RD100 - Remote Charger Display

REMOTE CHARGER DISPLAY (USER'S MANUAL)

FEATURES

The RD-100 Remote Charger Display is designed for use in any industrial lead-acid battery charging installation. It provides a remote display of the progress of a charging cycle, allowing convenient monitoring of the operation of a charger in situations where the charger's front panel is not visible to the operator. Significant features include:

Three LED indicators provide a clear display of the state of the charging cycle: CHARGING, 80% CHARGED, CHARGE COMPLETE, COOLDOWN PERIOD COMPLETE.

- * Compatible with all common battery voltages 12, 18, 24, 36, 48 as well as multi-voltage chargers.
- * Easily programmed by the end user for the desired charger voltage no switch settings or other adjustements required.
- * Easily installed only two wires to connect. Wires are Teflon insultated for excellant chemical and abrasion resistance.
- * Cooldown timer indicates that eight hours have elapsed since end of charging cycle.
- Cannot be damaged by connection to battery of incorrect voltage or polarity.

OPERATION

The RD-100 displays the following charging states:

INDICATION	STATE	
NONE		No battery connection
RED	CHARGING	Battery less than 80% charged
RED, YELLOW	80% charged	Battery 80% charged or more
GREEN	COMPLETE	Charger has shut off
FLASHING	COOLDOWN	Eight hours have elapsed since
GREEN	COMPLETE	end of charging cycle



- Connect the two wires to the battery positive and negative outputs of the charger (RED: positive, BLACK: negative). Note that the position lead contains a permanently-installed fuse; if the wires provided are longer than needed, bundle the excess wire with a wire tie rather than cutting.
- 2. Programming the unit for the desired battery voltage: the first time the unit in connected to a battery, it readds the battery voltage and permanently records the battery type. To correctly program the unit, make sure that the first battery connected has a voltage that falls within range specified in the following table

(this applies only to the very first time that power is applied to a new unit):

INPUT VOLTAGE	BATTERY TYPE PROGRAMME
7.0 - 8.5V	(for multi-voltage chargers)
10.0 - 14.0V	12V
16.0 - 20V	18V
22.0 - 28.0V	24V
32.0 - 40.0V	36V
44.0 - 62.0V	48V

- 3. Normally, an RD-100 will only need to be programmed once in its lifetime. However, it is possible to re-program a unit for a different battery voltage (if moving the RD-100 from a 24V to a 36V charger, for example). Perform the following steps to clear the units programming:
 - * With power disconnected, remove the cover and locate the programming jumper in the upper right corner of the circuit board.
 - * Move the jumper so that it connects both pins. Apply power to the unit (any voltage within the unit's operating range). After about one second, the LEDs will begin to flash; this indicates that the unit has been successfully cleard.
 - * Disconnect power. Return the jumper to its previous position (connected to only one of the two pins). The unit is now cleared. Repeat step 2 program the new battery type.

