

## WARNINGS

Blower blades can be quite sharp and can cut fingers or self destruct if impeded.

Use only brushless fans or blowers in the explosive atmosphere of a battery compartment. Fuses, switches and circuit breakers in the compartment must be rated for explosive atmosphere.

Use suction blowers, preferably remote from the battery compartment, to keep the batteries under negative air pressure so air sucks in any compartment leaks rather than blowing hydrogen out.

## FEATURES

- \* Ventilates enclosed battery compartments, especially for lead-acid batteries, to remove explosive gasses and acid fumes, excess heat and humidity.
- \* Turns on automatically when the battery approaches its gassing voltage of 14 (or 28) volts or higher.
- \* After charging ceases it starts a 15 minute drying cycle.
- \* Shuts down automatically at the end of the drying cycle.
- \* Draws no current when blowers are off.
- \* Draws only 0.15 amps when on.
- \* 12 or 24 volt adjustable input.
- \* Up to 50 amps output at battery voltage.
- \* The controller can be mounted in the battery compartment or at a remote location. It is waterproof and sealed for the corrosive or explosive atmosphere.
- \* A green LED indicator light shows when the blower is operating.
- \* A red LED shows over temperature, low battery voltage or failure conditions.

## INSTALLATION

**CAUTION:** When first connecting the controller to the battery it may turn on and complete a drying cycle. To avoid accidents, sparks or short circuit, connect the blower(s) first.

1. Mount in a convenient location. Access and visibility are not required. It comes with 24" power cables and ground lead.
2. SET THE VOLTAGE. The controller is supplied set for 12 volt batteries. To change to 24 volt operation cut both of the two small gauge loops of wire. Leave sufficient wire to re-join if it ever needs to revert back to 12 volts.
3. Connect the light gauge black wire to battery negative.
4. Connect the blower(s) positive to the white cable. The blower voltage must match the battery voltage with a maximum load of 50 amps. The negative side of the blower(s) connects to battery negative.
5. The red positive input cable connects to battery positive. A fuse or circuit breaker of a rating to match the blower load may be placed between the battery positive and the red wire. If located in the battery compartment the fuse or breaker must be rated for explosive atmosphere. If desired an on/off switch can be placed between the battery positive and the controller. Again, if located inside the battery compartment it should be rated for explosive atmosphere.
6. If you require a manual ON control to run the blowers when not on charge, just connect a "by-pass" switch between the battery positive and the blowers (between the red and white leads). Remember when you turn this switch off the blowers will continue running if a drying cycle is in progress.

## OPERATION

Operation is fully automatic. It will power the blower(s) when the charging voltage approaches the gassing level. It will turn off about 15 minutes after charging is finished and the voltage has dropped.

## TROUBLE SHOOTING

### BLOWER NEVER TURNS ON

Check the voltage on the controller between the black ground wire and the red input cable. If that voltage stays above 14 (or 28) volts for at least 30 seconds it should turn on and the green LED should be visible.

Check blower operation by bypassing the red and white cables.

### THE BLOWER REQUIRES MORE THAN 14 OR 28 VOLTS TO TURN ON

There is a time delay for turn on to prevent triggering on voltage spikes. The voltage has to stay above the turn on level for about 30 seconds. If it fails to turn on, repeat the above voltage measurements to make sure power is getting to the controller and staying above the 14 or 28 volt threshold.

### THE BLOWER RUNS MORE THAN 15 MINUTES

The blower timing components are not precise. Variations up to 25% are possible and not critical for normal operation.

If the batteries are supporting a load and being maintained by a smart charger it may be cycling back to the bulk stage periodically to maintain the batteries and this can re-start the timer.

Large batteries with only a small blower for a load may remain above the switching threshold for an extended time before the voltage falls enough to end the timing cycle.

### THE TIMER RUNS ONLY FOR A FEW MINUTES

If the battery voltage dropped suddenly due to an applied load just as the a drying cycle was starting the 15 minute cycle may not have had time to set up.

If the red LED is on it can indicate a thermal or voltage overload which can cancel the timer.

## SUPPORT

Support is available from [tech@yandina.com](mailto:tech@yandina.com) or toll free at 877 355 2184.

## WARRANTY

Yandina products carry an unconditional warranty. If it ever fails to operate for any reason, return for repair or replacement at no charge.

Check with support first for trouble shooting assistance. Return address can be found at [www.yandina.com/AboutUs.htm](http://www.yandina.com/AboutUs.htm).