification, power source, and other

Troubleshooting

information.

the trouble

Before requesting service, refer to "Troubleshooting" of Basic Information and Operating Instructions. Then, confirm

Power source *1:	DC 12 V PoE (IEEE802.3af compliant)		
Power consumption *1:	S4176		
	DC 12 V: 680 mA/Approx. 8.2 W		
	PoE DC 48 V: 180 mA/Approx. 8.6 W	(Class 0 device)	
	S4156		
	DC 12 V: 520 mA/Approx. 6.2 W PoE DC 48 V: 140 mA/Approx. 6.7 W	(Class 0 device)	
Operating environment			
Ambient operating temperature:	–10 °C to +50 °C {14 °F to 122 °F}		
Ambient operating humidity:	10 % to 90 % (no condensation)		
Storage environment			
Storage temperature: Storage humidity:	-30 °C to +60 °C {-22 °F to +140 °F} 10 % to 95 % (no condensation)		
Monitor output *2	VBS: 1.0 V [p-p]/75 Ω , composite, ø3.5 mm mini jack (Audio output term		
(for adjustment):	An NTSC or PAL signal can be outputted from camera (use softwar to select NTSC or PAL signal).		
EXT I/O terminals:	ALARM IN1		
	(Alarm input 1/Auto time adjustment in ALARM IN2 (Alarm input 2/ ALARM OL	put): x1	
	ALARM IN3 (Alarm input 3/ AUX OUT):		
Built-in microphone:	Nondirectional electret condenser micro	phone	
Audio input:	ø3.5 mm stereo mini jack		
For microphone input:	Recommended applicable microphone (Sensitivity of microphone:	-48 dB±3 dB (0 dB=1 V/Pa, 1 kHz)	
	Input impedance:	Approx. 2 k Ω (unbalanced)	
For line input:	Supply voltage: Input level:	2.5 V ±0.5 V Approx. –10 dBV	
Audio output *2:	ø3.5 mm stereo mini jack (Audio outpu		
Addio odiput	Output impedance:	Approx. 600 Ω (unbalanced)	
	Output level:	–20 dBV	
Dimensions:	S4176		
	ø150 mm × 49.5 mm (H) {ø5-29/32 inches × 1-15/16 inches (H)}		
	S4156		
	ø150 mm × 50.5 mm (H) {ø5-29/32 ind	ches × 2 inches (H)}	
Mass:	S4176 Approx. 420 g {0.93 lbs}		
	S4156 Approx. 390 g {0.86 lbs}		
Finish:	Main body: ABS resin, i-PRO white		

support web site for descriptions of how to switch the output.

Optional accessories^{*1}

Ceiling Mount Bracket: WV-Q105A

<i-PRO white brackets> Ceiling Mount Bracket (ISO) WV-QCL100-W Wall Mount Bracket:

Ceiling Mount Bracket (ANSI) WV-QCL101-W

*1 Refer to our support website <Control No.: C0501> for other optional accessories that can be installed.

WV-QWL500-W

r						
Standard accessories						
Installation Guide (this document)1 pc. Code label*1 IMPORTANT SAFETY INSTRUCTIONS1 pc. *1 This label may be required for network management. Use caution		1 pc. el.				
The following parts are used during installation procedures.						
Attachment plate1 pc. Cable tie Template A		2 pcs. (of them, 1 for spare)				
	ıg	1 pc.				
Power cord plug*21 pc. Safety wire		1 pc.				
EXT I/O terminal plug*21 pc. Washer		1 pc.				
Cable for easy kitting *31 pc. Spring washe	Spring washer1 pc.					
*2 The power cord plug and EXT I/O terminal plug are attached to the camera.						
*3 The cable for easy kitting is attached to the camera.						
Other items that are needed (not included)						
Fixing screw						
Installation method	Recommended screw ^{*1}	Minimum pull-out strength*2				
Gangbox/ : Mount the camera on the two-gangbox/ junction	M4 x 16 mm* ³					

	screw*1	strength*2		
Gangbox/ Junction box : Mount the camera on the two-gangbox/ junction box using the attachment plate	M4 x 16 mm* ³ {5/8 inches} x	196 N {44 lbf}		
Directly mount : Directly mount the camera onto the ceiling or wall using the attachment plate	4 pcs.			
When mounting the camera using the optional bracket	Refer to the Ins each bracket	tallation Guide for		
*1 Select screws according to the material of the location that the camera will be mounted to. In this case.				

wood screws and nails should not be used. *2 For information about the minimum pull-out strength, refer to our support website <Control No.: C0120>. *3 The screw length is an example when installing the camera on a robust ceiling or wall with a thickness of

- 20 mm {25/32 inches} or more.
- RJ45plug, Ethernet cable (category 5e or better, straight, all 4 pairs (8 pins)) • As necessary, audio input cable, audio output cable, alarm I/O cables, power supply cable
- Tools

