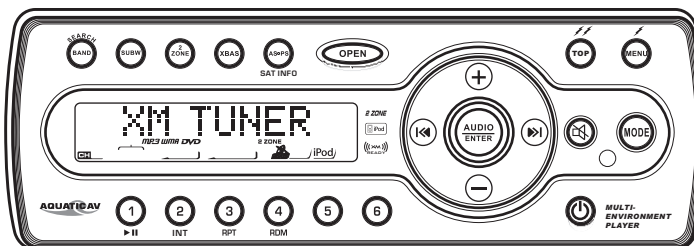


# AQUATICAV

## AQ-CD-3 AQ-CD-3B

CD / MP3 / WMA /  
AM / FM / XM Radio / iPod  
Wired Remote Ready



*MP3 WMA MP4*



*2 ZONE*

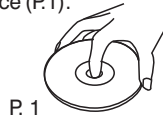
## 1. NOTE OF DISCS

### MOISTURE CONDENSATION

On a rainy day or in a very damp area, moisture may condense on the lenses inside the unit. Should this occur, the unit will not operate properly. In such a case, remove the disc and wait for about an hour until the moisture has evaporated.

### NOTES ON CDs

1. A dirty or defective disc may cause sound dropouts while playing. To enjoy optimum sound, handle the disc as follows.  
Handle the disc by its edge. To keep the disc clean, do not touch the surface (P.1).



2. Do not stick paper or tape on the disc (P.2).



3. Do not expose the discs to direct sunlight or heat sources such as hot air-ducts, or leave them in a car parked in direct sunlight where there can be a considerable rise in temperature inside the car (P.3).



4. Before playing, clean the discs with an optional cleaning cloth. Wipe each disc from the centre out (P.4).



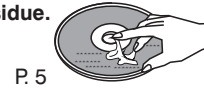
5. Do not use solvents such as benzene, thinner, commercially available cleaners, or antistatic spray intended for analog discs.

### NOTES ON DISCS

If you use the discs explained below, the sticky residue can cause the CD to stop spinning and may cause malfunction or ruin your discs.

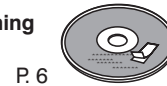
Do not use second-hand or rental CDs that have a sticky residue on the surface (for example, from peeled-off stickers or from ink, or glue leaking from under the stickers).

**There are paste residue.  
Ink is sticky (P.5).**



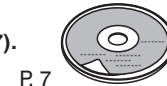
Do not use rental CDs with old labels that are beginning to peel off.

**Stickers that are beginning to peel away, leaving a sticky residue (P.6).**



Do not use your CDs with labels or stickers attached.

**Labels are attached (P.7).**



**Do Not Use Special Shape CDs**

Be sure to use round shape CDs only for this unit and do not use any special shape CDs. Use of special shape CDs may cause the unit to malfunction.(P.8).



Be sure to use CDs with disc mark

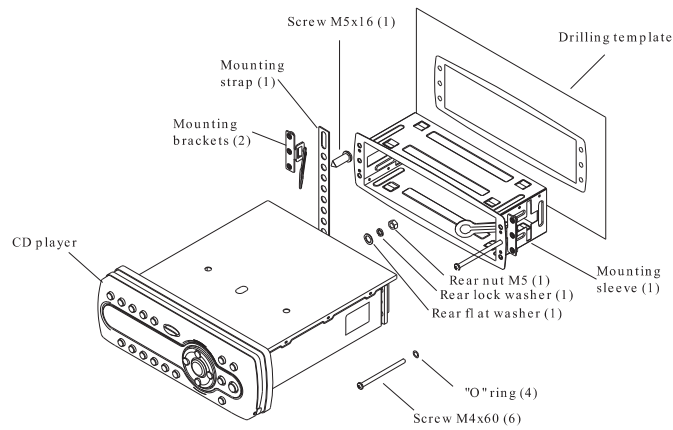


Only for this unit.

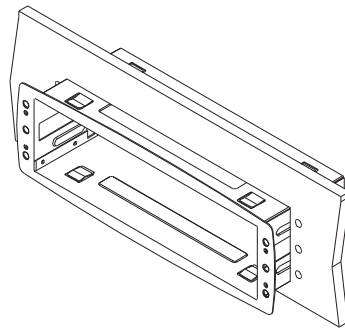
CD-Rs and CD-RWs which have not undergone finalization processing cannot be played. (For more information on finalization processing, refer to the manual for your CD-R/CD-RW writing software or CD-R/CD-RW recorder.) Additionally, depending on the recording status, it may prove impossible to play certain CDs record on CD-R or CD-RW.

## 2. MOUNTING PRECAUTIONS

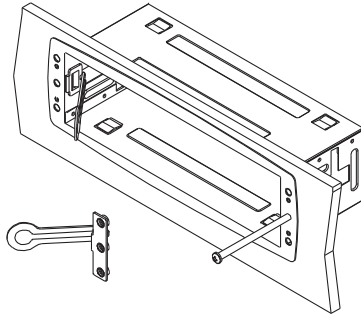
The AQ-CD-3 & AQ-CD-3B Media Center is designed for the harsh conditions of the marine environment. For easy system set-up, mount the Media Center so the front panel controls will be easily accessible from the driver's seat. In addition, observe the following precautions: 1. Check clearances on both sides of a planned installation before drilling any holes or installing any screws. 2. When routing RCA cables, keep them away from power cables and output speaker wires. 3. Due to the harsh conditions of the marine environment, Always support the back of the unit with the supplied back strap.



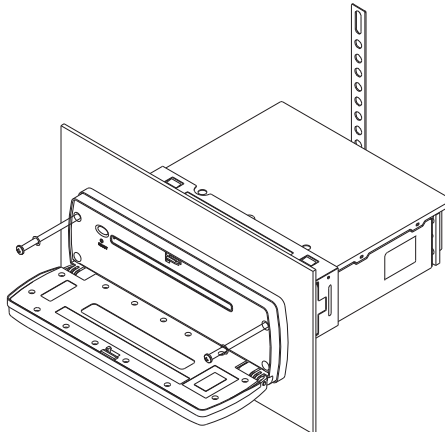
1. Slide mounting can into DIN opening



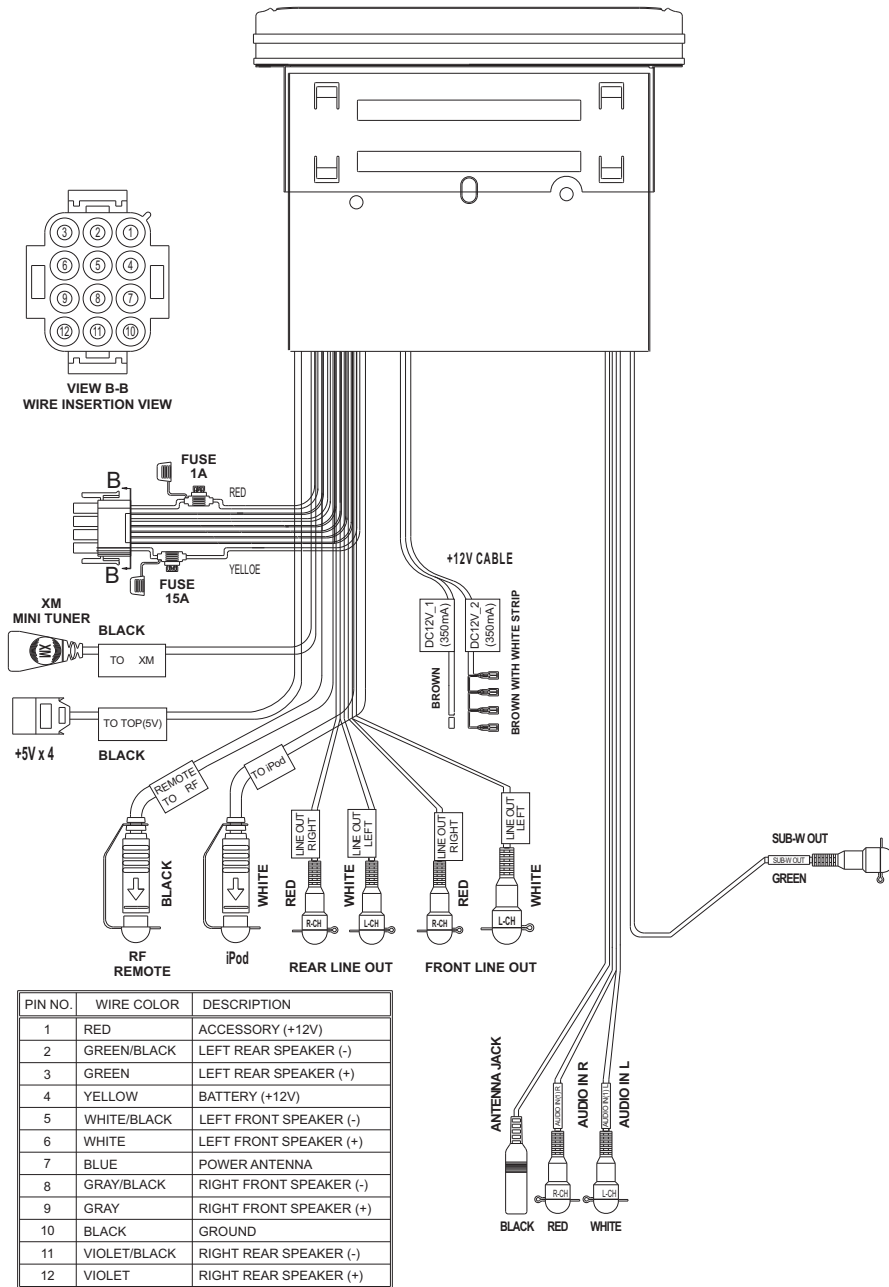
2. Slide backing brackets into position and tighten center bolts. Remove backing brackets handles by bending backing bracket handles until they break off.



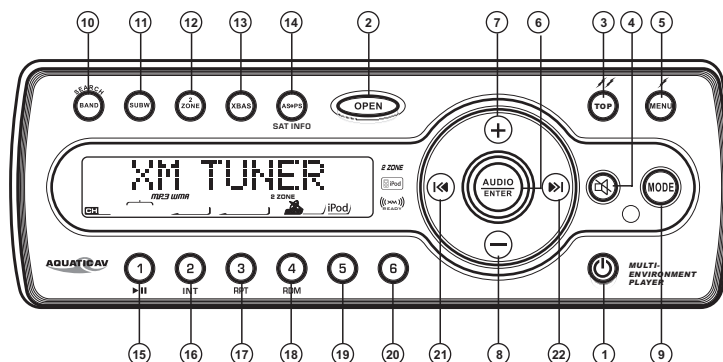
3. Slide Media Center into mounting can. Secure Media Center using supplied SS hardware and back strap.



### 3. WIRING DIAGRAM



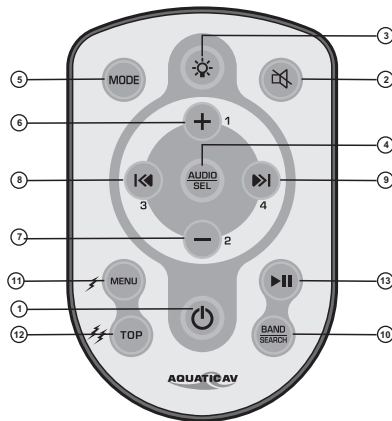
## 4. CONTROL PANEL FUNCTION



### OPERATIONS:

KEY	SYSTEM		TUNER		CD/MP3/WMA		SAT		iPod	
	Short Press	Long Press	Short Press	Long Press	Short Press	Long Press	Short Press	Long Press	Short Press	Long Press
1	Power									
2	OPEN (Panel release button)									
3	Top	12V_2								
4	Mute									
5	Menu	12V_1								
6	Audio Menu				Enter		Enter		Enter	
7	Volume Up									
8	Volume down									
9	Mode									
10			Band				SAT Band	SAT Search	iPod Search	
11	Sub-W									
12	2 Zone									
13	Ix-bass							Diagnostic		
14			PS	AS		Set-up	SAT information		iPod information	iPod Video
15			M1	Memory 1	Pause/Play		SAT 1	Memory 1	Pause/Play	
16			M2	Memory 2	Stop		SAT 2	Memory 2		
17			M3	Memory 3	Repeat Off Repeat Track Repeat Disc		SAT 3	Memory 3	Repeat	Album Repeat
18			M4	Memory 4	Random Folder		SAT 4	Memory 4	Shuffle	Album Shuffle
19			M5	Memory 5	Left		SAT 5	Memory 5		
20			M6	Memory 6	Right		SAT 6	Memory 6		
21			Seek Down	Tune Down	File/Track Down	Fast Backward	CH Down	Fast CH Down	File Down	Fast Backward
22			Seek Up	Tune Up	File/Track Up	Fast Forward	CH Up	Fast CH Up	File Up	Fast Forward

**5. REMOTE FUNCTION (OPTIONAL, THE AQ-RF-3 REMOTE CONTROL IS OPTIONAL, NOT INCLUDED IN THIS UNIT, SOLD SEPARATELY)**



(OPTIONAL, THIS AQ-RF-3 REMOTE CONTROL IS OPTIONAL, NOT INCLUDED IN THIS UNIT, SOLD SEPARATELY)

**OPERATIONS:**

KEY	SYSTEM		TUNER		CD/MP3/WMA		SAT		iPod		Top control	
	Short Press	Long Press	Short Press	Long Press	Short Press	Long Press	Short Press	Long Press	Short Press	Long Press	Short Press	Long Press
1	Power											
2	Mute											
3	Torch											
4	Audio				Enter		Enter		Enter			
5	Mode											
6	Volume Up											
7	Volume Down											
8			Seek Down	Tune Down	File/Track Down	Fast Backward	CH Down	Fast CH Down	File/Track Down	Fast Forward		
9			Seek Up	Tune Up	File/Track Up	Fast Forward	CH Up	Fast CH Up	File/Track Up	Fast Backward		
10			Band				SAT Band	SAT Search	iPod Search			
11	Menu	12V_1										
12	Top	12V_2									Top	
13					Pause Play				Pause Play			

**Note: Top control operation please refer to user manual of this remote.**

## 6. BASIC OPERATIONS

### 2) **PANEL OPEN BUTTON (OPEN)**

Press this button to open the control panel.

### 1) **POWER ON/OFF BUTTON (⏻)**

Press the POWER button or **Short** Press any other button on the front of the unit (except the Open/Eject) to turn On the unit. Press the POWER button to turn Off the unit.

### 4) **MUTE BUTTON (⏸)**

Short Press the MUTE button to mute the audio output, and "Mute" will appear on the display. Press the mute button again to restore the audio output to the previous level.

### 11) **SUB-WOOFER (SUBW)**

Press the SUB-W button to activate the Sub-woofer function On, and "Sub-woofer" will appear on the LCD display for 3 seconds. Press the SUB-W button again to turn off the Sub-woofer function.

**NOTE** Please refer to the related description in "Audio Operation of Sub-woofer" for details operation of the Sub-woofer control !

**TIPS** The Subwoofer Level and Low Pass Filter control will only appear in the Audio Menu only if the Subwoofer function is currently activated 'On'.

### 13) **iX-BASS BUTTON (XBAS)**

Press the iX-BASS button to turn on the iX-BASS function, and "iX-BASS" will appear in the LCD display for 3 seconds. Press the iX-BASS button again to turn off the iX-Bass function.

**NOTE** Please refer to the related description in "Audio Operation of iX-Bass" for details operation of iX-Bass control !

**TIPS** The iX-Bass Boost Level control will only appear in the Audio Menu only if the iX-Bass function is currently activated 'On'.

### 9) **MODE BUTTON (MODE)**

**Short** Press the MODE button to select a different mode of operation as indicated on the display panel. Available modes include Tuner, AV IN-1.

### 7/8) **VOLUME UP/ DOWN BUTTON**

Press the volume up button. When the volume is adjusted, the volume level is shown on the display panel as a number ranging from 00 (lowest) to 46 (highest).

### 3/5) **DC +12V POWER OUT**

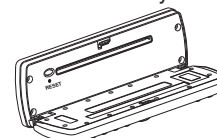
This unit has two buttons named 12V\_1 (↗) and 12V\_2 (↘). These will be used to transmit switching signals to the receiver which will have 2 trigger wire outputs capable of driving 12VDC/300mA for operating relays. The 2 triggers will be activated On/Off via the following:

- Trigger 1 (12V\_1): Press and hold MENU button (>3 second)
- Trigger 2 (12V\_2): Press and hold TOP button (>3 second).

### **RESET**

#### ● **To Reset the Main Unit System**

After releasing the front panel, use a pencil or any non-metalic object to press & hold the reset button for five seconds to reset the main unit and the unit will return to the factory default settings.



## Menu Operations

### 18) MENU FUNCTION LIST (MENU)

When you press the MENU button for < 3 seconds, the following list of items are inside the MENU:

- Contrast – Display
- Low Batt – 10.5V low battery alert On/Off
- Dimmer – High/Low
- Distant / Local – Tuner seek mode
- Area – Tuner freq. Step spacing
- Rear Speaker – On/Off
- Interamp – On/Off
- Vol PGM - Programmable turn on volume
- Beep Tone – On/Off

#### **Steps To Access Menu Items**

1. To access the MENU press the Menu button < 3 seconds.
2. "MENU" will be displayed for 2 seconds, and then "CONTRAST" will appear on the display.
3. To navigate through the MENU use the (▶) or (◀) buttons to navigate thru the menu items, or Press the MENU BUTTON repeatedly to view the menu items.
4. To adjust the selected menu item, press the VOLUME +/-
5. After the selected menu item(s) has been changed and no other buttons have pressed within the 5 second time-out, unit will resume to the previous operation.

#### **Description Of Menu Items**

CONTRAST – "CONTRAST 5" will be displayed by default. The user now has 5 seconds to press the VOLUME +/- from 0 – 10.

#### **Low Battery Alarm**

"LOW BATT Off" is the default setting. User now has 5 seconds to use the VOLUME +/- to adjust from "Off" to "On". The low battery detection will monitor the voltage on the ACC line. The threshold voltage shall be 10.5 +/- 0.3 VDC. A true low voltage state shall be determined by the sampling of the ACC line over time, where it is reading consistently at the 10.5 +/- 0.3 VDC.

- If selected LOW BATT "On"- The alarm shall be a beep tone heard over the speaker outputs at a burst of 8 seconds every 30 seconds. The visual warning "LOW BATT" message will be flashing for 8 seconds every 30 seconds on the LCD.
- If selected LOW BATT "Off"- User won't be alerted and no "LOW BATT" message will be displayed when in low voltage state.

#### **Dimmer**

The dimmer feature of the display is set to "DIMMER High" by default. User can use the Volume Up or Down button to adjust the Dimmer level between High or Low

#### **Distant / Local**

"Distant" is the default setting. User now has 5 seconds to adjust the VOLUME +/- from "Distant" to "Local". User can use the Volume Up or Down button to select between Local or Distance mode. This feature is used to designate the strength of the signals at which the radio will stop during automatic tuning. "Distance" is the default setting, allowing the radio to stop at a broader range of signals. To set the unit to select only strong local stations during automatic tuning, use the volume control button until "Local" appears in the display.

**Area**

"USA" is the default setting. User now has 5 seconds to select "USA" to "LATIN" to "EUROPE" or "ORIT" by pressing the VOLUME +/-

**Rear Speaker On/Off**

Rear speaker is turned 'ON' by default. If OFF is selected, the rear speaker's audio output will be TURNED OFF. This function user doesn't need Rear Speakers sounds output through rear speakers. Select "ON" to reactivate the rear speakers sound output.

**Interamp On/off**

"On" will be displayed by default. The user has 5 seconds to press the VOLUME +/- from "On" to "Off".

**Programmable Turn-on Volume**

"VOL PGM 12" is the default setting. User now has 5 seconds use the VOLUME +/- to program the turn on volume.

**Beep Tone**

"ON" is the default setting. User now has 5 seconds to adjust by pressing the VOLUME +/- from "ON" to "Off". (see attached documents for LCD Numeric)

## 7. DUAL ZONE OPERATION

This unit is equipped with the advance feature "Dual Zone". This function is useful if the user want to select different modes of the audio output source for Front and Rear Speakers. The details operation as follow;

### **On/Off operation**

- "Off" is the default setting.
- Short Press the "2-Zone" button on the control panel or remote control to switch between Dual Zone On or Off. The "2-Zone" icon will appear on the LCD after Dual Zone is selected "on".

### **To Select Front / Rear Sources**

- Once "ON" is selected, Short Press the "AUDIO" button repeatedly to change between the F-Zone (Front ) and the R-Zone (Rear) sources.
- If Front Zone "F-Zone" is selected, user has 10 seconds to navigate through different modes by using the volume button.  
Tuner > iPod > AV - 1 are available for selection for Front Speakers Audio Output.
- If Rear Zone "R-Zone" is selected, user has 10 seconds to navigate through different modes by using the volume button.  
Tuner > iPod > AV - 1 are available for selection for Rear Speakers Audio Output
- If no selection is being made within 5 seconds, the unit will resume to the pervious mode.

### **To operates function of Front / Rear Sources**

- The Front Panel & Remote control , is defaulted to control the FRONT source's function / operation.
- When DUAL ZONE is turned "ON", the Mode button is used to change between the Front Source & Rear Source. Press mode button repeatedly to change between Front and Rear mode.
- The LCD will display the Rear Source mode for 10 seconds. User has 10 seconds to make the operation on the Rear Source's function on Front Panel or Remote.
- The LCD display will automatically switch back to the Front Source after 10 seconds. And the Front Panel and Remote now are resumed to operate for Front Source's function again.

### **The default setting when Dual Zone is "ON"**

- When DUAL ZONE is turned on, the audio output will be muted for about 1 second.
- The default source / mode for Front ZONE is Tuner & for Rear ZONE is "DVD"
- The default Volume level is "12" for both Front & Rear ZONE audio output. (or the Volume Level set as VOL PGM Level set in the Menu)
- The LCD display is defaulted to display the Front Mode.
- When Dual Zone is "ON", some of the AUDIO FUNCTION WILL NOT BE FUNCTIONAL, THESE FUNCTION ARE: Bass / Treble / Middle / Balance / Fader / Sub-woofer / iX-bass / 3D Gain

### **The default setting when Dual Zone is in "OFF" mode**

- The default audio output reverts to what the user selected for the FRONT Zone source when DUAL ZONE IS "On". For example: When the DUAL Zone is "ON ", user has selected CD for Front ZONE & Tuner for Rear ZONE. Once DUAL ZONE is tuned "OFF", Audio Output for all 4 speakers becomes "CD" mode.

## 8. AUDIO OPERATION

### Audio Menu

**Short** Press "AUDIO" button to access the Audio Menu. User can navigate thru the Audio Menu items by pressing the / "AUDIO" button repeatedly, or by pressing the Tuning Up or Tuning Down Button. Once the desired menu item appears on the display, adjust that option by using the Volume Up or Down button within 5 seconds. The following menu items can be adjusted as described above. The unit will automatically exit the Audio Menu after five seconds of inactivity.

#### **VOLUME (Volume Level)**

- User has 5 seconds to use the Volume button to adjust the desired volume level, the volume level will be shown on the LCD display ranging from 00 (lowest) to 46 (highest).

#### **SUBWOOFER (Sub-woofer Level)**

- User has 5 seconds to use the volume up or down button to adjust the Sub-woofer level from '00' to '12'.

**NOTE** The Sub-woofer level control is only applicable if the unit is equipped with the optional sub-woofer line out, and only if the unit is connected to an optional sub-woofer speaker.

**NOTE** The Sub-woofer level control option will only appear in the Audio Menu if the "Sub-woofer" function is activated "ON" by pressing the "Sub-w" button on control panel.

#### **SUB-W LPF (Sub-woofer Low Pass Filter)**

- User has 5 seconds to use the Volume Up or Down button to select the 4 different Low Pass filter Flat, 80Hz, 120Hz or 160Hz.

**NOTE** The Sub-woofer LPF control is only applicable if the unit is equipped with the optional sub-woofer line out, and only if the unit is connected to an optional sub-woofer speaker.

**NOTE** The Sub-woofer LPF option will only appear in the Audio Menu if the "Sub-woofer" function is activated by pressing the "Sub-w" button on control panel.

#### **iX-BASS (iX-Bass Level)**

- User has 5 seconds to use the Volume up or down button to select the 3 different Bass Boost level: Low, Mid, or High.

#### **BASS (Bass Level)**

- User has 5 seconds to use the Volume Up or Down button to adjust the desired Bass level range from -6 to +6.

#### **BASS -CFQ (Bass Center Frequency)**

- User has 5 seconds to use the Volume Up or Down button to adjust the desired Bass Center Frequency to 60Hz, 80Hz, 100Hz, or 200Hz.

#### **BASS-Q: (Bass Quality Factor)**

- User has 5 seconds to use the Volume Up or Down button to adjust the desired Bass Quality Factor to 2N, 1N, 1W or 2W.

**Figure 1** shows the Bass Quality factor (Curve characteristics) of each step.

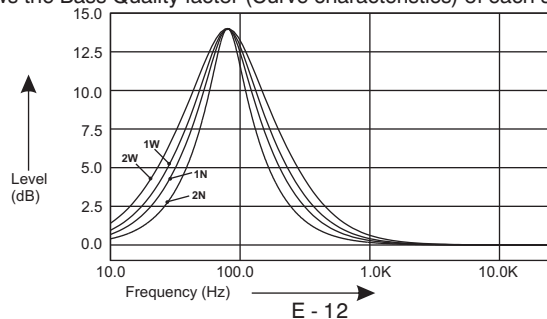


Figure 1

**MIDDLE (Middle Level)**

- User has 5 seconds to use the Volume Up or Down button to adjust the desired Middle level range from -6 to +6.

**MID-CFQ (Middle Center Frequency)**

- User has 5 seconds to use the Volume Up or Down button to adjust the desired Middle Range Center Frequency to 500Hz, 1KHz, 1.5KHz, or 2.5KHz.

**MIDDLE-Q (Middle Quality Factor)**

- User has 5 seconds to use the Volume Up or Down button to adjust the desired Middle Quality Factor to 2N, 1N, 1W or 2W.

Figure 2 shows the middle Quality factor (Curve characteristics) of each step.

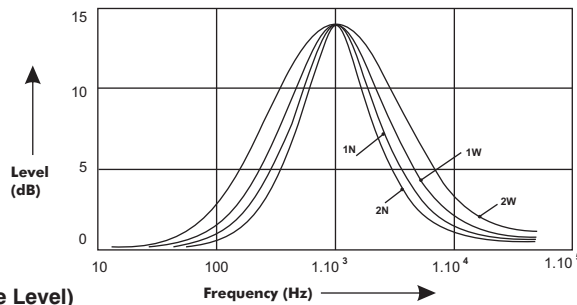


Figure 2

**TREBLE (Treble Level)**

- User has 5 seconds to use the Volume Up or Down button to adjust the desired Treble level range from -6 to +6.

**TRE-CFQ (Treble Center Frequency)**

- User has 5 seconds to use the Volume Up or Down button to adjust the desired Treble center frequency to 10KHz, 12.5KHz, 15KHz, or 17.5KHz.

**BALANCE**

- User has 5 seconds to use the Volume Up or Down button to adjust the Balance between the right and left speakers from R12 (full right) to L12 (full left). "C00" represents an equal balance between the right and left speakers.

**FADER**

- User has 5 seconds to use Volume Up or Down button to adjust the Fader between the front and rear speakers from R12 (full rear) to F12 (full front). "C00" represents an equal balance between the front and rear speakers.

## 9. XM OPERATION

Listeners can subscribe to XM Radio on the Web by visiting [www.xmradio.com](http://www.xmradio.com), or by calling (800) 967-2346. Customers should have their Radio ID ready (see “Displaying the Identification (ID) Code”). Customers can receive a limited number of free-to-air channels without activation.

**NOTE** This unit supports the XM Mini Tuner only.

### Accessing XM Radio Mode

To switch to XM Radio mode, press the MODE button until “XM RADIO” appears on the display.

### Displaying the Identification (ID) Code

Before you listen to XM Radio, you must subscribe to the service using your radio's identification number. To display the radio ID, press the UP TUNING (▶) or DOWN TUNING (◀) button to access channel 000. The screen displays “RADIO ID” followed by an 8-figure ID number.

### Selecting a Station

Press the UP TUNING (▶) or DOWN TUNING (◀) button to change to another station. Holding UP TUNING (▶) or DOWN TUNING (◀) activates the fast channel up or down.

### Preset Stations

Press BAND to change between three XM Radio bands. Each band stores up to six preset stations. You can store and recall a total of 18 preset stations.

### Store a Station

1. Select a band (if needed), then select a station.
2. Hold a preset button for three seconds. The preset number appears in the display.

### Recall Station

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

### XM Display Information

Pressing the AS/PS button will change the XM information display, in the below order: Channel Name Genre (News, Sports, Hits, Kids, etc.) Artist name Song Name If the selected channel name, artist, or title exceeds eleven characters, the display information will scroll twice upon selection.

### XM Channel Searching Method, There Are Two Different Methods. Method 1-Direct Tuning Mode

To enter a station directly, perform the following steps.

1. Press and hold the BAND button until “Direct-T” appears.
2. Press Vol Up/Down to display XM CH 0 \_ \_.
3. Press Vol Up/Down again to select the first digit of the channel you want to tune to (0, 1, or 2).
4. Press the AUDIO button to enter the first number and move to the second position.
5. Press Vol up/down again to select the second digit of the channel you want to tune to (0 - 9).
6. Press the AUDIO button to enter the second number and move to the third position.

**NOTE** Note: Use the UP TUNING (▶) or DOWN TUNING (◀) button to move between the first and third positions.

7. Turn the Vol up/down again to select the third digit of the channel you want to tune to (0 - 9).
8. Press the AUDIO button to enter the third number and access the channel.

**NOTE** If the channel is unauthorized or invalid, “CH Unavail” appears on the LCD and return to the input interface after 2 seconds.

### **Method 2-Category Mode**

To select stations in a specific category, perform the following steps.

1. Press and hold the Band button until "Direct-T" appears.
  2. Press Band button again to "CATEGORY" searching mode.
  3. User can either press Vol up or short press "AUDIO" button to confirm enter into the category / channel navigate searching mode.
  4. Press Vol up/down to navigate thru the category, the category name will display on the LCD.
  5. Once the desired category is displayed on the LCD. Short Press "AUDIO" button to confirm enter into the chosen category.
- The first channel name under the chosen category will be displayed on the LCD. User can either press Vol Up/Down or Track Up/Down button to navigate thru the channels under the chosen category. Once found the desired channel display on the LCD, Short press "AUDIO" to confirm play the selected channel.

**Tips** Under the Channel navigate, Short press "AS/PS" button to quick return back to the category which is under those channels. .

### **Diagnostic Mode**

Enter into Diagnostic Mode

1. Long press iX-Bass button under XM mode, then "Diagnostic" will be displayed on the LCD. If no button is pressed within 10 seconds, unit will auto exit Diagnostic mode.
2. Press AUDIO button to confirm enter into Diagnostic mode.
3. Press Volume Up/Down to see the diagnostic displays.

Exit Diagnostic Mode

1. Press and hold Ix-Bass button or
2. Press AS/PS button.

## 10. TUNER OPERATION

### 10) BAND BUTTON (BAND)

Press BAND to change between FM bands and AM(MW) bands.

### 21/22) TUNING UP/DOWN BUTTON (▶▶ / ◀◀)

#### **Manual Tuning**

Press the Up Tuning (▶▶) or Down Tuning (◀◀) button for more than 3 seconds to move the radio frequency number up or down by one step.

#### **Auto Seek Tuning**

Press the Up Tuning (▶▶) or Down Tuning (◀◀) button for less than 3 seconds to move to next station automatically.

### 15~20) PRESET STATIONS BUTTONS

Six numbered preset buttons store and recall stations for each band.

### 14) AUTOMATICALLY STORE / PRESET SCAN (AS/PS)

Automatically select 6 strong stations and store them in the current band. Select a band (if needed). Press AS/PS button for more than three seconds. The new stations replace stations already stored in that band.

#### **Preset Scan**

Scan stations stored in the current band. Select a band (if needed). Press AS/PS button for less than 3 seconds. The unit will pause for ten seconds at each preset station. Press AS/PS button again to stop scanning when the desired station is reached.

#### **STEREO**

The unit will automatically pick up a stereo signal when available. When in stereo mode, the ST icon appears in the display. When no stereo signal is available, the unit will automatically revert to mono operation, and no icon will be displayed.

## 11. iPod OPERATION

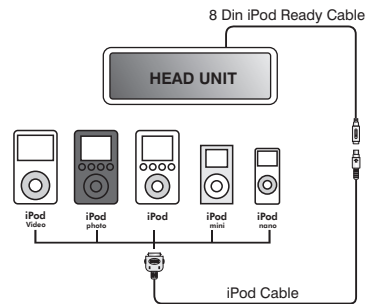
This unit is equipped with iPod Ready function which allow end user to have direct control of the iPod on the front panel control button and display iPod song information on the unit's LCD display. Please read below for more details operation

### **iPod Compatibility Chart**

This unit is support following iPod software version

iPod 1G	Not Supported
iPod 2G	Not Supported
iPod 3G	Firmware Version 2.2
iPod Mini	All versions
iPod 4G	All versions
iPod Photo	All versions
iPod Nano	All versions
iPod 5G(Video)	All versions

### **Connect the iPod to this unit**




### **About Video File**

This unit can support iPod Video display output feature, however it is **NOT ABLE** to select any VIDEO FILE OR VIDEO ALBUM which contained in the iPod Video. This unit will only automatically select Music Album or File regardless the connected Video iPod last playing is a Video File or Album. If user want to select and playback a video file on the iPod Video, Long press "AS/PS" button for more than 3 seconds to de-activates the front panel control iPod feature. After the LCD display "iPod Video", the iPod now is controllable and user can select the desire playback video file on iPod itself. Once selected a video it will automatically display on the unit thru the video output.

### **Turning iPod Power On and Off**

The iPod power turns on automatically as soon as it is connected to the 30 Pin Connector and as long as the vehicle's ignition is turned ON. The iPod power can be turned OFF by removing the iPod from the 30 Pin Connector or if the vehicle's ignition is turned OFF. Under this condition the iPod will go into pause mode and goes into sleep mode about 2 minutes later

**NOTE** While the iPod is connected, the power cannot be turned on or off from the iPod itself.

**Tips** "  " to disconnect will be shown in the iPod's display while it is connected to the unit .

### **iPod Battery Charging**

While connected to the unit, the iPod will automatically start re-charging as long as the vehicle's ignition key is turn to ACC or ON.

### **Switch to iPod Mode**

**When the Head unit is power on and iPod is connected to the 30 pin connector, press the mode button to change to iPod mode and the unit will display **iPod** for a while then starts **iPod Reading** the music files contained in the iPod and the playback will automatically start. Press Mode button repeatedly to change to other modes or switch back to iPod mode.**

### **iPod information Display on the Head Unit LCD**

This unit can display the Song, Artist, Album name and Elapsed time on the LCD display, these information can be displayed by pressing the AS/PS button repeatedly while a iPod Song file is playing

### **Searching a Desire Song**

Under iPod playback mode, press BAND to enter into the iPod Searching Mode. Pressing BAND button repeatedly to accesses the different searching methods as below :

- 1) **Play list**
- 2) **Artist**
- 3) **Album**
- 4) **Song**
- 5) **Genre**

Once selected the desire searching method, within 10 second press the AUDIO button as confirm & access into the searching mode, then turn the rotate encode volume knob to navigate thru the Album or Artist or Song contained in the iPod. Press the AUDIO button to confirm & play the selected song. During the searching mode, press AS/PS as quick move back to the last upper level of Album, Play list, Genre, etc.

### **Song Select**

Press the Track UP ( **▶▶** ) or Track DOWN ( **◀◀** ) button for less than one second to skip to the next or previous song. Press and Hold Track UP ( **▶▶** ) or Track DOWN ( **◀◀** ) button for more than 3 seconds to fast forward or fast reverse of the current song.

### **Song Repeat / Repeat All play :**

Long press the M3 button for more than 3 seconds during iPod playback mode for "REPEAT ALL". All songs of the current album will be kept on repeat playing until the "Repeat All" function is disabled. To disable current Album "REPEAT ALL" function, long press M3 button more than 3 seconds

Press the M3 button for less than 3 seconds to "REPEAT PLAY" the current song. And keep on repeat playing the current song until the "REPEAT PLAY" function is disabled. To disable current song "REPEAT PLAY", press the M3 button less than 3 seconds

### **Shuffle play: / Shuffle Album**

Long press the M4 button for more than 3 seconds during iPod playback mode to activate the "SHUFFLE ALBUM" function. This function allows RANDOM playback of all the albums contained on the iPod. To disable "SHUFFLE ALBUM" function, long press M4 button for more than 3 seconds.

Press the M4 button for less than 3 seconds during iPod playback mode to activate "SHUFFLE PLAY". This function allows the playback of all the songs in the iPod in random sequence. To disable "SHUFFLE PLAY", short press M4 button again for less than 3 seconds.

## 12. CD/MP3/WMA OPERATION

### INSERT AND EJECT CD

Insert a CD label-side up with the unit turned on, and the disc will begin to play. Press the Eject button to stop CD play and eject the CD. The unit does not have to be turned on to eject the CD.

### CD-DA OPERATION

#### 15) PAUSE BUTTON

Press the pause button to suspend disc play. Press the pause button again to resume disc Play.

#### 21-22) TRACK SELECT

Press the Up Tuning or Down Tuning button ( **▶|◀** ) for less than one second to advance to the next track on the CD, The selected track number will appear on the display. Press and hold the Up Tuning or Down Tuning button ( **▶|◀** ) for more than one second to fast forward or fast reverse through the disc. CD play starts when the button is released.

#### 17) REPEAT BUTTON (RPT)

Press REPEAT BUTTON (RPT) during disc play to continuously repeat the track. Press REPEAT BUTTON (RPT) again to stop Repeating.

#### 18) RANDOM BUTTON (RDM)

Press RANDOM BUTTON (RDM) during disc play to play all tracks on a CD in random, shuffled order. Press RANDOM BUTTON (RDM) again to stop random play.

#### 16) INTRO SCAN BUTTON (INT)

During disc play, press INTRO SCAN BUTTON (INT) to play the first 10 seconds to each track on the disc. When the desired track is reached, press INTRO SCAN BUTTON (INT) again to end the scan and play the selected track.

### MP3/WMA OPERATION

MP3 and WMA (Windows Media Audio) music files are audio compression format. This unit can play MP3/WMA directly from files contained on a CD-R/RW.

#### **Notes on Disc Play**

Depending on the media type and recording method, some CD-R/RW's may be incompatible with this unit. The MP3/WMA recording media acceptable to this unit are CD-ROM, CD-R and CD-RW. When using CD-RW, use full format rather than quick format to prevent malfunction.

#### **Notes on MP3/WMA Play**

This unit can play MP3 (MPEG1, 2, 2.5 Audio Layer 3). However, the MP3 recording media and accepted formats are limited. When writing MP3/WMA, pay attention to the following restrictions.

#### Acceptable Medium Formats

The following formats are available for the media used in this unit. The maximum number of characters used for file name including the delimiter (".") and three-character extension are indicated in parentheses.

- ISO 9660 Level 1 (11 characters)
- ISO 9660 Level 2 (31 characters)
- Joliet (31 characters)
- Romeo (31 characters)

Up to 200 characters can be displayed in the long file name format. For a list of available characters, see the instruction manual of the writing software and the section "Entering File and Folder Names" below. The media reproducible on this unit has the following limitations:

- Maximum number of nested folders: 8
- Maximum number of files per disc: 999
- Maximum number of files per media device: 2000
- Maximum number of folders per disc: 255

MP3/WMA written in the formats other than the above may not be successfully played and their file names or folder names may not be properly displayed.

#### **MP3/WMA Encoder and CD Writer Settings**

Use the following settings when compressing audio data in MP3 data with the MP3 encoder.

- Transfer bit rate : 32- 320 kbps
- Sampling frequency : 32,44.1,48 kHz(WMA) 16,22.05,24,32,44.1, 48kHz (MP3)

When using a CD writer to record MP3/WMA up to the maximum disc capacity, disable additional writing. For recording on an empty disc up to the maximum capacity at once, check disc at once.

#### **Entering ID3 Tag**

This unit supports ID3 tag versions 1.0 and 1.1.

The unit also supports CD-TEXT encoded discs for Album, Track and Artist Title information.

#### **Entering File and Folder Names**

Names using the code list characters are the only file names and folder names that can be entered and displayed. Using any other character will cause the file and folder names to be displayed incorrectly. The unit recognizes and plays only files with the MP3/WMA extension.

***NOTE*** ➤ ***A file name entered with characters not on the code list may not play correctly.***

#### **Writing Files into a Media**

When a media containing MP3/WMA data is loaded, the unit checks all data. If the media contains many folders or non-MP3/WMA files, MP3/WMA play will be delayed, it may take time for the unit to move to the next file, and searches may not be performed smoothly. Loading such a media may produce loud noise and cause damage to the speakers. ***Do not attempt to play a media containing a non-MP3/WMA file with the MP3/WMA extension or a media containing non MP3/WMA files.***

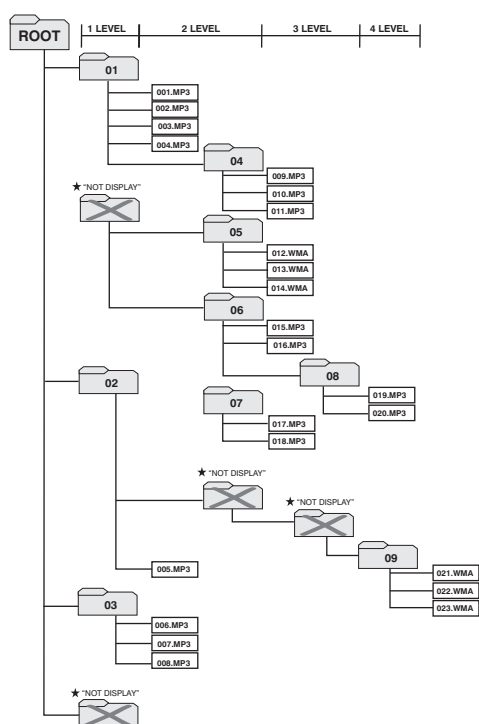
#### **Bit Rates**

The unit supports bit rates from 32 - 320 kbps.

### Files Playing Order

When selected for play, Folder Search, File Search or Folder Select, files and folders are accessed in the order in which they were written by the PC writer. Because of this, the order in which they are expected to be played may not match the order in which they are actually played. For example, a media with the following folder/file hierarchy is subject to Folder Search, File Search or Folder Select as shown below.

- An outline of a Media with MP3/WMA is shown below. Subfolders are shown as folders in the folder currently selected.



- The equipment assigns folder numbers. The user can not assign folder numbers.
- ★ It is not possible to check folders that do not include MP3/WMA files. (These folders will be skipped without displaying the folder number and name)

### FILE/FOLDER PLAY

There are three different play methods as following:

#### File/Folder Intro play:

- Press M2 button more than 3 seconds during playing MP3/WMA disc for “intro play” all files of the current folder. Intro play should restart from the first song of the current folder, after all files in the current files have been intro-played.  
To disable current folder “intro play”, long press M2 button more than 3 seconds
- Press M2 button less than 3 seconds is “intro play” all files on the disc. Intro play should re-start at the very first file of the disc after all files in the disc has been intro played.  
To disable all files “intro play”, press M2 button less than 3 seconds

#### **File/Folder Repeat play :**

- Press M3 button more than 3 seconds during playing MP3/WMA disc for “repeat play” all files of the current folder. And keep on repeat playing the current folder until “repeat play” is disabled.  
To disable current folder “repeat play”, long press M3 button more than 3 seconds
- Press M3 button less than 3 seconds to “repeat play” the current file. And keep on repeat playing the current file until the “repeat play” is disabled.  
To disable current file “repeat play”, press M3 button less than 3 seconds

#### **File/Folder Random play:**

- Press M4 button more than 3 seconds during playing MP3/WMA disc to “random play” all files of the current folder.  
To disable current folder “random play”, long press M4 button more than 3 seconds
- Press M4 button less than 3 seconds is “random play” all files on the disc.  
To disable all file “ random play”, press M4 button less than 3 seconds.

#### **Folder Up / Down Play**

- Press M5 button less than 3 seconds to One Folder Down
- Press M6 button less than 3 seconds to One Folder Up

#### **MP3/WMA File or Folder Search**






##### **Folder / Files Navigate Searching**

Press BAND button. The LCD will display "Navigate", and the illumination around the select knob will blink. Rotate the knob to navigate through all folders and sub-folders on the disc. The folder names will be displayed on the LCD. Press the select knob for more than three seconds to play the first file in the folder. Press the select knob for less than three seconds to access the sub-folders or files. Rotate the select knob to navigate, then press the select knob to confirm and begin file play. During navigation search, press AS/PS or rotate the select knob counter-clockwise to move back to the last upper level of a folder.

#### **ID3 INFORMATION DISPLAY**

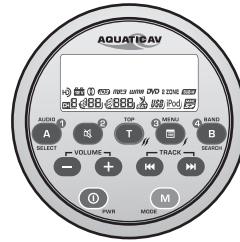
If any MP3/WMA file recording with ID3 Tag information. The ID3 information such like Album title, Track title, Artist Title will be displayed and automatic scrolling through the LCD while the file is playing. User also allows pressing the AS/PS button repeatedly to view the ID3 tag information manually.

#### **NOTE OF ID3 ICONS ON DISPLAY**

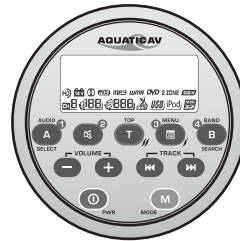
<b>ICON</b>	<b>DESCRIPTION</b>
	FOLDER ICON
	FILE ICON
	TRACK ICON
	ARTIST ICON
	ALBUM ICON

### 13. OPTIONAL ACCESSORIES

Wired Remote  
AQ-WR-3 (Silver)  
AQ-WR-3B (Black)



Wireless Remote  
AQ-RF3F (Silver)  
AQ-RF3FB (Black)



AQ-RF-3 Wireless Remote Control



AQ-IRR IR Remote Control



iPod cables  
AQ-EXT-IP-3



## 14. SPECIFICATION

### **Auxiliary Input Section**

Frequency response	20Hz to 20KHz -3dB
Input Maximum Voltage	1200 mV
Input Impedance	4.7k ohm

### **Radio Section**

#### **FM**

Frequency Range	87.5-107.9 MHz (200 KHz Space) 87.5-108MHz
Usable Sensitivity	≤ 15dB at S/N 30 dB
Stereo Separation	25 dB at 1KHz
S/N Ratio	50 dB

#### **AM or MW**

Frequency Range	530-1710 (10 KHz Space) 522-1620KHz
Usable Sensitivity	≤ 40dB at S/N 20dB
S/N Ratio	40 dB

### **XM RADIO**

Support XM Mini Tuner

#### **General**

Operating Voltage	DC 11 -14.4V
Grounding System	Negative Ground
Fuse:	15-Amp Mini ATM Type
Operating Temperature:	0 -C to 50 -C
Unit Mounting Angle	≤ 30°

## 15. TROUBLE SHOOTING

Before going through the check list, check wiring connection. If any of the problems persist after check list has been made, consult your nearest service dealer.

Symptom	Cause	Solution
No power	The ignition is not on.	If the power supply is properly connected to the car accessory terminal, switch the ignition key to "ACC"
	The fuse is blown.	Replace the fuse.
Disc cannot be loaded or ejected	Presence of CD disc inside the player.	Remove the disc in the player, then put a new one.
	Inserting the disc in reverse direction.	Insert the compact disc with the label facing upward.
	Compact disc is extremely dirty or defective disc.	Clean the disc or try to play a new one.
	Temperature inside the car is too high.	Cool off or until the ambient temperature returns to normal.
	Condensation.	Leave the player to off for an hour or so, then try again.
No sound	Volume is in minimum.	Adjust volume to a desired level.
	Wiring is not properly connected.	Check wiring connection.
The operation keys do not work	The built-in microcomputer is not operating properly due to noise.	Press the RESET button. Front panel is not properly fixed into its place
Sound skips.	The installation angle is more than 30 degrees.	Adjust the installation angle to less than 30 degrees.
	The disc is extremely dirt or defective disc.	Clean the compact disc. Then try to play a new one.
The radio does not work. The radio station automatic selection does not work.	The antenna cable is not connected.	Insert the antenna cable firmly.
	The signals are too weak.	Select a station manually.
ERROR	Mechanism Error	Press the eject button to correct the problem. If the error code does not disappear, consult your nearest service dealer.
Disc Error	Maybe disc dirty / disc scratched / disc upside down.	Replace the disc.