

products with a watertight reputation

# AQ-MP-5UBT-H - WATERPROOF MEDIA PLAYER

for iPhone, iPod, USB, Bluetooth & MP3 devices

# **USER / INSTALLATION MANUAL**



Replaces Factory Radio on Harley-Davidson® Motorcycles (Models 1996-2013)





PLEASE READ THIS INSTRUCTION MANUAL BEFORE INSTALLATION AND OPERATION

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# 1.1 Contents

- AQ-MP-5UBT-H Digital Media Player
- Four-pin Speaker Wiring Harness
- Owner's Manual

# 1.2 Connections (see also '1.3 Wiring Diagram')

#### 1. 23-pin Harley-Davidson® Standard Harness Connection

The 23-pin harness supplies power and ground connections to the Media Player and two speaker channel output connections from the Media Player.

#### 2. FM/AM Radio Antenna Jack

Allows connection of FM/AM radio antenna. For best FM/AM performance make sure the antenna is extended to the highest achievable position.

#### 3. Auxiliary Outputs

Allows external amplifiers to be connected to power additional speakers.

#### 4. Auxiliary Inputs

Allows an additional RCA input, from a standalone unit or another stereo source.

#### 5. 8-pin DIN Cable

Allows connection of the wired Remote Control (AQ-WR-5F sold separately) or wireless Remote Control (AQ-RF-34 sold separately) RF receiver.

#### 6. Bluetooth Antenna

Allows a Bluetooth device to wirelessly connect to the unit.

#### 7. Subwoofer Output

Allows powered (active) subwoofer to be connected via RCA connector.

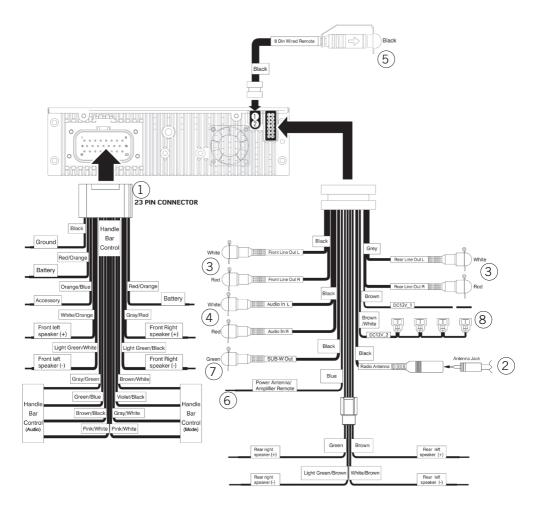
#### 8. 12V DC External Trigger (x2)

Allows for external lighting or relays to be triggered (350mA max load).

#### 9. USB Input

USB for connection of Apple devices USB flash drives. Charges USB devices when connected.

# 1.3 Wiring Diagram





No lower than a 2 Ohm load should be used or damage may occur to the Media Player. Make sure the polarity of speakers are connected correctly.

# **1.4. Mounting Precautions**

Please observe the following precautions:

1. Install the unit where it does not interfere with driving.

2. Check clearances on both sides of a planned installation before drilling any holes or installing any screws.

- 3. When routing RCA cables, keep them away from power cables and speaker wires.
- A common source of noise in the audio system is the motorcycle ignition system. This is usually due to the radio being located close to the ignition system (engine). This type of noise is detectable by a varying pitch with the speed of the engine.

Ignition noise can be removed using a high voltage radio suppression type ignition wire and a suppressor resistor. Your motorcycle may already use this wire and resistor but it may be necessary to check them to ensure they are operating correctly. Alternatively, a noise suppressor could be installed.

# 1.5 Installing the Media Player if no stereo is already installed

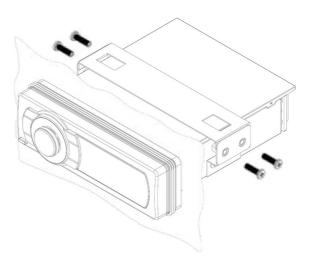
Use the existing Harley-Davidson  $\ensuremath{^{@}}\xspace$  factory side mounting brackets and hardware to mount the Media Player.

1. Position the Media Player in front of the fairing opening so the wiring can be passed through the opening.

2. Follow the wiring diagram and ensure all connections are secure and insulated with crimp connectors to ensure proper operation.

3. Turn the Media Player on to confirm operation (motorcycle ignition switch must be on) and once correct operation is achieved turn the motorcycle ignition switch off before proceeding with the final mounting of the chassis.

4. Ensure that the unit is supported and secured on the sides using the existing 4 factory screws; failure to do so may allow the unit to move during while riding, causing damage to the mounting area.



# 1.6 Installing the Media Player if an existing factory stereo is already installed

If replacing an existing Harley-Davidson<sup>®</sup> factory stereo use the existing Harley-Davidson<sup>®</sup> factory side mounting brackets and hardware to mount the Media Player.

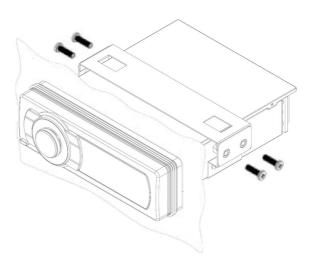
1. Unplug the 23-pin harness and FM/AM radio antenna from the factory stereo.

2. Remove the factory stereo and replace with the AQ-MP-5UBT-H Media Player using the existing factory mounting hardware.

3. Plug the 23-pin harness and FM/AM radio antenna into the AQ-MP-5UBT-H factory stereo.

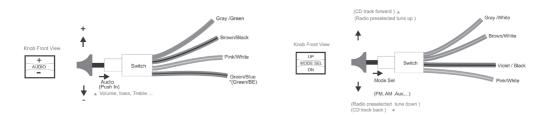
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4. Ensure that the unit is supported and secured on the sides using the existing 4 factory screws; failure to do so may allow the unit to move during while riding, causing damage to the mounting area.



# **1.7 Handle Bar Controls**

#### Audio switch (left hand side)



Mode switch (right hand side)

The AQ-MP-5UBT-H is a plug and play solution for 1996-2013 Harley-Davidson<sup>®</sup> Motorcycles. Plug the standard Harley-Davidson<sup>®</sup> 23-pin connector in to the back of the AQ-MP-5UBT-H and your speakers and hand controls will work the same as the standard factory install (some Harley-Davidson<sup>®</sup> models may require additional steps).

Some stock Harley-Davidson $^{\mbox{\tiny B}}$  features e.g. CB radio will not be supported through the AQ-MP-5UBT-H.

Below is a matrix of what can be controlled on the AQ-MP-5UBT-H via the stock Harley-Davidson® hand controls.

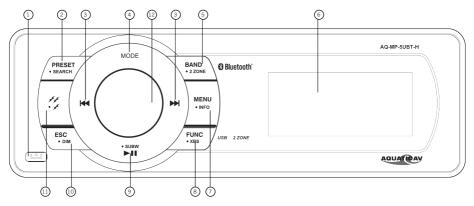
	Hand Control Up	Hand Control Down	Mode Select
AM/FM	Tunes to next station	Tunes to previous station	Switches Mode
Bluetooth/USB	Next Track	Previous Track	Switches Mode
AUX			Switches Mode
	(+)	( - )	Audio
AM/FM	Turns volume up	Turns volume down	Accesses Audio Menu adjustments
Bluetooth/USB	Turns volume up	Turns volume down	Accesses Audio Menu adjustments
AUX	Turns volume up	Turns volume down	Accesses Audio Menu adjustments

# 1.8 Power On

The AQ-MP-5UBT-H requires +12V DC to both the red and yellow wires. When both of these wires have power the AQ-MP-5UBT-H is powered on. Ground is connected to the black wire.

Once all connections are made press the rotary knob and the stereo will turn ON.

### 2.1 Media Player Controls



#### 1. Front face release

- 4. Mode button
- 2. Preset/Search 3. Fast Rewind/Forward 6. LCD screen
- 5. Band/2-Zone
- 7. Menu/Info 8. Function/XBS
- 10. ESC/Dimmer 11. 12V Triggers
- 9. Play/Pause/Subwoofer 12. Rotary Select Knob

				1
Button	AM/FM Mode	Aux In	Bluetooth	USB
Rotary Select Knob	Short Press: Mute			
	Long Press: Power Off			
	In menu: Select			
Mode	Short Press: Enter mode select screen			
	Long Press: No Function			
Rotary Knob Clockwise	When turned clockwise the volume increases			
Rotary Knob Counter Clockwise	ter When turned counter clockwise the volume decreases			
Fast Forward	Short Press: Scans to the next station	No Function	Changes to next song	Changes to next song
	Long Press: Switches into manual seek mode	No Function	No Function	No Function
Fast Rewind	Short Press: Scans to the previous station	No Function	Changes to Previous Song	Changes to Previous Song
	Long Press: Switches into manual seek mode	No Function	No Function	No Function
Play/Pause/Subwoofer	Short Press: Toggles between Play and Pause No Function Short Press: Toggles between Play and Pause		en Play and Pause	
	Long Press: Displays subwoofer volume			
Band/2 Zone	Short Press: Switches between AM/FM Bands	No Function	No Function	No Function
	Long Press: Toggles 2 Zone selection menu	÷		
12V Trigger	Short Press: Toggles 12V Trigger menu			
Func/XBS	Short Press: Toggles applicable functions for each m	ode		
	Long Press: Toggles XBS ON/OFF			
ESC/DIM	Short Press: Returns you to the previous screen			
	Long Press: Toggles between dimmer modes			
ESC/Info	Short Press: Returns you to the Default Screen			
	Long Press: Displays info if any available	No Function	No Function	
Preset/Search	Short Press: Displays your presets	No Function	Toggles Search feature*	Toggles Search feature*
	Long Press: Autosets presets	No Function	No Function	No Function
Menu/Info	Short Press: Toggles system menu			
	Long Press: Changes the information displayed on screen		Changes the information displayed on screen*	Changes the information displayed on screen*

\* iPod & iPhone only



If your music player is connected via the Auxiliary input you will not be able to control track or receive track information.

Turn off DSP to access control of Bass and Treble

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### 3.1 Listening via Bluetooth

The Bluetooth menu is accessible via the in the 'Menu/Info' button and is used to connect or disconnect a Bluetooth device that has already been paired.

IAP (Information Apple Protocol) Bluetooth connectivity allows device information, such as song, playlist and album titles, to be streamed wirelessly and viewable on the AQ-MP-5UBT-H screen. This feature is available for Apple devices only.

#### 3.1.1 Pair with Bluetooth Device

- 1. Enable Bluetooth mode by pressing MODE and selecting Bluetooth.
- 2. Switch on your Bluetooth device.
- 3. Select 'AQUATIC AV' from the list of available devices to pair (no password is needed).
- 4. A Bluetooth logo will illuminate on the Media Player LCD to verify Bluetooth is activated.

**i** Only one Bluetooth device can be paired with the Media Player at any time.

#### 3.1.2 Listening via Bluetooth Device

- 1. Bluetooth mode will be activated once a Bluetooth device is linked.
- 2. Play the song from device and the sound will play through the Media Player.
- 3. Press PLAY/PAUSE to play/pause the song.
- 4. Press FAST REWIND/FORWARD buttons to play previous/next song file.

5. Previous/next track and volume up/down can be controlled directly from your Bluetooth device or directly from the Media Player controls.

#### 3.2 Listening via USB

#### 3.2.1 Listening via USB (Apple Devices)

1. Remove the faceplate and press the lever in the lower right corner of the unit to release the mechanism.

2. Set the iPod/iPhone in the mechanism and adjust the clamps to hold it secure.

3. Plug the iPod/iPhone cable into the USB input, and tuck the cable in so the faceplate can be reattached.

4. Replace the faceplate. If the stereo was previously on it will come back on. If not press the Rotary Knob to power the unit on.

5. Press the Mode button and select USB Mode.

### 3.2.2 Listening via USB Flash Drives

1. Remove the faceplate and press the lever in the lower right corner of the unit to release the mechanism.

2. Plug the USB drive in the USB port.

3. Replace the faceplate. If the stereo was previously on it will come back on. If not press the Rotary knob to power it on.

4. Press the Mode button and select USB Mode.

### 3.2.3 USB Search

1. When using an iPhone, iPod or USB flash drive press SEARCH to enter USB searching mode.

2. Once in searching mode the menu will display 'Playlist'. Use the Rotary Knob to scroll through the search modes below:

1) Playlist 2) Artist 3) Album 4) Song 5) Genre 6) Composer 7) Audio Book

3. Press the Rotary Knob to select the desired search mode and continue in this manner to navigate the menu sub-folders.

4. Use and FAST REWIND/FAST FORWARD to navigate through your menu page by page.

### 3.2.4 Device Charging

When specified USB devices are connected to the USB input the device battery will charge.

#### 3.3 Listening via Auxiliary Input (3.5mm Jack)

- 1. Remove the faceplate from the stereo.
- 2. Connect your MP3 device to the 3.5mm connector.
- 3. Re-attach the faceplate.

4. Press the rotary knob to power the Media Player ON (if the faceplate was removed with the stereo still powered on, it will power on by itself).

5. Press (MODE) on the Media Player or remote control to select 'AUX IN-1' mode.

Always ensure to connect and disconnect your Media Player with dry hands!

### **3.4 Adjust Volume Level**

- 1. Turn the rotary knob clockwise increase the volume.
- 2. Turn the rotary knob counter clockwise to reduce the volume.

### 4.1 Enter FM/AM Radio Mode

1. Press MODE on the unit keypad and select RADIO mode.

### 4.2 Scan or Navigate FM/AM Radio Channels

- 1. Press FAST REWIND/FAST FORWARD to seek another station.
- 2. Press and hold either FAST REWIND/FAST FORWARD for manual tuning back or forward.

# 4.3 Saving Radio Channel to Memory

- 1. Tune to the station you would like to be saved as a preset.
- 2. Press the FUNC button to enter the Function menu.
- 3. Select 'Manually Save Preset'.

4. Using the rotary knob you can choose which preset slot you would like to save the current station to.

5. Upon successfully saving a preset, the preset number that was chosen will be shown in the left corner.



Presets are only for the current band you are on. Each band FM1, FM2, FM3, AM1 and AM2 has six presets for a total of 30 (18x FM & 12x AM).

# 4.4 Listening to Saved Radio Memory

1. Once the presets have been set either manually or using AS/PS press the 'Preset' button to display your presets.

# 4.5 Switching between US and European FM Modes

- 1. When in 'RADIO' mode.
- 2. Press the FUNC button to enter the Function menu.
- 3. Scroll to 'AREA' then press the rotary knob.

4. Use the Rotary Knob to scroll to the desired tuning Area and select by pressing the Rotarey Knob.



US mode will increase and decrease the FM frequency in steps of 0.1 MHz, e.g. 88.5, 88.6, 88.7 MHz. EUR mode will increase and decrease the FM frequency in steps of 0.05 MHz, e.g. 88.25, 88.30, 88.35 MHz.

## 5.1 Audio Menu

From the 'Audio Menu' you are able to change the bass, treble, balance, and fader.

- 1. To enter the 'Audio Menu' press the 'AUDIO/MENU' button.
- 2. In the 'Audio Menu' press the 'AUDIO/MENU' to scroll through all options.
- 3. To change the parameters use the rotary knob to adjust settings.

Any changes made in the 'Audio Menu' are system wide so it will affect all modes.

### 5.2. AS/PS (Auto Scan/Preset Scan)

Scans through the current frequency band, and assigns presets to the radio stations that have the strongest signal strength. Press and hold PRESET button to swicth between AS and PS modes.

- 1. When in AM/FM mode press FUNC to access the 'AS/PS' settings.
- 2. Use the rotary knob to adjust settings.



Only does this for one AM/FM band at a time.

# 5.3 Local/Distant Tuning

When 'Local' is turned on the Media Player seeks to only the radio channels with strong signal strength. When 'Local' is turned off the Media Player will seek to all radio channels it receives signal from.

- 1. When in AM/FM mode press FUNC to access the 'Local/Distant Tuning' settings.
- 2. Use the rotary knob to adjust settings.

When local is turned on the word 'Local' will appear in the upper right hand corner of the Media Player LCD.

#### 5 4 Stereo/Mono

Change the output mode between stereo and mono. Some applications only accept a mono input.

- 1. When in AM/FM mode press FUNC to access the 'Stereo/Mono' settings.
- 2. Use the rotary knob to adjust settings.

#### 5.5 FM Tuning Area

The FM tuning can be set to different areas, using the rotary knob to scroll through to select the desired tuning area.

There are seven different tuning areas: USA, EUR, LAT, ASIA, MIDDLE EAST, AUSTRALIA, RUSSIA.

- 1. When in AM/FM mode press FUNC to access the 'FM Tuning Area' settings.
- 2. Use the rotary knob to adjust settings.

### 5.6 Beep Tone

Beep tone plays when any button is pressed, it can be toggled on and off from this selection.

#### 5.7 System Reset

Restores all factory settings.

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# **6.1 Specifications**

#### Media

Supported media	.Bluetooth/USB/MP3/FM/AM
Supported media max. dimensions	.107 x 184mm (WxH)
Device charging	.via USB
Inputs	

Auxiliary...... 1x 3.5mm stereo Jack socket, 1x stereo pair RCA

#### Outputs

Pre-Out	2x stereo pair RCA (4V)
Subwoofer	1x RCA (4V)
12V Trigger	2x 12V triggers (350mA)

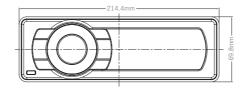
#### Power

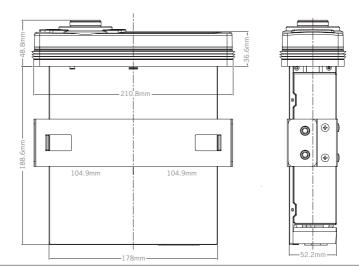
Output voltage @ 2 Ohm	.4x 72W
Output voltage @ 4 Ohm	.4x 45W
Operation voltage	.9.6V - 14.4V DC
Max current draw	.7A
Standby current draw6mA	

#### **Multi-Environment Certifications**

Waterproof / Dustproof	. Yes - IP55
Conformal PCB coating	Yes
UV protection	500 hours stable, ASTM D4329 compliant
Salt/Fog protection	. 500 hours stable, ASTM B117 compliant
Stainless Steel mountings	Yes

# 6.2 Dimensions





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Aquatic AV offers a limited warranty of our products on the following terms:

#### Length of warranty

2 years on audio systems, electronics, speakers, and accessories (receipt required).

#### Coverage

This warranty covers only the original purchaser of an Aquatic AV product purchased from an authorized Aquatic AV dealer. In order to receive service, the purchaser must provide Aquatic AV with a copy of the receipt stating the customer name, dealer name, product purchased and date of purchase.

#### **Defective products**

Products found to be defective during the warranty period will be repaired or replaced (with a product deemed to be equivalent) at Aquatic AV's discretion.

#### What is not covered

Damage caused by accident, abuse, improper operations or theft. Any cost or expense related to the removal or reinstallation of product. Service performed by anyone other than an authorized Aquatic AV service center. Any product with the serial number or tamper labels defaced, altered, or removed. Subsequent damage to other components. Any product not purchased from an authorized Aquatic AV dealer.

#### Limit on implied warranties

Any implied warranties including warranties of fitness for use and merchantability are limited in duration to the period of the express warranty set forth above. Some states do not allow limitations on the length of an implied warranty, so this limitation may not apply. No person is authorized to assume for Aquatic AV any other liability in connection with the sale of the product.

#### How to obtain service

You must obtain a return material authorization number (RMA) to return any product to Aquatic AV. You are responsible for shipping charges of returned products to Aquatic AV.

Please record the model and serial number[s] of your equipment in the space provided below as your permanent record and will assist us with your factory warranty coverage. These numbers can be found on the rear of the Digital Media Player.

Model number[s]:	Serial number[s]:

#### FCC ID: MADE IN CHINA

This device complies with Part 15 of the FCC Rules. Operation is subject to the following two conditions: (1) this device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.

#### NOTE:

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

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

Patent: 7,831,756 & 8,578,081

iPhone and iPod are trademarks of Apple Inc., registered in the U.S. and other countries.

Made for iPod and Made for iPhone mean that an electronic accessory has been designed to connect specifically to iPod or iPhone respectively, and has been certified by the developer to meet Apple performance standards. Apple is not responsible for the operation of this device or its compliance with safety and regulatory standards. Please note that the use of this accessory with iPod or iPhone may affect wireless performance.

Product design and specification subject to change without notice. E&OE. Doc V1.1

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