

QuiQ 24V Off-Board Battery Charger

SAVE THESE INSTRUCTIONS



FOR SAFETY: Before operating battery charger, read the manual supplied by the charger manufacturer.

Charger Programming Instructions

Estimated time to complete: 5 minutes

NOTICE: For chargers equipped with new machines, the algorithm position is factory set to match the batteries supplied with your machine.

For replacement chargers, the algorithm position is set at position 2 (default).

The charger is pre-loaded with 6 algorithm positions as shown in the chart below.

NOTE: See chart on backside for earlier models equipped with 10 algorithm positions.

Battery Charger Algorithm Chart (6 Positions)		
Algorithm Position of Order	Algorithm ID Setting No. of LED Flashes	Battery Description
1	1	Trojan Flooded w/ temperature sensor
2	3*	Trojan T105 constant power dv/dt (200-250 Ah@20hr lead/acid battery)
3	7*	Trojan J305 constant power dv/dt (>250Ah@20hr lead/acid battery)
4	1-2	Exide/Sonnenschein Gel -240 (220Ah@20hr)
5	2-8	MK 8GGC2 Gel (180Ah@20hr)
6	4-3	Discover AGM

* Common Tennant batteries.

To Check the Current Algorithm ID Setting:

- 1) Disconnect battery connector from battery pack.
- 2) Connect the AC power cord into an AC outlet. At start up, the charger LED will display three self test flashes, one red, one green and one amber, followed by a series of green flashes which is the algorithm ID setting (See Algorithm ID Settings in chart above).

The algorithm ID setting (series of green flashes) will repeat for approximately 11 seconds then end with red flashes (See Examples below).

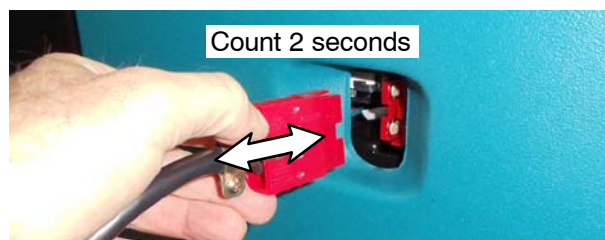
- 3) To recheck the algorithm ID, unplug AC power cord for 15 seconds or until LED stops flashing red then reconnect AC power cord.

To Change the Algorithm ID Setting:

NOTE: Before changing the Algorithm ID setting, confirm current setting as described in first column.

- 1) Plug the charger's AC power cord into an AC outlet.
- 2) At start up, the LED will display 3 self test flashes followed by a series of green flashes (See Examples below). While the series of green flashes are flashing, approx. for 11 seconds, plug the battery connector into the battery pack for 2 seconds then unplug as shown in the photo.

This will advance the algorithm ID setting to the next position in the order shown in the chart.



To continue to advance the algorithm ID to the next position repeat the 2 second plug and unplug process while the LED is still flashing green until desired algorithm ID is reached. Each time you advance to a new setting you have another 11 seconds to continue advancing. While advancing, count the number of green flashes each time to confirm new setting.

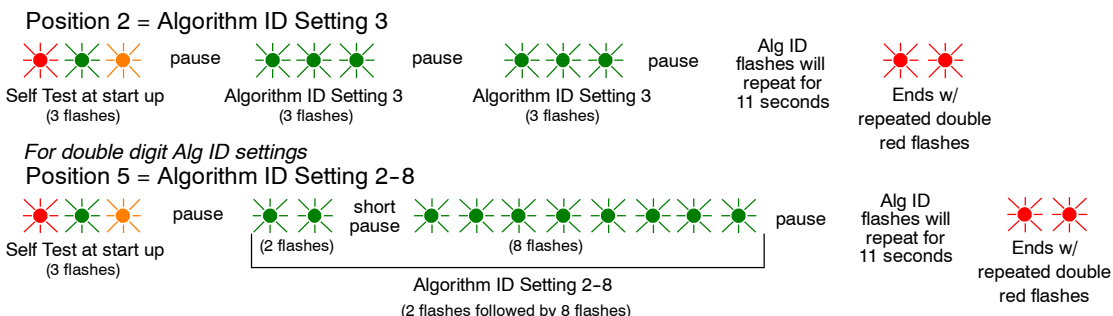
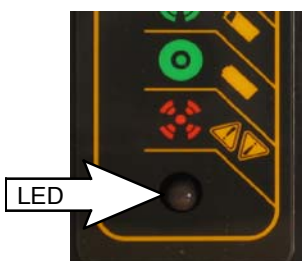
- 3) To store the new algorithm setting, plug the battery connector back into battery pack until the charger relay clicks (approx. 10 seconds). This step must be done during the 11 second span when LED is flashing green.

NOTE: If the LED is flashing red anytime during this procedure you must start over. To start over, disconnect AC power cord and battery connector for 15 seconds to reset charger.

- 4) To confirm the new algorithm is properly set, check the algorithm ID setting as described in the instructions.

Contact Tennant if your battery pack is not supported by the charge algorithms loaded in your charger.

Examples:



Use Chart below for earlier models equipped with 10 algorithm positions:

Battery Charger Algorithm Chart (10 Positions)		
Algorithm Position of Order	Algorithm ID Setting No. of LED Flashes	Battery Description
1	1	Trojan Flooded w/ temperature sensor
2	3*	Trojan T105 constant power dv/dt (200-250 Ah@20hr lead/acid battery)
3	5	Trojan 30XHS
4	6	DEKA 8G31 GEL
5	7*	Trojan J305 constant power dv/dt (>250Ah@20hr lead/acid battery)
6**	8	Concorde 10xAh AGM
	1-2	Exide/Sonnenschein Gel -240 (220Ah@20hr)
	2-6	MK 8GGC2 Gel (180Ah@20hr)
	2-8	MK 8GGC2 Gel (180Ah@20hr)
7	1-1	Generic 224Ah flooded constant power dv/dt (parallel enabled)
8	2-7	Crown CR-325
9	4-3	Discover AGM
10	7-3	Generic 400Ah flooded constant power dv/dt (parallel enabled)

* Common Tennant batteries.

** Depending on how your charger is programmed, position 6 may display algorithm ID 8, 1-2, 2-6 or 2-8.

Refer to page 1 for Charger Programming Instructions.

Examples:

