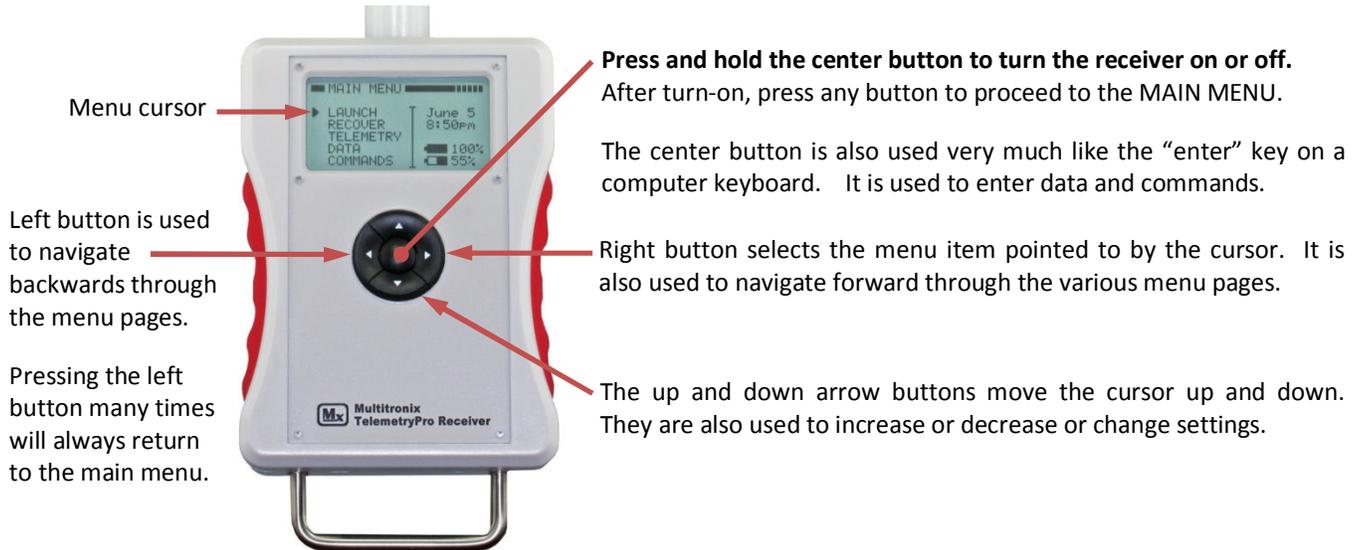




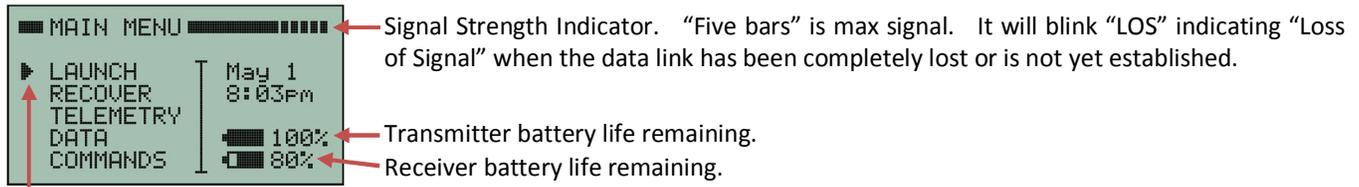
TelemetryPro® Receiver Quick Start User Guide

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This Quick Start Guide is a short overview designed to help a new user become familiar with operating the TelemetryPro Receiver. Even a new user should find the receiver to be very intuitive and easy to learn. (See manual for more details.)



The MAIN MENU operates like a "home page". It is a good place to start. If you get lost the best way back to a known place is to press the back button (left arrow button) multiple times. This will always return you to the MAIN MENU.



Move the menu cursor up and down. Then press the right arrow button to select the option it is pointing at.

Select LAUNCH to setup for a launch and to establish a link with the transmitter.

Select RECOVER to see the LOCATOR screen that shows the location of the rocket so that it can be recovered.

Select TELEMETRY to see the real time telemetry data being received from the transmitter in the rocket.

Select DATA to see various types of flight data and other system related information.

Select COMMANDS to do something such as turn-off the transmitter, replay Kate audio, or adjust settings.



Each transmitter has a unique ID code. The receiver must be set to match. Start at the MAIN MENU and select LAUNCH then select RADIO LINK then select TRANSMITTER ID. Edit bars will now be blinking above and below a digit in the ID number. They indicate which digit will be changed by pressing the up or down arrow buttons. The edit bars can be moved right or left by pressing the right or left arrow buttons. This scheme allows you to set each digit in the number. Press the center button when finished. It can take 20-60 seconds for the link to be established once the ID code has been set.



The LAUNCH STATUS screen shows all the go/no-go criteria. If any are no-go then position the cursor onto the line that is no-go and press the right arrow button to enter a menu or status screen for that item. The receiver will prompt you for any info it needs.

TelemetryPro is ready for launch when all systems are "GO". Kate will automatically begin speaking when liftoff is detected. (See manual for running a launch simulation.)

PLEASE NOTE: The receiver is extremely sensitive and is able to detect very low level signals from a transmitter that is many many miles away. Consequently, the receiver can be overloaded by signal strength when it is in close proximity to a transmitter. This can cause it to fail to link or even drop the link if it was previously linked. **It is best to point the antenna on the receiver AWAY from the transmitter when within 200 feet of the transmitter. It also helps to stand with your back to the transmitter while holding the receiver and pointing the antenna away because your body helps block and attenuate the signal.** If the link is not established within 60 seconds then double check that you have set the receiver to the correct transmitter ID number. Also try moving the receiver further away from the transmitter.

Once you are at a safe distance from the rocket and ready to launch then you should be able to point the antenna directly at the rocket. It is also important to keep pointing it at the rocket during the entire flight!

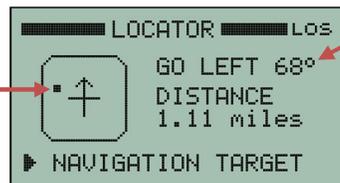
Point the antenna at the rocket during the entire flight!

The TELEMETRY screen shows real time downlink information during a flight. It is the single most important screen to be watching during a flight but any others can be viewed if desired. The top four lines on the TELEMETRY screen will always show the same thing: altitude, velocity, distance, bearing and elevation. The last two lines will show different information depending on what is most relevant at the moment. The TELEMETRY screen can be reached directly from the MAIN MENU.



To find the rocket after it has landed, select RECOVER on the MAIN MENU. This will bring up the LOCATOR screen.

The location of the rocket is displayed in a manner similar to a “blip” on a “radar screen.”



Bearing and distance to the rocket will change as you walk around with the receiver. The receiver must be held with the antenna pointing in the direction you are walking in order for the bearing to be valid. In other words, the arrow on the “radar screen” must be pointing in the direction of travel.

The “radar blip” is solid when a valid measurement is being displayed. This occurs when the receiver is moving at least at walking speed. The “radar blip” will blink when it is displaying the last valid measurement but that measurement is more than 10 seconds old.

To find the rocket, it is a simple matter of walking or driving in a direction that causes the “blip” to be dead ahead. This is when it is at the tip of the arrow on the “radar screen”.

To replay Kate audio, go to MAIN MENU and then navigate to the COMMANDS #1 menu and select REPLAY KATE AUDIO.



Recording 1 of 2 is being displayed on this screen.

This recording is from a flight named “FIREBIRD” that occurred on May 7 at 1:29pm.

A different recording can be selected by pointing the cursor at NAME and pressing the right arrow button. Point the cursor at either line labeled PLAY and press the right arrow button to start playback.

Map Mode allows the receiver to show the rocket location in real time on a Google Earth map being displayed on a tablet or laptop computer. This can be very handy for planning a route to recover the rocket. See the User Manual for details.

The **Flight Data Analyzer** program can be used to download the flight data and display a summary of the information. It also generates various graphs, a Google Earth trajectory and a spreadsheet with the raw data. See User Manual for details.

