INSTRUCTIONS FOR USING IOTA CHARGER WITH 120VDC MICRO HYDRO

When using the Iota, it is important to keep the charger "loaded" that is, connected to the battery and charging all the time. Failing to do this, will result in permanent damage to the Iota when the input voltage goes above 200V. this will happen with our 96V unit, if your pressure is greater than 43psi or 100 feet.

- 1. Always use a shunt regulator with a resistor or water heating element to absorb the excess power. Do not use a series regulator.
- 2. Your Iota has been preadjusted by your supplier or by me to put out 16, 32, or 64V, depending on your battery voltage. If your Iota has not been preadjusted, it will be destroyed by the high input voltage of the hydro once your battery is charged. If you have to replace your Iota, *do not use a replacement without having it adjusted*.
- 3. <u>Always turn the hydro off when working on battery system</u>. The Iota can be unplugged in an emergency situation but it is not advisable to leave the hydro running open circuit.
- 4. The Iota comes with fuses. Connect directly to battery or bus bar. Avoid breakers that can be turned off accidentally, which will damage the unit.
- 5. Make sure all connections are tight and check connections for heat after unit has been running. Turn off and retighten bad connections.
- 6. The unit will fail if the fan is stopped by foreign objects, such as leaves, sticks or mice. Mount sideways in a protected place to reduce damage.
- 7. Meters to measure the output induction, inline or shunt are available from your dealer or from us.