

## ME70BT OWNER'S MANUAL



### ME70BT IPX6 Marine Amplifier with Keypad Display

#### FEATURES

- 200-Watt 4x50W Amplifier
- Waterproof design IPX6
- USB Charging
- USB Audio Player
- A2DP player (AVRCP 1.4)
- Graphic Display Wired Remote
- 2 Zones with Low and High pass filters
- Balance and fade control for zones
- Drives 8, 4 or 2 Ohm speakers
- BT3.0HS/BT4.0 EDR
- 4.5" Remote size
- Silicon rubber sun/dust cover included
- RCA Auxiliary Audio Input
- 10 EQ presets
- Line-in player
- Amp NMEA 2000 Compatible
- Remote control interface
- Software Field upgradeable by USB
- Full metadata display
- 2 Zones with individual volume and EQ
- Configurable Subwoofer channels
- 100 meter Bluetooth range
- 2.4" LCD with adjustable backlight

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## INSTALLATION

### **Mounting the Amplifier:**

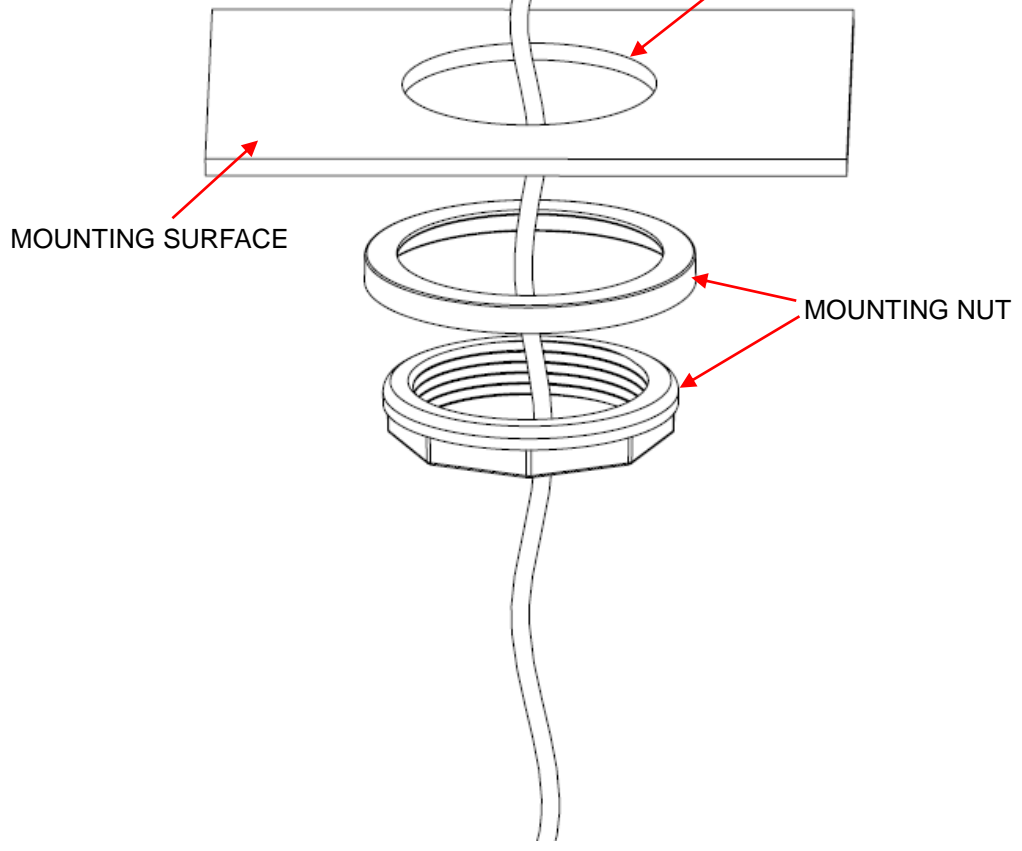
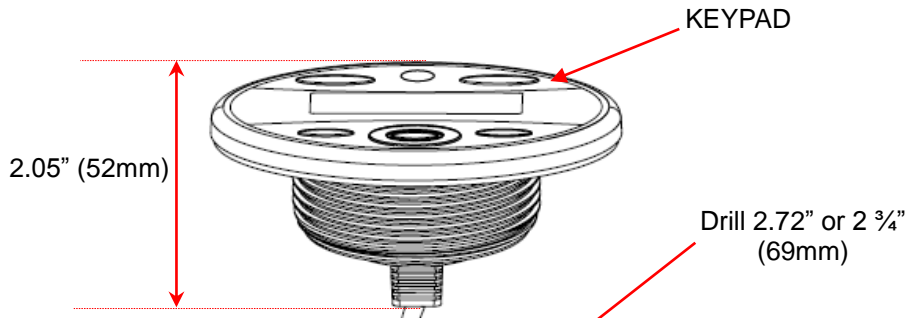
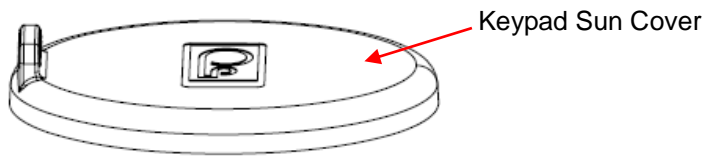
- 1) Choose a mounting location that is well ventilated. The Amplifier generates significant heat when operating at high power levels.
- 2) It is preferable to mount the unit such that the ventilation fins are vertical or facing upward.
- 3) Drill 1/8" (3mm) pilot holes in the mounting surface corresponding to the 2 mounting holes of the amplifier. Be sure not to drill into any critical areas of your boat or spa or vehicle.
- 4) Fasten the amplifier to the surface securely using the 2 included tapping screws.
- 5) Plug in all wiring harnesses and cables. Refer to the wiring diagram on page 5 for wire harness connection types.

*Tip: When a suitable ground wire is not present in the vehicle wiring harness. Connect the black ground wire to the vehicle chassis.*

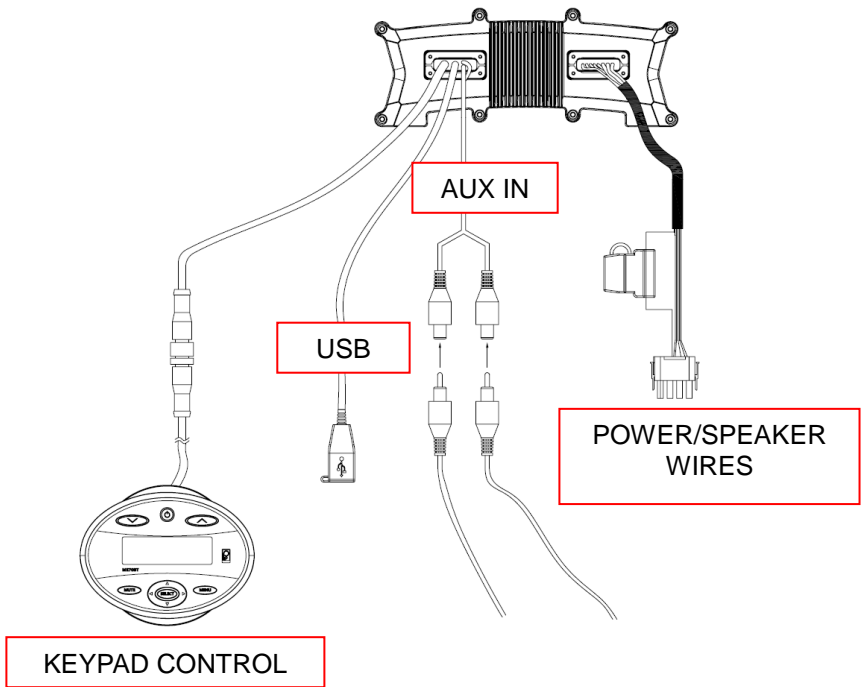
*Fuse: When replacing the fuse, make sure new fuse is the correct type and amperage. Using an incorrect fuse could damage the radio. Please use Spare fuse included in this package.*

### **Mounting the Keypad Control:**

- 1) Choose a mounting location with a flat surface the size of the keypad control body
- 2) There must be at least 2.05" (52mm) of clearance behind the mounting area
- 3) Drill a 2.75" or 2 3/4" (69mm) hole making sure that there is nothing behind the surface that could be damaged.
- 4) Run all cables, make connections, and test the entire system.

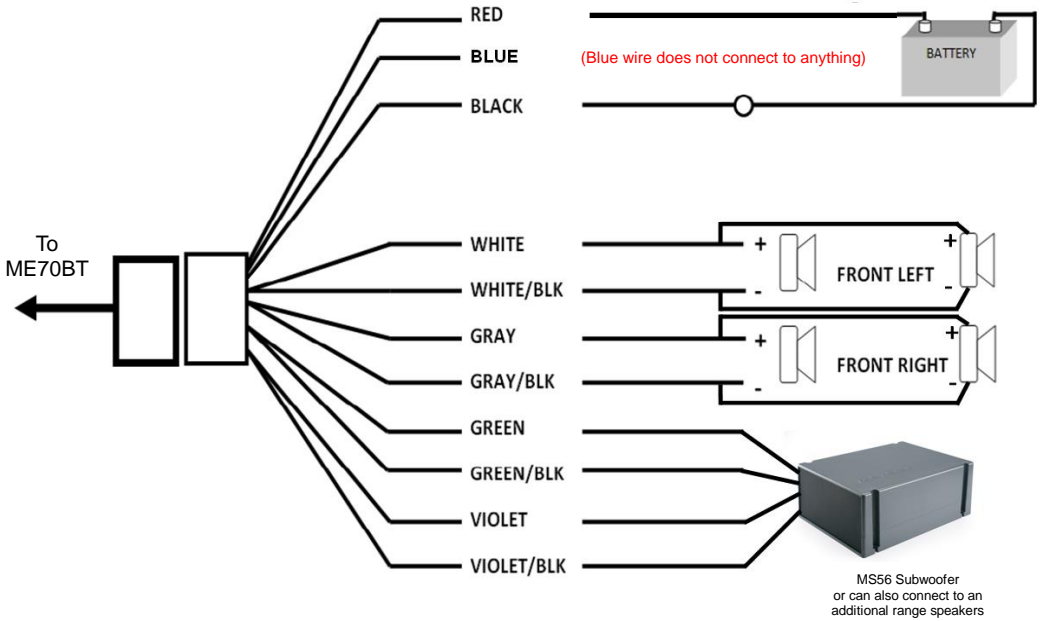


## WIRING DIAGRAM



### Wiring Details:

Use the wired plug end (Pigtail) provided to make power and speaker connections according to the diagram below. Using this connector will make it easy to disconnect the amplifier for adding additional features or service. Removing the factory plug end will void warranty.

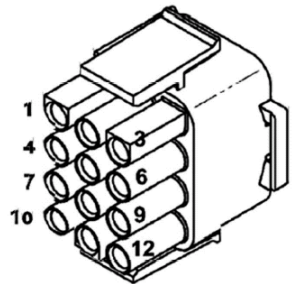


**Wire Color**

- Red
- Green w/stripe
- Green
- BLANK
- White w/stripe
- White
- Blue
- Gray w/stripe
- Gray
- Black
- Violet w/stripe
- Violet

**Function**

- 1 B+ (+12VDC)
- 2 Rear Left Speaker-
- 3 Rear Left Speaker+
- 4 BLANK
- 5 Front Left Speaker-
- 6 Front Left Speaker+
- 7 (Blue wire does not connect to anything)
- 8 Front Right Speaker-
- 9 Front Right Speaker+
- 10 Ground (Neg)
- 11 Rear Right Speaker-
- 12 Rear Right Speaker+



**Power Wire Specifications:**

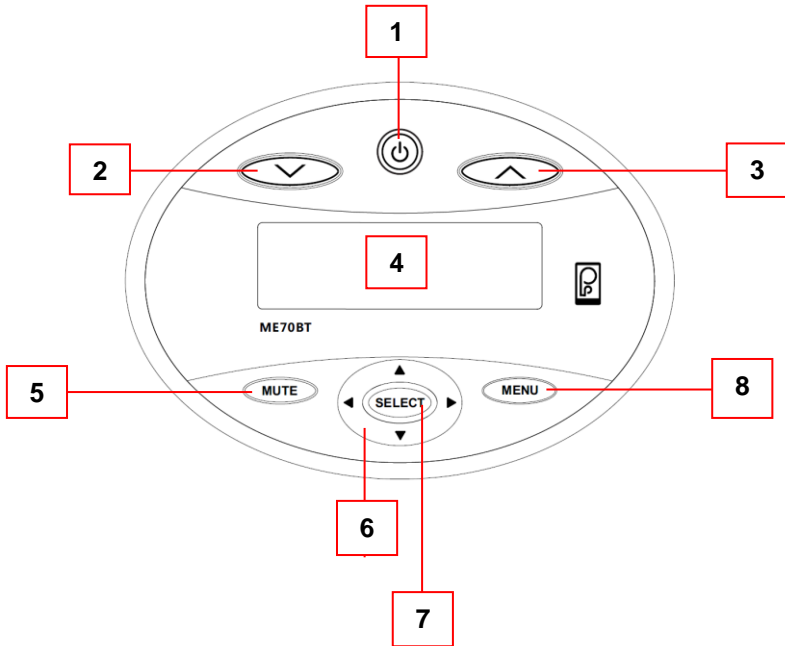
**Red Wire** - Connect this wire to a +12V.

**Black Wire** - Connect this wire to the negative battery terminal or other good power ground.

**Notes:**

- Use the included plug/wire bundle to connect to the power source and speakers.
- The Red and Black power wires should be 16AWG or larger depending on the length to the battery. NEVER operate the unit without the proper power and ground wire.
- NEVER ground the speaker leads and NEVER allow the speaker leads to come in contact with each other. The speaker wire should be at least 20 gauge or larger. Be sure to observe the correct polarity on the speaker connections
- Use quality crimp connectors to connect wires together. Seal the connection well with electrical tape.
- NEVER operate the unit without proper fusing. Fuse holder must be located within 2 feet from the battery. This fuse is to protect the vessel, not the electronics. In case of a short, the fuse will blow instead of the wire burning up. Using other than the recommended fuse ratings at the battery and at the unit may cause damage to the unit and will void your warranty.
- Whenever possible, use cable ties, mounting clamps and similar wiring aids. Adding stress relief loop to wiring is also advisable to prevent straining or breakage.
- If after reading the directions you feel uncomfortable about installing the unit, or not equipped or competent to do so, you should have this installed by a professional installer
- Connect the white and grey speaker wires to 1 or 2 pairs of speakers. Pay close attention to polarity (black stripe = negative)
- Connect the green and purple speaker wires to 1 or 2 pairs of speakers or to a subwoofer if the low pass filter switch is set

## BASIC OPERATION



**1** – Power Button – press to turn on the unit. Press and hold to turn off the unit

**2** – Volume down - Press ▼ button to decrease volume level

**3** – Volume up - Press ▲ button to increase volume level

**4** – LCD Display - Exhibits current frequency and activated functions on the display

**5** – Mute - Press MUTE button to mute audio level. Press the button again to release mute function.  
- Mute + Menu pressed simultaneously shows software version

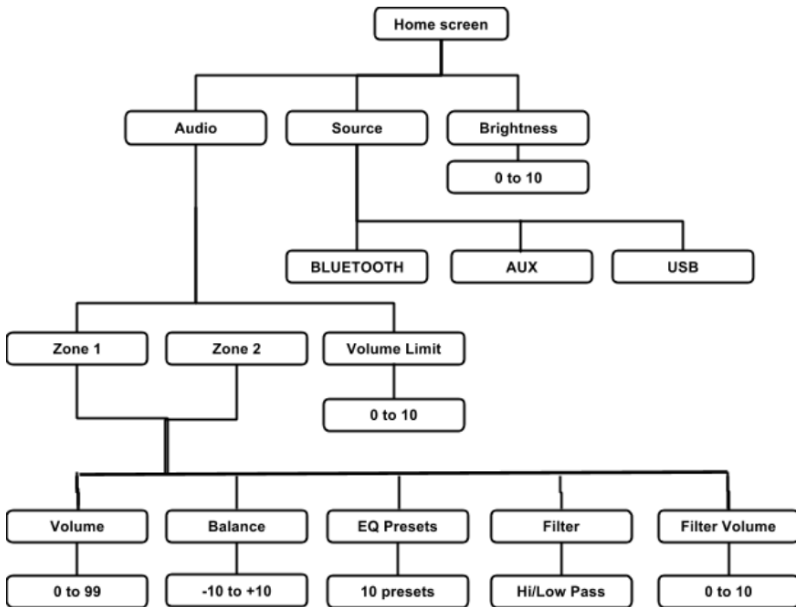
**6** – Navigation Control  
**UP** - Navigates UP in the menu



- LEFT** - Goes back in menu  
 - Rewind song when press and hold  
 - Previous song when pushed in player
- DOWN** - Navigates Down in Menu
- RIGHT** - Goes forward in menu  
 - Fast Forward song when pressed hard  
 - Next song when pushed in player

**7** – Select Button – Selects a menu choice, used also to pause and play

**8** – Menu – for Menu Functions (see diagram below)



**AUDIO ZONE SETTING** *(This unit is equipped with 2 zones setting)*

Press **MENU** button then press **SELECT** button then choose ZONE 1 or ZONE 2 by using **NAVIGATION CONTROL** button.

- Zone 1** - for front speakers/subwoofer setting
- Zone 2** - for rear speakers/subwoofer setting

Each zone has its own independent setting for volume, balance, EQ presets, Filter and Filter Volume. Use **NAVIGATION CONTROL** button to adjust to

your desired setting and press **SELECT** button to confirm.

**Volume** – for setting a default volume

**Balance** – use this to balance your right or left speaker

**EQ Presets** – use this to set your desired equalizer setting

**Filter** - Off – set filter to off

- High Pass Filter – used for regular speakers

- Low Pass Filter – use this setting when connecting subwoofer

**Filter Volume** – to set a default bass gain trim. As a rule, keep the gain setting as low as possible while still ensuring that the system will reach full output power

### AUDIO SOURCE SELECTION

Press **MENU** button then use **Navigation Control** button to choose between Bluetooth Mode, USB mode or AUX IN mode then press **SELECT** button to confirm

### ADJUSTING BRIGHTNESS ON THE DISPLAY

Press **MENU** button then use **Navigation Control** button to select brightness setting then press **SELECT** button to confirm

### DISPLAY SOFTWARE VERSION

Mute + Menu pressed simultaneously shows software version

### NMEA SETTING

To convert amplifier to NMEA only mode, the 8 fasteners holding the plastic case to the heatsink must first be removed to allow access to the PC board. In upper right corner of board (picture below) are two jumpers. Amp is shipped with top pin set to middle pin on both jumpers. To convert to NMEA only mode, the jumpers must be set middle pin to bottom pin.



Once converted, the ME70BT Amp is ready to be connected to NMEA 2000 bus via male to male NMEA stub connector (*sold separately*).



NMEA stub connector (*sold separately*)

Once connected, the ME70BT Amp is ready to be controlled by applicable NMEA 2000 MFD's

## USB OPERATION

### SWITCHING TO USB MODE

If there is no USB inserted in the driver:

Insert a USB through the USB port located at the back of the unit then Press **MENU** button then use **Navigation Control** button to change to USB then press **SELECT** button to confirm

If a USB is already inserted in the driver:

Press **MENU** button then use **Navigation Control** button to change to USB mode then press **SELECT** button to confirm

### SELECTING A SONG

Press **Navigation Control button** to select a song.

### PAUSE FUNCTION

Press **SELECT button** to pause play. Press **SELECT button** again to resume play.

## MUTE FUNCTION

Press **MUTE button** to stop the sound. Press **MUTE button** again to resume the sound.

### IMPORTANT NOTE:

*Some USB devices may not be compatible with the unit.*

*Some USB devices may take more than 45 seconds to initiate after plugging in. If this happens, try to remove the USB memory stick and insert it again.*

### CAUTION

If there are important files in the USB device, do not connect it to the main unit to play. Any wrong operation may cause file loss. Our company assumes no responsibility for lost files or directories.

|                   |                                             |
|-------------------|---------------------------------------------|
| <b>Media type</b> | USB (can support USB3.0)                    |
| <b>Capacity</b>   | Up to 300 songs and must be .mp3 songs only |

## BLUETOOTH OPERATION

**On the Amplifier** - Press **SRC button** or **MENU button** to change to Bluetooth (BT) mode.

**On your Bluetooth music device** – Turn on or enable Bluetooth feature then open Bluetooth setting for pairing. Choose “Poly-Planar” from the list of available Bluetooth link.

Once connected, you can now start playing your favorite music from your Bluetooth music device.

If available, Press **▶▶** or **◀◀** **button** to select a song

Connecting distance is up to 100 meters (will vary, dependent on installation)

Pairing distance is 12 – 15 meters

## PAUSE FUNCTION

Press **BND button** to pause play. Press **BND button** again to resume play.

### IMPORTANT NOTE:

*Some Bluetooth-enabled devices may take more than 45 seconds to initiate after pairing or does not pair at all. If this happen, try to turn off the stereo and the device and pair it again.*

The head unit supports A2DP wireless streaming audio from a Bluetooth music device to Poly-Planar unit.

## AUX IN OPERATION

This unit can be connected to any portable music devices such as MP3 Player or smartphone devices through the AUX IN located at the back of the unit.

Press **MENU** button then use **Navigation Control** button to change to AUX mode then press **SELECT** button to confirm

*Please note: In this mode, all controls and functions must be controlled from your music device.*

## TROUBLESHOOTING

| ISSUE                            | OPTIONS                                                                                                                                                       |
|----------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Unit will not turn on (no power) | CAUSE: Red wire not connected or incorrect voltage<br>ACTION: Check connections for proper voltage (11-16V DC)                                                |
|                                  | CAUSE: Black wire not connected<br>ACTION: Check connection to ground                                                                                         |
|                                  | CAUSE: Fuse blown<br>ACTION: Replace the fuse                                                                                                                 |
| Unit has power (but no sound)    | CAUSE: Speaker wire not connected<br>ACTION: Check connections at speakers                                                                                    |
|                                  | CAUSE: One or more speaker wires touching each other or touching chassis ground<br>ACTION: Insulate all bare speaker wires from each other and chassis ground |

|                  |                                                                                |
|------------------|--------------------------------------------------------------------------------|
| Unit blows fuses | CAUSE: Red wire touching chassis ground<br>ACTION: Check for pinched wire      |
|                  | CAUSE: Speaker wires touching chassis ground<br>ACTION: Check for pinched wire |
|                  | CAUSE: Incorrect fuse rating<br>ACTION: Use fuse with correct rating           |

## TECHNICAL SPECIFICATIONS

***NOTE: Specification & design subject to change without notice for improvements.***

|                                    |                                         |
|------------------------------------|-----------------------------------------|
| Speaker impedance                  | 2-8 ohms                                |
| Output power (2 ohm load)          | 4x55W (80W max 10% distortions)         |
| Output power (4 ohm load)          | 4x30W (50W max 10% distortions)         |
| EQ presets                         | 10                                      |
| Crosstalk                          | >65dB                                   |
| Operating voltage                  | 10.5V - 16V DC                          |
| Max current draw at full power out | 9-15 amps                               |
| Dimensions                         | 8' wide X 3' high X 4.3' deep           |
| Weight                             | 2.0 lbs.                                |
| Installation clearance             | 10 inches space around heat sink        |
| Bluetooth version                  | BT3.0HS/BT4.0 EDR                       |
| Bluetooth Profiles                 | HS/HF, A2DP, AVRCP, OPP, DUN, SPP, etc. |
| Bluetooth Range                    | 100 meters                              |
| Communications                     | RS485 or CAN 2.0 (NMEA2000)             |
| Sources                            | USB, Bluetooth, AUX                     |
| Waterproof Rating                  | IPX6                                    |
| Charging Voltage                   | Standard 5V USB power spec              |

## WARRANTY INFORMATION

This unit is warranted to be free of defects in material and workmanship for a period of two years. Warranty is subject to proper installation and operation within the published specifications. Except as provided below, Poly-Planar will repair or replace, at its discretion, any unit returned prepaid to our facility with proper documentation and determined to be defective in normal use. Poly-Planar is not liable for any consequential damages.

### LIMITS OF LIABILITY

Proof of date of purchase is required for warranty service of this unit.

Poly-Planar will consider this warranty void if unit has been tampered with or has had serial number altered, defaced or removed. Poly-Planar warranty does not cover damage incurred in transit, accident, abuse, misuse, negligence, fire, flood, lightning, or unauthorized service. This warranty assumes no responsibility for damages incurred during installation of this equipment. This warranty does not cover labor costs for removal of defective unit or reinstallation of replacement unit. This warranty covers normal consumer use only. In no event shall Poly-Planar be liable for special, incidental, or consequential damages.

To obtain service under this warranty, please call Poly-Planar for a **RETURN AUTHORIZATION NUMBER**. After a return authorization number is issued, return unit with proof of purchase and a letter stating your return address, daytime phone number and detail description of the problem or malfunction

***poly-planar***  
Maryland, USA  
(410) 761-4000  
[www.polyplanar.com](http://www.polyplanar.com)









**WARRANTY REGISTRATION**

To validate your Warranty please complete your warranty registration within 1 week of purchase. Please go to <http://www.polyplanar.com/content/warranty-registration> or Detach this registration card and mail it to Poly-Planar Group, LLC P.O. Box 409, Hanover, MD 21076

|                                  |  |              |                          |
|----------------------------------|--|--------------|--------------------------|
| SERIAL NUMBER( <i>optional</i> ) |  | MODEL NUMBER | DATE OF PURCHASE         |
| LAST NAME                        |  | FIRST NAME   | EMAIL( <i>optional</i> ) |
| STREET ADDRESS                   |  |              |                          |
| CITY                             |  | STATE        | ZIP                      |
| DEALER                           |  | CITY         | STATE                    |

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