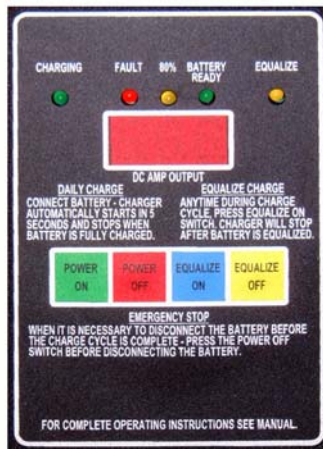


## 164 Control (046-0164)



### Display Capabilities

- LED display test at startup
- Digital LED output ammeter
- Charging, Fault, 80%, Battery ready, and Equalize LED's
- Digital Fault LED readout indicating ten numeric fault codes
- Delayed Start time remaining
- End of charge Voltage, Amps, Run time, Total Amp-hours

### Features

- Fully automatic, utilizes  $dV/dt$ - $dI/dt$  termination of charge  
The control will start charging approximately 5 seconds after the battery is connected. Charge cycle termination is controlled by the slope of the battery's voltage with relationship to time. The nearer to fully charged, the flatter the charge voltage curve.
- Wrong battery voltage-discrimination  
If a battery with too many or too few cells is connected, the charger will not start.
- Jump start for dead batteries  
Using battery voltage-discrimination requires a means to initiate the charge cycle if a properly sized battery is deeply discharged and the charger cannot see it.
- Thermal runaway protection (hot battery shutdown)  
If a battery starts to overheat, its voltage will drop, and at the same time, the charge current will increase. This will be sensed by the control, and the charge cycle will terminate under fault.
- Watchdog circuit for microprocessor or time faults  
If the microprocessor fails, or if it takes too long to reach certain milestones during the charge cycle, the control will terminate the charge.
- High DC voltage shutdown  
Factory setting of 2.80 volts per cell
- Timed delay start (0-12 hours).  
Prevents opportunity charging or delays charge until after AC Peak Demand Periods
- Zero DC current shutdown (disconnected battery)  
If the battery is disconnected during the charge cycle, the loss of current flow is sensed and the charger is de-energized.
- Manual/Auto equalize (by number of cycles)  
In addition to the manual equalize keypad button, a default factory setting of automatic equalize every 7 charge cycles is set on the control.
- 12 hour refresh (automatic re-charge cycling)  
Allows the charger to cycle on every 12 hours and refresh the battery as long as it remains connected to the charger.  
Refresh cycles will not add to auto Equalize count. The 80% light during standard charge is on solid, but will flash during refresh to allow operator to select battery if needed
- Membrane Keypad Buttons (Eliminates broken switches)
- Dip Switch Programmable for simple setup