



# Getting Started with TrangoLink™

## Overview:

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TrangoLink™ allows you to configure and monitor your EAGLE PLUS, FALCON, or PTZ-900 transmitters and receivers. On the EAGLE PLUS and FALCON transmitters, you can change the active channel, operating mode, and alarm triggering. On the EAGLE PLUS and FALCON receivers, you can change the active channel and monitor the signal strength, transmitter battery status, video loss, and alarm status. On the PTZ-900 transmitter and receiver, you can configure the hopping sequence, the data rate, the mode, and the address as well as monitor the signal strength.

## PC Requirements and Installation:

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In order to run TrangoLink, you will need Windows 95 or higher, 400 kB of free disk space, and one free serial port.

To install:

The TrangoLink program which can be found at our website at <http://www.trangosys.com/> is a self-extracting and installing file. To install TrangoLink on your PC, simply download the file and double-click on it.

To uninstall:

1. Click on **Start**, then **Settings**, then **Control Panel**.
2. Double click on **Add/Remove Programs**.
3. Select TrangoLink, and click **Add/Remove**.

## TrangoLink with the EAGLE PLUS System:

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The TrangoLink software allows the user to change the user settings on the EAGLE PLUS transmitters and receivers. The software runs under the Windows 95 or higher PC platform and connects from COM1-4 to the Data interface on the transmitter or receiver via the CBLDAT-1 interface cable.

To enter the program, the user must apply power to the connected unit and run the TrangoLink program by clicking on the TrangoLink icon in **Start/Programs**.

After entering the program, a screen is displayed showing the current settings, which can be changed by the user.

## Configuring the EAGLE PLUS Transmitter:

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Via the TrangoLink interface panel for the VTX2500 transmitter, the user can configure the following settings:

### MENU CONTROLS:

**File:** Choosing this pull-down menu brings up three options:

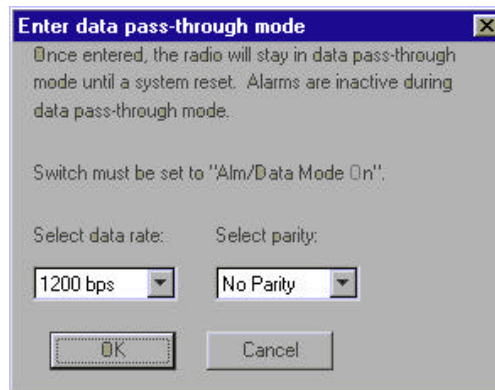
**Sound:** This toggles the PC sound on and off, so that the PC can beep (or not) if a change in any of the indicators is received.

**Select Port:** This selects the serial port through which the PC is connected to the transmitter or receiver. The cable required to connect may be purchased from your Trango Systems sales representative.

**Exit:** Exits TrangoLink.

**Link Verification:** This option brings up a dialog box by which the Link Verification Code can be set. This is a 32-bit code sent from the transmitter to the receiver to verify that the signal is being received from the proper location. The link verification codes on the transmitter and receiver must match for reception of alarms or low battery signals. If the codes do not match video will still be received, but the user will be notified that it is not coming from the proper location.

**Pass-Through Mode:** Choosing this pull-down menu brings up the following dialog box shown in Figure 1 through which the data rate and parity can be chosen. To use this function, the Stereo/Alarm switch on the transmitter and receiver must be set to "Alm/Data Mode On."



• FIGURE 1 •

**Help:** Choosing this pull-down menu brings up two options:

**Help Topics:** This offers you an index of online help topics.

**About:** This displays the copyright notice and version number of your copy of TrangoLink.

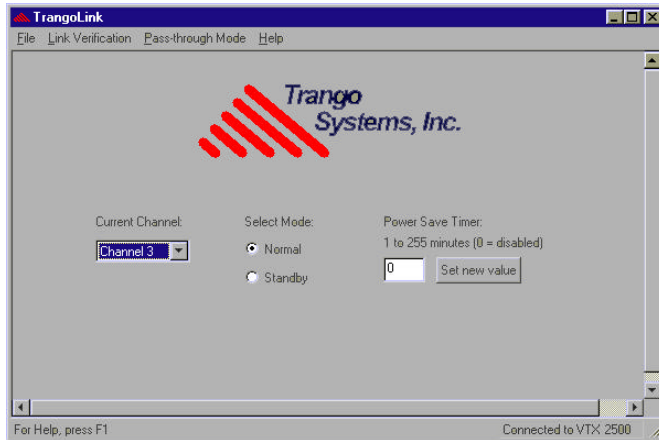
### SCREEN CONTROLS:

**Current Channel:** This must be the same on the transmitter and receiver in order for video, alarms, and/or data to be transmitted properly.

**Select Mode:** The Normal button places the transmitter in Normal mode or awakens it from Standby mode. The Standby button places the transmitter in either Secure

Standby or Power Save Standby, depending on the value entered in the Power Save Timer field.

**Power Save Timer:** The EAGLE PLUS can reenter Standby mode after a preset amount of time has passed, which can be entered in the Power Save Timer field (Power Save Standby mode). If zero is entered, the transmitter will not reenter Standby mode (Secure Standby mode). To enter a new value, type the desired number of minutes into the Power Save Standby field, and press the “Set new value” button.



In Fig. 2, the TrangoLink interface screen shows that the transmitter is set to Channel 3, in Normal mode (not Standby), with the Power Save timer set to 0 minutes (Secure Standby). In this configuration, the transmitter will *not* reenter Standby mode after awakening.

**Fig. 2**

## Configuring the EAGLE PLUS Receiver:

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Via the TrangoLink interface panel for the VRX2500 receiver, the user can configure the following settings:

### MENU CONTROLS:

**File:** Choosing this pull-down menu brings up three options:

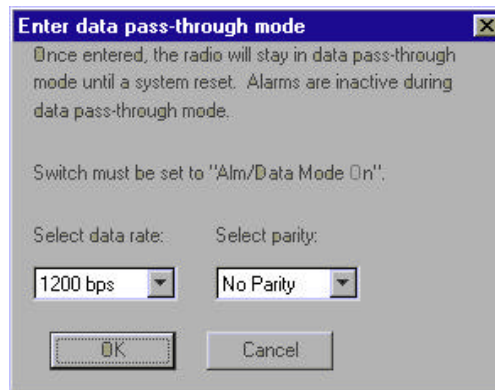
**Sound:** This toggles the PC sound on and off, so that the PC can beep (or not) if a change in any of the indicators is received.

**Select Port:** This selects the serial port through which the PC is connected to the transmitter or receiver. The cable required to connect may be purchased from your Trango Systems sales representative.

**Exit:** Exits TrangoLink.

**Link Verification:** This option brings up a dialog box by which the Link Verification Code can be set. This is a 32-bit code sent from the transmitter to the receiver to verify that the signal is being received from the proper location. The link verification codes on the transmitter and receiver must match for reception of alarms or low battery signals. If the codes do not match video will still be received, but the user will be notified that it is not coming from the proper location.

**Pass-Through Mode:** Choosing this pull-down menu brings up the following dialog box shown in Figure 3 through which the data rate and parity can be chosen. To use this function, the Stereo/Alarm switch on the transmitter and receiver must be set to "Alm/Data Mode On."



• FIGURE 3 •

**Help:** Choosing this pull-down menu brings up two options:

**Help Topics:** This offers you an index of online help topics.

**About:** This displays the copyright notice and version number of your copy of TrangoLink.

### SCREEN CONTROLS:

**Current Channel:** This must be the same on the transmitter and receiver in order for video, alarms, and/or data to be transmitted properly.

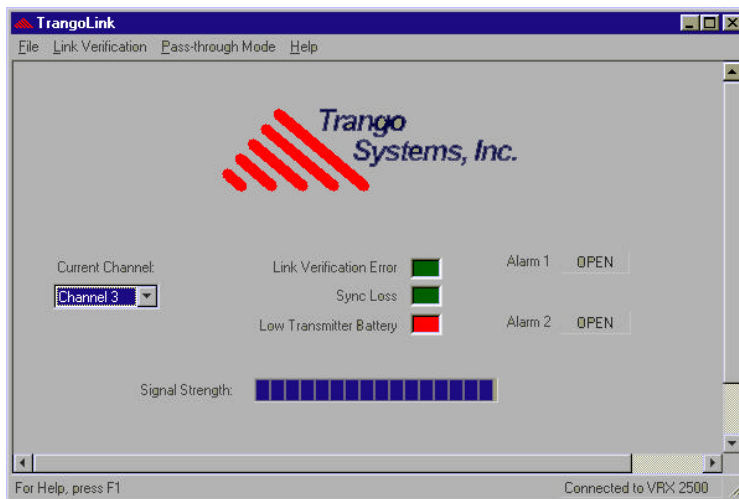
**Link Verification Error:** Green indicates that the receiver is receiving a matching Link Verification Code from the transmitter. Red indicates that it is not.

**Sync Loss:** Green indicates that the receiver detects a vertical sync pulse on the received video signal. Red indicates that it does not, and hence that no video is being transmitted.

**Low Transmitter Battery:** Red indicates that the transmitter has a low power supply voltage (< 6 Vdc). Green indicates that power supply voltage is within acceptable limits.

**Alarm 1 and Alarm 2:** OPEN indicates that contacts are open on the receiver, CLOSED that they are closed.

**Signal Strength:** Also called **RSSI (Received Signal Strength Indicator)**. Presents a bar graph proportional to the received signal. Useful in troubleshooting to determine if any other signals are present in the frequency band and to help align antennas.



In Fig. 4, the TrangoLink interface screen shows that the receiver is set to Channel 3, both Alarms are open, and a low battery condition exists on the transmitter.

**Fig. 4**

## TrangoLink with the FALCON System:

The TrangoLink software allows the user to change the user settings on the FALCON transmitters and receivers. The software runs under the Windows 95 or higher PC platform and connects from either COM1 or COM2 to the Data interface on the transmitter or receiver via the CBLDAT-1 interface cable.

To enter the program, the user must apply power to the connected unit and run the TrangoLink program by clicking on the TrangoLink icon.

After entering the program, a screen is displayed showing the current settings. The user may change the settings and then must click “Save Changes and Exit”. Upon exiting the program and cycling power to the unit, the settings will become effective.

## Configuring the FALCON Transmitter:

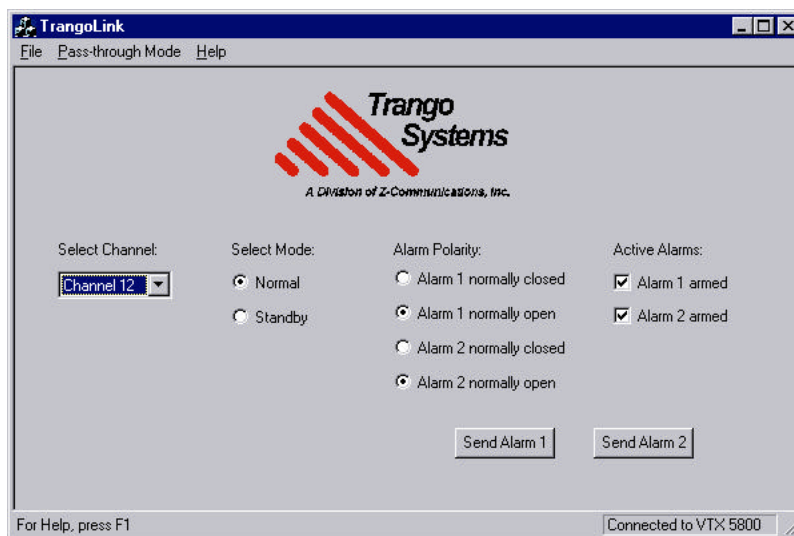
Via the TrangoLink interface panel for the VTX5800 transmitter, the user can configure the following settings:

**Link Verification:** This is a 32-bit code sent from the transmitter to the receiver to verify that the signal is being received from the proper location.

**Active Channel:** This must be the same on the transmitter and receiver in order for video to be transferred properly.

**Standby Mode:** When in standby mode, the transmitter shuts down the majority of its circuitry until it is awakened by an alarm. Via TrangoLink, the transmitter can be put into standby mode, or awakened from standby mode.

**Alarm Arming and Polarity:** Which of the alarms are active, and whether the alarms activate open or closed. Via TrangoLink, alarms can also be sent to the transmitters for testing and diagnostic purposes.



In Fig. 5, the TrangoLink interface screen shows that the transmitter is set to Channel 12, in Normal mode (not Standby), with both alarms Armed and set to alarm on closure.

**Fig. 5**

## Configuring the FALCON Receiver:

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Via the TrangoLink interface panel for the VRX5800 receiver, the user can configure the following settings:

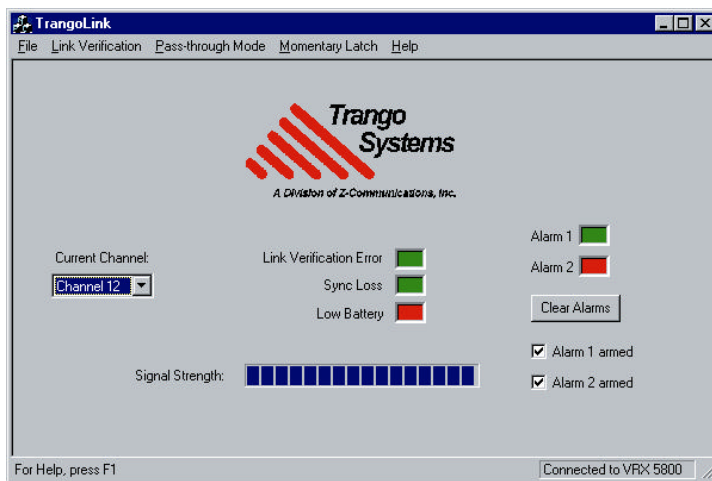
**Link Verification:** This is a 32-bit code sent from the transmitter to the receiver to verify that the signal is being received from the proper location.

**Alarms and Alarm Log:** Via TrangoLink, the alarm log can be viewed, printed, or saved to a file. You can also set which of the alarms are active, clear alarms, and whether the alarms activate open or closed.

**Active Channel and Channel Switching:** This must be the same on the transmitter and receiver in order for video to be transferred properly.

**RSSI:** Used for receiver only to monitor the radio spectrum. Presents a histogram. Useful in troubleshooting to determine if any other signals are present in the frequency band.

**Low Battery:** Whether or not the battery is below voltage on the transmitter and is hence in danger of failing.



In Fig. 6, the TrangoLink interface screen shows that the receiver is set to Channel 12, and is showing an alarm condition in Alarm 2, and a low battery condition on the transmitter.

**Fig. 6**

## TrangoLink with the PTZ-900 System:

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The TrangoLink software allows the user to change the user settings on the PTZ-900TX and PTZ-900RX. The software runs under the Windows 95 or higher PC platform and connects from either COM1 or COM2 to the Data interface on the transmitter or receiver via the CBLDAT-2 interface cable.

To enter the program, the user must apply power to the PTZ-900 unit and, within 20 seconds, run the TrangoLink program by clicking on the TrangoLink icon. The LED will flash green and red until communication is established. If a connection is not made within 20 seconds, the unit will treat all attempts to run TrangoLink as “pass through” and simply send the data out to the receiver. Simply reboot power to the unit and try again.

After entering the program, a screen is displayed showing the current settings. The user may change the settings and then must click “Save Changes and Exit”. Upon exiting the program and cycling power to the unit, the settings will become effective.

**PN Sequence:** The hopping channel sequence, which must be the same on the transmitter and receiver in order for data to be transferred properly.

**RSSI:** Used for receiver only to monitor the radio spectrum on all hopping channels. Presents a bar graph of power (dBm) vs. frequency (MHz). Useful in troubleshooting to determine if any other signals are present in the 900 MHz band. Meaningless if connected to the PTZ-900TX.

**Data Rate:** Serial port data rate for user data. Must be the same on the transmitter and receiver. Format is always N-8-1.

**Mode:** RS-232 (unbalanced) or RS-422/RS-485 (differential). Select the mode which matches your PTZ control equipment.

**Address:** Used if more than one system is to be used on the same hopping sequence in the same area. You must click on “set address” to make changes affective.