



INSTALLATION MANUAL

ST-BTWD650IR2812 B or W

Weatherproof Day/Night Infrared Color
Camera



PACKAGE CONTENTS

This package contains:

- One ST-BTWD650IR2812 camera with Black or White housing
- One extension tube for mounting on a ceiling
- One installation manual
- One hex wrench for adjusting the mounting bracket
- Four anchors and screws to mount the camera

NOTE: The ST-BTWD650IR2812 camera requires a 12 volts DC power with a minimum current of 800 milliamps (.8 Amps) or a 24 volts AC power supply with a minimum current of 500 milliamps.

PRODUCT DESCRIPTION

The ST-BTWD650IR2812 is an IP66 rated, weatherproof day / night infrared color camera designed around a 1/3" color Sony Super HAD CCD image sensor with 650 TV Lines of resolution. The 36 infrared LEDs provide an image in total darkness up to 160 feet. The camera can be easily installed in most orientations with the included 3-axis bracket. With Wide Dynamic Range, versatile OSD menu settings, rich color saturation and 650 lines of resolution, the ST-BTWD650IR2812 camera is a versatile, high quality addition to any surveillance application.

SPECIFICATIONS (Typical)

Image sensor element	1/3" Sony Super HAD CCD
Effective Picture Elements	811(H) x 508(V)
Horizontal Resolution	650TVL
Minimum Illumination	0.001 Lux (with IR LEDs ON)
S/N Ratio	>48dB
Scanning System	2:1 Interlace
Sync System	Internal, Negative Sync
Electronic Shutter	Auto, 1/60s ~ 1/100,000s
Gamma Characteristic	0.45
IR Distance	160 feet
IR Auto-on Level	Under 10 Lux
Video Output	1Vpp, 75Ω
Gain Control	Automatic
Power Draw (IR off)	DC12V @ 130mA / AC24V @ 70mA
Power Draw (IR on)	DC12V @ 600mA / AC24V @ 220mA
Lens	2.8mm ~ 12mm Manual Zoom Lens
Dimensions	10" x 6" x 4"
Weight	3.3 lbs
Storage Temperature	-22°F to +140°F
Operating Temperature	-14°F to +113°F
Warranty	1 Year

INSTALLATION AND OPERATION

CAUTION: To reduce the risk of electric shock and/or damage to the camera, do not disassemble this camera or open the casing. There are no user-serviceable parts inside and breaking the camera's weather seal may allow humid air to enter the camera which can cause a foggy or washed-out image. Always use a power supply which meets the specified voltage and meets or exceeds the specified current. Voltage drop over a cable's length should always be taken into consideration.

UNPACKING AND HANDLING

Each unit is shipped fully assembled and factory tested. There is no need to open the housing of the camera and doing so will void the warranty.

Ensure that all accessories are removed from the box before discarding the packing material.

Take care to ensure that the label with the camera's serial number is not removed or damaged. The serial number is needed to determine whether or not a camera is under warranty.

MECHANICAL INSPECTION

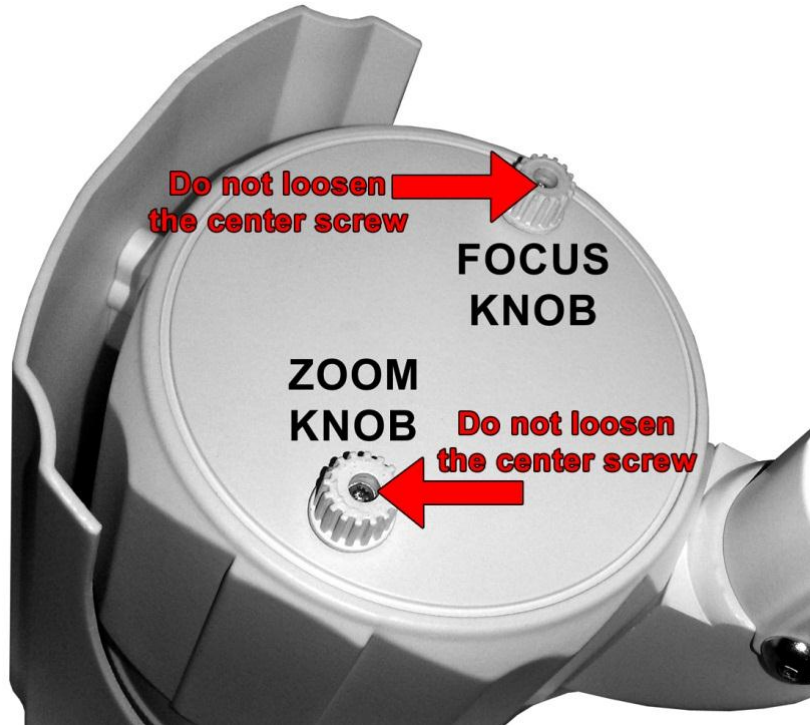
Inspect the camera for signs of shipping damage. Ensure that the equipment is clean and that no connections are damaged or loose. If the camera appears to be damaged or defective, call your distributor or SecurityTronix at 1 (800) 688-9282 for assistance.

SPECIAL ATTENTION

- The installer must comply with electrical safety standards - There must be sufficient space between the camera's power supply and video line and any high voltage equipment or cables.
- To help ensure the camera's life and proper operation do not point the camera towards the sun or strong light.
- Do not install the camera in an environment where the temperature is above 113 F. Do not install the camera near a magnetic field or a high-power motor. Do not mount the camera near a radiator or heater.
- Only use a dry cloth to clean the camera. If there is dirt that is difficult to remove wipe gently with a mild detergent. Never use strong or abrasive detergents.
- A minimum 12VDC 700mA power supply must be used. AC power using a 24VAC power supply @ 400mA can be used. Using an incorrect power supply will damage the camera.
- Only qualified installers are allowed to install, configure and test the camera.
- The IR LED angle and lens viewing range are adjusted at the factory, Any change to the cameras lens will affect image quality.
- The camera is a low voltage product, if installed outdoors proper safety and lightning grounding are required.

LENS ADJUSTMENTS

Zoom and focus adjustments are made via 2 knobs on the rear panel of the camera.



NOTE: The tension of these knobs is set at the factory for maximum weather protection. Do not loosen the screws which hold the knobs in place. This could cause the adjustment rod to fall inside the camera and will void the warranty. If the screws are difficult to turn by hand, pliers may be used.

WIRING CONNECTIONS (see diagram on following page)

- Connect the power supply's DC plug to the camera's DC jack.
- Connect the camera to a viewing source such as a DVR or monitor with a 75Ω video cable. RG59 coaxial cable with a 20AWG solid copper center conductor is the cable that SecurityTronix recommends for all analog CCTV cameras. If a balun must be used, it is recommended that an active balun be used. With all baluns, the proper wire should be UTP (Unshielded Twisted Pair) wire such as Cat5, Cat5e or Cat6.
- Connect the power supply's AC plug to a wall outlet supplying 110 ~ 127 volts @ 60Hz.
- Adjust the view of the camera according to the requirements of the environment and surveillance needs.



OSD SETTINGS

Accessing the camera's OSD menu and making menu selections is accomplished using the "joystick" mounted on the output cable of the camera. Use the UP, DOWN, LEFT (L) and RIGHT (R) to navigate the menu. PUSH the button inward to make selections.

TROUBLESHOOTING

- No picture after applying power (i) check all plugs and cables are securely connected to the proper connectors; (ii) ensure your power supply is providing the correct voltage and current.
- The picture has ripples (i) check to see if the power supply is experiencing AC ripple, if so a filter may be required; (ii) determine if the monitor is faulty; (iii) determine if other peripheral equipment is causing ripple and if so make the necessary adjustments.
- The picture background continuously changes color. A fluorescent lamp's magnetic field may cause color roll. First try turning on the camera's color roll feature. If the problem persists, reduce the number of fluorescent lamps or increase the distance between the camera and the lamps.
- The picture appears smeared. (i) the power supply voltage level may be unstable, try another power supply; (ii) ensure the cables are correctly connected and(or the cables are of the correct impedance.
- Other interference may require a SecurityTronix ground loop isolation filter.

Additional troubleshooting assistance can be found on-line at www.securitytronix.com in addition to support from Securitytronix Tech Engineers at 1-800-688-9282.

Press "3" for Tech support, then press "2" for SecurityTronix Tech Support