



Installation Guide for

# EasyIP Systems

Featuring the EasyIP Decoder and EasyIP 10 Camera

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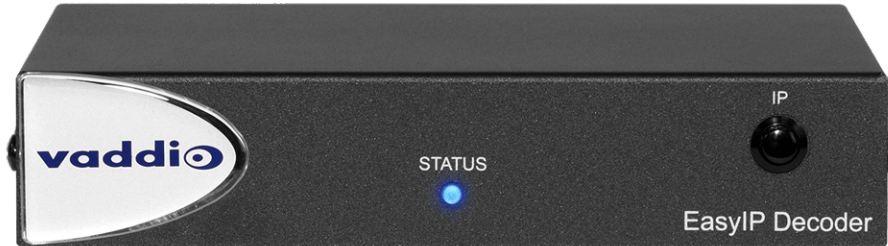
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## Overview

This guide discusses the following products:

- EasyIP Decoder AV-over-IP switching USB endpoint, 999-60210-000 (worldwide)



- EasyIP 10 AV-over-IP PTZ camera, 999-30200-000 (black, worldwide)
- EasyIP 10 AV-over-IP PTZ camera, 999-30200-000 (black, worldwide)



At a minimum, an EasyIP system includes one decoder and one camera. See [Basic Connections](#).

## What's in this Guide

This guide covers:

- Unpacking the system
- Tips for a successful installation
- Instructions for installing the camera mount
- Information on connecting the system components
- Information on mounting the camera
- System power-on

Complete product information for the EasyIP Decoder is available in the **Complete Manual for the EasyIP Decoder AV-over-IP Switching USB Endpoint**.

Complete product information for the camera is available in the **Complete Manual for EasyIP 10 AV-over-IP PTZ Camera**.

### Note

*If you are responsible for configuring the equipment after installing it, you will need the Complete Manuals. Each product's Complete Manual includes the information from this guide, plus information on system administration, operation, and troubleshooting.*

## The EasyIP Ecosystem

Vaddio® EasyIP products are designed to be used together. A basic EasyIP system includes an EasyIP Decoder managing up to four EasyIP cameras. Typically the EasyIP system is powered by a PoE+ switch.

- EasyIP cameras deliver video in Vaddio's proprietary EasyIP format.
- The decoder is required to convert the cameras' output signal to an IP and/or USB stream.
- The decoder automatically detects EasyIP cameras on its own subnet.
- The decoder does not recognize other types of cameras.
- The decoder can manage cameras in its directory. The administrator adds cameras to the directory.
- Cameras are not required to be on the same subnet as the decoder that manages them.
- EasyIP products require PoE+ power.

## EasyIP Decoder

The decoder is the central component of any EasyIP installation. Its functions include

- Video – pair with up to four cameras at a time, control the active camera via web interface, and decode the camera's AV-over-IP signal.
- Audio – provide connections for two Vaddio microphones and a speaker.
- USB streaming – UVC-compliant or client-custom USB streaming for conferencing applications.

## EasyIP Cameras

EasyIP cameras may be installed anywhere on the network. They require only a PoE+ power connection. An EasyIP Decoder is needed to decode the AV-over-IP signal.

## PoE+ Switch

A PoE+ switch simplifies installation, eliminating the need for PoE+ power injectors and placing all the connected products on the same subnet.

### **Caution**

*Do not connect the PoE+ switch to the network without guidance from an on-site network specialist.*

## Decoder Features

- Uncompressed USB 3.0 streaming
- Streaming video resolutions up to 1080p/60
- Full-duplex audio streaming
- Audio inputs for two Vaddio microphones
- HDMI video output for local display
- Universal Video Class (UVC) and Universal Audio Class (UAC) drivers supported in Windows®, macOS®, and Linux operating systems, compatible with most UC conferencing applications
- Integration-ready Telnet control
- Pairs with up to four EasyIP 10 cameras on your network to provide control and manage streaming
- Enterprise-class IT administrative capabilities with full web controls for remote management

## Camera Features

- 2.14 Megapixel effective, native 1080p/60 full HD image sensor
- 10x optical zoom, horizontal field of view of 67°
- Resolutions up to 1080p/60
- Precise pan and tilt movements at up to 90° per second
- Integration-ready Telnet control
- Pairs with an EasyIP Decoder, which provides video and audio connectivity and manages streaming
- Just one cable – the EasyIP connection to a PoE switch
- Enterprise-class IT administrative capabilities with full web controls for remote management

## Unpacking the EasyIP System Components

Make sure you received all the items you expected.

### EasyIP Decoder AV-over-IP switching USB endpoint

Worldwide: 999-60210-000



The box should contain one of each item listed here:

- EasyIP Decoder
- USB 3 cable, 6 ft. (1.8 m)
- Cat-5e cable, 3 ft. (0.9 m)
- 4-position Phoenix-type connector
- Half-rack mounting kit
- Quick-Start Guide

### EasyIP 10 AV-over-IP PTZ Camera

Worldwide: 999-30200-000 (black), 999-30200-000W (white)

#### Caution

*Always support the camera's body when lifting or moving it. Lifting the camera by its head or mounting arm will damage it.*



The box should contain one of each item listed here:

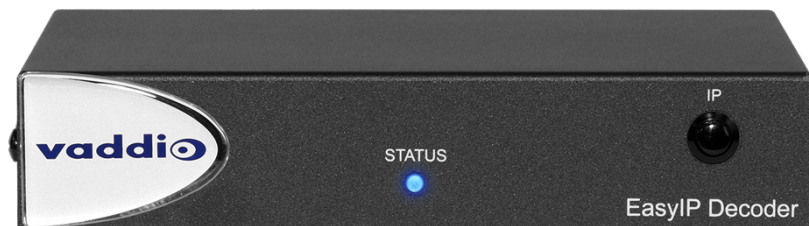
- Camera (black or white)
- VaddiIR Remote Commander
- Thin Profile Wall Mount with mounting hardware
- Cat-5e cable, 10 ft. (3 m)
- Quick-Start Guide

## A Quick Look at the System Components

EasyIP Decoder – Decodes the AV-over-IP signal from the camera(s) and originates a USB stream.

EasyIP 10 camera – Great video, simple installation, minimal set-up.

### Front of the Decoder



**Status light** – Provides basic information about the device.

- Illuminated: Normal operation
- Off: No power to the device
- Blinking: Error

**IP Address button** – Press to display the decoder's IP address in its USB stream.

**Dimensionally enhanced logo badge** – We have spared no expense to provide a puffy logo badge to elevate your experience. It's quite shiny, and offers superior tactile appeal.

### Front of the Camera



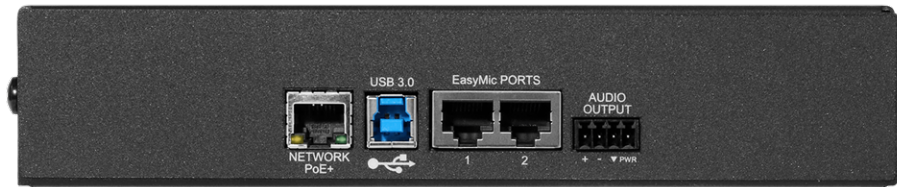
**Camera and zoom lens** – 10X optical zoom lens.

**IR sensor** – Receives signals from the IR remote.

**Status light** – Multi-colored LED that indicates the camera's current state.

- Blue – Camera is active
- Purple – Standby mode or booting
- Yellow – Firmware update is in progress
- Blinking red – Video mute is on (UC color scheme)
- Blinking yellow – Motor out of calibration

## Back of the Decoder



- **Network/PoE+** – RJ-45 connector. Connect to a powered port on the PoE+ switch.
- **USB 3.0** – USB Type B connector. Connect to a computer for use with soft conferencing applications. Provides uncompressed USB 3.0 stream.
- **EasyMic** – RJ-45 connectors. Connect to a TableMIC or other microphone with EasyMic connectivity.
- **Audio output** – Line level differential audio and 12 VDC power output to the optional amplified speaker or other audio infrastructure.

## Back of the Camera



**Network/PoE+** – RJ-45 connector. Connect to a powered port on the PoE+ switch.  
It doesn't get much easier than that, does it?

## Installation

Please refer to the **Installation Guide for EasyIP AV-over-IP Systems** for a more system-oriented view of EasyIP product installation. It includes information not available in this manual.

This section covers:

- Selecting the location for the camera
- Installing the mount
- Cabling notes
- Connection diagrams
- Connecting and mounting the camera

And a required safety note here:

### Note

*PoE type networks connected to this equipment are for intra-building use only and should not be connected to lines that run outside of the building in which this product is located.*

## Don't Void Your Warranty!



### Caution

*Always support the camera's body when lifting or moving it. Lifting the camera by its head or mounting arm will damage it.*

### Caution

*This product is for indoor use. Do not install it outdoors or in a humid environment without the appropriate protective enclosure. Do not allow it to come into contact with any liquid.*

### Caution

*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.*

## Before You Start

***Work with the network administrator to plan your EasyIP deployment. A typical EasyIP system includes network equipment.***

Do these things before installing any Vaddio product:

- Be sure you can identify all cables correctly.
- Check Cat-5 cables for continuity.
- Talk to the network administrator.
  - Inform the network administrator that the EasyIP system includes a switch that is configured for DHCP operation. The network administrator may need to take steps to ensure a trouble-free installation.
  - If you will be responsible for configuring the camera, ask what hostname (if any) you should assign to it.



## Before Installing a Camera

Things to keep in mind when deciding where to install the camera:

- Consider camera viewing angles, lighting conditions, line-of-sight obstructions, and in-wall obstructions where the camera is to be mounted.
- Ensure that the camera body can move freely and will normally point away from the ceiling and lights. The camera will not perform well if it is pointed toward a light source such as a light fixture or window.
- If the remote will be used, ensure that nothing blocks the IR lens in the camera's base.

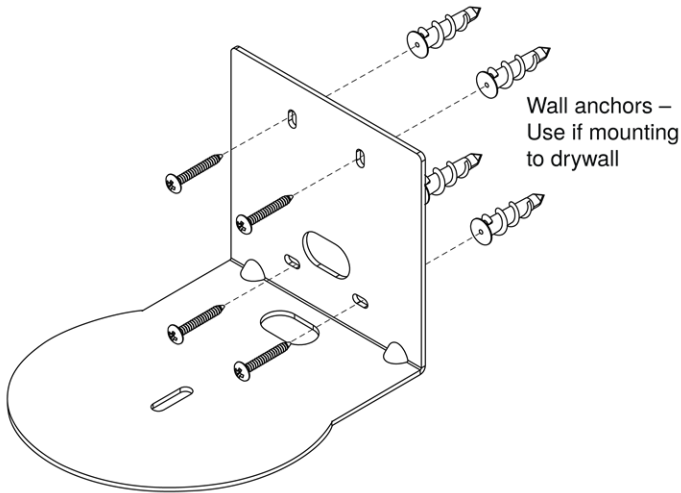
## Installing the Wall Mount

The camera is shipped with a wall mount. Other mounting options are available as well. Contact us if you don't have the camera mount you need.

You can install the camera wall mount to a 2-gang wall box or directly to the drywall.

- If you mount it to drywall, use the wall anchors provided with the wall mount.
- If you mount it to a wall box, use the cover plate screws supplied with the wall box.

If you install the camera wall mount to drywall, use the wall anchors provided with the mount.



Your camera mount may look somewhat different.

## About Ceiling-Mounted Cameras

If you use an inverted mount, set the camera's Image Flip mode ON for inverted operation. This orients the video image correctly and sets the tilt motors to respond appropriately to tilt up and down commands from the remote, web interface, and connected control devices. This control is available to the administrator on the web interface's System page.

## Cabling Notes

### Caution

When building cables for Vaddio products, do not use pass-through RJ-45 connectors. Incorrectly crimped pass-through connectors can damage the connectors on the product, which will void your warranty.



**Intact** – will make reliable contact with cable connector



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

Use Cat-5e or better cable. We recommend using high-quality connectors and a high-quality crimping tool. If connectors are crimped incorrectly, they can cause intermittent connections and degrade signal quality.



We recommend shielded cabling if the cables will be coiled, run tightly with other cables, or routed near sources of electromagnetic interference such as power lines or fluorescent light fixtures.

### 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.

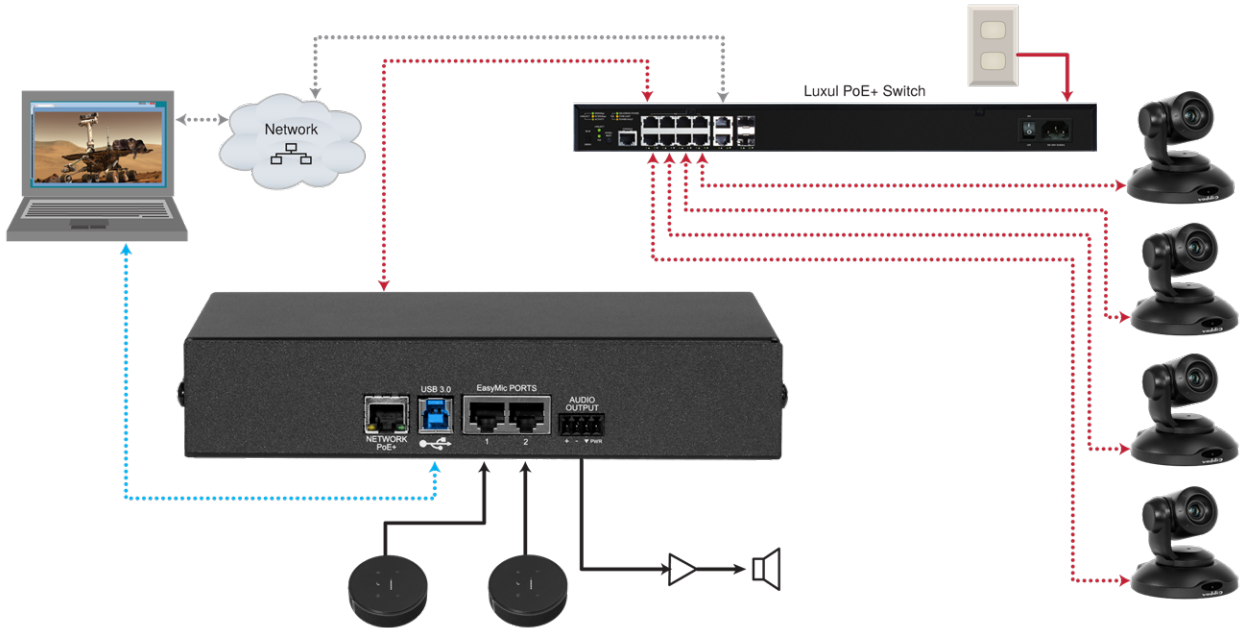
### Pro Tip

Label all cables at both ends.

## Basic Connections

Here is an example of a simple EasyIP deployment. In this setup, an EasyIP Decoder manages up to four EasyIP 10 cameras and provides hard-wired audio connections. A PoE+ switch provides power and network connectivity to the EasyIP products. The EasyIP Decoder connects directly to a computer as a USB conferencing device.

If no PoE+ switch is used, a mid-span PoE+ power injector (sold separately) is required for each EasyIP device.



### Note

EasyIP 10 cameras require an EasyIP Decoder to decode the AV-over-IP signal and originate a USB stream. The EasyIP Decoder is compatible with EasyIP cameras only. It does not detect or pair with other types of cameras.

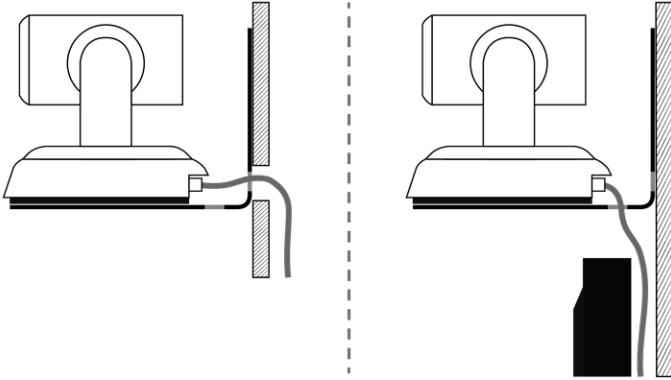
Vaddio recommends making all connections while the PoE+ switch is turned off.

### Caution

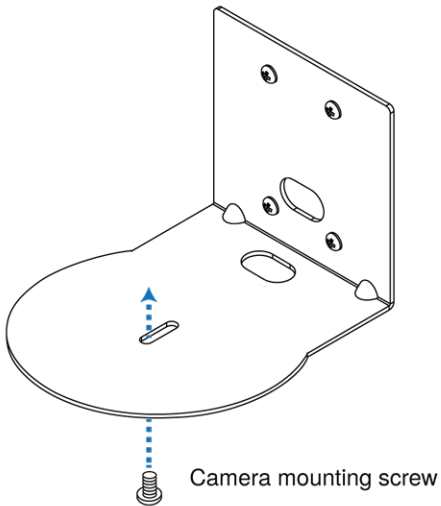
Do not connect the PoE+ switch to the network without guidance from an on-site network specialist.

## Installing the Camera

1. Route the cable through the opening in the mounting shelf and connect it to the camera.
2. Place the camera on the mount.



3. Attach the camera to the mount using the mounting screw supplied with the camera.



**Note**

*If the camera is jostled or bumped while it is connected to power, it may require a pan-tilt reset.*

## Powering Up the EasyIP System

Vaddio recommends making all connections while the PoE+ switch is turned off. To power the system, turn on the PoE+ switch.

- The EasyIP Decoder's status light turns blue when the device is ready. The connected computer recognizes it as a USB peripheral.
- The EasyIP 10 cameras initialize and move if they are powered from the same PoE+ switch. This will take a few seconds. When each camera's status light turns blue, the camera is ready to accept control information.

## Next Steps

No video is available from the EasyIP system until it is configured. Refer to the Complete Manual for the EasyIP System for information on initial device set-up and pairing EasyIP 10 cameras to the EasyIP Decoder.

## Specifications

Specifications are subject to change without notice.

### EasyIP Decoder

#### USB Streaming, Audio, and Control

<b>USB Stream</b>	Video and Audio Up to 1080p/60 Resolution (Full HD)	<b>Input Power</b>	PoE+
<b>USB Audio (record, playback)</b>	2 Channel (UAC) 16-bit resolution 48 KHz sample rate	<b>EasyMic Inputs (2 channels available)</b>	RJ-45 12V, bidirectional balanced
<b>Audio Line Out</b>	4-pin Phoenix type terminal block Impedance: 50 ohms Frequency response 20Hz - 20KHz THD + noise < 0.02% Maximum output level +12 dBu differential audio		
<b>Control</b>	Web interface, Telnet		

#### Physical and Environmental

<b>Height</b>	1.72 in. (4.4 cm)	<b>Operating temperature</b>	0°C to +40°C (32°F to 104°F)
<b>Width</b>	8.38 in. (21.3 cm)	<b>Operating humidity (relative)</b>	20% to 80% non-condensing
<b>Depth</b>	6.0 in. (15.2 cm)	<b>Storage temperature</b>	-5°C to +60° C (23°F to 140°F)
<b>Weight</b>	2.65 lb.(1.26 kg)	<b>Storage humidity (relative)</b>	20% to 80% non-condensing

### EasyIP 10 Camera

#### Camera and Image

<b>Image device</b>	1/2.8-type Exmor CMOS sensor	<b>Pixels</b>	2.14 million (effective)
<b>Pan angle and speed</b>	± 155°, up to 90°/sec	<b>Tilt angle and speed</b>	+90° -30°, up to 90°/sec
<b>Lens and horizontal FOV</b>	10x optical zoom, 67.0° wide to 7.6° tele, f=3.8mm to 38mm, F1.8 to F3.4		
<b>Min. working distance</b>	10mm (wide), 1.0m (tele)	<b>Min. illumination</b>	100+ lux recommended
<b>Aperture/detail</b>	16 steps	<b>Gain</b>	Auto or manual
<b>Backlight compensation</b>	On or off	<b>White balance</b>	Auto, manual, One-Push
<b>Focusing system</b>	Auto or manual	<b>Noise reduction</b>	On or off
<b>Sync system</b>	Internal	<b>S/N ratio</b>	Over 50 dB
<b>Remote management</b>	Web interface, Telnet	<b>Power</b>	PoE+

#### Physical and Environmental

<b>Height</b>	6.3 in. (16.3 cm)	<b>Operating temperature</b>	0°C to +40°C (32°F to 104°F)
<b>Width</b>	6.1 in. (15.5 cm)	<b>Operating humidity (relative)</b>	20% to 80% non-condensing
<b>Depth</b>	5.5 in. (14.5 cm)	<b>Storage temperature</b>	-5°C to +60° C (23°F to 140°F)
<b>Weight</b>	3.0 lb.(1.36 kg)	<b>Storage humidity (relative)</b>	20% to 80% non-condensing

## 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
- Under the sea, in an octopus's garden
- Dry environments with an excess of static discharge

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

## Compliance and Conformity Statements

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
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
IEC 62368-1:2014 (2nd Edition)	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.

Le présent appareil numérique n'émet pas de bruits radioélectriques dépassant les limites applicables aux appareils numériques de la classe A prescrites dans le Règlement sur le brouillage radioélectrique édicté par le ministère des Communications du 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 – Conducted and Radiated Emissions

EN 55024: November 2010 – Immunity

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

IEC 62368-1: 2014 (2nd Edition) – Safety

## Warranty and Return Policy

**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 [support@vaddio.com](mailto:support@vaddio.com) or by phone at one of the phone numbers listed on [support.vaddio.com](http://support.vaddio.com).

**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 products are not returnable.

**Voided warranty:** 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.

**General RMA Terms and Procedures:** RMA's are valid for 30 days and will be issued to Vaddio dealers only.

- End users must return products through Vaddio dealers.
- Before a defective product can be authorized to send in for repair, it must first go through the troubleshooting process with a member of the Vaddio Technical Support team.
- Products authorized for repair must have a valid RMA (Return Material Authorization) number.
  - Vaddio RMA Team will issue the RMA number.
  - An RMA number is to be included in all correspondence with Vaddio.
  - The RMA number must appear clearly on the shipping label (not the box) when the product is returned.
  - A packing slip must be included on the inside of the box with the RMA number listed and reason for RMA return.
- Products received at Vaddio that do not have a valid RMA number clearly marked on the outside of the shipping container may be refused and returned to sender.
- Boxes showing external damage will be refused and sent back to the sender regardless of the clearly marked RMA number and will remain the responsibility of the sender.

**RMA Charges (Restocking):** All qualified returns must be made in unopened, original packaging with all original materials.

- Initial shipments of equipment that are refused upon attempted delivery, for any reason, are subject to restocking charges.
- The Dealer has up to 60 days from the date of purchase to return Vaddio product for credit for future purchases of Vaddio product only.
- The Dealer has 61 to 90 days from the date of purchase to return Vaddio product with a 15% restocking fee or \$50.00 fee, whichever amount is greater
- The Dealer has up to 30 days from the date of purchase to return OEM and other manufacturer's products with a 15% restocking fee or \$50.00 fee, whichever amount is greater.
- NOTE: Special Order products from other manufacturers (identified in the Vaddio Price Guide as noncancelable, nonreturnable and not refundable) are not eligible for advance replacement from Vaddio.

**Advance Replacement Policies:** For Vaddio manufactured products, advance replacement will be provided for up to one (1) year after the initial shipment of products.

- NOTE: OEM and other manufacturer's products are excluded from the Vaddio advance replacement policy. Advance replacement will be provided for up to 30 days after initial shipment of OEM products. Thereafter, a return to Vaddio and factory repair is offered during the other manufacturer's warranty period. Vaddio will determine if the returned product is qualified for the OEM warranty.
- NOTE: Special Order products from other manufacturers (identified in the Vaddio Price Guide as noncancelable, nonreturnable and not refundable) are not eligible for advance replacement from Vaddio.

**Advance Replacement Procedures:** The Vaddio Dealer must submit a non-revocable purchase order for advance replacement equipment at normal dealer pricing. Credit shall be issued upon complete product return (including all accessories) for dealers with Net 30 terms. For credit card accounts, charges will be assessed to the credit card for the replacement and credited back upon complete product return.

- Returns must be made in the original Vaddio packaging with all original materials if at all possible. Vaddio products with missing original materials will be billed to the dealer at dealer price.
- NOTE: OEM products must be returned in the original packaging with all materials and the RMA number written on the shipping label only and not on the OEM box. If the return is incomplete and/or the OEM box is defaced, the product shall be returned to the dealer and the RMA will not be credited.
- Equipment returned with “No Trouble Found” after advanced replacement will be assessed a full 15% or \$50.00 restocking fee (whichever is greater) for each item and may also be assessed for additional charges to compensate for wear, damages and reconditioning.
- All returns must be accompanied by RMA # as stated above.
- All Advanced Replacement products are sent via 2-day service in the continental USA. If the product is requested to be sent via priority or overnight shipping, the Dealer shall pay shipping costs. The dealer can elect to supply their preferred shipping account number.
- International customers are responsible for all freight charges for equipment returned to Vaddio, including international shipping, taxes, and duties, insurance and all other associated logistic charges.

**Warranty Repair Terms and Procedures:** Vaddio will repair any product free of charge, including parts and labor, within the terms outlined in the warranty agreement for that product.

- Customers must provide proof of the product’s purchase date.
- Product that is within the warranty period will be repaired under the non-warranty terms if:
  - The equipment has been damaged by negligence, accident, act of God, mishandling, used with the incorrect, modified or extended power supply or has not been operated in accordance with the procedures described in the operating and technical instructions.
  - The equipment has been altered or repaired by other than the Manufacturer or an authorized service representative.
  - Adaptations or accessories other than those manufactured or provided by the Manufacturer have been made or attached to the equipment, which in the determination of the Manufacturer, shall have affected the performance, safety or reliability of the equipment; or the equipment’s original serial number has been modified or removed.
- Customer is responsible for shipping charges to send defective product under warranty to Vaddio. Vaddio will pay ground service return shipping charges during the 2nd year of the warranty period.
- Standard return shipping method for products under warranty, but out of the advance replacement warranty period, is ground shipment. Extra charges associated with priority shipping, when requested, will be the responsibility of the customer.

**Non-Warranty Repair Terms:** Vaddio will repair any non-obsolete product that does not meet the terms of the warranty. Non-warranty repair terms are as follows:

- The customer is responsible for, and agrees to pay, all parts and labor costs associated with the repair. Standard non-warranty repair charges are outlined below.
- Customers must provide payment method and one of the following, prior to receiving an RMA:
  - Hard copy of a PO, for dealers with Net 30 terms and in good standing with Vaddio.
  - Valid credit card number - Credit card will be charged upon shipping repaired product back to customer.
- Request for COD: Customers will be notified of COD charges prior to shipping repaired unit.
- Customer is responsible for all shipping charges both to and from Vaddio, and may use their own carrier.
- Customers will receive a courtesy call notifying them of total repair charges prior to return shipping.

**Non-Warranty Repair Charges:** Total repair charges (per unit) for a non-warranty repair consist of the following:

- Cost of any replacement parts needed to repair the defect.
- Labor costs billed per hour after minimum charges/time.
- Labor charges include troubleshooting and repair time only.
- Burn-in time and final test time is not included in the labor charges.
- Labor time is rounded to the nearest quarter hour.
- Labor charges are billed at the prevailing rate for the category of equipment repaired, after minimum charges/time. For prevailing labor rates, please contact the Vaddio technical support.
- All shipping and handling costs are the responsibility of the customer for non-warranty repairs.

**Minimum Labor Charges:** All non-warranty repairs are subject to a minimum evaluation/repair labor charge even if there is no problem found. Please contact Vaddio technical support for the current applicable rate.

**Repair Charge Estimates:** Estimates on repair charges for a specific problem will not be given before an RMA is issued and the actual product has been evaluated by a Vaddio technician. Repair estimates will be given after the repair department receives and evaluates the unit.

- Customers requesting an estimate on repair charges must do so up front when they call in for an RMA. The RMA team will call or email with the estimate after evaluating the unit and before proceeding with the repair.
- Any product evaluated for a repair estimate is still subject to the minimum labor charges even if the customer decides not to proceed with the repair.
- Vaddio does not guarantee estimates given on repair charges. Actual repair costs may exceed the estimate.
- Customer is responsible for actual repair charges, regardless of estimate.

**Repair Policy Notes:**

- **Duration of Repair:** Products are repaired on a first come first serve basis. The turn-a-round time of a particular repair is dependent upon circumstances such as product type, the nature of the problem and current repair volumes. Requests for expedited repair service will be considered on a case-by-case basis.
- **Repair Warranty:** Vaddio guarantees all of its repair work, performed on non-warranty items, for 90 days from the day the repaired product is shipped back to the customer. If the original problem described was not resolved or reoccurs within the 90-day period, Vaddio will repair the unit free of labor charges. However additional material charges may apply unless the parts used to affect the repair are again deemed defective.

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

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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.

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Author's own cats, photos by author, you're welcome.

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