

Antenna Options

Before installing the MiniBox-4, you should also consider antenna options (if you are using RF analog or digital transmission). You have the choice of using one or two patch antennas.

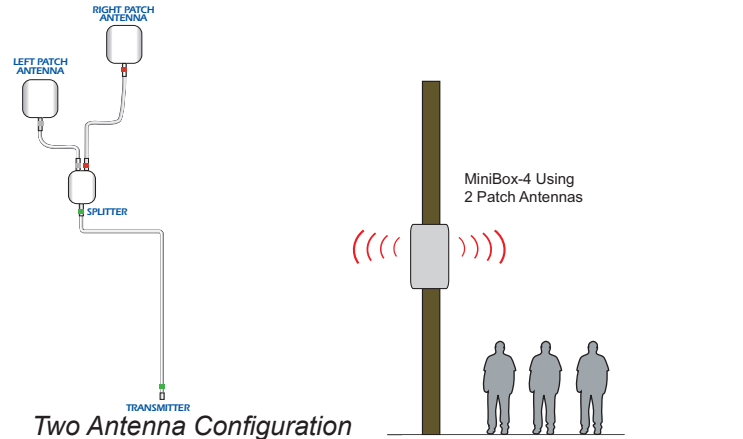
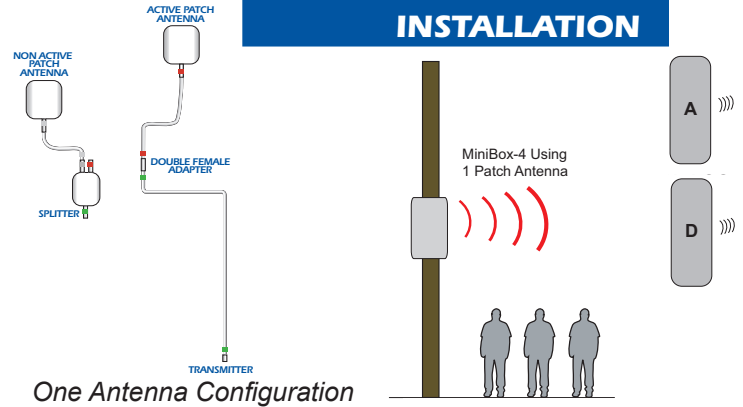
Using both patch antennas with the supplied splitter will provide the largest radiation pattern but at a lower gain. Using one antenna will make the radiation pattern directional, but will typically double the gain, which will increase the signal range in that direction.

To configure for one antenna, disconnect the coax from the transmitter at the bottom of the splitter and connect the double-female adapter in its place. Connect the cable from the desired active antenna to the adapter. See illustration top right.

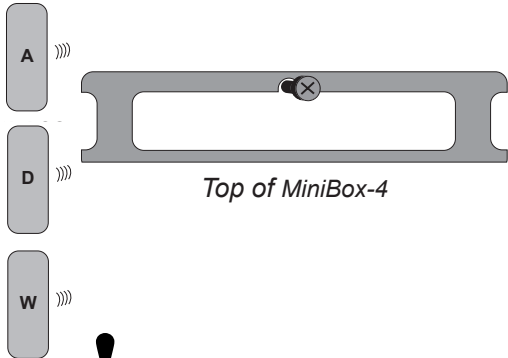
To configure for two antennas, disconnect the coax from the transmitter at the double-female adapter and connect the splitter (input) in its place. Connect the cables from both antennas to the splitter (outputs). See illustration bottom right.



NOTE: Do NOT remove antenna connections with device powered ON!



WALL MOUNTING SCHEME



WARNING: To prevent overheating, make sure the rear vent is not blocked.



WARNING: Never stand on or place weight on the MiniBox-4.

Wall-Mounting the MiniBox-4

To wall-mount the MiniBox-4, complete the following steps:

1. Dry-fit the MiniBox on the wall and make a pencil mark on the wall at the top-center mounting slot.
2. Drill a pilot hole at the pencil mark for a mounting screw. Make sure the wall is composed of solid, strong material such as wood or metal. Select a fastener that will support at least 30 pounds.
3. Install the screw but leave enough of the shank exposed (1-1/4" minimum) to hang the MiniBox-4 on.
4. Hang the MiniBox-4 as shown (left).
5. With the MiniBox-4 plumb and level, drill and mount a second screw in the bottom mounting hole.
6. Tighten the top screw.



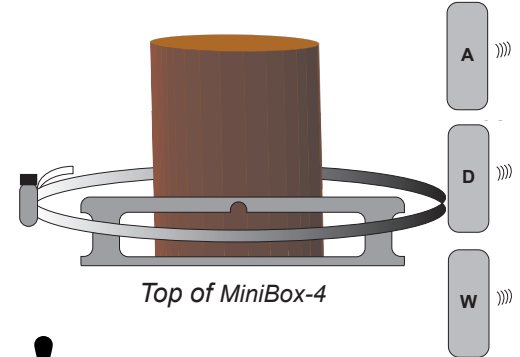
NOTE: Do NOT overtighten the mounting screws. Tighten enough to snug the wall mount bracket to the wall. Overtightening may bend or damage the mounting plate.

POLE MOUNTING SCHEME

Pole-Mounting the MiniBox-4

To pole-mount the MiniBox-4, complete the following steps:

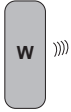
1. Use the Wall Mounting Scheme steps 1-4 (left) to hang the MiniBox-4 on the pole. Alternatively, a helper can hold the MiniBox-4 in place for step 2 below. The back of the MiniBox-4 features a self-centering bracket.
2. Using a band-clamp (provided), secure the top of the MiniBox-4 to the pole as shown (right).
3. Using a band-clamp (provided), secure the bottom of the MiniBox-4 to the pole in the same fashion.



WARNING: To prevent overheating, make sure the rear vent is not blocked.



WARNING: Never stand on or place weight on the MiniBox-4.

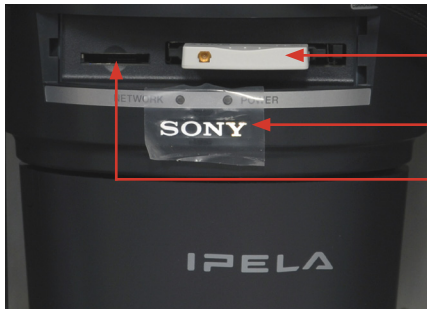


PCMCIA Slot (Gently squeeze cover to remove)



Wi-Fi Card in PCMCIA Adapter

Kapton® Tape



Wi-Fi Card in PCMCIA Adapter

Remove Protective Packaging

Memory Stick Slot

Wi-Fi

Factory setting of the camera network is DHCP.

Wireless LAN settings: Type=adhoc, SSID=snc-rx550, Channel=11 ch, WEP=nothing, IP address 10.0.0.100, subnet mask=255.0.0.0



Tech Tip: Set your configuration computer for an IP address in the shipped WiFi family. As an example, the WiFi is shipped 10.0.0.100, subnet 255.0.0.0. Set your configuration computer for 10.0.0.101, subnet 255.0.0.0.

To setup your Wi-Fi option, complete the following steps:

1. Remove the plastic door from the front of the camera to expose the PCMCIA slot.
2. The 802.11 Wi-Fi card is shipped in the Accessory Bag--attached with Kapton tape to the PCMCIA Adapter. Push this assembly gently but firmly into the slot on the front of the camera as shown. The gold connector must be on the left.
3. Access the Wi-Fi signal with a Wi-Fi-equipped computer via a web browser (see page 20).
4. To remove the card and adapter assembly, press the eject button to the right of the PCMCIA slot.



Camera Latency: *In applications where continuous or frequent camera control commands are sent or if controlling the camera using two sources (RF TX & WiFi) at the same time, latency may build due to the buffering and processing of these commands. This latency will be observed as the camera being slow or non-responsive to commands. To minimize this effect, DTC recommends controlling the camera with one source at a time and lowering the frame-rate to 5 fps for optimum viewing and operation.*

WARNING

WiFi (802.11g) operates in the S-Band 2.4 GHz.

If your MiniBox-4 is equipped with *both* WiFi *and* an S, S2, S3 Band transmitter, the transmitter will cause the WiFi system to be intermittent or inoperable. Use either WiFi *or* S, S2, S3 Band transmitter, but *not both at the same time*.

WiFi may also suffer from interference if used in close proximity to microwave ovens and cordless phones.

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OPERATION

Control Panel - All Models

Power LED The Power LED is ON or OFF to indicate that main power to the MiniBox-4 is ON or OFF. The LED blinks briefly during power-up.

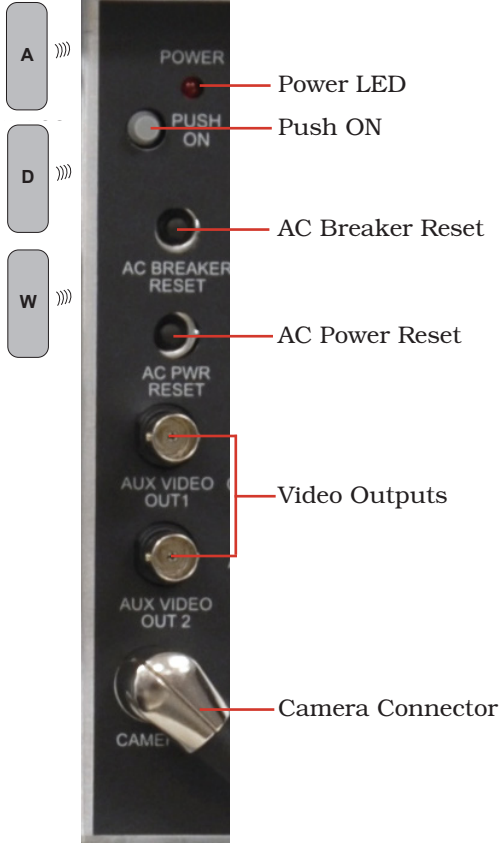
Push ON The Push ON button is a push-push master power ON/OFF switch for the MiniBox-4 including accessories plugged into the outlets. Always turn this master power ON/OFF switch to OFF before applying power or plugging anything into the MiniBox-4 outlets.

AC Breaker Reset The AC Breaker Reset is a 5 Amp circuit breaker that protects the outlets inside the MiniBox-4.

AC Power Reset The AC Power Reset is a circuit breaker that protects the MiniBox-4 electronics.

Video Outputs The MiniBox-4 has two video output connectors on the control panel. These are available for use with customer-supplied test monitors, VCRs, or DVRs as desired.

Camera Connector The Camera Connector is a multi-I/O connector that connects to the SONY IPELA camera.



Control Panel - Transmitter Models Only

Status LED The Status LED is ON or OFF to indicate that the transmitter is ON or OFF. The Status LED flashes to indicate that the channel selection was controlled by the DTMF radio, which means the channel selector switch does not correctly indicate what channel is in use.

TX Programming Connector The digital or analog transmitter programming connector allows the user to connect to the transmitter's programming DB-9 cable connector without having to remove the transmitter from the MiniBox-4.

PWR High/Low The PWR High/Low switch is used for MiniBox-4 models with analog transmitter only. The switch selects either high power (approximately 5 Watts) or low power (approximately 2 Watts).

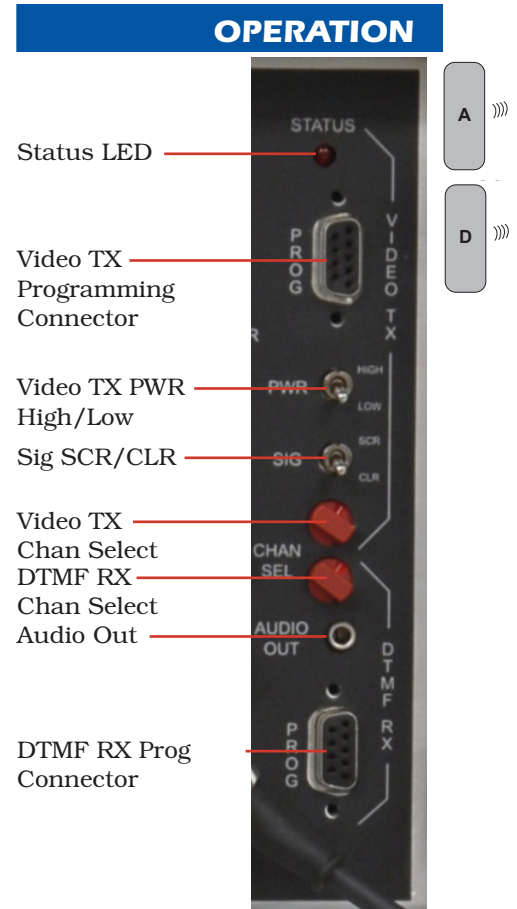
Sig SCR/CLR The Sig SCR/CLR switch is for MiniBox-4 models with analog transmitter and optional scrambling only. The switch selects scrambled or clear transmission.

Chan Sel Video TX The Chan Sel Video TX switch allows the user to select channels (10 analog or 8 digital) without having to access the transmitter, which is built inside the MiniBox-4.

Chan Sel DTMF RX The Chan Sel DTMF RX switch allows the user to select channels on the DTMF receiver. The selected frequency should correspond with the Kenwood DTMF radio.

Audio Out The audio out connector allows the user to temporarily listen to a channel with headphones to ensure that it is free of interference from other transmitters. DO NOT leave headphones connected during normal operation.

DTMF RX Programming Connector The DTMF RX programming connector allows the user to connect to the DTMF receiver's programming DB-9 cable connector without having to remove the receiver from the MiniBox-4.



OPERATION



Do NOT block airflow to vents at back and bottom of MiniBox-4

SONY®

Concealed Camera Ports

There are three concealed camera ports on the Utility Box. Each port is disguised with an ELECTRICAL PANEL IN USE label. Keep the label surface clean and free from scuff marks. Make sure nothing blocks this area.

A combination of two labels and an interior screen are installed per window. Three additional labels (one per window) are also included in the accessory kit. The installed label set and interior screen will provide the best camera performance while balancing covert appearance issues, such as reflection and light penetration from the other windows. The additional (accessory bag) labels can be customer-applied if desired. You must be willing to accept some honeycomb effect in the video at lower camera zoom settings in order to cover up the tinted glass area of the windows.

Ventilation and Thermal Considerations

The Utility Box has a louvered exhaust vent on the back and a wire mesh intake vent on the bottom of the enclosure. A cooling fan is mounted inside of one of these ports. The cooling fan and heater run automatically to keep the MiniBox-4 operating temperature between -20C (-4F) and +50C (122F). Foam mesh filtration protects against water/dirt invasion.

Optional Analog and Digital transmitters feature a thermal shut-down circuit to protect the transmitter if the inside of the MiniBox-4 gets too hot. Always remove obstructions from the vents to ensure good air flow. Vacuum the bottom vent to remove excess dust, Remove the rear louvers, clean and replace the foam filter if needed.

Sony Camera & PTZ Platform

The MiniBox-4 features a SONY high resolution color camera with 26X optical and 12X digital zoom. The SONY camera has its own pan/tilt mechanism and is hidden behind three concealed camera ports in the utility box. DTMF commands (transmitter models) or browser-based commands allow for control of pan, tilt, zoom, focus, and auto focus. The SONY camera works well in low light situations. The camera orientation can be panned to left, right, or front view ports.

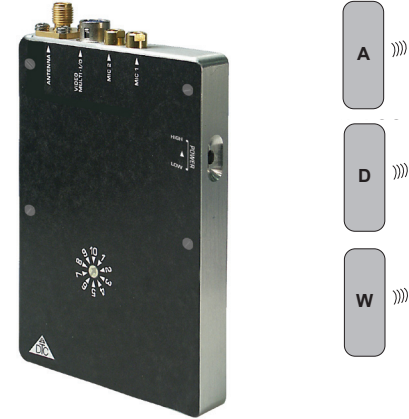
Analog Video Transmitter

The optional analog DTC Video Transmitter is built into the MiniBox-4 along with two microwave patch antennas. The analog video transmitter features ten user-programmable channels. A label on the inside door of the MiniBox-4 lists the factory-set frequencies. Access to the serial programming connector and channel switch are provided on the MiniBox-4 Control Panel. Programming should be performed at the factory or by a trained depot technician using DTC's Universal Programming software.

Digital Video Transmitter

The optional DTC Palladium II Digital Video Transmitter is built into the MiniBox-4 along with two microwave patch antennas. The video transmitter features eight user-programmable channels. A label on the inside door of the MiniBox-4 lists the factory set frequencies. Access to the serial programming connector and channel switch are provided on the MiniBox-4 Control Panel. Programming should be performed at the factory or by a trained depot technician using DTC's Palladium Programming software.

OPERATION



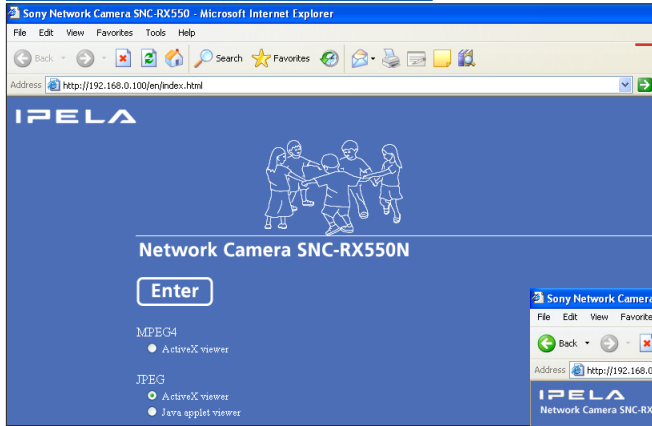
Optional Analog Video Transmitter



Optional Digital Video Transmitter

OPERATION

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Start
Screen

Web Access

Type the MiniBox-4 IP address from page 14 into your web browser and you should see the Start Screen (left). Click Enter to view the Video Screen (below). Click Control to access the Controls (right) or click twice to access the Remote Control (below).

Click 2X
to Display
Remote
Control

