

RVC-W3

AHD Wireless Camera & Receiver Kit



ECHOMASTER
PRO

Introduction

Thank you for purchasing your EchoMaster Wireless Camera & Receiver.

This EchoMaster camera with receiver is designed to improve safety during driving by providing high quality images of surrounding areas and obstacles in the vicinity of the vehicle.

Please ensure you read and understand all aspects of this manual before fitting or using your EchoMaster camera. Choose a suitable mounting place dependant on the application. Ensure that there are no wiring harnesses or hoses/pipes located behind this panel before drilling.

Features

- ▶ Universal wireless camera and receiver
- ▶ CVBS/AHD Selectable
- ▶ Receiver supports 2 wireless cameras (Compatible camera: P/N: RVC-W3-C)
- ▶ 3 viewing modes: CAM1, CAM2 or split screen
- ▶ Infrared night vision

Box Contents

- | | | |
|---|-----------------------|---------------------|
| ▶ Camera (with built in TX) | ▶ 2 x Red Male Spades | ▶ 2 x 10mm screws |
| ▶ Camera Power Cable | ▶ 3 x Antennas | ▶ 3 x Cable Ties |
| ▶ Power & Video Cable
(Length 0.15m/0.5ft) | ▶ Hole Saw | ▶ Double Sided Tape |
| ▶ Receiver Extension Cable
(Length 3.66m/12ft) | ▶ Receiver (RX) | ▶ User Manual |
| | ▶ 2 x Red T-taps | |

Pairing the Camera

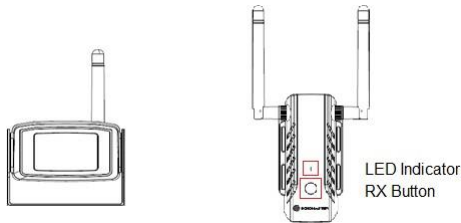
The Camera & Receiver have been paired previously and there is no need to pair again in normal use cases. Pairing will be needed in case the camera or receiver needs to be replaced or under other special circumstances.

How to pair:

Power on the RX. Press and hold the button on the RX for 3 seconds. It will enter pairing mode and the LED indicator will begin to flash rapidly.

Within 30 seconds, power on the Camera. Pairing will then start. If the signal is not detected within 30 seconds, pairing mode will end. Repeat the steps for pairing.

Once pairing is complete, the indicator light on the RX will change from flashing rapidly to constant ON.



How to pair an additional EchoMaster wireless camera:

The original camera would have been paired to CAM1 by default. Press the RX Button to switch to CAM2. Then repeat the steps on how to pair the camera.

**Compatible only with EchoMaster P/N: RVC-W3-C

Functions

How to cycle through video sources:

Press the RX Button to switch between CAM1, CAM2 or split screen mode.

Note: The RX must be in an accessible location to utilize this feature.






How to select AHD/CVBS:

Default (factory) setting is AHD. Press and hold the RX Button for 6 seconds to switch between AHD and CVBS mode. The indicator light will flash slowly 3 times to indicate successful selection.

How to check FW (Firmware) versions:

Press the RX Button three times consecutively and both the RX and TX FW will appear on the screen. (TX FW will only appear if a camera is connected.)

LED Indicator Status:

Indicator Status	Definition
	No power to RX or not paired to a camera
	Flash once: RX is powered on
	Flash rapidly: RX is in pairing mode
	Flash slowly 3 times: AHD/CVBS is switching successfully
	Constant on: RX is working properly; Camera signal received

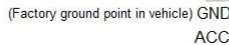
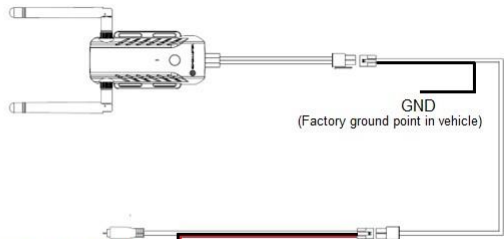
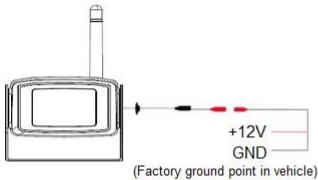
Wiring Diagram & Pin-Out

Camera wiring

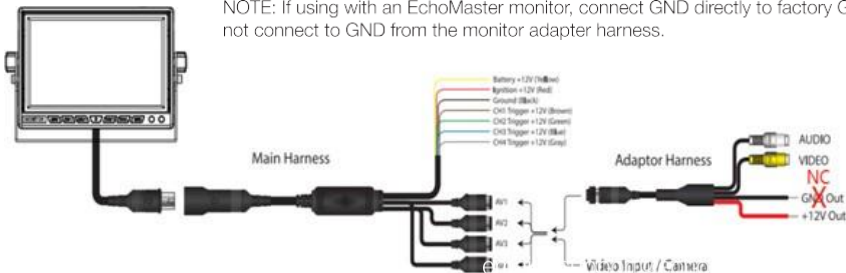
Red (Power) – Locate the **Parking Lamp (+)** wire in the vehicle/trailer. Connect this wire to the camera red power cable

Black (Ground) – Locate a suitable location to ground (negative) the black wire in the wiring harness. You may connect this wire to a factory ground point in the vehicle, or attach a ring terminal to the black wire and screw into the body of the vehicle/trailer. If you choose to screw into the body, clean the area of any paint or adhesives to allow for good metal-to-metal contact.

NOTE: Only one of the GND leads from the receiver needs to be connected. Two are provided for convenience.



NOTE: If using with an EchoMaster monitor, connect GND directly to factory GND. Do not connect to GND from the monitor adapter harness.



Receiver	
Output Signal	AHD/CVBS
Output Resolution	1280x720 AHD / 720x480 CVBS
Transmit Power	21 ± 2 dBm
Sensitivity	-92dBm
Working frequency	2.4GHz ISM
Antenna gain	2.0dBi@2400~2500MHz
Transmission power	23 ± 2 dBm
Working frequency	2.4GHz ISM
Antenna gain	2.0dBi@2400~2500MHz
Frequency hopping	2412-2462MHz
Frequency hopping interval	5MHz
System	OFDM/CCK
Transmission frame	30fps
Latency time	<150ms
Cable length	200mm / 7.9in
Operating voltage	ACC 12V
Working current	Max 250mA (@12V)
Operating temperature	-20°C to +65°C

Camera (with built-in TX)	
Image sensor	GC2053
Lens	1/2.9"
Horizontal angle	94° ± 5° AHD / 99° ± 5° CVBS
Vertical angle	54° ± 3° AHD / 50° ± 3° CVBS
Resolution	1280x720 AHD / 720x480 CVBS
Minimum illumination	0 Lux (IR Mode)
Transmission power	23 ± 2 dBm
Working frequency	2.4GHz ISM
Antenna gain	2.0dBi@2400~2500MHz
Frequency hopping	2412-2462MHz
Frequency hopping interval	5MHz
System	OFDM/CCK
Cable length	400mm / 1.31ft
Operating voltage	ACC 12V
Working current	Max 350mA (@12V)
IP Rating	IP67
Operating Temperature	-20°C to +65°C

FCC ID: IK4-RVC-W3

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 undesired operation.

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

NOTE: This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician for help.

This equipment complies with FCC radiation exposure limits set forth for an uncontrolled environment. This equipment should be installed and operated with minimum distance 20cm between the radiator & your body.

AGREEMENT: End user agrees to use this product in compliance with the instructions and terms of use above and with all State and Federal laws. ECHOMASTER provides instructions and safety warnings with respect to this product and disclaims all liability for any use not in conformity with those instructions or other misuse of its product. If you do not agree, please discontinue use immediately and contact EchoMaster. This product is intended for off-road use and passenger use only.



Clearwater, Florida 33760

EchoMaster is a Power Brand of AAMP Global.

Echomaster.com

email - support@echomaster.com - tel - 800-477-2267

REV. 092023