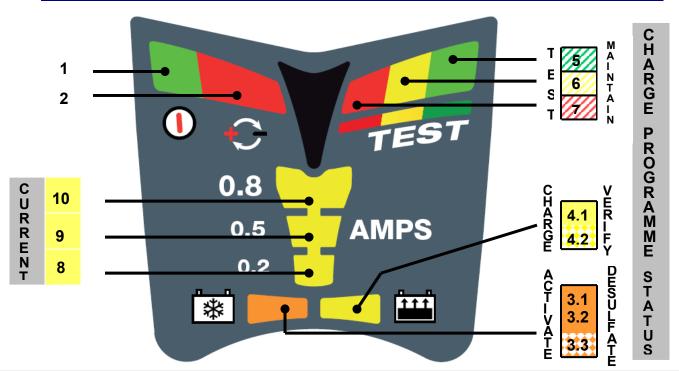
OptiMate 4 QUICK GUIDE - LED INFORMATION PANEL

FULL DETAILS ON ANY LED OR STEP CAN BE FOUND IN THE MANUAL UNDER THE SAME #



- 1. LED #1 Power on. This LED confirms AC power supply to the charger. ALL LEDs EXCEPT # 2, 8, 9, 10 LIGHT BRIEFLY TO CONFIRM MICROPROCESSOR HEALTH.
- 2. LED #2 indicates inverse polarity wrong output connections. Swap around to activate output.

3. CIRCUIT ACTIVATION & RECOVERY OF DEEP-DISCHARGED, NEGLECTED BATTERIES

- 3.1 ACTIVATION If the battery voltage is above 2V, LED #3 lights briefly to confirm circuit activation. FOR MOST BATTERIES LED #3 GOES OUT IMMEDIATELY AND CHARGE LED #4 COMES ON.
- 3.2 RECOVERY For neglected or very flat batteries, LED #3 remains on & indicates steadily.
- 3.3 TURBO RECOVERY For a badly neglected battery TURBO RECOVERY engages & LED #3 flashes. IF STEP 3 HAS NOT CONCLUDED AFTER 2 HOURS, STEP 4 ENGAGES AUTOMATICALLY.

4. CHARGE & CHARGE VERIFICATION

- 4.1. CHARGE: A steady LED #4 indicates the bulk charge stage.
- 4.2. VERIFICATION: LED #4 flashes while the circuit verifies battery charge level. If the battery requires further charging the programme reverts to CHARGE. Multiple reversions may occur. These reversions will cause LED #4 to alternate between steady & flashing, irregularly.

WHEN LED # 4 HAS FLASHED CONTINUOUSLY FOR 30 MINUTES (OR IF STEPS 3 + 4 HAVE NOT CONCLUDED WITHIN 48 HOURS) STEP 5 ENGAGES AND A VOLTAGE RETENTION TEST STARTS.

5. 6. 7. VOLTAGE RETENTION TESTS ALTERNATING HALF-HOURLY WITH BATTERY MAINTENANCE

5. For a good battery LED #5 flashes throughout the 30 minute test. NO CHARGE CURRENT.

6 & 7. Flashing #6 / 7 may replace #5 if the battery voltage falls during the test, or vice versa.

READ § 6 & 7 IN THE MAIN MANUAL IF EITHER OR BOTH LEDS #6 & 7 INDICATE IN THIS PERIOD. MAINTENANCE - FLOAT CHARGE AT A SAFE VOLTAGE LIMIT TO COUNTER SELF-DISCHARGE.

During the 30 minute maintenance charge periods, whichever LED(s) #5 / 6 / 7 was/were flashing at the

end of the TEST now indicate steadily. The battery can draw current as required to support small loads & counter self-discharge.

MAINTENANCE & VOLTAGE RETENTION TEST PERIODS CONTINUE ALTERNATING HALF-HOURLY UNTIL THE BATTERY IS DISCONNECTED. THE TEST RESULT IS UPDATED DURING EACH SUBSEQUENT TEST. 8. 9. 10. CHARGE CURRENT LEDS

LED #8 (0,2A) could indicate if LED #3 (DESULFATE) is on or if LED #4 (CHARGE) is flashing. LED #9 (0.5A) is normally on during the early part of the charge verification with LED #4 flashing. LED #10 (0,8A) should indicate together with a steady LED #4 (CHARGE) during bulk charge.

IF ANY LEDs #8/9/10 ARE ON & ANY LEDs #5/6/7 ARE ALSO ON, READ "NOTE" IN MANUAL AFTER \$10.

On battery disconnection, all LEDs (except # 2, 8, 9, 10) light just briefly to confirm microprocessor reset.