

# Warning!!!

This charger is connected to high voltage electricity which can injure or kill. We strongly recommend installation by a qualified marine electrician.

Start Here

Wall Mount  
Allow room for ventilation

Mount charger. Allow at least 3" clearance on bottom for cable routing and cooling. Refer to Table 1.



## Mounting (Table #1)

Screw length: 1" min  
Screw diameter: ¼" min

Connect Remote Display

Consult remote display instructions. Connect display to provided jack. Note: Jack is not Ethernet.

Connect optional battery temperature sensors

Ring lugs are positioned over power conducting posts on either battery terminal. Connect other end to Easy Change Connector. Observe polarity and bank number. Consult remote battery temperature sensor instructions.



Connect DC Batteries

- Common Ground Only Negative Ground System -  
Use only appropriate gauge wire (see table 2) and ring lugs. Remove DC cover. Connect to any of the four banks. Place Red Insulating Caps over positive terminal wires, Black Insulating Caps over the negative terminal wires prior to installing. Tighten to 75 in-lbs. Position Insulating Caps properly over the studs. Secure cable with strain reliefs.

## Connection Wire Gauges in AWG (Table #2)

Model	120 VAC Input			240 VAC Input			DC Output	
	25'	50'	100'	25'	50'	100'	15'	25'
93-IMC20-A	18	16	14	18	16	14	12	12
93-IMC40-A	14	12	10	16	14	14	8	6
93-IMC60-A	12	10	10	14	12	12	6	4

Label DC cables with provided material

Place provided labels around wire to form a flag to identify bank.

Connect AC Power Source

**Warning: HIGH VOLTAGE**  
Turn off AC power source. Use only appropriate gauge wire (see table 2) and ring lugs. Remove AC cover. Place ring lugs over appropriate terminals. Tighten to 75 in-lbs. Secure cable with strain reliefs. Replace AC & DC covers before turning on AC power.

You are now ready to perform initial configuration. To configure the system, you will need the following for each bank:  
• Battery voltage • Battery type • Maximum charging amps  
Follow the instructions on the other side of this guide.  
Note: The charger will not operate until configured.

# Configuring your IMC Charger

You must have your IMC Charger mounted and wired.  
See instructions on flip side of this sheet.

Configuration

Turn Charger ON

Enter Setup Mode

Follow Flow chart below

If display is blank, press and hold the ON button for 3 seconds to turn on charger. Wait for startup messages to complete.

Press **↵** to enter setup mode

Use the buttons as described in table 3.

## Button Functions active during Setup (Table #3)

Up Arrow    ↑ Moves icon up /increases level  
Down Arrow   ↓ Moves icon down /decreases level  
Enter        ↵ Moves to next menu  
Back Arrow   ← Backs up one menu

**Bank Summary**  
Shows nominal voltage for all banks and set battery type.

**Individual Summary**  
Shows battery type, nominal voltage, and max amps

**Enable Bank**  
Enable only banks that are used

**Bank Voltage**  
Select nominal bank voltage

◀Edit 12v 0off  
Next 00off 0off

Next

F Display  
◀C Temperature

Temperature

◀On Audio Beep  
Off and Alarm

Audio

◀On Password  
Off Enable

Password

Protects setup (Refer to owner's manual when enabling password)

◀Save Settings  
Off Cancel

Save Changes

**Battery Type**  
AGM, Lead Acid, NiCAD, Gel or Fixed Bank Output mode

Battery Type B1  
◀Fixed Output →

Tip: "B1" indicates Bank 1 is being modified

- Customize Voltage**
- 1<sup>st</sup> ..Customize the Bulk/Equalize output voltage
  - 2<sup>nd</sup> ..Customize the Float voltage (n/a in Fixed Bank Output mode)

Bulk Voltage B1  
12.0 15.5 14.3v

Float Voltage B1  
12.0 15.5 13.6v

**Bulk Charge Duration**  
Set the time the charger will stay in Bulk Charge (Equalize for NiCADs)

Bulk Duration B1  
10.0 10.0 2.60

**Maximum Amps**  
Set the maximum amps the bank will supply

Maximum Amps B1  
15 40 22A

**Equalize Cycle**  
Set the number of days between Equalize Cycles

Equalize Cycle B1  
17.0 30.0 13.00

**Summary**  
After making your selections, you are returned to the Individual Summary

◀Edit Bank 1 FBO  
Next 24v 20A

- Selecting "Edit" will return to modifying this bank.
  - Selecting "Next" will advance to next bank.
- After the 4<sup>th</sup> bank, system returns to the Bank Summary page (near start of flow chart)

## Normal Operation

The IMC Charger employs a round robin approach to battery charging. During normal operation, each bank is charged individually, with the current bank being charged displayed on the screen along with important bank statistics. All enabled banks are automatically charged one at a time using repeating short charging intervals. The length of the charging interval varies based on the bank's current charging requirements.  
\* Charger will not overcharge batteries. \*

## Typical Display during IMC Charger Operation

Bank Number currently being charged

Battery Voltage

Battery 28.6v  
32c 17A

Output Amperage

Optional External Temperature Probe measurement