

# DESIGNED TO MOVE [YOU]® JWM20

## Installation and Owner's Manual





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## INTRODUCTION

#### Thank You!

Thank you for choosing a Jensen product. We hope you will find the instructions in this owner's manual clear and easy to follow. If you take a few minutes to look through it, you'll learn how to use all the features of your new Jensen receiver for maximum enjoyment.

#### Features

Features of Jensen JWM20 mobile audio system include:

- Digital AM/FM Tuner/30 Preset stations (12 AM/18 FM)
- AM/FM Tuner (US/EURO)
- Bluetooth Ready with A2DP/AVRCP Streaming Audio
- Electronic Bass, Treble, Balance and Fader Controls
- USB Playback of MP3/WMA Files
- HDMI Input Pass Through Rear HDMI Output
- Time/Alarm Clock
- Dimmable Backlit LCD Control
- Rear Auxiliary Audio Input (RCA)
- Rear Auxiliary Audio Output (RCA)
- Subwoofer Audio Output (RCA)
- 2 Zones / 4 Speakers Output
- Wireless Remote Control Included

### Precautions

• Use the Proper Power Supply

This product is designed to operate with a 12 volt DC, negative ground battery system (the standard system in a North American vehicle)

Use Authorized Service Centers

Do not attempt to disassemble or adjust this precision product; contact a professional for assistance.

Avoid Moisture.

To reduce the risk of fire or electric shock, do not expose this equipment to rain or moisture.

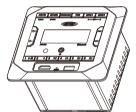
Avoid Cleaning Products
 The front of this unit should only be cleaned with a slightly damp cloth. Do
 not use cleansers.

Use Recommended Accessories.

TO REDUCE THE RISK OF FIRE OR ELECTRIC SHOCK AND ANNOYING INTERFERENCE, USE ONLY THE RECOMMENDED ACCESSORIES.

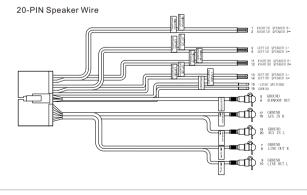
## Packing List

JWM20



Remote Control







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## INSTALLATION

It's a good idea to read all of the instructions before beginning the installation. We recommend having your Jensen JWM20 installed by a reputable RV dealership.

#### **Tools and Supplies**

You will need these tools and supplies to install your JWM20:

- · Phillips screwdriver
- · Wire cutters and strippers
- · Tools to remove existing radio (screwdriver, socket wrench set or other tools)
- Electrical tape
- Crimping tool
- Volt meter/test light
- Crimp connections
- 16 gauge wire for power connections
- 16-18 gauge speaker wire
- Four M3x20mm (3/32 x 0.75") screws

#### **Disconnecting the Battery**

To prevent a short circuit, be sure to turn off the ignition and remove the negative (-) battery cable prior to installation.

NOTE: If the JWM20 is to be installed in a vehicle equipped with an onboard drive or navigation computer, do not disconnect the battery cable. If the cable is disconnected, the computer memory may be lost. Under these conditions, use extra caution during installation to avoid causing a short circuit.

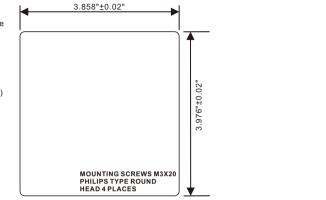
#### **Selecting the Mounting Location**

Select a mounting location, taking care to avoid the following:

- Places exposed to heat-radiating appliances such as electric heaters
- Adjacent to other equipment that radiates heat
- Poorly-ventilated or dusty places
- Moist or humid locations

#### Mounting the Radio

- · Use the mounting hole diagram to measure and cut a mounting hole
- Route power, speakers, AV and antenna cable through the hole and connect
- Check and ensure correct operation
- Mounting the unit using four M3x20mm (3/32 x 0.75") screws
- Attached trim ring

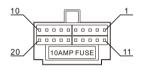


NOTE: Before cutting the mounting hole, make sure the area behind the mounting location is clear of wires, fuel and vacuum or brake lines.



## WIRING

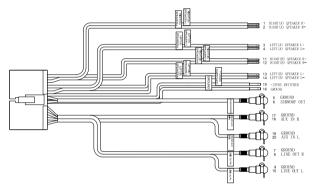
The wiring diagram depicts all the wiring connections required for proper operation of the unit.



#### DETAIL A SHOWN FROM PIN VIEW

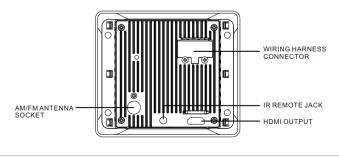
PIN NO.	WIRE COLOR	DESCRIPTION
1	GREY/BLACK	RIGHT(A) SPEAKER R-
2	GREY	RIGHT(A) SPEAKER R+
3	WHITE/BLACK	LEFT(A) SPEAKER L-
4	WHITE	LEFT(A) SPEAKER L+
5	BLACK	A-GROUND
6	GREY (BLUE JACK)	SUBWOOFER
7	BLACK	A-GROUND
8	GREY (RED JACK)	LINE OUT R
9	BLACK	A-GROUND
10	GREY (WHITE JACK)	LINE OUT L
11	VIOLET/BLACK	RIGHT(B) SPEAKER R-
12	VIOLET	RIGHT(B) SPEAKER R+
13	GREEN/BLACK	LEFT(B) SPEAKER L-
14	GREEN	LEFT(B) SPEAKER L+
15	RED	+12VDC SWITCHED
16	BLACK	GROUND
17	BLACK	A-GROUND
18	YELLOW (RED JACK)	AUX IN R
19	BLACK	A-GROUND
20	YELLOW (WHITE JACK)	AUX IN L

WARNING: Wiring harness comes with stripped and tinned leads to aid in the installation process. Any unused speaker wires must have their exposed ends cut off or insulated individually.



## CONNECTIONS

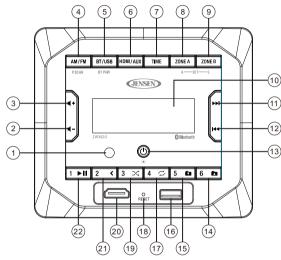
The wiring diagram depicts all the wiring connections required for proper operation of the unit.





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## **BASIC OPERATION**



#### Power

Press the 0 power button (13) to turn the unit on. The unit will resume at the last mode (Tuner, BT, USB, etc.) Press and hold the 0 power button (13) to enter standby mode.

#### Volume Control

Press the 4+ button (3) to increase the volume. Press the 4- button (2) to decrease the volume. Press and hold either button to change the volume level continuously.

#### Liquid Crystal Display (LCD)

The liquid crystal display (LCD) panel (10) displays the frequency, time and activated functions.

Press the 0 button (13) on the front panel to turn the dimmer On (selected brightness level) and press again to turn the dimmer Off (maximum brightness level).

NOTE: When subjected to cold temperatures for an extended period of time, LCD panels will take longer to illuminate and the display visibility may slightly decrease. Optimal LCD operation will return to normal when the temperature increases to a normal range.

#### Audio Menu

Press & hold ZONE A button (8) to access the audio menu. Press the ZONE A button (8) repeatedly to adjust the following audio adjustment options: BASS, TREBLE, BALANCE, FADER and LOUD. Use the I ← or ► buttons (12, 11) to choose a value for each setting.

#### Audio Settings Adjustment

- BAS: Adjust the Bass level from "-7" to "+7"
- TRE: Adjust the treble from "-7" to "+7"
- BAL: Adjust the speaker output balance between "L7" (left) and "R7" (right)
- "BAL 0" indicates an equal balance between the left and right speakers."
- FAD: Adjust the speaker fade between "R7" (rear) and "F7" (front).
- LOUD: toggle the loudness on/off. When listening to music at low volumes, this feature will boost the bass/treble range to compensate for the characteristics of human hearing.

This function will time out after five seconds of inactivity and the unit will resume normal operation.

#### System Menu

Press and hold ZONE B button (9) to access the system menu. Press the ZONE B button (9) repeatedly to adjust the following system menu list: BT DEVICE, BT PAIR, BT (ON/OFF), DIMMER ON/OFF, DIMMER LEVEL (0 - 8), REGION (USA/EURO), PRESET VOLUME TIME (12/24) and RESET. Use the I or > I buttons (12, 11) to choose a value for each setting. Press the > II buttons (22) to confirm selection and exit menu.

#### System Settings Adjustment

- BT DEV: Bluetooth device (Locked/Unlocked, Disconnect/Connect, Delete): view lock and delete from a list of previously paired mobile device models.
- BT PAIR: Start the pairing process to enable pairing to be paired with for 120 seconds.
- BT (ON/OFF): Choose "Bluetooth On" or "Bluetooth Off"
- DIM (ON/OFF): Adjust the speaker fade between "R7" (rear) and "F7" (front).
- DIM LEVEL: Adjust the Dimming level of the backlighting from "DIM 8" to "DIM 0" (Off).
- REG (USA/EURO): Set frequency spacing for various regions.
- PVOL LEVEL (1-40): Preset volume; select an automatic turn on volume.
- TIME (12/24): Set the clock display in 12 hours or 24 hours.
- RESET: Press ▶ II button (22) to reset the JWM20 to factory default settings.



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#### **Time Display**

Press the **TIME** button (7) to alternate between playing time and clock time while in Tuner, USB, BT, HDMI In or auxiliary input mode.

#### **Time Menu Setup**

Press & Hold the **TIME** button (7) to access time menu settings. Press the **TIME** button (7) repeatedly to adjust the following time menu list: ALARM (ON/OFF), ALARM SET, SLEEP TIMER and CLOCK SET. Use the I≪I or I≫I buttons (12, 11) to choose a value for each setting.

#### Time Settings Adjustment

- ALARM (ON/OFF): To turn the alarm function on or off.
- ALARM SET: The hour and minutes clock digit will flash. Press the ➡ button (11) to adjust hour or press the ◄ button (12) to adjust minute.
- SLEEP TIMER: Select the sleep time from 0 (OFF), 15, 30, 45 or 60 minutes. The sleep timer will automatically turn off the JWM20 in designated number of minutes.
- TIME SET: The hour and minutes clock digit will flash. Press the ▶ button (11) to adjust hour or press the I◄ button (12) to adjust minute.

#### **USB Interface Connector**

You can connect a USB device directly to USB interface (16) on the front of the JWm20 for playback of compatible files. Playback begins automatically. Press BT/USB button (5) to switch to USB mode from another source. Refer to "MP3/USB" Operation on Page 15 for additional operating instructions.

NOTE: USB will not support Apple device playback. The USB input supplies up to 1A of charging current.

#### **Remote Sensor**

Infrared receiver (1) is located on the bottom left of front panel to receive infrared signal emitted by the remote control.

#### **Speaker Output**

The two speaker output buttons, **ZONE A**, **ZONE B** (8, 9) control speaker zones output from the radio. Press any of the two buttons to turn the corresponding speaker zone ON or OFF. SPK A (Zone A), SPK B (ZONE B) will appear on the display.

#### Reset

The reset button should be activated for the following reason:

- Initial installation of the unit when all wiring is completed.
- Function buttons do not operate.
- Error symbols on the display.

Use a ball point pen or similar object to press the **RESET** button (18). This may be necessary should the unit display an error code.

#### HDMI IN

When a portable audio device is connected to the unit, press the HDMI/AUX button (6) repeatedly to source to HDMI IN mode, The HDMI audio input will play over speaker and low level outputs. To connect a portable device with HDMI output ports, connect HDMI cable from your portable device into the HDMI IN interface (20) on the bottom left of the JWM20.

#### **HDMI** devices

Amazon Fire Stick streaming device: http://www.amazon.com\*

Roku HDMI streaming device: http://www.roku.com/products/compare\*

Warning: Using the front USB input for powering your HDMI streaming stick is not recommended. We suggest using a wall adapter power supply to power your HDMI streaming stick.

#### Notes:

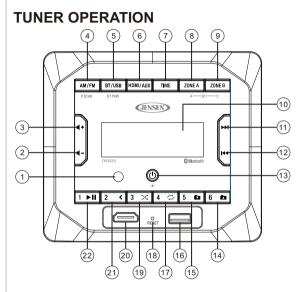
\* Web links can change over time; if the above links do not function go to your device manufacturer's or smartphone service provider's web site for more information.

\*\* These devices require connection to Wi-Fi or a hotspot in order to stream video content from providers such as Netflix, Hulu, Crackle, etc.

Caution: Streaming video can consume large amounts of data when a smartphone is used as a hotspot. Data rates may apply. See your mobile phone service provider for details.



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#### Select a Band

Press AM/FM button (4) repeatedly to select the band (FM1, FM2, FM3, AM1 and AM2)

#### Manual Tuning

Press I or I buttons (12, 11) to seek station up/down step by step.

#### **Auto Seek Tuning**

Press & hold III or III buttons (12, 11) to automatically seek to the next or previous strong station

#### **Preset Stations Menu**

Six numbered preset buttons store and recall station for each AM and FM band.

#### Store a Station

Select a band (if needed), then select a station. Press & hold a 1-6 preset button for 2 seconds, the preset number will appear on the display.

#### **Recall a Station**

Select a band (if needed), Press 1-6 preset button to select the corresponding stored station.

#### Automatically Store / Preset Scan (AS/PS)

#### Auto Store

Select an AM or FM band, Press & hold the AM/FM button (4) to access tuner menu list: AUTO STORE & PRESET SCAN. Press AM/FM button (4) repeatedly until "AUTO STR" appears on the display. Press the ▶III button (22) to begin the Auto Store function and the unit will automatically scan for and store 12 or 18 strongest station for all bands. To stop this function before the automatic storing is complete, press the ▶II button (22) again.

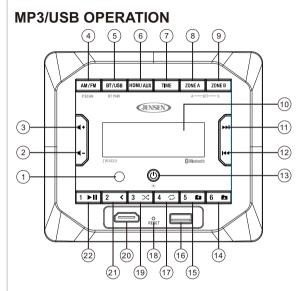
NOTE: Only stations detected with sufficient signal strength will be stored in the preset channel automatically.

#### Preset Scan

Select a band, Press & hold the AM/FM button (4) to access tuner menu list: AUTO STORE & PRESET SCAN. Press AM/FM button (4) repeatedly until "PRE SCAN" appears on the display. ►II button (22) to scan stations stored in the current band. The unit will pause for 10 seconds at each preset station. Press ►II button (22) again to stop scanning when the desired station is reached.



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If the user connects a USB mass storage device, the radio automatically powers on, if necessary, and switches to digital file playback mode and selects that physical media. Changing modes or turning off the radio pauses playback. Playback will resume exactly where paused when returning to digital file.

#### **Insert a USB Device**

The USB connector (16) is at the bottom right side of the panel. Insert a USB device to automatically access USB mode and begin playback. The LCD will display "READING" while files are initially loaded. When USB removed, it will automatically back to the previous mode before the USB is connected. During other playback mode, when USB is connected, press **BT/USB** button (5) repeatedly to enter USB playback mode direct.

#### Play/Pause

Press the **I** button (22) to suspend or resume media playback.

#### **Next/Previous File**

Press the ▶ II button (22) to select the previous or next track.

#### Folder Up/Down

Press the 6/FD UP button (14) to access higher folder level (FOLDER UP) Press the 5/FD DW button (15) to access lower folder level (FOLDER DOWN)

#### Repeat

Press the  $rac{1}{2}$  button (17) on the control panel multiple times during playback to select from the following repeat play options: RPT ONE, RPT OFF, RPT ALL and RPT FOLD.

#### **Random Shuffle**

Press the  $\propto$ , button (19) during playback to play all files in random, shuffled order. Press  $\propto$ , button (19) again to stop random play.

#### Fast Forward/Reverse

Press and hold the I or D buttons (12, 11) to fast forward or fast reverse.





## **BLUETOOTH OPERATION**

The JWM20 includes built-in Bluetooth technology that allows you to connect this head unit to Bluetooth-enabled devices for streaming audio playback.

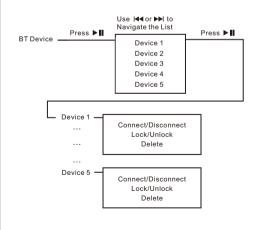
#### **About Bluetooth Technology**

Bluetooth wireless technology is a short-range wireless radio protocol. Operating in the 2.4GHz range, it transmits audio and data at speeds up to 2.1Mbit/s over a range of up to 10 meters.

#### **Bluetooth Menu Options**

NOTE: Please note that some Bluetooth menu options are only available while the unit is in Bluetooth Audio mode.

Press and hold the **ZONE B** button (9) to enter system setting adjustment. Repeatedly press again the **ZONE B** Button (9) to access the "BLUETOOTH ON/OFF" menu function. Press I ← or → b buttons (12, 11) to turn Bluetooth function On or Off. The following additional menu options are available when the unit is in Bluetooth mode.



Press and hold the **ZONE B** button (9) to enter the menu adjustment mode. The following additional menu options are available when the unit is in Bluetooth mode:

- BT PAIR: Press and hold the BT/USB button (5) to make pairing available for 120 seconds then start pairing with a Bluetooth enabled device.
   BT DEVICE: Proces the SH button (22) to view of list of provincely paired mobility
- BT DEVICE: Press the ►II button (22) to view a list of previously paired mobile phone devices. Press the I<>1> buttons (12, 11) to view devices in the list. When viewing a specific device press ►II button (22) again to enable the following LOCK/UNLOCK, CONNECT/DISCONNECT, or DELETE functions and press I<<0 F>I outtons (12, 11) to cycle through them. You cannot delete a device that is actively connected.
  - DISCONNECT: To disconnect a paired device, press the >II button (22) to temporarily remove the Bluetooth connection. The connection can be reestablished through your phone menu by selecting the JWM20 for connection.
  - CONNECT: Select the phone device name on pairing list through the radio unit. Select CONNECT for connection and Press II button (22) to connect desired paired device.
  - LOCK/UNLOCK: The JWM20 can store up to 5 devices for Bluetooth connection. The devices are stored in a FIFO (First in First Out) order. To prevent a device from being bumped from the list when more than 5 devices are used, you can lock the device. To Lock/Unlock a device, press ►II button (22) to change between Lock/Unlock.
  - DELETE: Deleting a device removes it from the pairing list. To delete a
    device from the list, press the Fillbutton (22). To reconnect with a deleted
    device it must be paired again.

#### **Pairing a Bluetooth Device**

Before you begin, consult the owner's manual for the Bluetooth device you want to pair with the JWM20. Make sure the device you intend to pair with is on and ready to receive a signal from the JWM20. Press the BT/USB button (5) to enter Bluetooth mode. Press and hold the **ZONE B** button (9) and press repeatedly until the unit display BT PAIR, then press ► II button (22). The unit will display PAIR and count down from 120 to 0. While the unit counts down, use your mobile device Bluetooth function to search for a Bluetooth function to search for a Bluetooth device. When your mobile device has completed its search, the mobile device will display the Bluetooth device name (JWM20). Select JWM20. Once connected the Bluetooth Audio icon ()) will appear on the radio LCD display. Enter the pairing password (0000), if requested.

After connecting successfully, you will be able to listen to audio stored on your Bluetooth enabled device through the radio.



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#### **Answering a Call**

When answering a call using the connected phone, Bluetooth audio playback will pause. After hanging up from the call, Bluetooth audio will continue on some phones. It may be necessary to press the play button (22) to resume Bluetooth audio playback.

#### **Bluetooth Audio (A2DP)**

The A2DP music is available for Bluetooth enabled phones when the phone is connected. To access Bluetooth mode and play songs stored on your phone, press the **BT/USB** button (5) to enter the Bluetooth mode.

#### Selecting Tracks

During playback, press I ← or ► button (12, 11) to play the previous or next track.

#### Pausing Playback

During playback, press ►II button (22) to pause the Bluetooth audio playback. "PAUSE" will appear on the LCD. Press ►II button (22) again to resume playback. If you change to another mode, playback will automatically pause. Press the **BT/USB** button (5) to return to Bluetooth mode and resume audio playback from your Bluetooth enabled device.

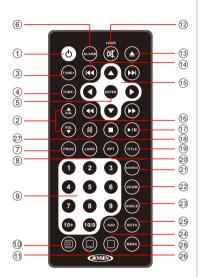
NOTE: If a Bluetooth device is disconnected due to the power being turned off or if the device goes out of range, the unit will automatically search for the matching Bluetooth mobile device when the power is restored.



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## **REMOTE CONTROL OPERATION**

REF	DESCRIPTION	TUNER	BLUETOOTH	MP3/USB	SYSTEM MENU
1	Power	Turn radio on/standby mode.			
2	VOL +/-	Adjust volume up/down. Press for Audio Control Setup menu.			
3	TUNE +	Tune to higher station	NA	NA	NA
4	TUNE -	Tune to lower station	NA	NA	NA
5	ENTER	NA	NA	NA	Confirm menu selection
6	ALARM	Turn the alarm feature on/off.	Turn the alarm feature on/off.	Turn the alarm feature on/off.	Turn the alarm feature on/off.
7	PROG	NA	NA	NA	NA
8	LANG	NA	NA	NA	NA
9	Numeric Keyboard	Use 1-6 to access preset stations.	NA	NA	NA
10	Setup	Time Setup	Time Setup	Time Setup	Time Setup
11	Subtitle	NA	NA	NA	NA
12	Mute/LOUD	Silence Audio output. Press and hold to turn LOUDNESS feature on/off.	Silence Audio output. Press and hold to turn LOUDNESS feature on/off.	Silence Audio output. Press and hold to turn LOUDNESS feature on/off.	Silence Audio output. Press and hold to turn LOUDNESS feature on/off.
13	Eject	NA	NA	NA	NA
14	Previous/Next	NA	Select next/previous track.	Select next/previous track.	NA
15	Directional Buttons	NA	NA	Move to desired menu item and then press ENTER to confirm.	Left/Right to advance through menu item Up/down to select menu item parameter
16	Fast Reverse/ Forward	NA	Fast Forward/Fast Reverse	Fast Forward/Fast Reverse	NA
17	Play/Pause	Silence Audio output (Mute)	Pause/resume playback	Pause/resume playback	NA
18	Stop	NA	NA	Stop playback.	NA
19	TITLE	NA	NA	NA	NA





20	RPT	NA	NA	Repeat track	NA
21	SOURCE	Select source for playback	Select source for playback	Select source for playback	Select source for playback
22	ZOOM	NA	NA	NA	NA
23	ANGLE	NA	NA	NA	NA
24	AUD	Access Audio Menu options.	Access Audio Menu options.	Access Audio Menu options.	Access Audio Menu options.
25	GOTO	NA	NA	NA	NA
26	Display	Switch Clock and current information display	Switch Clock and current information display	Switch Clock and current information display	Switch Clock and current information display
27	AS/PS	Browse preset stations (10 sec. interval). Press and hold to scan/store stations.	NA	NA	NA
28	MENU	Access system MENU.	Access system MENU.	Access system MENU.	Access system MENU.

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## **CARE AND MAINTENANCE**

Keep the product dry. If it does get wet, wipe it dry immediately. Liquids might contain minerals that can corrode the electronic circuits.

Keep the product away from dust and dirt, which can cause premature wear of parts.

Handle the product gently and carefully. Dropping it can damage circuit boards and cases, and can cause the product to work improperly.

Wipe the product with a dampened cloth occasionally to keep it looking new.

Do not use harsh chemicals, cleaning solvents, or strong detergents to clean the product.

Use and store the product only in normal temperature environments. High temperature can shorten the life of electronic devices, damage batteries, and distort or melt plastic parts.

#### Ignition

The most common source of noise in reception is the ignition system. This is a result of the radio being placed close to the ignition system (engine). This type of noise can be easily detected because it will vary in intensity of pitch with the speed of the engine.

Usually, the ignition noise can be suppressed considerably by using a radio suppression type high voltage ignition wire and suppressor resistor in the ignition system. (Most vessels employ this wire and resistor but it may be necessary to check them for correct operation.) Another method of suppression is the use of additional noise suppressors. These can be obtained from most CB/A radio or electronic supply shops.

#### Interference

Radio reception in a moving environment is very different from reception in a stationary environment (home). It is very important to understand the difference. AM reception will deteriorate when passing under a bridge or when passing under high voltage lines. Although AM is subject to environmental noise, it has the ability to receive at great distance. This is because broadcasting signals follow the curvature of the earth and are reflected back by the upper atmosphere.

#### **FCC Notes**

NOTE: This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

---Reorient or relocate the receiving antenna.

---Increase the separation between the equipment and receiver.

---Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.

---Consult the dealer or an experienced radio/TV technician for help.

WARNING: Changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment. This equipment complied with FCC radiation exposure limits set forth for an uncontrolled environment. This equipment should be installed and operated with minimum distance 20cm between the radiator & your body.

NOTE: The manufacturer is not responsible for any radio or TV interference caused by unauthorized modifications to this equipment. Such modifications could void the user's authority to operate the equipment.



## TROUBLESHOOTING

Symptom	Solution			
	Try the reset button.			
Radio will not turn ON or No front	Check fuse.			
panel operation	Check 12V+ on accessory wire to radio (RED wire)			
	Check Ground.			
	Verify Volume, Fader/Balance, Mute controls are set correctly (see owner's manual).			
Radio turns ON,	Try the reset button.			
but no sound	Verify proper speaker selections.			
	Verify proper speaker connections.			
	Check for shorts or open circuits on speaker wires.			
Display is blank	Turn unit off and on to reset the display.			
Bluetooth Device	Make sure no devices are already connected. Disconnect any connected devices.			
connect/pair	On your smart device, turn the Bluetooth off and on and try again.			
No AM or FM reception	Verify you are tuned to a valid station.			
	Check your antenna connection on rear of stereo.			
	Try a different antenna			
Unit does not	Verify that you have a clear line of sight for the IR signal.			
respond to Remote Control	Check the batteries.			

## SPECIFICATIONS

#### FM Tuner

Frequency Coverage (USA)
Frequency Coverage (Europe) 87.5 to 108 MHz
Sensitivity
Stereo Separation@1 kHz>25 dB
AM Tuner
Frequency Range (USA)
Frequency Range (Europe)
Sensitivity (S/N=20dB)
Amplifier
Output Power
Output ImpedanceCompatible with 4-8 Ω ohms speakers, 4 ohm load minimum
General
Power Supply Requirements DC 12 Volts, Negative Ground
Operating Voltage
Overall Dimensions
Weight



2602 Marina Drive • Elkhart, IN 46514 www.asaelectronics.com