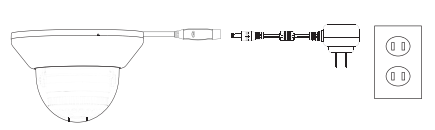


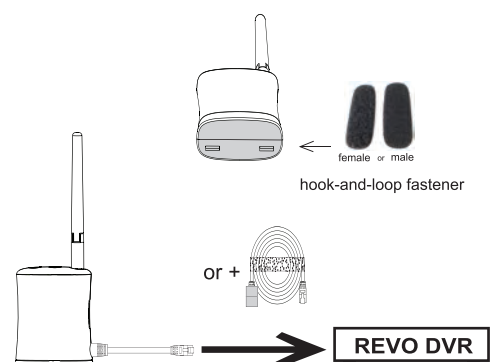
RCWDS30-1T_User Manual

1.6). Connect the power cable from the camera to the power adapter. Plug the power adapter into a power outlet or surge protector.



2). Install Receiver

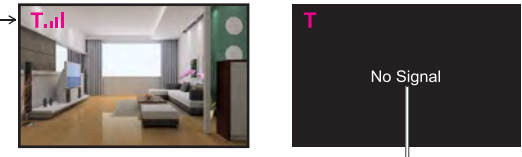
2.1) Screw the wireless antenna to the back of the receiver, paste the hook-and-loop fastener(female or male) at the receiver bottom, connect the RJ-12 end of the receiver cable to the DVR, place the receiver in a place that will have clear reception to your camera, and paste the hook-and-loop fastener(male or female) at this position, with the receiver bottom's the hook-and-loop fastener stick together.



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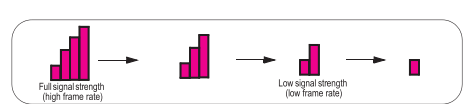
2.2). Check the signal strength of the receiver's signal indicator, adjust the receiver antennas angle to improve signal strength.

- Signal Indicator: The signal indicator shows the strength of the signal being received from the camera. The number of bars in the signal indicator shows the strength of the signal. One or no bars indicates the signal is poor. Four bars indicate a very strong signal.
- Status Indicator: The status indicator message "No Signal" appears when the receiver is trying to locate a camera.
- If the signal is low (e.g. 1 or 2 bars) adjust the antennas or reposition the camera or receiver to improve signal strength.



Signal Indicator

Status Indicator



◆ Installation Noted:

- Avoid installing in a location which requires the wireless signal to pass through cement, concrete, and metal structures. This will reduce the range of transmission.
- It is not recommended to install more than 4 digital wireless security cameras in the same environment to maintain optimal video frame rate performance.
- When installing multiple digital wireless security cameras in the same environment maintain as much space as possible between the receivers to optimize camera performance.
- The signal range varies depending on the type of building materials and/or objects the wireless signal must pass through.
- Drywall, glass, and windows generally do not degrade wireless signal strength.
- Brick, concrete floors, and walls degrade signal strength.
- Trees that are in the line of sight of the wireless camera and receiver may impact signal strength.

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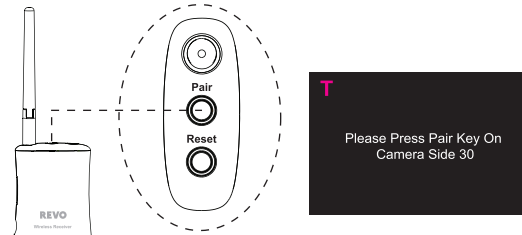
- The signal range also depends on whether there are competing signals using the same frequency as the camera.
- Signal strength decreases as it passes through different types of material. Try to position your wireless camera and receiver in a location where the signal does not degrade too much signal strength (as shown in the table below).

Material	Signal Reduction (%)
Plaster & Wood & Moist materials	10 - 30%
Brick & Concrete floors & Walls	30 - 50%
Concrete Cinder Blocks	50 - 70%
Metal & Metal Cladding	70 - 90%
Drywall & Glass & Windows generally	< 10%

6. Pairing System

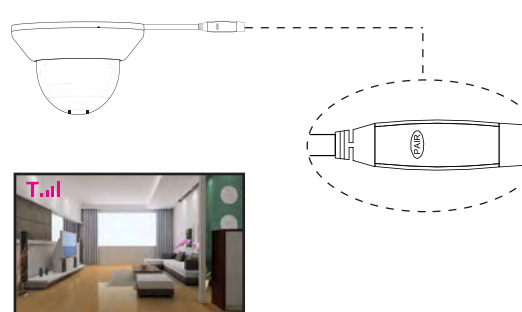
1). Make sure that the camera and receiver are both powered up.

2). On the receiver, press and hold the "pair" button for 3 seconds to activate pairing function.



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3). Press the Pair button on the end of the camera cable. You must press the Pair button on the camera within 30 seconds of pressing the Pair button on the Wireless Receiver. If pairing is successful, live video from the camera will immediately appear on the monitor.



◆ Pairing Noted:

- The on-screen displays informs you that you have 30 seconds to press the pair button on the camera.
- The camera and receiver have already been pre-paired at the factory, which means that they are exclusively communicating with each other. If for some reason the pairing is lost, follow these steps to pair up the camera and receiver.
- Press "Reset" button, restart the receiver.

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7. System Specifications

1). Camera Specifications

Model No.	RCWDS30-1T
Transmitting Frequency Range	2400MHz-2480MHz
TX Power	1W(10m)
TX Range	165ft (50m) indoor / 450ft (137m) open space
Data Rate	4096 Kbit/s max.
Modulation	QPSK
Spread Spectrum	FHSS
Image Compression	MPEG 4
Image Device	1/4" Color Image Sensor
Picture Elements	NTSC: 640x480
Resolution	800 TVL
Min Illumination	0 Lux (IR On)
S/N Ratio	More than 48dB
Electronic Shutter	1/60 ~ 1/62,500 Sec.
Gain Control	Auto
White Balance	Auto
Gamma	0.45
Lens Furnished	Board Lens
Sync System	Internal
Video Output	TV-out 75 Ohms
Power Supply	DC 12V(10%)
Power Consumption	20mA max.
IR LED OFF	400mA max.

Infrared Illuminator Module

Infrared Luminary	30W LED
Wavelength	850nm
Illuminant Distance	200m
IR filter	Automatic IR Cut Filter Removal

System Device

Operating Temp.	-10° to 50° (14°F to 122°F)
Construction	Plastic case
Dimensions	ø147x84 (H) mm

(Note: Design and specifications are subject to change without prior notice.)

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2).Receiver Specifications

Model No.	RCWBS30-1R
Receiving Frequency Range	2400MHz-2480MHz
RX Sensitivity	20dBm (At input for 40m x 10.5 at 20dB RXSIS)
RX Range	165ft (50m) indoor / 450ft (137m) open space
Data Rate	4096 Kbit/s max.
Transmission mode	QPSK
Spread Spectrum	FHSS
Resolution Supported:	640 x 480 @ 25ps
Video Output	TV-out 75 Ohms
Power Supply	DC 12V(10%)
Power Consumption	100mA max.
Operating Temp.	-10° to 50° (14°F to 122°F)
Construction	Plastic case
Dimensions	64x26x15(L/W/H)

(Note: Design and specifications are subject to change without prior notice.)

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REVO™ OUT OF SIGHT
PEACE OF MIND

2.4G Wireless Digital Security
Camera System

Instruction Manual

VER.1.0

Thank you for purchasing our product. Before installing this product, please read this instruction manual carefully to ensure proper use.

1. Safety Precautions

CAUTION
RISK OF ELECTRIC SHOCK. DO NOT OPEN

CAUTION : TO REDUCE THE RISK OF ELECTRICAL SHOCK, DO NOT OPEN COVERS. NO USER SERVICEABLE PARTS INSIDE. REFER SERVICING TO QUALIFIED SERVICE PERSONNEL.

Disposal of Old Electrical & Electronic Equipment (Applicable in the European Union and other European countries with separate collection systems).

- ◆ This product is not sealed against water or water vapor intrusion, and is only intended for indoor use.
- ◆ Please avoid all direct contact to eliminate contamination, and use cotton balls dipped in cleaning alcohol to clean the window.
- ◆ Do not use receivers in humid or wet places.
- ◆ The product should be situated away from heat sources such as radiators, heat registers, stoves, or other products that produce heat.
- ◆ Keep enough space around the product for ventilation; Slots and openings in the storage cabinet should not be blocked.
- ◆ Do not use attachments unless recommended by the product manufacturer as they may cause a hazard.
- ◆ FCC Note:
 - 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;
 - (2). This device must accept any interference received, including interference that may cause undesired operation.

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- The manufacturer is not responsible for any radio or TV interference caused by unauthorized modifications or change to this equipment, such modifications or change could void and change antenna which the manufacturer provides. It is the user's authority to operate the equipment.
- ◆ To ensure compliance with the FCC's RF exposure guidelines, this equipment should be installed and operated with minimum distance 20cm (7.87inch) between the radiator and nearby persons.

2. Description

- ◆ The Digital Wireless signal transmission type used by REVO digital wireless cameras is also known as FHSS—Frequency Hopping Spread Spectrum; strong anti-interference ability, provide high quality audio and video transmission.
- ◆ This Infrared Illuminator camera uses a highly sensitive 1/4" interline transfer color image sensor, which provides extremely long life and high reliability. This camera offers excellent image quality and functions with low lag and high burn resistance, and is not subject to distortions from magnetic fields. Highly resistant to shock and vibration and easy to install, this camera is an excellent choice for your CCTV system.
- ◆ The camera and receiver signal is highly resistant to eavesdropping as it generates a channel hopping sequence using an algorithm generated by the receiver, which only the camera can follow through the "pairing" function. FHSS makes digital wireless signals secure, private, and interference free.

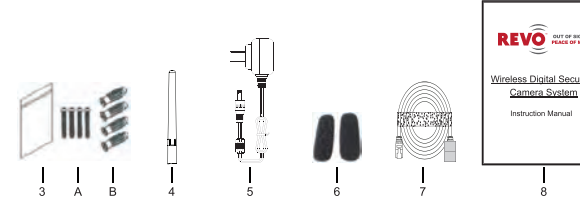
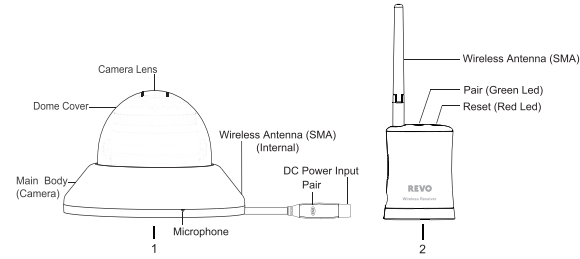
2

3. Feature

- ◆ General
 - Real time (25 frames per second) wireless video.
 - Adaptive FHSS digital wireless technology minimizes conflicts with competing wireless signals.
 - Simple installation, No video cable required.
 - Connect multiple receivers to your surveillance recorder (DVR) to create a wireless surveillance solution.
 - Up to 165ft (50m) indoor / 450ft (137m) open space wireless range.
 - SMA connectors for range extension accessories.
- ◆ Camera
 - Super high resolution camera with a built-in high performance infrared illuminator module.
 - Total pixels of sensor: NTSC=300Kpixels.
 - High sensitivity, low smear, excellent anti-blooming, and high S/N ratio. Supports functions: Auto Electronic Shutter (AES), Auto Gain Control (AGC), Auto White Balance (AWB), Back Light Compensation (BLC), and Flickerless mode (FL).
 - Automatic IR Cut Filter Removal.
 - Low DC power consumption.
- ◆ Receiver
 - High gain antenna ensures improved long distance operation.
 - Safety warning feature notifies you when the camera is out of range.
 - Convenient signal strength indicator.
 - The receiver itself with a signal indicator, used to indicate the signal strength from camera

3

4. Content



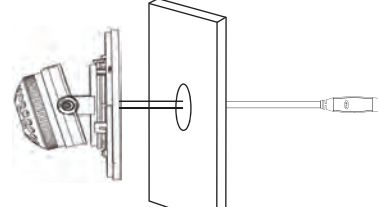
Item	Name of Part	Quantity
1	Wireless Camera (RCWDS30-1T)	1
2	Wireless Receiver (RCWBS30-1R)	1
3	Bag	1
4	A Fix Retaining Screw for Bracket	4
5	B Anchor	4
6	Wireless Antenna	1
7	AC/DC Adaptor	1
8	Hook-and-loop fastener	1
9	10ft RJ12 cable(Include RJ12 Coupler)	1
10	Instruction Manual	1

4

5. Installation & Operation

1).Install Camera

1.1). Drill a hole in the wall if wire needs to go through the wall or the ceiling surface.



Note!

The IR dome's cable may run directly through a drilled hole in the mounting surface, or through the camera's rim at one of three locations. The camera's rim may be clipped at any of the cable's exit points to allow flat camera mounting.


◆ Installation Noted:

- Before you install a camera, carefully plan where and how it will be positioned, and where you will route the cable that connects the camera to the power adaptor. Aim the camera(s) to best optimize the viewing area: select a location for the camera that provides a clear view of the area you want to monitor, that is free from dust, and that is not in line-of-sight to a strong light source or direct sunlight.
- Avoid installing the camera where there are thick walls or obstructions between the camera and the receiver.
- Avoid installing in a location which requires the wireless signal to pass through cement, concrete, and metal structures. This will reduce the range of transmission.
- Wireless camera requires a power source to operate.

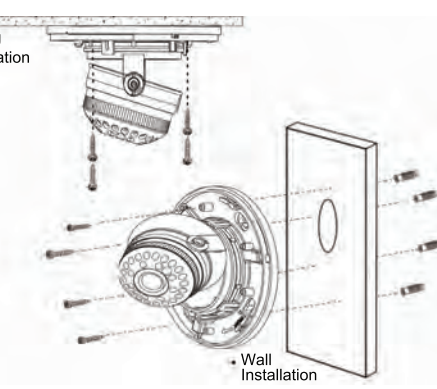
5

1.2).Removing the Dome Cover

Remove the dome cover from the main body by gently turning the cover counter-clockwise to unlock and pull free from the main body.



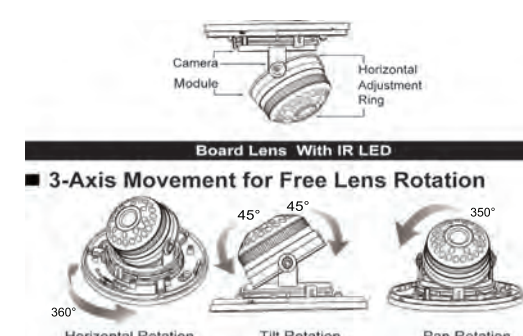
1.3). Use the 4 screws provided to attach the camera and bracket to the ceiling surface or wall.



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1.4). Camera Diagram Image Adjustment

- You can adjust the camera to any direction by using Pan, Tilt, and Rotate mechanism.
- Pan Base can be rotated 350°
- Tilt Base covers total 90° angle (45° to each side).
- Angle range of Rotate Base is 360°.




Board Lens With IR LED

3-Axis Movement for Free Lens Rotation



1.5). Attaching the Dome Cover

After all necessary adjustments have been made reinstall the dome cover to the main body by turning the dome clockwise until it locks in place.



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