

## BATTERY BOOST-CHARGING / JUMP-STARTING

The MOBI-ARC Control Unit can provide regulated voltage at 100% of the alternator's current capability for efficient BATTERY BOOST-CHARGING and vehicle JUMP-STARTING applications.

The 16-Pin Receptacle denoted as "MODE SELECT" is located on the back of the Control Unit. MODE SELECT Modules can be inserted which program the MOBI-ARC Control Unit to create specific regulated voltage from the welding receptacles at 100% of the alternator's current capability. Standard MODE SELECT Modules are programmed for 14 volts, 28 volts, 36 volts, and 42 volts. Any voltage requirement between 0 and 42 volts can be custom engineered. Please contact the manufacturer.

### When Jump-Starting, please adhere to the following safety conditions:

- Wear protective eyewear and clothing and remove all jewelry.
- No smoking, open flames or sparks should be allowed near the battery.
- Never attempt to jump-start a car if gasoline fumes are present either around the source vehicle (good battery) or the dead vehicle.
- Check the water level in the dead vehicle's battery and fill if needed.
- Use extreme caution with jumper cables!
- Avoid connecting cables in reverse polarity.
- Do not let the vehicle bumpers touch.
- Turn the source vehicle off before making any jumper cable connections between the two batteries.
- Clean the battery terminal surfaces of corrosion to ensure clean and quick connections.



To jump-start a vehicle with a 12 volt negative ground, the jump-starting voltage should not exceed 14.7 volts. Insert a 14 volt MODE SELECT Module and the Unit's output voltage will not exceed 14.7 volts, regardless of RPM.

1. Insert 14 volt MODE SELECT Module in 16-Pin receptacle.
2. **Adhering to correct polarity**, connect stinger positive to the positive terminal of the dead battery.
3. **Adhering to correct polarity**, connect ground clamp to the negative terminal of the dead battery.
4. Connect welding leads into welding sockets on the front of the MOBI-ARC Control Unit; adhere to polarity: stinger positive, ground negative.
5. Start the source vehicle, increase RPM to about 2,000 and allow two to five minutes for the dead battery to charge a little.
6. Start the dead vehicle and remove the cables in reverse order.



### IMPORTANT

Do not Jump-Start or Boost-Charge without the proper MODE SELECT Module inserted. Damage to vehicle, battery, or the MOBI-ARC may occur. With module inserted, normal battery charging cannot resume. Do not leave module permanently inserted.

The chart below illustrates the MOBI-ARC Control Unit's output levels:

MODE SELECT MODULE	VOLTAGE OUTPUT	IDEAL CHARGING SYSTEM	CURRENT LEVEL
<b>NOT INSERTED</b>	<b>42v</b>	<b>DO NOT JUMP</b>	<b>100% of ALT. CAPABILITY</b>
14v Module	14.7v	12v	100% of ALT. CAPABILITY
28v Module	28.7v	24v	100% of ALT. CAPABILITY
42v Module	42v	42v	100% of ALT. CAPABILITY

While a MODE SELECT Module is inserted, standard charging of the vehicle's battery is disabled; all alternator current is flowing through the welding receptacles at the specified voltage. Upon removal of the MODE SELECT Module, standard charging of the vehicle's battery will resume after a thirty-second delay.

