



Installation Guide for

# **RoboSHOT IW**

Architectural PTZ Conferencing Camera

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# Overview

This guide describes installation and related information for the RoboSHOT<sup>®</sup> In-Wall architectural PTZ conferencing camera:

- RoboSHOT IW with smart glass, black 999-9965-100 (North America); 999-9965-101 (Europe/UK)
- RoboSHOT IW with smart glass, primer coated 999-9965-150 (North America); 999-9965-151 (Europe and UK)
- RoboSHOT IW OneLINK® HDMI System with smart glass, black 999-9965-200 (North America); 999-9965-201 (Europe and UK)
- RoboSHOT IW OneLINK HDMI System with smart glass, primer coated 999-9965-250 (North America); 999-9965-251 (Europe and UK)
- RoboSHOT IW OneLINK Bridge System with smart glass, black 999-9965-300 (North America); 999-9965-301 (Europe and UK)
- RoboSHOT IW OneLINK Bridge System with smart glass, primer coated 999-9965-350 (North America); 999-9965-351 (Europe and UK)
- RoboSHOT IW with safety glass, black 999-9966-100 (North America); 999-9966-101 (Europe/UK)
- RoboSHOT IW with safety glass, primer coated 999-9966-150 (North America); 999-9966-151 (Europe and UK)
- RoboSHOT IW OneLINK® HDMI System with safety glass, black 999-9966-200 (North America); 999-9966-201 (Europe and UK)
- RoboSHOT IW OneLINK HDMI System with safety glass, primer coated 999-9966-250 (North America); 999-9966-251 (Europe and UK)
- RoboSHOT IW OneLINK Bridge System with safety glass, black 999-9966-300 (North America); 999-9966-301 (Europe and UK)
- RoboSHOT IW OneLINK Bridge System with safety glass, primer coated 999-9966-350 (North America); 999-9966-351 (Europe and UK)





## What's in this Guide

This guide covers:

- Unpacking the camera
- Tips for a successful installation
- Information on mounting and connecting the camera
- Camera power-on

Complete product information is available in the **Complete Manual for the RoboSHOT IW Architectural PTZ Conferencing Camera**.

Download manuals, dimensional drawings, and other information from <u>www.vaddio.com/support</u>.

## Features

- Attractive, ADA-compliant recessed design
- Fully enclosed with smart glass cover (frosted when the camera is not sending video) or tamperresistant safety glass cover
- Exmor® 1/2.8 type, high-speed, low-noise image sensor for 2.38 megapixels total, full HD (native 1080p/60)
- 10x optical zoom with horizontal field of view from 67° (wide end) to 7.6° (tele end)
- Superior low-light performance (0.4 Lux)
- Web interface for remote administration and operation, integration-ready Telnet and serial RS-232 control, presenter-friendly IR remote control
- Use with a OneLINK device for power, video, and control:
  - OneLINK HDMI uncompressed HDMI video, bidirectional RS-232 connectivity for camera control via third-party equipment, passes IP stream from the camera
  - OneLINK Bridge OneLINK HDMI capabiliities plus uncompressed USB 3.0 streaming, HD-SDI output, and audio routed up to the camera and injected into the IP stream

# Unpacking the Camera

Make sure you receive all the items you expected.

## Camera Only

#### **RoboSHOT IW with Smart Glass**

999-9965-100 – RoboSHOT IW with Smart Glass, Black, North America 999-9965-150 – RoboSHOT IW with Smart Glass, Primer Coated, North America 999-9965-101 – RoboSHOT IW with Smart Glass, Black, Europe/UK 999-9965-151 – RoboSHOT IW with Smart Glass, Primer Coated, Europe/UK

#### **RoboSHOT IW with Clear Glass**

999-9966-100 – RoboSHOT IW with Clear Glass, Black, North America 999-9966-150 – RoboSHOT IW with Clear Glass, Primer Coated, North America 999-9966-101 – RoboSHOT IW with Clear Glass, Black, Europe/UK 999-9966-151 – RoboSHOT IW with Clear Glass, Primer Coated, Europe/UK

#### Camera

- Enclosure assembly, black or primed
  - Back box
  - Interior side plates, right and left
  - Side brackets, qty. 2
  - Drywall clips, qty. 4
  - Screws, 6-32, 1/4 in, qty. 10
  - $\circ~$  Screws, 6-32, 3/8 in, qty. 8
  - $\circ~$  Screws, 10-24, 1 in, qty. 4
- Front frame, black or primed, with smart glass (opaque) or clear glass
- PoE+ mid-span power injector with AC cord set(s)
- Vaddio IR Remote Commander
- Installation Guide 411-0016-31 for RoboSHOT IW



## Camera Systems with OneLINK HDMI

#### RoboSHOT IW OneLINK HDMI System with Smart Glass

999-9965-200 – RoboSHOT IW OneLINK HDMI System with Smart Glass, Black, North America 999-9965-250 – RoboSHOT IW OneLINK HDMI System with Smart Glass, Primer Coated, North America 999-9965-201 – RoboSHOT IW OneLINK HDMI System with Smart Glass, Black, Europe/UK 999-9965-251 – RoboSHOT IW OneLINK HDMI System with Smart Glass, Primer Coated, Europe/UK

#### RoboSHOT IW OneLINK HDMI System with Clear Glass

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  - Screws, 6-32, 1/4 in, qty. 10
  - Screws, 6-32, 3/8 in, qty. 8
  - Screws, 10-24, 1 in, qty. 4
- Front frame, black or primed, with smart glass (opaque) or clear glass
- Vaddio IR Remote Commander
- Installation Guide 411-0016-31 for RoboSHOT IW
- OneLINK HDMI receiver
- Power supply, 48 VDC/1.36 A, with AC cord set(s)
- EZCamera RS-232 control adapter
- Quick-Start Guide 411-0019-01 for OneLINK HDMI



## Camera System with OneLINK Bridge

#### RoboSHOT IW OneLINK Bridge System with Smart Glass

999-9965-300 – RoboSHOT IW OneLINK Bridge System with Smart Glass, Black, North America 999-9965-350 – RoboSHOT IW OneLINK Bridge System with Smart Glass, Primer Coated, North America 999-9965-301 – RoboSHOT IW OneLINK Bridge System with Smart Glass, Black, Europe/UK 999-9965-351 – RoboSHOT IW OneLINK Bridge System with Smart Glass, Primer Coated, Europe/UK

#### RoboSHOT IW OneLINK Bridge System with Clear Glass

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- Camera
- Enclosure assembly, black or primed
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  - Screws, 6-32, 3/8 in, qty. 8
  - Screws, 10-24, 1 in, qty. 4
- Front frame, black or primed, with smart glass (opaque) or clear glass
- Vaddio IR Remote Commander
- Installation Guide 411-0016-31 for RoboSHOT IW
- OneLINK Bridge AV interface
- Power supply, 48 VDC/1.36 A, with AC cord set(s)
- USB 3.0 A to B cable, 6 ft. (1.8 m)
- 3-position Phoenix connector plug, 3.5 mm, qty. 4
- EZCamera RS-232 control adapter
- Quick-Start Guide 411-0009-01 for OneLINK Bridge



## A Quick Look at the Camera and Enclosure



**Camera and Lens** – The 10x optical zoom lens and Exmor® 1/2.8 type, high-speed, low-noise image sensor deliver crisp full-HD video.

Frame – Metal frame and glass window.

Interior side panels – No wiring is visible when the camera is installed.

Camera platform – Houses the electronics.

**IR window** – A sensor in the front of the camera platform receives signals from the remote. Make sure there's nothing directly in front of the camera platform, and point the remote at the camera.

Status indicator – The multicolored LED indicates the camera's current state.

- Blue: Normal operation (blinks once when the camera receives a command from the remote)
- Red: On-air tally
- Blinking blue or blinking red: Video is muted
- Purple: In standby mode or booting
- Yellow: Firmware update in progress
- Blinking yellow: Motor calibration fault

#### Note

By default, the camera's status light is active during normal operation; however, it can be configured to remain off when the camera is powered up. The camera may be sending video even if the indicator light is off.

If the camera has a smart-glass cover, the cover is frosted when the camera is in standby mode (not sending video). The glass remains clear when video is muted; however, if enabled, the status light blinks.

# Installing the Camera

This section covers:

- Selecting the location for the camera
- Installing the enclosure
- Connecting the camera
- Completing the installation

## Don't Void Your Warranty!

#### Caution

This product is for indoor use. Use an appropriate protective enclosure if installing it outdoors or in a humid environment.

Do not install or operate this product if it has been dropped, damaged, or exposed to liquids. If any of these things happen, return it to Vaddio for safety and functional testing.

Use the power source included with or recommended for use with this product. Using the wrong power supply will void the warranty, and could create unsafe operating conditions or damage the product. Power supplies for different products may look nearly identical – always check the label for the output voltage.

## **Cabling Notes**

Use Cat-5e or better cable. We recommend using high-quality connectors and a high-quality crimping tool. *Caution* 

Do not use pass-through RJ-45 connectors. If they are crimped incorrectly, they can damage the connectors on the product, cause intermittent connections, and degrade signal quality. Physical damage to the connectors may void your warranty.



Intact – will make reliable contact with cable connector



**Damaged** – Bent contact fingers will NOT make reliable contact with cable connector

We recommend shielded cabling if the cables will be coiled, run tightly with other cables, or placed close sources of electromagnetic interference such as power lines.

#### Caution

Check your cables. Connecting a cable to the wrong port or using the wrong pin-out can result in equipment damage and will void the warranty.



#### Pro Tip

To prevent tragic mishaps, label both ends of every cable.

## Selecting the Installation Area

Install the camera in a location that meets the following requirements.

Note

Work must conform to local building codes and should be performed by qualified personnel.

**Environment:** This product is designed for indoor use only.

#### Structural requirements:

- The enclosure is designed to be mounted into a wood or steel stud wall 16 in. (40.6 cm) on center, or to a drywall surface at least 0.5 in (1.27 cm) thick.
- If the wall studs are on greater than 16 in. centers, you will need to mount to drywall on at least two corners.

**Safety:** Ensure that no obstructions of any kind are present in the area that the camera enclosure will be set into.

#### Warning

Before cutting the opening for the camera enclosure, ensure that no wiring and no pipes are present in or immediately adjacent to the area that the camera enclosure will be set into.

Cutting or drilling into electrical wiring can cause electrical shock or fire, resulting in death, injury, and damage to the building.

Cutting or drilling into gas pipes can cause explosion or fire, resulting in death, injury, and damage to the building.

Cutting or drilling into water or wastewater lines can result in injury and damage to the building.

#### Performance:

- Choose a camera mounting location that will optimize camera performance. Consider camera viewing angles, lighting conditions, and line-of-sight obstructions where the camera is to be mounted.
- If the remote control will be used, ensure that nothing blocks the IR lens in the camera enclosure.

## Pre-Installation Functional Check

Before you install the camera, verify that it powers up and sends video. Referring to the basic connection diagrams, connect the camera and verify that video is available on the connected display.

When you have verified that the camera operates properly, disconnect it and continue with the installation.

## **Basic Connections**

Connecting the camera is simple – just connect the cable to the OneLINK device or to the Power + Data connector of the mid-span power injector. The following diagrams show basic connections to other components of the room system.



### RoboSHOT IW OneLINK Bridge System



## RoboSHOT IW OneLINK HDMI System



### RoboSHOT IW with Third-Party Connectivity Solution



## **Options for Power and Other Connections**

**Connect the camera to a OneLINK device –** A single Cat-5e (or better) cable provides power to the camera, along with HDBaseT network and video connectivity. Network, video output, and RS-232 control are connected at the OneLINK device.

**Use a PoE+ power injector –** Connect to the network or to an HDBaseT-capable third-party control device through a PoE+ power injector.

## Things You Will Need for the Installation

Before you start, be sure you have what you need:

- Access to the area above the ceiling
- Plumb line
- Pencil
- Appropriate tools for cutting a hole in the ceiling
- #2 Phillips screwdriver
- Conduit box, if required

### Installing the Power Source

You can connect the camera to the IP network using a mid-span power injector, or you can connect it to a OneLINK device. If you use a OneLINK device, it may be installed up to 328 ft (100 m) from the camera.

- 1. Install the power injector or OneLINK device before installing the camera enclosure.
- 2. Route the camera cable from the power injector or OneLINK device to the camera enclosure location.

### Installing the Camera Enclosure

The RoboSHOT IW camera may be installed either in an unfinished wall, before the drywall is in place, or in a finished wall. In either situation, the installation is in three steps:

- Install the enclosure using the appropriate procedure.
- Install the camera in the enclosure.
- Install the cover.

### Before You Start

Consider which direction the camera cable needs to enter the enclosure, and remove the knock-out tab from either the upper or lower face of the enclosure.



### Installing the Camera Enclosure in an Unfinished Wall

Follow these steps if the drywall has not yet been installed.

- 1. Measure, mark, and level the mounting position between two studs.
- 2. Holding the enclosure in place against the wall studs, mark the locations for the holes.
- 3. Set the camera enclosure aside and drill the holes.
- 4. Fasten the camera enclosure to the wall studs.
- 5. Route the camera cable into the enclosure.

#### Installing the Camera Enclosure in a Finished Wall

Follow these steps if the drywall is in place.

Warning

Before cutting the opening for the camera enclosure, ensure that no wiring and no pipes are present in or immediately adjacent to the area that the camera enclosure will be set into.

Cutting or drilling into electrical wiring can cause electrical shock or fire, resulting in death, injury, and damage to the building.

Cutting or drilling into gas pipes can cause explosion or fire, resulting in death, injury, and damage to the building.

Cutting or drilling into water or wastewater lines can result in injury and damage to the building.

- 1. Verify that no pipes or wiring pass through or immediately adjacent to the part of the wall where the camera enclosure will be mounted.
- 2. Level, measure, and mark the cutting lines for the opening.
- 3. Cut the opening.
- 4. Slide the drywall clips into the corners of the enclosure. *Note*

Although the drywall clips are not visually symmetrical, they can be installed with either curved surface facing forward, depending on the corner in which they are placed.

- 5. Install the side brackets using 1/4 in. 6-32 screws.
- 6. Route the camera cable into the enclosure.
- 7. Slide the enclosure into place.
- 8. Use the 10-32 screws to attach the drywall clips to the side brackets. The clips tilt outward and engage the drywall as you tighten the screws.



## Installing the Camera

Do this only after verifying that the camera powers up properly. See <u>Pre-Installation Functional Check</u> for details.

- 1. Place the camera assembly in the enclosure, with the face in front of the tabs. If the enclosure has a smart glass cover, ensure that the cable for the cover panel is accessible.
- 2. Attach the camera to the back tabs using two 1/4 in. 6-32 screws.
- 3. Attach the camera to the front tabs using two 3/8 in. 6-32 screws.
- 4. Connect the camera cable.



### Installing the Interior Side Panels

The two interior side panels are not interchangeable. The right side panel has a cut-out for the smart glass cable.

#### To install each interior side panel:

- 1. Insert the tabs into the slots in the back of the enclosure.
- 2. Rotate the interior side panel into place. If the enclosure has a smart glass cover, ensure that the smart glass cable passes freely through the opening in the right side panel.
- 3. Secure the side panel with 1/4 in. 6-32 screws.

### Installing the Cover

Do this only after verifying that the camera powers up properly. See <u>Pre-Installation Functional Check</u> for details.

- 1. If the enclosure has a smart glass front frame, connect its cable.
- 2. Position the front frame over the front of the enclosure, being sure that the cable (if used) is not pinched.
- 3. Attach the cover using 3/8 in. 6-32 screws.

## Powering Up the Camera

#### Connect camera power.

The camera will run a self-test routine and move to its home position. This will take a few seconds. When the camera is initialized and ready, video is available and the status light is blue. At this point, the camera is ready to accept control information.

#### Note

Wait until the camera finishes initializing before trying to operate or control it.

## Status Light

The light in the camera's base indicates its current state.

- Blue: Normal operation (blinks once when the camera receives a command from the remote)
- Red: On-air tally
- Blinking red: Video is muted (UC LED color scheme only)
- **Purple:** In standby mode or booting
- Yellow: Firmware update in progress

#### Caution

Do not remove power or reset the camera while the indicator is yellow, showing a firmware update in progress. Interrupting a firmware update can make the camera unusable.

#### Note

By default, the camera's status light is active during normal operation; however, it can be configured to remain off when the camera is powered up. The camera may be sending video even if the indicator light is off.

# Next Steps

The camera is now ready to configure and use. This information is available in the **Complete Manual for the RoboSHOT IWArchitectural PTZ Conferencing Camera**.

# Operation, Storage, and Care

For smears or smudges on the product, wipe with a clean, soft cloth. Use a lens cleaner on the lens. Do not use any abrasive chemicals.

Keep this device away from food and liquids.

Do not operate or store the device under any of the following conditions:

- Temperatures above 40°C (104°F) or below 0°C (32°F)
- High humidity, condensing or wet environments
- Inclement weather
- Severe vibration
- Dry environments with an excess of static discharge

Do not attempt to take this product apart. There are no user-serviceable components inside.

# Compliance Statements and Declarations of Conformity

Compliance testing was performed to the following regulations:

FCC Part 15 (15.107, 15.109), Subpart B	Class A
ICES-003, Issue 54: 2012	Class A
EMC Directive 2014/30/EU	Class A
EN 55032: 2015	Class A
EN 55024: November 2010	Class A
KN24 2008 (CISPR 24: 1997 + A1: 2000 + A2: 2002)	Class A
IEC 60950-1:2005 (2nd Edition); Am 1: 2009 + Am 2: 2013	Safety
EN 60950-1: 2006 + A11: 2009 + A1: 2010 + A12: 2011 + A2: 2013	Safety

### FCC Part 15 Compliance

This equipment has been tested and found to comply with the limits for a Class A digital device, pursuant to Part 15, Subpart B, 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/her own expense.

Operation is subject to the following two conditions: (1) This device may not cause interference, and (2) This device must accept any interference including interference that may cause undesired operation of the device.

Changes or modifications not expressly approved by Vaddio can affect emission compliance and could void the user's authority to operate this equipment.

### ICES-003 Compliance

This digital apparatus does not exceed the Class A limits for radio noise emissions from digital apparatus set out in the Radio Interference Regulations of the Canadian Department of Communications. Industry

Le présent appareil numérique n'emet pas de bruits radioélectriques dépassant les limites applicables aux appareils numériques de la classe A

préscrites dans le Règlement sur le brouillage radioélectrique édicté par le ministère des Communications du Canada.



Canada

## **European Compliance**

This product has been evaluated for Electromagnetic Compatibility under the EMC Directive for Emissions and Immunity and meets the requirements for a Class A digital device. In a domestic environment this product may cause radio interference in which case the user may be required to take adequate measures. Standard(s) To Which Conformity Is Declared:

### EMC Directive 2014/30/EU EN 55032: 2015 EN 55024: November 2010 EN 61000-4-2: 1995 + Amendments A1: 1998 + A2: 2001 EN 61000-4-3: 2006 + A1: 2008 EN 61000-4-3: 2006 + A1: 2008 EN 61000-4-5: 2006 EN 61000-4-6: 2009 EN 61000-4-8: 2010 EN 61000-4-11: 2004

KN24 2008 (CISPR 24: 1997 + A1: 2000 + A2: 2002) EN 61000-4-2 EN 61000-4-3 EN 61000-4-4 EN 61000-4-5 EN 61000-4-6 EN 61000-4-8 EN 61000-4-11 IEC 60950-1: 2005 (2nd Edition); Am 1: 2009 + Am 2: 2013

EN 60950-1: 2006 + A11: 2009 + A1: 2010 + A12: 2011 + A2: 2013

Conducted and Radiated Emissions Immunity Electrostatic Discharge Radiated Immunity Electrical Fast Transients Surge Immunity Conducted Immunity Power Frequency Magnetic Field Voltage Dips, Interrupts and Fluctuations **IT Immunity Characteristics** Electrostatic Discharge Radiated Immunity Electrical Fast Transients Surge Immunity Conducted Immunity Power Frequency Magnetic Field Voltage Dips, Interrupts and Fluctuations Safety

# Warranty Information

See Vaddio Warranty, Service and Return Policies posted on support.vaddio.com for complete details.

**Hardware\* warranty:** Two (2) year limited warranty on all parts and labor for Vaddio manufactured products. Vaddio warrants its manufactured products against defects in materials and workmanship for a period of two years from the day of purchase, to the original purchaser, if Vaddio receives notice of such defects during the warranty. Vaddio, at its option, will repair or replace products that prove to be defective. Vaddio manufactures its hardware products from parts and components that are new or equivalent to new in accordance with industry standard practices.

**Exclusions:** The above warranty shall not apply to defects resulting from improper or inadequate maintenance by the customer, customers applied software or interfacing, unauthorized modifications or misuse, mishandling, operation outside the normal environmental specifications for the product, use of the incorrect power supply, modified power supply or improper site operation and maintenance. OEM and special order products manufactured by other companies are excluded and are covered by the manufacturer's warranty.

**Vaddio Customer Service:** Vaddio will test, repair, or replace the product or products without charge if the unit is under warranty. If the product is out of warranty, Vaddio will test then repair the product or products. The cost of parts and labor charge will be estimated by a technician and confirmed by the customer prior to repair. All components must be returned for testing as a complete unit. Vaddio will not accept responsibility for shipment after it has left the premises.

**Vaddio Technical Support:** Vaddio technicians will determine and discuss with the customer the criteria for repair costs and/or replacement. Vaddio Technical Support can be contacted by email at <a href="mailto:support@vaddio.com">support@vaddio.com</a> or by phone at one of the phone numbers listed on <a href="mailto:support.vaddio.com">support.vaddio.com</a>.

**Return Material Authorization (RMA) number:** Before returning a product for repair or replacement request an RMA from Vaddio's technical support. Provide the technician with a return phone number, e-mail address, shipping address, product serial numbers and original purchase order number. Describe the reason for repairs or returns as well as the date of purchase. See the General RMA Terms and Procedures section for more information. RMAs are valid for 30 days and will be issued to Vaddio dealers only. End users must return products through Vaddio dealers. Include the assigned RMA number in all correspondence with Vaddio. Write the assigned RMA number clearly on the shipping label of the box when returning the product. All products returned for credit are subject to a restocking charge without exception. Special order product are not returnable.

**Voided varranty:** The warranty does not apply if the original serial number has been removed or if the product has been disassembled or damaged through misuse, accident, modifications, use of incorrect power supply, use of a modified power supply or unauthorized repair.

**Shipping and handling:** Vaddio will not pay for inbound shipping transportation or insurance charges or accept any responsibility for laws and ordinances from inbound transit. Vaddio will pay for outbound shipping, transportation, and insurance charges for all items under warranty but will not assume responsibility for loss and/or damage by the outbound freight carrier. If the return shipment appears damaged, retain the original boxes and packing material for inspection by the carrier. Contact your carrier immediately.

**Products not under warranty:** Payment arrangements are required before outbound shipment for all out of warranty products.

# Photo Credits

This manual may include some or all of these photos.

European Space Agency (ESA) astronaut Samantha Cristoforetti, a Flight Engineer with Expedition 42, photographs the Earth through a window in the Cupola on the International Space Station

By NASA - https://blogs.nasa.gov/ISS\_Science\_Blog/2015/03/06/women-in-space-part-two-whats-gender-got-to-do-with-it/, Public Domain, https://commons.wikimedia.org/w/index.php?curid=38834990

Carl Sagan, Bruce Murray, Louis Friedman (founders) and Harry Ashmore (advisor), on the occasion of signing the papers formally incorporating The Planetary Society

By credit NASA JPL - JPL, Public Domain, https://commons.wikimedia.org/w/index.php?curid=1180927

Main Control Room / Mission Control Room of ESA at the European Space Operations Centre (ESOC) in Darmstadt, Germany

By European Space Agency - ESOC flickr, Credit: ESA - Jürgen Mai, CC BY-SA 3.0-igo, https://commons.wikimedia.org/w/index.php?curid=36743173

Expedition 42 on orbit crew portrait, International Space Station, Mar. 7, 2015 – Barry Wilmore (Commander) Top, Upside down, to the right cosmonaut Elena Serova, & ESA European Space Agency Samantha Cristoforetti. Bottom center US astronaut Terry Virts, top left cosmonauts Alexander Samokutyaev and Anton Shkaplerov.

By NASA - https://www.flickr.com/photos/nasa2explore/16166230844/, Public Domain, https://commons.wikimedia.org/w/index.php?curid=38931301

European Space Agency astronaut Luca Parmitano, Expedition 36 flight engineer, outside the International Space Station

By NASA - http://spaceflight.nasa.gov/gallery/images/station/crew-36/html/iss036e016704.html, Public Domain, https://commons.wikimedia.org/w/index.php?curid=27263573

Chris Cassidy, Luca Parmitano, and Karen Nyberg, ISS, 2013. Photo Credit: NASA

Nicolas Altobelli, Rosetta Scientist at ESA's European Space Astronomy Centre, Villanueva de la Cañada, Madrid, Spain

By European Space Agency - Nicolas Altobelli talks to the media, CC BY-SA 3.0-igo,

https://commons.wikimedia.org/w/index.php?curid=36743144

Andrea Accomazzo, ESA Rosetta Spacecraft Operations Manager, providing a live update from the Main Control Room at ESA's European Space Operations Centre, Darmstadt, Germany during the Rosetta wake-up day.

By European Space Agency - Live update from the Main Control Room, CC BY-SA 3.0-igo, https://commons.wikimedia.org/w/index.php?curid=36743150

Sleeping goose

By ladypine - Own work, CC BY-SA 3.0, https://commons.wikimedia.org/w/index.php?curid=1695227

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