

TRUECHARGE™ 2 Remote Panel Owner's Guide

⚠ WARNING: Fire hazard

Read, follow, and save these instructions to reduce the risk of fire hazard, equipment damage, or malfunction.

⚠ WARNING: Limitations on use

Do not use Remote Panel in connection with life support systems, medical equipment, or where human life or medical property may be at stake.

This package includes:

1. Truecharge2 Remote Panel unit (Product Number: 808-8040-01)
2. Two 7.6 m (25 ft.) communications cables
3. Owner's Guide with mounting template
4. 1½" NPT locknut (for mounting)

About the Truecharge2 Remote Panel

The Remote Panel can be used to:

- Set the charger to on or standby,
- Adjust maximum charger output settings¹,
- Program the charger for battery type and temperature,
- Set the charger mode (two or three-stage charging),
- Activate and terminate equalization (not allowed for GEL and AGM),
- Monitor charger status and output,
- Display faults and warnings,
- Display individual battery bank status, and
- Operate two chargers connected in parallel to increase output capacity.

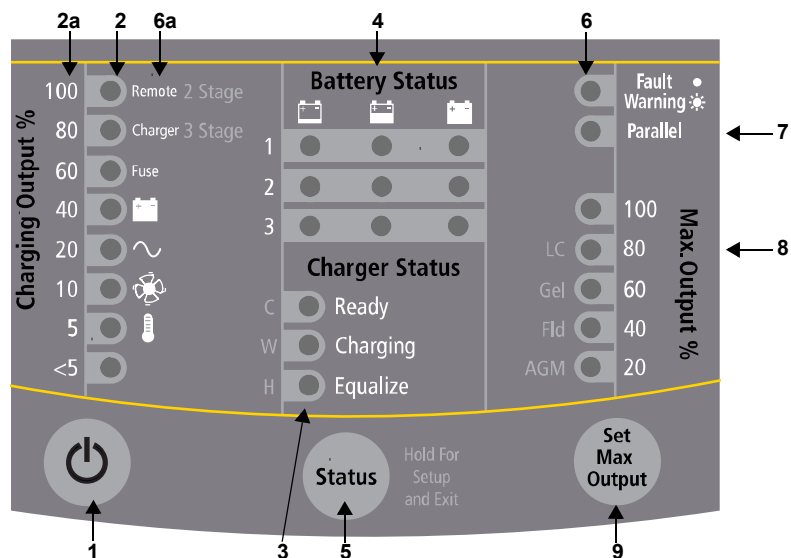


Figure 1 Truecharge2 Remote Panel

Item	Description
1	ON/STANDBY Button <ul style="list-style-type: none"> • Press to enable or disable the charger while AC power is connected. • When in Setup Mode: Press to select the Charger Mode: two or three-stage. • To set or cancel an Equalization program: Press and hold both the Status and ON/STANDBY buttons for more than five seconds.
2	Charging Output (%) LEDs <ul style="list-style-type: none"> • The LEDs illuminate like a bar graph displaying the present total output charge current as a percentage of the maximum rated charge current. For example, unit model TC4012 has a maximum rated charge current of 40 A so at 60% the charger's current output is 24 A. The numbers to the left of the LEDs represent the percentage values (see 2a). NOTE: When the maximum Charge Output current is limited by pressing the Set Max Output button, the LEDs will still display the total charge output current as a percentage of the maximum charge current and NOT as a percentage of the limited charge current. • An LED may flash intermittently in combination with a solid Fault LED to indicate a fault or with a flashing Fault LED to indicate a warning condition. The icons on the right side of the LEDs represent different types of faults and warnings.

1. Limits the maximum charger output current (20, 40, 60, 80, and 100% of charger rating) to lower the current drawn from the generator or AC source

Item	Description
3	Charger Status LEDs <p>Displays the present status of the charger.</p> <ul style="list-style-type: none"> • Ready - a solid light indicates that all batteries are fully charged and in rest stage. • Ready and Charging - solid lights indicate that batteries are fully charged and in float stage. • Charging - a solid light indicates that the charger is performing a normal charge cycle. • Equalize - a solid light indicates that the charger is performing an equalization cycle. <ul style="list-style-type: none"> - a flashing light indicates that the equalization cycle will begin after the absorption stage is done.
4	Battery Status LEDs <p>Displays the present status of each battery (or battery bank) – available only on the Remote Panel. Each row represents the battery (or battery bank) number designation—1, 2, or 3. Each column represents Low, Medium, or Full battery capacity.</p> <p>NOTE: These levels are measured and the status updated at the start of each stage in the charge cycle during charging, on demand when AC is disconnected and the Status button is pressed, or whenever AC is cycled.</p> <ul style="list-style-type: none"> • Low if battery voltage is below 11.9 V (23.8 V for 24 Vdc systems) • Medium if the voltage is 11.9 to 12.4 V (23.8 to 24.8 V for 24 Vdc systems) • Full if the voltage is above 12.4 V (24.8 V for 24 Vdc systems)
5	Status Button <p>NOTE: The LEDs will flash intermittently when the Remote goes into Setup Mode.</p> <ul style="list-style-type: none"> • Press and hold for five seconds to enter Setup Mode. • When in Setup Mode: Press to select the Battery Temperature: <u>C</u>old, <u>W</u>arm, or <u>H</u>ot. <p>NOTE: If the optional BTS^a is used, the battery temperature setting is adjusted automatically.</p> • Press and hold for five seconds to save settings and exit Setup Mode. • When setting or cancelling an Equalization cycle or program: Press and hold both the Status and ON/STANDBY buttons. • When AC is disconnected: Press to view battery status.
6	Fault/Warning LED <p>The LED displays a solid light to indicate a fault condition or flashes intermittently to indicate a warning condition. Faults or warnings are displayed in combination with a flashing Charging Output (%) LED to indicate the type of fault or warning (6a).</p>
7	Parallel LED <p>The LED illuminates a solid light indicating that two Truecharge2 Battery Chargers are in parallel configuration.</p>
8	Max. Output (%) LED <p>The LED illuminates a solid light corresponding to the Maximum Charger Output % setting.</p>
9	Set Max Output Button <ul style="list-style-type: none"> • Press to select and limit the maximum charge current. For example, the unit model TC4012 has a maximum charge current of 40 A. Changing the Max Output setting from 100 to 80 will limit the maximum charge current to 32 A (80% of 40 A). It will also limit the equalization current if the Max Output is set to below 50%. This feature is available only on the Remote Panel. • When in Setup Mode: Press to select the Battery Type: AGM, Flooded, GEL, or Lead-Calcium. <p>NOTE: The OEM battery type setting is also available if a custom setting has been programmed by Xantrex or a designated OEM and is indicated when all four battery type LEDs are illuminated.</p>

a. Battery Temperature Sensor (to order reference part number: 808-0232-01)

Installing the Truecharge2 Remote Panel

1. Choose a location for the remote panel that is within 7.6 m (25 ft.) from the charger. Use only the six-conductor communications cable (RJ-12) that comes with the package. If you require a longer communications cable, call Xantrex and order the 15.2 m (50 ft.) communications cable (part number: 31-6262-00).
2. Use the mounting template provided on the right to predrill a 1.875-inch (48 mm) hole where the threaded bracket at the back of the remote will go through and a small 0.125-inch (3 mm) hole where the stud pin will go. Take care that there is nothing behind the surface for you to damage such as other cables or pipes.
3. After making the holes, push the back of the remote panel through and secure the remote panel in place by screwing the locknut (provided) to the threaded bracket until fastened firmly to the wall.
4. Connect the RJ-12 connector to the remote panel's PRIMARY port and route it to the charger. Be careful not to damage the connector locking tab when routing the cable. You can protect the locking tab by covering it with tape temporarily to prevent it from catching on something and breaking off when routing the cable.
5. Once the Truecharge2 Battery Charger is mounted, plug the other RJ-12 connector into the Remote port on the rear panel of the primary Truecharge2 Battery Charger.
6. If two Truecharge2 Battery Chargers will be operated in parallel, connect the second communications cable to the remote panel's second RJ-12 port. Connect the other end of the cable to the secondary charger's Remote port.

IMPORTANT: If the remote panel does not turn on automatically when you first connect it to a powered Truecharge2 Battery Charger, cut power to the battery charger by disconnecting the AC source (via the AC breaker switch) and disconnecting the batteries (via the DC disconnect switch). Wait one minute before returning power to the battery charger.

Configuring the Charger Mode

NOTE: By default, the Charger Mode is set to three-stage.

1. Press and hold the **Status** button for five seconds to enter Setup mode. Entering Setup mode will enable you to select the charger mode.
2. Press **on/standby** button to select the desired charger mode.
The LEDs will indicate which of the two types is being selected: three-stage (default) or two-stage.
3. Press and hold the **Status** button for five seconds to exit Setup mode and save the new setting.

Configuring the Battery Bank Type

NOTE: By default, the Battery Type is set to Flooded.

1. Press and hold the **Status** button for five seconds to enter Setup mode. Entering Setup mode will enable you to select the battery type.
2. Press **Set Max Output** button to select the proper battery type.
The LEDs will indicate which of the four types is being selected: Flooded (default), GEL, Lead Calc., or AGM.
NOTE: If a custom battery type has been programmed by the OEM, then all four LEDs will light up to indicate a fifth type. To select the OEM battery type, use the Truecharge2 Battery Charger control panel.
3. Press and hold the **Status** button for five seconds to exit Setup mode and save the new setting.

Configuring the Maximum Output Current Percentage of the Charger

NOTE: By default, the Max. Output % is set to 100.

- Press the **Set Max Output** button to select the appropriate maximum output setting.
The LEDs will indicate which of the five values is being selected: 100, 80, 60, 40, or 20.

NOTE: The equalization charge current may be affected. See note under Description for Set Max Output Button.

NOTE: If operating two Truecharge2 Battery Chargers in parallel, configuration settings made via the remote panel or primary charger will be applied to both chargers. Settings cannot be changed via the secondary charger.

Mounting Template

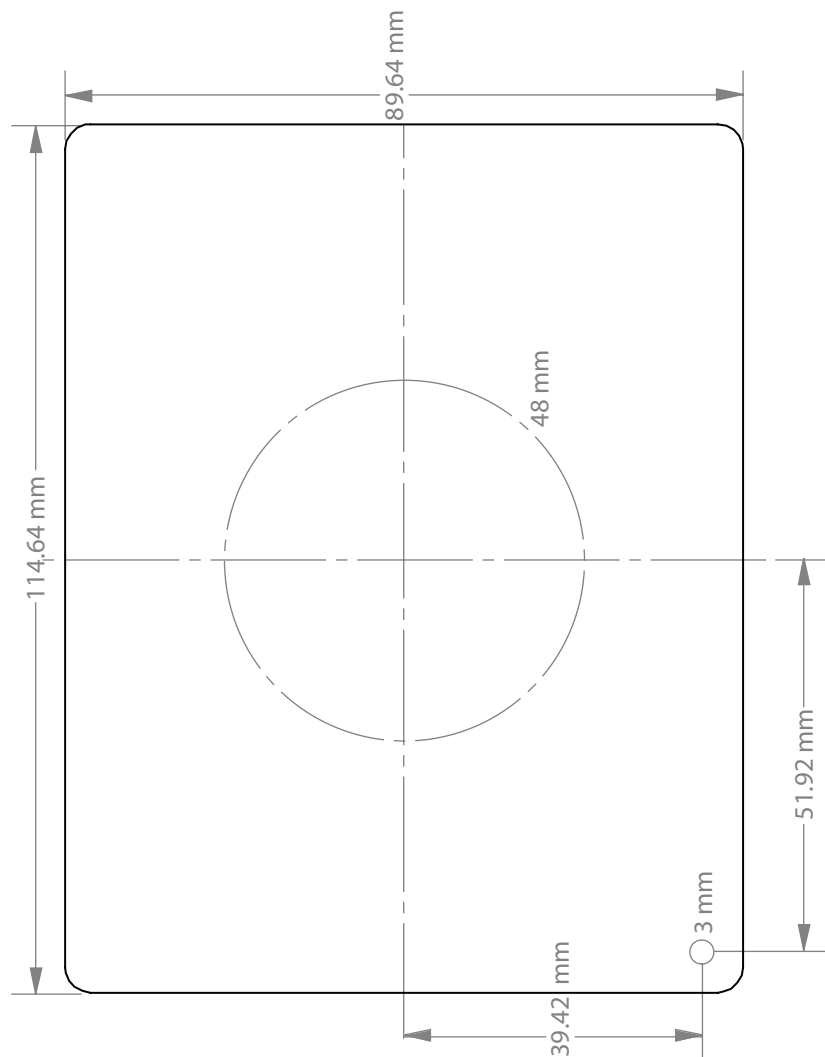


Figure 2 Truecharge2 Remote Panel Mounting Template (1:1)

Technical Specifications

NOTE: Specifications are subject to change without prior notice.

DC input voltage range	+10.5–15 Vdc
Operating DC voltage range	+9–15 Vdc
Input current range	30 mA (60 mA at LED test)
Operating ambient temperature	0–50 °C
Dimensions (L×W×H)	4 ⁹ / ₁₆ × 1 ³ / ₄ × 3 ⁹ / ₁₆ in. (114.64 × 44.39 × 89.64 mm)