

BTR-240 / TR-240

Wireless Intercom

F01U196143 Rev. DRAFT

RTS[®]
Bosch Security Systems, Inc.

QUICK START GUIDE

NOTE: Prior to use, the BP-240 battery packs should be fully charged. Refer to the battery charge instructions in the user manual.

Wireless Mode Setup

For a wireless mode configuration, a BTR-240 base station provides the wireless coverage area for belpacks configured in wireless mode.

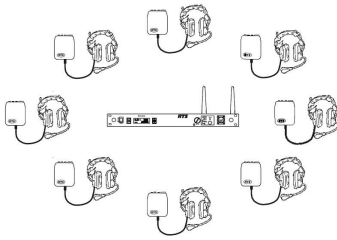


Figure 1 - Example of Wireless Mode System

1. Select a location for the BTR-240 base station and connect the power cord and antennas.
 - For omni-directional antennas, place the BTR-240 as close to the center of the coverage area as possible.
2. Connect the base station to external audio interfaces. For example: local headset, 2-wire, 4-wire, auxiliary, speaker.
3. Turn on the base station.
 - After approx. 25 seconds, the boot cycle will complete and Status Screen is displayed.
 - Activate the connected audio interfaces by navigating the menu on the LCD screen.
4. Perform a ClearScan™.
 - Press and hold the <MENU> + <SET> buttons simultaneously for approx. 3 seconds.
 - ClearScan™ will find and select the optimal RF channel for operation.
5. Plug headsets into the TR-240 belpacks and turn them on, one by one.
 - If the belpack has not been previously set to “wireless mode”, press and hold the <TALK> button while the belpack boots.
 - Allow a few seconds in-between each belpack power on.
 - After approx. 20 seconds, a voice prompt will announce “wireless” in the belpack headphones indicating that wireless communication has started.

Wired Mode Setup

For a wired mode configuration, TR-240 belpacks are directly connected to each other via Ethernet cable or through a building's Ethernet infrastructure. No base station is required for a wired mode configuration.

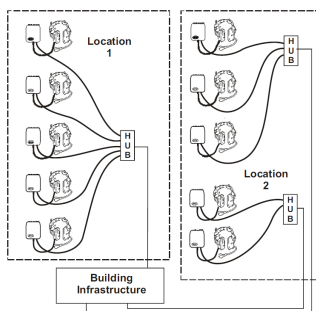


Figure 2 - Example of Wired Mode System

1. Connect the TR-240(s) to each other with Ethernet cables via the RJ-45 connectors.
 - Use CAT-5e or better Ethernet cables that are wired to standards T-568A or T-568B.
 - Do not use more than 100m (328ft) of Ethernet cable between devices.
 - If desired, a wired-mode TR-240 into an AC outlet for prolonged usage.
2. Plug headsets into the TR-240 belpacks and turn them on, one by one.
 - If the belpack has not been previously set to “wired mode”, press and hold the <2> button while the belpack boots.
 - Allow a few seconds in-between each belpack power on.
 - After approximately 20 seconds, a voice prompt will announce “wired” in the belpack headphones indicating that wireless communication has started.

Master Wireless Mode Setup

For a master wireless mode configuration, one TR-240 belpack is configured as the “master” and provides the wireless coverage for other “wireless” belpacks. The “master” belpack can still be used for audio just as a “wireless” belpack. No base station is required for a master wireless mode configuration.

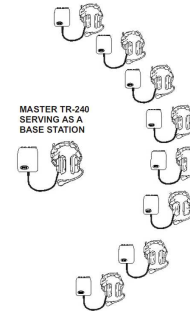


Figure 3 - Example of Master Wireless Mode System

1. Select one of the belpacks to operate in master wireless mode and plug in a headset.
 - If desired, the “master” belpack can be plugged into an AC outlet for prolonged usage.
2. Turn on the “master” TR-240 belpack.
 - If the belpack has not been previously set to master wireless mode, press and hold the <1> button while the belpack boots.
 - After approximately 20 seconds, a voice prompt will announce “master wireless” in the belpack headphones.
 - A second voice prompt will announce the current RF channel of operation, for example, “Channel 1”.
3. Perform a ClearScan™.
 - Continue holding the <1> button until the voice prompt announce “RF Selection”.
 - Press <TALK> and the voice prompt will announce “ClearScan”.
 - ClearScan™ will find and select the optimal RF channel for operation.
 - Release all the buttons for approx. 3 seconds and the ClearScan™ channel becomes active.
4. Once the “master” TR-240 belpack has booted and been configured, plug headsets into the “wireless” belpacks and turn them on, one by one.
 - If the belpack has not been previously set to “wireless mode”, press and hold the <TALK> button while the belpack boots.
 - Allow a few seconds in-between each belpack power on.
 - After approximately 20 seconds, a voice prompt will announce “wireless” in the belpack headphones indicating that wireless communication has started.

BTR-240 Controls and Connections

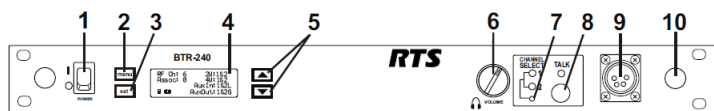


Figure 4 – BTR-240 Front Panel

- Power on/off switch** – turns the power on/off.
- <MENU> button** – used to navigate the menu options on the LCD.
- <SET> button** – used to navigate the menu and select options on the LCD.
- Backlit Graphics LCD (liquid crystal display)**
- <UP> and <DOWN> buttons** – used to navigate the menu options on the LCD.
- <VOLUME> control knob** – controls the volume for the local headset.
- <CHANNEL SELECT> button** – controls the intercom channel to which the local headset is connected.
- <TALK> button** – press to enable/disable the audio path from the local headset. LED will illuminate solid when active.
- Local Headset Connector** – standard 4-pin XLR connector. Male XLR for Telex units, female XLR for RTS units.

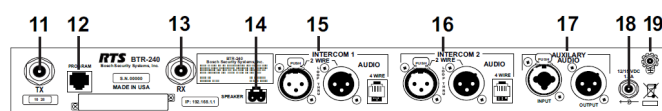


Figure 5 – BTR-240 Rear Panel

- Antenna Mount Kockouts** – remove to mount the antennas on the front panel.
- Transmit Antenna** – reverse “TNC” connector.
- Program Input** – RJ-45 jack for wired Ethernet connections.
- Receive Antenna** – reverse “TNC” connector.
- Speaker Output** – 2-pin connector to attach cables and a speaker.
- Intercom Channel 1 In/Out** – 2-wire and 4-wire interface to wired intercom system 1.
- Intercom Channel 2 In/Out** – 2-wire and 4-wire interface to wired intercom system 2.
- Auxiliary Input/Output** – 3-pin female XLR / ¼ “ combo jack for input and 3-pin male XLR output.
- DC Input Jack** – accepts 12-15 VDC, 1.5 Amp source to power the BTR-240.
- Chassis Ground** – grounding point of the base station.

Special Key Sequences:

ClearScan™	<MENU> + <SET> for approx. 3 seconds. Sequence takes from 25 to 45 seconds to complete.
Lockout	<UP> + <DOWN> for approx. 3 seconds. Repeat to toggle on/off.

Software Version	<SET> + <DOWN> for approx. 3 seconds. Will flash the software version for approx. 3 seconds.
Factory Restore	<MENU> + <SET> + <UP> + <DOWN> for approx. 3 seconds. User reset to restore audio settings and RF channel. Factory restore to restore audio settings, RF channel, and all configurations.

TR-240 Controls and Connections

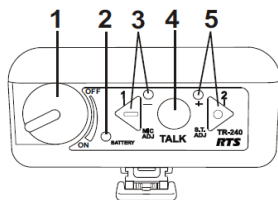


Figure 6 – TR-240 Front Panel

- On/Off & Volume Control** – turns the power on/off and controls the headset volume.
- Battery Light** –
GREEN = Battery OK
YELLOW = Battery Low (approx. 15 mins left)
RED = Battery Low (needs to be charged)
- Channel <1> “Green” Button and Light** – selects the “Channel 1” intercom. The green light will illuminate upon selection.
- <TALK> button** – press to enable/disable the audio path from the headset microphone. Channel LED(s) will illuminate solid when the microphone path is enabled and will blink when the microphone path is disabled.

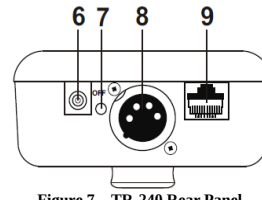


Figure 7 – TR-240 Rear Panel

- Channel <2> “Blue” Button and Light** – selects the “Channel 2” intercom. The green light will illuminate upon selection.
- Charge Jack** – used to charge the Li-Ion battery. Accepts 12VDC regulated power supply.
- Charge Light** –
RED = Battery is charging.
GREEN = Battery is charged.
- Headset Connector** – standard 4-pin XLR connector. Male XLR for Telex units, female XLR for RTS units.
- Program Input** – RJ-45 jack for wired Ethernet connections.

Special Key Sequences:

Wireless Mode	Press and hold <TALK> while booting.
Wired Mode	Press and hold <2> while booting.
Master Wireless Mode	Press and hold <1> while booting.
Momentary Mode / Push-to-Latch Mode	<1> + <TALK> + <2> for approx. 3 seconds. Repeat to toggle.

Microphone Gain	<1> + <TALK> for approx. 3 seconds. Continue to hold <TALK> and use <1> to decrease the gain and <2> to increase the gain. Release all buttons to set.
Sidetone Level	<2> + <TALK> for approx. 3 seconds. Continue to hold <TALK> and use <1> to decrease the level and <2> to increase the level. Release all buttons to set.
Software Version	<1> + <2> for approx. 3 seconds. Voice prompts will indicate the mode and software version.