

## GSMR20 OWNER'S MANUAL



### FEATURES

- AM/FM/Radio/Preset
- 180 Watts Max Power
- Pre-Amplifier Outputs
- Splash Proof LCD Display
- Bluetooth Audio Streaming (Bluetooth 3.0)
- A2DP Audio Streaming
- USB/AUX Input
- IPX5 Rating

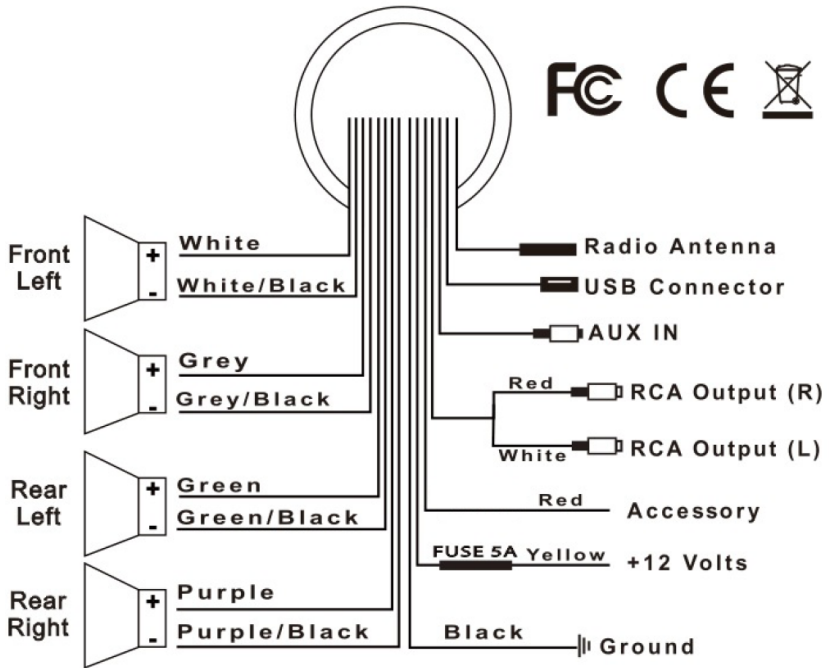
### THIS PACKAGE CONTAINS

- |                                      |     |
|--------------------------------------|-----|
| • Marine Media Player with Bluetooth | x 1 |
| • Sun/Dust Cover                     | x 1 |
| • USB Extension Cable 1m             | x 1 |
| • U Mounting Bracket (Pre-Installed) | x 1 |
| • Screw Posts (Pre-Installed)        | x 2 |
| • Hex Nuts (Pre-Installed)           | x 2 |
| • User's Manual                      | x 1 |

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# WIRING DIAGRAM



Color	Connection
Red	12V Ignition / Accessory
Yellow	Battery
Black	Ground
Grey	Right Front (+)
Grey/Black	Right Front(-)
White	Left Front (+)
White/Black	Left Front (-)
Violet	Right Rear(+)
Violet/Black	Right Rear(-)
Green	Left Rear(+)
Green/Black	Left Rear(-)

*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.*

**Power Wire Specifications:**

**Yellow Wire** - Connect this wire to a **constant** +12V source.

**Red Wire** - Connect this wire to a switched +12V source such as an ignition or accessory switch. Red wire must be connected to +12V source for unit to operate.

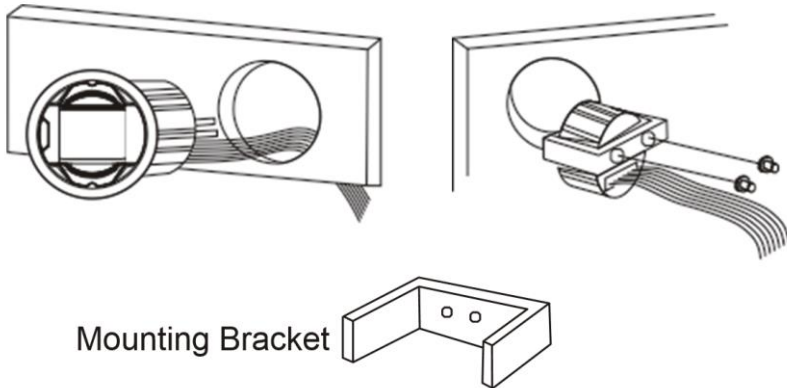
**Black Wire** - Connect this wire to the negative battery terminal or other good power ground.

## INSTALLATION

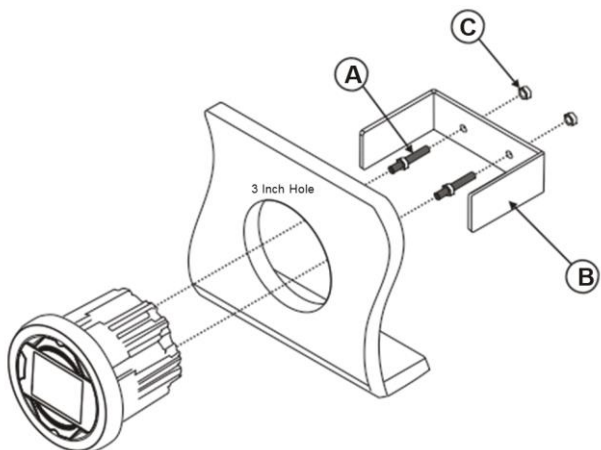
Please read entire manual before installation.

**Before You Start**

Disconnect negative battery terminal. Consult a qualified technician for instruction. Avoid installing the unit where it would be subject to high temperatures such as direct sunlight, or where it would be subject to dust, dirt or excessive vibration.



Once a suitable location has been decided, drill the hole and secure the stereo using the metal mounting bracket.



1. Choose a mounting location on the dash board or instrument panel that will allow room behind to run radio cables to the power source. Consider how you will use the AUX IN, LINE OUT and USB connectors and route the appropriate extension cables to an accessible area.

2. Cut a hole Diameter: 80mm/3.15 inch in the dash board using the provided template. At least 3.5-inch depth is needed to mount the radio. **IMPORTANT! Do not mount this unit where it can be submerged in water.**

3. Attach the included screw posts (A) to the back of the radio.

4. Place the radio in front of the dashboard opening so the wiring can be brought through the opening.

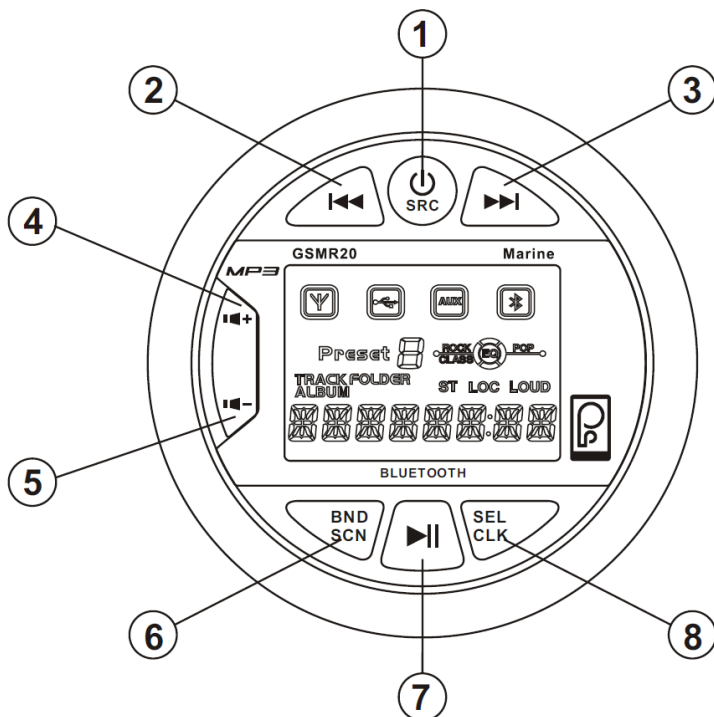
5. After completing the wiring connections (refer page 3), turn on the radio to confirm operation (vehicle accessory switch must be on). If the radio does not operate, recheck all wiring until the problem is corrected. Once proper operation is achieved, turn the accessory switch off and proceed with final mounting of the radio. Refer to the wiring diagram on page 3.

**NOTE: Before final installation, test the wiring connections to make sure the unit is properly connected, and the system works.**

6. Insert the radio into the mounting hole.

7. Place the 'U' bracket (B) over the screw posts and secure the radio to the dash using the included hex nuts (C).

## BUTTON DESCRIPTION



- |                                   |                        |
|-----------------------------------|------------------------|
| <b>1</b> Power/Source             | <b>5</b> Volume Down   |
| <b>2</b> Tune Down/Previous Track | <b>6</b> Band/Scan     |
| <b>3</b> Tune Up/Next Track       | <b>7</b> Play/Pause    |
| <b>4</b> Volume Up                | <b>8</b> Setting/Clock |

## BASIC OPERATION

Press **⏻/SRC button** to turn the unit on. Press and hold **⏻/SRC button** to turn the unit off

Press **⏻/SRC button** to choose desired listening mode. (E.g. Radio mode to USB mode to AUX IN mode... etc.)

Press **⏮/⏭ button** to change station or music track

Press **⏪+/⏩- button** to adjust volume up/down

Press **BND/SCN button** to change frequency band if in Radio mode or scan music file if in USB mode

Press **⏸ button** to pause/play or preset function

Press **SEL/CLK button** to set following menu:  
BASS, TREBLE, BALANCE, FADE, LOUD(on/off), EQ, STEREO/MONO, DX/Local, AREA EURO/USA, USER/DEFAULT. Use **⏪+/⏩- button** to adjust the desired setting.

**DX/Local** is used on AM/FM mode for Local/Distance control, LOC selects an internal attenuator which will help to reduce the interference and distortion often associated with very strong local radio transmissions. For long distance reception select the DX option.

**User/Default** is used to restore settings to factory default

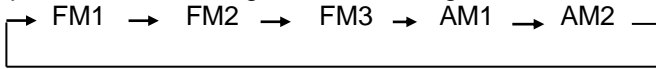
### Clock Display and Adjustment

Press and hold **SEL/CLK button** to view the clock. Press **SEL/CLK button** again to exit or wait 10 seconds for auto exit. To adjust the time, press and hold the **SEL/CLK button** to display the clock, press and hold **SEL/CLK button** again until the hour number is flashing, Use **⏪+/⏩- button** to adjust the hour, press **SEL/CLK button** again to adjust the minute. When the time is set, press and hold the **SEL/CLK button** to save and exit.

## RADIO OPERATION

Press **⏻/SRC button** to select radio mode.

In radio mode, press **BND/SCN button** to locate the desired band. The reception band will change in the following order:



Press **▶▶/◀◀ button** to select the strongest station or Press and Hold **▶▶/◀◀ button** to manually select a station. Or, Press **▶|| button** to access the Preset stations.

### AUTOMATIC MEMORY STORING & PRESET SCAN

Press and Hold **BND/SCN button**, the radio searches and checks the signal strength until one cycle search is finished then the strongest stations are stored automatically into the corresponding preset stations. Each band can store up to 6 preset stations. Press **▶|| button** to access the Preset stations.

*Please note: the new stations will replace any stations previously stored on the Preset Stations.*

## USB (MP3/WMA) OPERATION

If there is no USB inserted in the driver:

Insert a USB through the USB port located at the back of the unit then the unit will automatically play the mp3/wma music files.

If a USB is already inserted in the driver:

Press **⏻/SRC button** to change to USB mode.

Press **▶▶ or ◀◀ button** to select a song. Press and hold **▶▶ or ◀◀ button** to fast forward or rewind.

Press **BND/SCN button** to display information of the song if available. Press and hold **BND/SCN button** to search a song by track number from 1 to 999. TRK \*\*\* will be displayed on the screen, use **◀+ or ▶- button** to set the track number then press **SEL/CLK button** to confirm.

Press **▶|| button** to pause/play



### 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 USB2.0)
<b>Capacity</b>	999 songs

## 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 **⏮/SRC button** to change the mode to "AUX IN" *Please note: In this mode, all controls and functions must be controlled from your music device.*

## BLUETOOTH OPERATION

**On the radio** - Press **⏮/SRC button** to change to Bluetooth (BT) mode. "CONNECT" will be flashing on the screen.

**On your Bluetooth music device** – Turn on or enable Bluetooth feature then open Bluetooth setting for pairing. Choose "GSMR20" from the list of available Bluetooth link. If pin number is required, please enter 0000.

Once connected, "CONNECTED" will be flashing on the screen on the radio, you can now start playing your favorite music from your Bluetooth music device. Operating Range is up to 30' (will vary, dependent on installation)

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

Press **▶||** **button** to pause/play

## TROUBLESHOOTING

<b>ISSUE</b>	<b>OPTIONS</b>
Unit will not turn on (no power)	CAUSE: Yellow/red wire not connected or incorrect voltage ACTION: Check connections for proper voltage (11-16V DC)
	CAUSE: Black wire not connected ACTION: Check connection to ground
	CAUSE: Fuse blown ACTION: Replace the fuse
Unit has power (but no sound)	CAUSE: Speaker wire not connected ACTION: Check connections at speakers
	CAUSE: One or more speaker wires touching each other or touching chassis ground ACTION: Insulate all bare speaker wires from each other and chassis ground
Unit blows fuses	CAUSE: Yellow/red wire touching chassis ground ACTION: Check for pinched wire
	CAUSE: Speaker wires touching chassis ground ACTION: Check for pinched wire
	CAUSE: Incorrect fuse rating ACTION: Use fuse with correct rating

## TECHNICAL SPECIFICATIONS

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

### **General**

Power supply requirements: DC 12V Negative Ground

Load impedance: 4-8 Ohms/channel

Maximum output power: 45W x 4 (CH)

Operate temperature: -10-50

**FM Tuner:** Tuning range: 87.9MHz-107.9MHz (USA)  
87.5MHz-108MHZ (EUR)

**AM Tuner:** Tuning range: 530KHz-1710 KHz (USA)  
522KHz-1620 KHz (EUR)

### **USB playback**

Signal to Noise Ratio: 55dB

Frequency Response: 50Hz- 20KHz

A/D Conversion Filter: 16BIT

USB Storage Capacity: 999 songs

### **Bluetooth**

Version: 3.0

## WARRANTY INFORMATION

This unit is warranted to be free of defects in material and workmanship for a period of one year. 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)





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detach here  
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### WARRANTY REGISTRATION

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

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