PRECAUTIONS

Do not attempt to open the unit. There are no user serviceable parts or adjustments inside.

No responsibility can be taken for use of the unit other than under normally expected operating conditions.

If exposed to direct sunlight or operated for extended periods metal surfaces may become hot. Take care when handling.

FCC COMPLIANCE STATEMENT

This device complies with part 15 of the FCC rules. Operation is subject to the following two conditions:
- This device may not cause harmful interference, and
- This device must accept any interference received, including interference that may cause undesired operation.

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RECORD YOUR PRODUCT DETAILS HERE:

Serial Number ........................................
Date Of Purchase .....................................
Affix Receipt Here
INSTALLATION

IF ANY MODIFICATION TO THE VESSEL IS REQUIRED, SUCH AS DRILLING HOLES ETC FUSION RECOMMENDS CONSULTATION WITH YOUR BOAT DEALER OR MANUFACTURER BEFOREHAND.

» Create mounting hole for product and drill Screw Pilot Holes
   Refer to mounting template included with product or download from www.fusionelectronics.com

» Fit mounting gasket

» Insert the unit into the mounting hole

» Use the supplied 4 x self tapping screws, to affix the unit into position.

» Attach screw covers

Note: Appropriate mounting is very important to ensure correct operation. Select a location that allows both free/open airflow around rear of chassis, whilst minimizing exposure to moisture. Allow adequate room at the rear of the unit for the cable looms (approx 2”).

ELECTRICAL WIRING

Caution: The MS-RA200 is designed for vessels with a 12V DC Negative ground electrical system

» Note: Ensure the Aerial cable is routed away from any power cables, and is the minimal length, as long cable runs will affect AM reception performance.

For optimum radio reception please ensure you use an independent am/fm marine antenna (ground independent).

Please refer to the following site for further info: www.pacificaerials.co.nz

INSTALLATION WARNING

» Ensure the marine vessels +12V lead is removed from the battery before any equipment is connected

» Investigate the marine vessels fuel tanks and electrical wiring locations before you begin installation

» Ensure all wiring is protected to avoid damage

When wiring the MS-RA200, ensure that the wires are away from sharp objects and that rubber grommets and insulated bungs are used when routing the wiring. Ensure that when connecting the wires to the speakers and audio system, the terminals and connections are protected from shorting to each other.
### CONNECTIONS

#### AERIAL CONNECTION
Connect an AM/FM marine antenna or FM/VHF splitter.

#### USB/iPod CONNECTION
Connect a USB storage device (not included) or the MS-DKIP / MS-DKIP USB Marine Docks for iPod (not included) or a certified Apple iPod lead (not included).

#### SIRIUS SATELLITE RADIO (for use in USA only)
Connect to SiriusConnect™ tuner (not included)

#### WIRED REMOTE (MS-WR600)
Connect a marine wired remote to the CANbus system connector.

Up to 3 remotes can be connected to the system.

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### WIRING DIAGRAM

#### A CABLE
- **YELLOW**: POWER (+)
- **RED**: IGNITION (+12V switched)
- **BLACK**: GROUND (-)
- **WHITE**: SPEAKER ZONE 1 L (+)
- **WHITE/BLACK STRIPE**: SPEAKER ZONE 1 L (-)
- **GREY**: SPEAKER ZONE 1 R (+)
- **GREY/BLACK STRIPE**: SPEAKER ZONE 1 R (-)
- **GREEN**: SPEAKER ZONE 2 L (+)
- **GREEN/BLACK STRIPE**: SPEAKER ZONE 2 L (-)
- **PURPLE**: SPEAKER ZONE 2 R (+)
- **PURPLE/BLACK STRIPE**: SPEAKER ZONE 2 R (-)
- **ORANGE**: 2 WIRE REMOTE
- **ORANGE/WHITE STRIPE**: 2 WIRE REMOTE
- **BROWN**: DIM (+12V switched)
- **BLUE/WHITE STRIPE**: AMPLIFIER ON
- **BROWN/WHITE STRIPE**: TEK MUTE / INTERRUPT

#### B CABLE
- **WHITE RCA (Grey wire)**: AUX-IN (L)
- **RED RCA (Grey wire)**: AUX-IN (R)
- **ORANGE RCA (Black wire)**: SUB-OUT
- **ORANGE RCA (Black wire)**: SUB-OUT
- **WHITE RCA (Black wire)**: LINE-OUT ZONE 1 (L)
- **RED RCA (Black wire)**: LINE-OUT ZONE 1 (R)

**Note:** Sub + Lineout volume control is linked to Zone 1.

### ADDITIONAL FEATURES

- **DIM**
  - Connect to vessel lighting system to dim LCD and button illumination when vessel lights are turned on.
- **2 WIRE REMOTE**
  - Connect to FUSION 2 Wire Remote (not included).
- **TELE MUTE / INTERRUPT**
  - Connect to handsfree kit to either mute the stereo or switch to AUX to hear call.

**Note:** If turn off from ignition is not required, the +12V ignition (Red) and +12V battery (Yellow) can be connected together.
**BUTTON DESCRIPTION**

- **ROTARY ENCODER**
  - **Turn**
    - To adjust volume, move up or down a menu structure, or adjust a specific setting.
  - **Press**
    - To select a highlighted option, confirm a setting. Press to step through each zone for volume adjustment.
  - **Press and Hold**
    - For quick access to subwoofer level adjustment

- **POWER**
  - **Press**
    - To turn the unit ON/OFF.
  - **Press and Hold**
    - Press and hold for 10 seconds to ’Reset’ the stereo.

- **MENU**
  - **Press**
    - To enter Menu System. Press to return to previous screen.
  - **Press and Hold**
    - To exit the menu system.

- **BACK/PREVIOUS**
  - **Short Press**
    - iPod/USB - Select the previous track.
    - AM/FM/Sirius/VHF - Start tuning down the frequency spectrum. Option for Auto/Manual tuning mode or previous preset (Preset mode).
  - **Press and Hold**
    - iPod/USB - Rewind the current track.
    - VHF - Fast channel stepping.

- **FORWARD/NEXT**
  - **Short Press**
    - iPod/USB - Select the next track.
    - AM/FM/Sirius/VHF - Start tuning up the frequency spectrum. Option for Auto/Manual tuning mode or next preset (Preset mode).
  - **Press and Hold**
    - iPod/USB - Fast forward the current track.
    - VHF - Fast channel stepping.

- **SOURCE**
  - **Press**
    - To cycle through sources
    - AM - FM - VHF - iPod - USB - AUX - SIRIUS (USA only)

- **PLAY/PAUSE**
  - iPod/USB - Pause / resume the current track.
  - AM/FM/Sirius/VHF - Switch between Auto/Manual and Preset tuning mode.

- **MUTE**
  - Mutes sound in all zones.
GENERAL OPERATION

INITIAL SETUP
Important: The Tuner Region must be selected for correct operation. Default - USA.
Important: The Marine Region must be selected for correct operation. Default - USA.

ADJUSTING THE VOLUME
Turn the Rotary Encoder to adjust the volume.

ZONE VOLUME
Press the Rotary Encoder to step through zones.

SETTINGS
Press the 'Menu' button and select 'Settings'.
Select the desired setting to adjust.
Note: Whilst in Settings the 'Menu' button acts as a back/return to the previous screen.

TONE
Adjust the treble and bass settings. Press the 'Rotary Encoder' to cycle between bass and treble selection.

LCD
Press the Rotary Encoder to cycle between Contrast and Brightness. Turn to adjust.

KEY SOUND
Press the Rotary Encoder to cycle between 'On' and 'Off'.

ZONE SETUP
The MS-RA200 Marine Stereo features Multi-Zone technology which enables 2 'Zones' with independent volume/balance control.

Select the Zone you wish to setup.
Select 'Balance' to adjust the audio balance from left to right within the selected zone.
Select 'Volume Limit' to set the maximum volume limit within the selected zone.

SUBWOOFER
Select 'Settings' then 'Zones' then 'Subwoofer'.
Select 'Sub Limit' to set the desired maximum subwoofer output volume.
Select 'Sub Filter' to select the desired cut-off frequency. 55hz - 85hz - 120hz - 160hz
Default: 85hz

Note: Press and Hold the 'Rotary Encoder' for quick access to subwoofer level adjustment

LANGUAGE
Select the desired language for the on screen display
English - Deutsch - Nederlands - Espanol - Italiano - Francais

POWER SAVE
Press the Rotary Encoder to cycle between 'On' and 'Off'.
OFF: LCD/Button backlight on constantly
ON: LCD/Button backlight turns off after one minute of non-activity

TUNER REGION
Select the appropriate Region.
Europe → USA → Japan → Australasia
Important: The correct Tuner Region must be selected. Default - USA.

MARINE REGION
Select the appropriate VHF Marine Region.
USA → Canada → International
Important: The correct Marine Region must be selected. Default - USA.

Note: The MS-RA200 can be be completely disconnected from the constant +12V voltage supply (Battery switch) with no settings lost.
Radio Operation

Source Selection
Press the 'Source' button and cycle to desired source.
- AM → FM → VHF → SIRIUS (USA only)

Station Search
Press 'Play' to cycle between tuning seek modes.
- Auto → Manual → Preset

Automatic Seek Tuning
Press 'Play' to cycle to Auto tuning mode. Press the 'Previous' or 'Next' button to scan to the next station.

Manual Seek Tuning
Press 'Play' to cycle to Manual tuning mode. Press the 'Previous' or 'Next' button to step up and down the spectrum.

Preset Tuning Mode
Press 'Play' to cycle to Preset tuning mode. Press the 'Previous' or 'Next' button to select previous or next preset.

Note: Preset function is only available when more than one preset has been saved.

Presets

Storing a Station as a Preset
When listening to a frequency (AM/FM/VHF), press and hold the 'Play' button to store preset.
Alternatively: Press the 'Menu' button and select 'Presets'. Select 'Save Current'.
Note: There are 15 presets available per band.

View Presets
Press 'Menu' and select 'Presets'. Select 'View Presets'. Use the 'Rotary Encoder' to cycle and select a saved preset.

Remove Preset
Press 'Menu' and select 'Presets'. Select 'Remove Preset'. Select the desired preset.

Remove All Presets
Press 'Menu' and select 'Presets'. Select 'Remove All Presets'.

VHF Operation

Squelch
Press 'Menu' and select 'Squelch'. Increase Squelch to filter out nearby chatter and decrease Squelch to receive all.

Scan
Press 'Menu' and select 'Scan'. The Marine Stereo will scan the VHF preset stations for an active channel.
It remains on the channel until the transmission ends, then resumes scanning.
Note: If the Squelch control is adjusted so you can constantly hear a hissing sound the unit will not scan correctly.

Usb/Mp3 Operation

Source Selection
- Press the 'Source' button and cycle to USB.
- Press 'Menu' and select 'DISK'.
Note: We recommend you name your USB device allowing the device name to be displayed. Default name of a connected device is 'DISK'.
- Navigate USB device file structure and select Track to begin playback.

Repeat
Press the 'Menu' button and select 'Repeat', to repeat all playable tracks within the folder of the current selection. Default: On.

Shuffle
Press the 'Menu' button and select 'Shuffle', to shuffle all playable tracks within the folder of the current selection. Default: Off.
Important: Ensure the USB Device is formatted as Fat32 format.

Aux Operation

Connecting an Auxiliary Audio Device
- The Left & Right AUX RCA plugs are located on accessory cable 'B' at the rear of the unit.
- Connect your auxiliary audio device.
Note: You may require an adapter cable to connect your device.

Listening to Your Auxiliary Audio Device
- Press 'Source' and cycle to AUX mode.
- Start playback on your auxiliary audio device.
Use both the volume control on your auxiliary device (if available) and the volume control on the FUSION Marine Stereo to set the volume level.
iPod/iPhone OPERATION

CONNECTING AN iPod/iPhone
Connect a FUSION Marine Dock for iPod (MS-DKIP or MS-DKIPUSB) to gain the benefits of integrated housing for your iPod or iPhone. Alternatively, a certified Apple iPod cable can be used to connect your iPod/iPhone to the MS-RA200.

LISTENING TO AN iPod/iPhone
Press 'Source' button and cycle to iPod mode. Playback of the iPod/iPhone will start automatically.

iPod/iPhone NAVIGATION
Press the 'Menu' button to enter the iPod menu. The rotary encoder operates similar to the click wheel on your iPod. Turn to navigate and press to enter.

REPEAT
Press the 'Menu' button and select 'Preferences', select 'Repeat'.

SHUFFLE
Press the 'Menu' button and select 'Preferences', select 'Shuffle'.

F.A.S.T
FUSION ALPHA SEARCH TECHNOLOGY
If your iPod contains more than 50 Artists, Songs or Albums you can use F.A.S.T to quickly navigate by letter or number.

Example: Press the 'Menu' button and select ' Artists'. Select 'D' and the first 'Artist' beginning with ' D' will automatically highlight. Using the 'Rotary Encoder' you can then scroll up or down from this selection.

F.A.S.T THRESHOLD
The threshold (number of items) at which point the Alpha Search screen appears for iPod menus can be changed. To change the threshold, navigate as follows - press the 'Menu' button and select 'Setup', then 'Searching'. Select your desired item number threshold.

VIDEO PLAYBACK
Note: Requires the optional FUSION Marine Portable Media Device Dock (MS-DKIPUSB), featuring composite video out which enables iPod/iPhone video playback on a compatible monitor or television.

Press the 'Menu' button to enter the iPod/iPhone menu. Select 'Videos' and select video to start playback.

SUBTITLES
Press 'Menu' and select 'Preferences'. Select 'iPod Video' then 'Subtitles'.

DISABLE SOURCES
For ease of navigation some sources (AM, AUX, VHF, SIRIUS) can be turned off so that they no longer display when toggling through source screens.

NO iPod CONNECTED
If this appears on the display possible causes are

» Ensure the iPod/iPhone is correctly connected
» Ensure the cable is not excessively bent
» The iPods battery remains low (refer to iPod manual and charge battery)
» Reset your iPod/iPhone
SIRIUS SATELLITE RADIO

USA only - SIRIUS TUNER NOT INCLUDED

ACTIVATING YOUR SIRIUS TUNER
You must activate the SIRIUS tuner before you can begin
receiving the SIRIUS Satellite Radio Service.
In order to activate your radio subscription, you will
need the SIRIUS ID (SID) which uniquely identifies your
tuner. The 12 digit SID is displayed on the LCD on
initialization. The Marine Stereo will display the SID on
Channel 0.

Power on your system and make sure that you are
receiving good signal, you are able to hear audio on the
SIRIUS Preview channel (Ch-184)

Note: Have your credit card handy and contact SIRIUS
via the internet at https://activate.sirius.radio.com/
and follow the prompts to activate your subscription.
You can also call SIRIUS toll-free at 1-888-539-SIRIUS
(1-888-539-7474) Once activated, you will be
able to begin enjoying SIRIUS Satellite Radio’s digital
entertainment and can tune to other channels.

SIRIUS OPERATION
Press ‘Source’ to select Sirius Satellite radio source.

SIRIUS NAVIGATION
Press the ‘Menu’ button and navigate the functions.

CHANNELS
Select the desired channel (listed in channel order) and
music preference

CATEGORY
Select the desired genre type. (The unit will only play the
selected option)

PRESET TUNING MODE
Press ‘Play’ to cycle to preset tuning mode. Press the
‘Previous’ or ‘Next’ button to select previous or next
preset.

Note: Preset function is only available when more than
one preset has been saved.

PRESETS
Add your channel preset to your favourites list by
selecting 'Add Preset' (Maximum 30 channels). Remove
channels by selecting 'Remove Preset'. Select 'All' or
the individual channel. Exit by pressing the 'Menu'
button.

Alternatively: Press and hold the 'Play' button to store
favourite.

PARENTAL MODE

ENABLE ON/OFF
Select to enable channels to be locked/unlocked

PIN =
Turn the ‘Rotary Encoder’ to select number and press
to enter, repeat to enter the 4 digit code. (Factory
setting is 0000)

Note: Must be entered before the following items are
operational.

LOCK / UNLOCK
Select the channel to be locked or unlocked

SKIP / UN-SKIP
Select the channel to be bypassed

CHANGE PIN
Personalise your Pin number. (4 digits max)

PIN RESET
When on Sirius source, press & hold mute key for 15
seconds. PIN will be reset to ‘0000’.

ZONE OPERATION

The MS-RA200 Marine Stereo features Multi-Zone
technology which enables 2 ‘Zones’ with independent
volume control.

ZONE SETUP
Press the ‘Menu’ button and select ‘Settings’. Select
‘Zones’ then the Zone you wish to setup.

VOLUME LIMIT
Select ‘Volume Limit’ to set the desired maximum
output volume for each individual Zone.

BALANCE
Select ‘Balance’ to adjust the balance from left to
right.

SUBWOOFER
Adjust the sub limit and filter.

SUB FILTER
Press the ‘Menu’ button and select ‘Zones’. Select
‘Subwoofer’ then ‘Sub Filter’. Select the desired
frequency 80hz - 120hz - 160hz - OFF

SUB LIMIT
Press the ‘Menu’ button and select ‘Zones’. Select
‘Subwoofer’ then ‘Sub Limit’. Select the desired
maximum subwoofer output volume.

Note: Press and Hold the ‘Rotary Encoder’ for quick
access to subwoofer level adjustment.

Note: Subwoofer and Lineout volume control is linked
to Zone 1.
**MENU STRUCTURE**

**ROOT MENU**

- **SYNC**
  - Internal presets
  - Save current preset
  - View presets
  - Remove preset
  - Remove all presets
  - Squelch scan

- **USB stick**
  - iPod
    - Folders/Track list
    - DISK
  - Repeat
  - Shuffle

- **MIX**
  - Settings

- **USERS**
  - Channels
  - Category tune
  - Presets
  - Add presets
  - Remove presets
  - Parental menu
  - Enable
  - Lock/unlock
  - Skip/unskip
  - Change PIN

- **PREFERENCES**
  - iPod
    - Playlists
    - Artists
    - Albums
    - Songs
    - Podcasts
    - Genres
    - Composers
    - Audio books
    - Videos
  - Repeat
  - Shuffle
  - Off - Tracks - Albums

- **VARIABLES**
  - iPod
    - Repeat
    - Shuffle
    - Off - On - All
    - Search
    - Time/Date
    - Subtitles
    - Search
    - iPod Video

- **TUNER REGION**
  - EU - USA - JAP - AUS

- **VHF REGION**
  - USA - CAN - INT

- **DISABLE SOURCES**
  - AM - AUX - VHF - SIRIUS

**TROUBLESHOOTING**

**RESET**

Should the stereo become unresponsive, follow the below steps:

- Press and hold the 'Power' button for 10 seconds to reset the stereo.
- Reset your iPod/iPhone
- Remove all power for 5 minutes and then reconnect.
- If you are unable to correctly tune to radio stations, check you have the correct tuner region selected.
SPECIFICATIONS AND LICENSING

SPECIFICATIONS

CHASSIS DIMENSIONS
Depth 93mm - 3-5/8"
Width 130mm - 5-1/16"
Height 50mm - 2"

FACE PLATE DIMENSIONS
Depth 29mm - 1-1/8"
Width 157mm - 6-3/16"
Height 68mm - 2-11/16"

OPERATING VOLTAGE:
10 – 16VDC Negative ground

FUSE RATING:
15 Amp

OUTPUT POWER:
50 Watts x 4 (Max)

SPEAKER IMPEDANCE:
4 Ohms per channel

PRE-OUTPUT VOLTAGE:
3V

TUNING RANGE

EUROPE AND AUSTRALASIA:
AM Radio
Frequency Range: 522 – 1620 MHz
Frequency step: 9 kHz

FM Radio
Frequency Range: 87.5 – 108 MHz
Frequency step: 50 kHz

USA
AM Radio
Frequency Range: 530 – 1710 kHz
Frequency step: 10 kHz

FM Radio
Frequency Range: 87.5 – 107.9 MHz
Frequency step: 200 kHz

FM Radio
Frequency Range: 76 – 90 MHz
Frequency step: 50 kHz

JAPAN
AM Radio
Frequency Range: 522 – 1620 MHz
Frequency step: 9 kHz

AM Radio
Frequency Range: 530 – 1710 kHz
Frequency step: 10 kHz

VHF TUNING RANGE

All Regions:
Frequency Range: 156 – 164 MHz

LICENSING

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**FUSION MARINE ACCESSORIES**

**MARINE DOCK FOR iPod**
MS-OKIP
Connect a Marine Dock for iPod (MS-OKIP) to provide an integrated housing for your iPod or iPhone, protecting them from the harsh marine environment. The dock can be flush mounted or wall mounted.

**MARINE WIRED REMOTE**
MS-WR600
The Marine Wired Remote Control extends the capabilities of our Stereo by enabling local control of the audio in each zone of your vessel. Up to three remotes can be linked to the Stereo, providing true system flexibility.

**MARINE PORTABLE MEDIA DEVICE DOCK**
MS-DKIPUSB
Connect a Marine Portable Media Device Dock (MS-DKIPUSB) to provide an integrated housing for your iPod or iPhone, protecting them from the harsh marine environment. Video playback from your iPod/iPhone and two USB ports for portable flash drive playback. The dock can be flush or wall mounted.

**MARINE ZONE AMPLIFIER**
MS-AM702
The Marine 2x70 Watt D-Class Zone Amplifier is designed to support the Multi-Zone technology of the Marine Stereo. The Zone Amplifier is small, enabling discrete installation and when combined with the Marine Stereo provides the platform for a True Multi-Zone audio system.

**MARINE ACTIVE SUBWOOFER**
MS-AB108
Features a down firing bass reflex enclosure and its own internal Active 210 Watt amplifier allowing easy connection to the music source delivering crisp clear low frequency reproduction from any music selection.

**MARINE 2 CHANNEL AMPLIFIER**
FM-402
Add more power and increase the bass level of your music of your FUSION Marine Audio System by connecting a 2-Channel Amplifier. Built for the harsh marine environment with conformal coated PCB and stainless steel end panels.