Hardware
Transmitter Diagram

POWER SWITCH · RED/YELLOW LED · MINI-B USB · PAIR BUTTON · GREEN LED

Rear Label
The rear label is marked with international safety and hazard symbols in accordance with IEC standards.

OMEGA ENGINEERING, INC.
UWBT-TC-M12
Serial No.
FCC ID : T9JRN41-3

IEC SYMBOL: EU's WASTE ELECTRICAL AND ELECTRONIC EQUIPMENT COMPLIANCE

IEC SYMBOL: CAUTION, REFER TO ACCOMPANYING DOCUMENTATION

NOTE:

It is recommended that you recharge your transmitter when you reach 20% battery level or lower.

Transmitter LED Indication Table

LED Action	(The red & yellow colors come from one LED)		Green LED	Transmitter Status
	Red LED State	Yellow LED State		
Red & Green LEDs blink alternately.	Blinking	-	Blinking	Sensor Out of Range
Red & Green LEDs blink alternately.	Blinking	-	Blinking	Sensor Open
Red LED blinks twice every 2 seconds.	Blinking	-	-	Low or High Alarm
Red LED blinks every 5 seconds.	Blinking	-	-	Low Battery
Green LED blinks every second.	-	-	Blinking	Downloading data from probe
Green LED blinks 3 times every 3 seconds.	-	-	Blinking	Device Paired/ Data being sent
Green LED blinks twice every 3 seconds.	-	-	Blinking	Internal logging on
Green LED blinks once every 3 seconds.	-	-	Blinking	The transmitter is on and connected to a sensor, but is not paired with a smart device.
Red LED blinks every second for 2 minutes, then unit switches off.	Blinking	-	-	Device unpaired
Red LED blinks every second for 2 minutes, then stops.	Blinking	-	-	Transmission enabled (searching to pair)
Red & Green LEDs blink twice together, then go off.	Blinking	-	Blinking	Factory Settings have been successfully re-installed on the transmitter.
Yellow LED is on continuously.	-	On	-	Battery Charging
Yellow LED blinks every second.	-	Blinking	-	Battery Fully Charged
Green & Red LEDs turn on for ½ second, then go off.	On	-	On	Transmitter has been powered up successfully
Red LED turns on for ½ of a second, then goes off.	On	-	-	Transmitter has failed to power up successfully
Green LED blinks 3 times, then the transmitter turns off.	-	-	Blinking	Transmitter has successfully poweredoff
Yellow & Red LEDs blink alternately.	Blinking	Blinking	-	Transmitter internal memory is full.

Wiring Diagrams
UWBT-TC-M12 Wiring
The TC models use standard pin connections, as shown below:

TC#2 (OPTIONAL) · TC#1 · TC#2 + (OPTIONAL) · TC#1 +

UWBT-RTD-M12 Wiring
The RTD models use Wiring Option #1, as shown in the

PIN #4 · PIN #1 · PIN #3 · PIN #2 · PIN #1 · PIN #2 · PIN #3

diagram below:
UWBT-RTD-TB Terminal Block Wiring
The UWBT-RTD-TB comes with a 3-wire terminal block. The terminal block can be unplugged from the handle, allowing for easier handling of the wires. See below:

ANSI & IEC: RED
ANSI: BLACK (IEC: WHITE)
ANSI: BLACK (IEC: WHITE)
3-WIRE RTD

ANSI & IEC: RED
ANSI: BLACK (IEC: WHITE)
2-WIRE RTD

Additional Information
Please visit the Omega website and download the full-length UWBT manual for more information on the UWBT transmitter and its applications.
www.omega.com/uwbt

For complete product manual:
www.omega.com/manuals/manualpdf/M5417.pdf

RoHS 2 Compliant

UWBT SERIES
Handheld *Bluetooth*® Wireless Temperature, Humidity and pH Transmitter Series
UWBT-TC
UWBT-RTD
UWBT-RH
UWBT-PH

Software Notes For (iOS & Android™)

NOTE:

Having the transmitter paired with the UWBT app does not mean that transmission is active. You must either be in the "Display" or "Settings" screens, or be logging data, for the *Bluetooth®* wireless transmission to be active. Otherwise, the transmitter will unpair after 2 minutes.

NOTE:

You cannot pair the same transmitter with multiple smartphones or tablets. In order to view a transmitter's information on a different tablet, you will need to unpair the transmitter from the UWBT app.
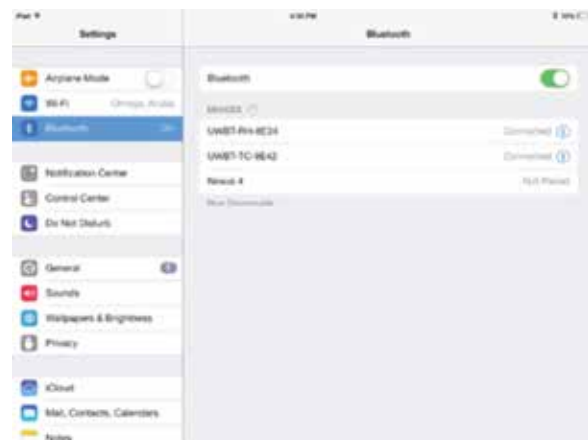
Software For (iOS)

Initial Pairing Instructions

In order to start communicating with the UWBT transmitter, you need to pair it with your smart device via *Bluetooth* wireless communication. For devices that work with the iOS operating system, you must pair within the iOS settings before pairing within the UWBT app. Devices for Android only require pairing from within the UWBT app.

Pairing within smart device Settings menu (iOS only):

1. Switch on your UWBT transmitter.
2. Hold down the transmitter's 'Pair' button for 2 seconds – this will put the sensor in discovery mode.
3. Go to the Settings page of your smart device
4. Select the *Bluetooth* wireless section
5. Make sure your *Bluetooth* wireless functionality is turned on – the *Bluetooth* wireless slider should be showing a green background.
6. Tap the device to be paired via *Bluetooth* wireless communication.

Pairing Within the UWBT App:

1. Make sure your UWBT transmitter is switched on and that the *Bluetooth* wireless communication to the smart device has already been established. See "Pairing within smart device Settings menu (iOS operating system only)" in the previous section for details on this process.
2. Open the UWBT app.
3. In the UWBT app, go to the 'Transmitter Pairing' settings.

4. In the 'Discovered Devices' list, select the transmitter you would like to pair with.

5. Click on the 'Pair' button.
6. You are ready to display and log data!

Software For (Android)

Initial Pairing Instructions

In order to start communicating with the UWBT transmitter, you need to pair it with your smart device via *Bluetooth* wireless communication.

Pairing within the UWBT App:

1. Make sure your UWBT transmitter is switched on.
2. Open the UWBT app.
3. In the UWBT app, go to the 'Transmitter Pairing' settings
4. Hold down the transmitter's 'Pair' button for 2 seconds – this will put the sensor in discovery mode.

5. In the 'Discovered Devices' list, select the transmitter you would like to pair with.
6. Click on the 'Pair' button.
7. The smart device will create a prompt asking if you would like to pair with the specific transmitter. Click 'Yes'. (Please note that this prompt only pops up during your first time pairing with a transmitter.)

8. You are ready to display and log data!

Software (PC)

Installing the PC Application

To install the UWBT PC application on your computer follow these steps:

1. Download the latest UWBT PC application release from our website at ftp://ftp.omega.com/public/DASGroup/products/
2. After download is completed, open the directory where the download was saved
3. Click and run the UWBT PC app executable file (.exe). The application and its drivers will be installed automatically.
4. After application is fully installed, a shortcut is created on your computer desktop and "UWBT Libusb" directory is created in the C: drive of your PC. This directory contains the drivers for all UWBT transmitter models.

Discover Transmitter:

Clicking the "Discover Transmitter" button searches for UWBT transmitters connected to USB ports of the PC. The maximum number of UWBT transmitters that can be discovered is four.

After being discovered, only one UWBT transmitter can be connected with the PC app at a time.

• You can connect to any of the discovered transmitters by clicking the "Select" button next to the transmitter's name.
• You can also switch the transmitter you are connected to by clicking on the "Select" button next to the new transmitter of your choice. The application will automatically disconnect from the previous transmitter, and connect to the new one.

NOTE:

The "Discover Transmitter" button's name changes to "Disconnect Transmitter" after a UWBT device is connected.