

AQUATIC AV®

products with a watertight reputation

AQ-BC-6UBT-X

BLUECUBE+ 'HIDE-AWAY' MEDIA PLAYER

Supports Bluetooth Audio, USB, MP3 and FM Radio

USER / INSTALLATION MANUAL



BLUECUBE+ MEDIA PLAYER



! PLEASE READ THIS INSTRUCTION MANUAL BEFORE INSTALLATION AND OPERATION !

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1.1 Contents

- AQ-BC-6UBT-X BlueCube+ Media Player
- 2-Way RF Waterproof Remote Control (AQ-RF-6UBT-T)
- Wiring Harness (AQ-UNH-2)*
- Four (4) Stainless Steel Mounting Screws
- User/Installation Manual
- USB Charging Cable (AQ-RF-6UBT-C)
- Mounting Template*
- Bluetooth Antenna

*Retail packaged models only.

1.2 Connections (see Diagram 1.2.1)

1. 12-pin Watertight Harness*

The 12-pin harness supplies power and ground connections to the BlueCube+ Media Player and four (4) speaker channel output connections from the BlueCube+ Media Player (see Wiring Diagram 1.3.1).

 *Do not cut or modify the 12-pin harness* on the Bluecube+ side or warranty will be void.*

2. FM Radio Antenna Jack

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

3. Auxiliary Outputs - Rear

Allows external amplifiers to be connected to power additional speakers.

4. Auxiliary Outputs - Front

Allows external amplifiers to be connected to power additional speakers.

5. Auxiliary Inputs

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

6. 12V DC External Trigger (x2)

Allows for external lighting or relays to be triggered (3A max load).

7. USB Input

For connection of USB thumb drives with MP3 and/or WMA files. Charges compatible USB devices when connected via USB cable.

8. Wired Remote 8-pin DIN Cable

Allows connection of a wired Remote Control (AQ-WR-6F sold separately).

9. Power On LED

When the BlueCube+ is powered on the LED will illuminate red.

10. Bluetooth *Halo Aerial* Connector

Connect the Bluetooth *Halo Aerial Technology* Antenna (AQ-BTANT-1) to the male SMA connector. Do not apply excessive torque on the SMA connector (no more than 0.5N-m). Use hands to tighten the connection (do not use a wrench). See section 1.5.

11. Power Attenuation Wires

Allows the output level to be adjusted from a factory preset of -3dB to either -6dB, 0dB or +6dB. See section 1.6 for further details.

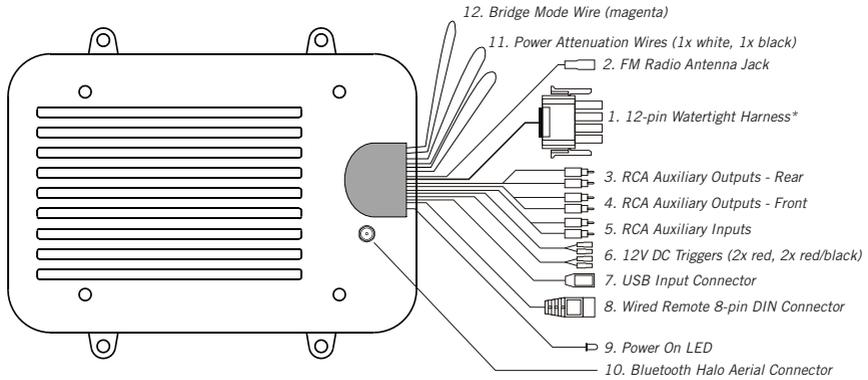
12. Bridge Mode Wire

Allows the left and right rear channels to be used to power a standard passive subwoofer (e.g. AQ-SWP8-2) instead of speakers. See section 1.7 for further details.

 *Aquatic AV does not recommend the wired Remote Control AQ-WR-6F for use in spa applications.*

*Retail packaged models only.

1.2.1 Connections Diagram

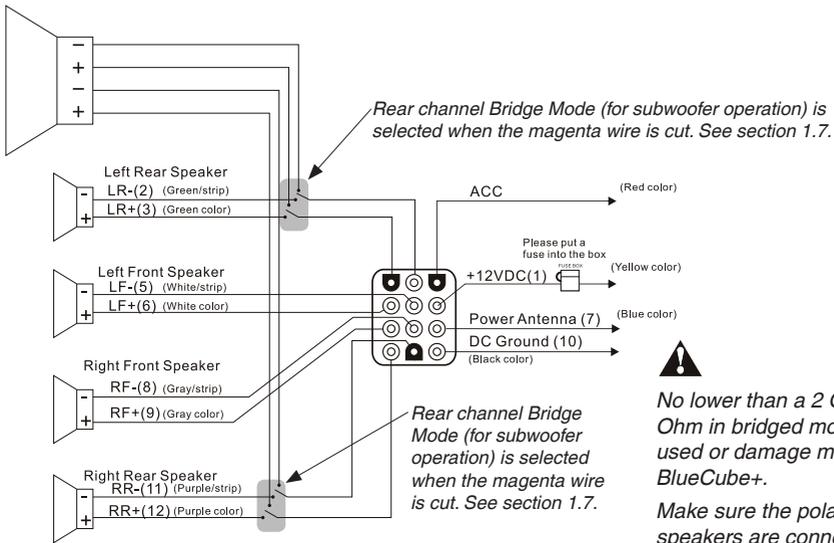


1.3 12-pin Harness Connection (retail packaged models only)

If your AQ-BC-6UBT-X was purchased from an Aquatic AV dealer and/or supplied with retail packaging it is supplied with the Aquatic AV universal harness AQ-UNH-2 in order to connect the media player to power and speakers. Please proceed to section 1.3.1.

If your AQ-BC-6UBT-X was supplied as a pre-installed waterproof entertainment system it will utilise 3rd party wiring connections and is not supplied with the Aquatic AV 12-pin Harness. Please proceed to section 1.4

1.3.1 12-pin Harness Wiring Diagram



No lower than a 2 Ohm load, or 4 Ohm in bridged mode, should be used or damage may occur to the BlueCube+.

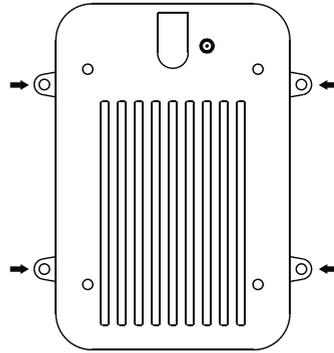
Make sure the polarity of speakers are connected correctly.

All open wire connections should be soldered and protected against water and dust for best long-term performance.

*Retail packaged models only.

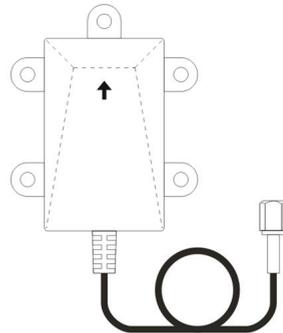
1.4. Mounting the BlueCube+ Media Player

1. Make sure the outside surface is clean and clear of debris.
2. The BlueCube+ Media Player has four (4) front screws. Drive the screws using a screw driver. Make sure screws are snug and do not over tighten.



1.5 Bluetooth Antenna Installation

1. Screw on the provided Bluetooth Antenna, avoiding bending the cable at a 90° angle.
2. Install the Bluetooth antenna as high as possible, above the waterline of the spa if possible, and making sure the arrow is pointing directly upwards towards the sky to ensure the Bluetooth range is maximized. If there is no suitable surface to screw it in, we recommend using a good quality double sided tape.



1.6 Power Attenuation Wires

The AQ-BC-6UBT-X Bluecube+ Media Player's power can be reduced or increased to suit different applications. An output level of -3dB or -6dB should be used to avoid blowing very small speakers, often used in spa applications.

Black Wire	White Wire	Output Level
Intact (not cut)	Intact (not cut)	-3dB
Intact (not cut)	Cut	-6dB
Cut	Intact (not cut)	0dB (reference)
Cut	Cut	+6dB

By cutting only the white wire the output level will decrease to -6dB below the nominal 0dB. By cutting both the white and black wires the power/volume will increase to +6dB above the nominal 0dB.

By cutting only the black wire the power/volume will increase from -3dB to the nominal 0dB.

These modifications should only be carried out by an experienced audio installer.

i Should you cut the wrong wires or wish to reconnect them to further alter the attenuation, the Power Attenuation Wires can be crimped back together.

1.7 Bridge Mode

The AQ-BC-6UBT-X is capable of powering up to eight 4 Ohm speakers, however should you wish to power a subwoofer in addition to standard speakers this can be achieved by using the two rear speaker channels in Bridge Mode.

Cut the magenta wire to place the Bluecube+ Media Player in Bridge Mode and you will now be able to use the left and right rear channels to power a standard passive subwoofer such as the Aquatic AV AQ-SWP8-2.

In Bridge Mode you will only be able to power up to four 4 Ohm speakers (two from the front left channel and two from the front right channel) plus a subwoofer.

These modifications should only be carried out by an experienced audio installer.

i *Should you wish to reconnect the Bridge Mode wire this can be crimped back together.*

1.8 Power On

The AQ-BC-6UBT-X requires +12V DC to both the red and yellow wires. When both of these wires have power the AQ-BC-6UBT-X is always powered on, indicated by a red LED on the heatsink of the media player. Ground is connected to the black wire.

In a spa application this requires the red and yellow wires to be jumped together and then connected to the +12VDC output of the power source. In this set up the AQ-BC-6UBT-X will always be on, with a very low current draw when idle.

In a boat, ATV or other application requiring power from a battery, the yellow wire (constant power) should be connected to the battery, and the red wire should be connected to the ignition or a switch.

For detailed instructions you can check out our online video:

‘How to wire your Aquatic AV stereo system’

<http://www.aquaticav.com/support/videos>

1.9 Handheld Remote Control Charging

The remote has a built-in Polymer Lithium rechargeable battery and comes with a charging cable. Connect one end of the charging cable to the charging connection on the remote control and connect the USB end of the charging cable to any USB charger (5V DC) for charging.

Make sure the remote has been charged before used.

1.10 Handheld Remote Control Synchronizing

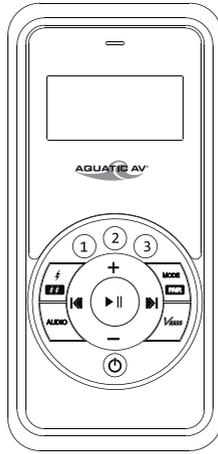
The remote should already be paired from the factory, but if you need to synchronize the remote, follow the steps below.

1. Make sure BlueCube+ Media Player is powered ON (red LED)
2. Put the remote within 0.5 meter of the BlueCube+ Media Player.
3. Press and hold MODE on remote control until the LCD shows “Pairing in Progress”. Release the button.
4. Within 2 seconds, the LCD will show “Paired”. If it fails to pair, the LCD will show “Retry again”. If this happens, wait 5 seconds and repeat steps above.

For any additional remote controls, you will also need to synchronize those remote controls to the BlueCube+ Media Player.

- i** *If the pairing process is not successful, try again to put your remote close to the remote receiver or charge the remote control if the battery is low.*
- i** *Depending on the frequency of usage, the remote may drain its battery. Please charge the remote before use. If the LCD shows nothing, the battery has been drained and will need charging.*
- i** *If you have lost or damaged your remote control and buy a new remote control, follow the above steps to pair the new remote control.*

2.1 Wireless Handheld Remote Control AQ-RF-6UBT-T



Buttons		Button Action	Bluetooth	AUX	USB	FM Radio
Power		Press once: Press and hold:	Toggle Operational mode to Standby mode or vice versa No function			
Mode/Pair		Press once: Press and hold:	Change mode Synchronize remote control			
Volume Up		Press once: Press and hold:	Volume up Fast volume up			
Volume Down		Press once: Press and hold:	Volume down Fast volume down			
Fast Forward		Press once: Press and hold:	Next track Fast forward	No function No function	Next track Fast forward	+0.05kHz Scan up
Fast Rewind		Press once: Press and hold:	Previous track Fast Rewind	No function No function	Previous track Fast Rewind	-0.05kHz Scan down
Play/Pause		Press once: Press and hold:	Play / Pause No function	Mute / unmute No function	Play / Pause No function	Mute / unmute No function
1		Press once: Press and hold:	No function No function	No function No function	No function No function	Preset 1 Save to Preset 1
2		Press once: Press and hold:	No function No function	No function No function	No function No function	Preset 2 Save to Preset 2
3		Press once: Press and hold:	No function No function	No function No function	No function No function	Preset 2 Save to Preset 2
EXT Trigger		Press once: Press and hold:	Toggle EXT 1 on/off Toggle EXT 2 on/off *	Toggle EXT 1 on/off Toggle EXT 2 on/off *	Toggle EXT 1 on/off Toggle EXT 2 on/off *	Toggle EXT 1 on/off Toggle EXT 2 on/off *
Audio		Press once: Press and hold:	Enter Audio Menu Save & Exit Audio Menu			
VBass		Press once: Press and hold:	Toggle VBass on/off No function			

3.1 Listening via USB

3.1.1 Listening via USB

1. Attach your USB thumb drive to the female USB socket of the BlueCube+ Media Player.
2. Press MODE on the remote to select USB mode.
3. Press PLAY to play or pause the music.
4. Press FAST REWIND / FAST FORWARD once play previous / next song file.
5. Press and hold FAST REWIND / FAST FORWARD to fast forward / fast rewind the song file.

 Playback and navigation of music files via USB includes MP3 and WMA files.

3.1.2 Navi Search

You can navigate folders in the USB thumb drive.

1. Press 1 once to go to the next folder.
2. Press 3 once to go to the previous folder.

3.1.3 Random Playing

Press and hold 2 will toggle Random Play in USB mode.

3.1.4 Device Charging

When specified USB devices, such as Smartphones or MP3 players, are connected with a standard male-to-female USB cable, the device's battery will charge automatically. The USB socket can deliver 1A of current to charge a device battery.

3.2 Listening via Bluetooth Audio

3.2.1 Pair with Bluetooth Audio Device

1. Switch on your Bluetooth Audio device.
2. Select 'AQUATIC AV' from the list of available devices to pair (no password is needed).

3.2.2 Listening via Bluetooth Audio Device

1. Bluetooth Audio mode will be activated once a Bluetooth Audio device is paired in any mode. Use MODE to change to the Bluetooth Audio mode to listen to music.
2. Play the song from device and the sound will play through the BlueCube+ Media Player.
3. Press PLAY/PAUSE to play/pause the song.
4. Press FAST REWIND/FORWARD buttons to play previous/next song file.
4. Press and hold FAST REWIND/FORWARD buttons to fast forward / fast rewind the song file.
5. Previous/next track and volume up/down can be controlled directly from your Bluetooth Audio device or directly from the BlueCube+ Media Player remote control.

3.2.3 Bluetooth Multi-link

A second Bluetooth Audio device can pair to the BlueCube+ Media Player even when music is playing from the first Bluetooth Audio device.

Once paired, playing music from device 2 will override device 1 and the BlueCube+ Media Player will begin playing music from device 2.

Should you wish to play music from device 1 again, wait 10 seconds and press play on device 1. This process can be repeated between device 1 and device 2 indefinitely while both devices are paired.

3.3 Listening via Auxiliary Input

1. Connect your MP3 device to the RCA inputs.
2. Press MODE on the remote control to select 'AUX' mode.

i Only one Auxiliary input (RCA) can be used at any one time.

3.4 Adjust Volume Level

1. Press VOLUME UP once to increase the volume.
2. Press VOLUME DOWN once to reduce the volume.
3. Press and hold either VOLUME UP or VOLUME DOWN to increase or decrease audio volume continuously.

4.1 Enter FM Radio Mode

1. Press MODE on the remote control to switch to FM radio mode.
2. Press PLAY/PAUSE to mute or unmute the audio.

i *If this is the first time you listen to FM radio, the default frequency will be 87.5MHz, as shown on the remote LCD.*

i *FM radio is only available when you are in FM Radio mode.*

4.2 Scan or Seek FM Radio Channels

1. Press FAST REWIND/FAST FORWARD to seek another station.
2. Press once FAST REWIND/FAST FORWARD to -0.05kHz or +0.05kHz to the frequency.

4.3 Saving Radio Channel to Memory

To save the current frequency to memory, press and hold 1, 2 or 3 for more than 2 seconds. The station will be stored into relevant button.

4.4 Listening to Saved Radio Memory

Press the 1, 2, or 3 preset button once to listen to the station stored in that button.

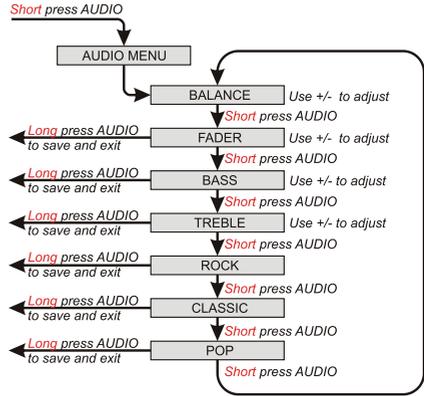
4.5 Adjust Volume Level

1. Press VOLUME UP once to increase the volume.
2. Press VOLUME DOWN once to reduce the volume.
3. Press and hold either VOLUME UP or VOLUME DOWN to increase or decrease audio volume continuously.

5.1 Audio Menu

The BlueCube+ Media Player is equipped with an audio DSP (Digital Signal Processor) to provide preset listening experiences for different music types.

1. To enter audio menu, press once AUDIO button on the remote control.
2. Each press of AUDIO button will advance to the next audio setting as described on the right.
3. In the audio menu, press and hold AUDIO to save and exit the audio menu back to the original mode.



If you have chosen preset equalizer (Rock, Classic, or Pop), the previous Bass & Treble settings will be overridden.

5.2 Virtual Bass (VBass)

Virtual Bass (VBass) boosts the bass of the audio signal using the latest DSP technology and is particularly useful when used with very small speakers to create perceived bass frequencies of a much larger speaker.

Press VBASS once on the remote control to toggle it ON or OFF.

5.3 External 12V Triggers

Aquatic AV understands the need for more flexible remote applications. With the BlueCube+ Media Player Aquatic AV has provided two independent 12V ‘accessory’ triggers, activated from the remote control. These could activate any 12V based device like 12V lights or 12V motors.

In any operational mode, press the 12V TRIGGER button on the remote control to activate. Press again to deactivate.

If using two external trigger wires you can also activate the second external trigger by pressing and holding the 12V TRIGGER button to activate. Press and hold again to deactivate.

i Aquatic AV strongly recommend you speak to our technical service staff or your local Aquatic AV dealer if you are considering using this feature.

⚠ Load on External Trigger should not exceed 3A.

5.4 Bluetooth Halo Aerial Technology

The Bluetooth Halo Aerial Technology antenna AQ-BTANT-1 (included) improves the standard Bluetooth wireless signal and range, for a stronger signal and increased range.

5.5 Connecting Multiple Amplifiers or High Current Draw Lighting Systems

Wiring a Single Pull Single Throw (SPST) Relay

The SPST is necessary to protect the stereo in systems with multiple amplifiers. The AQ-BC-6UBT-X remote and trigger wire provide 2A max current. While this enough to power a single amplifier, complex systems with multiple amplifiers will require a SPST relay.

Position 30: requires 12VDC from the main power source (12V battery, power supply etc). This should be the same power source that is powering your stereo.

Position 85: this is where you connect your ground from your power source (12V battery, power supply, etc.) This should be the same ground reference as your stereo.

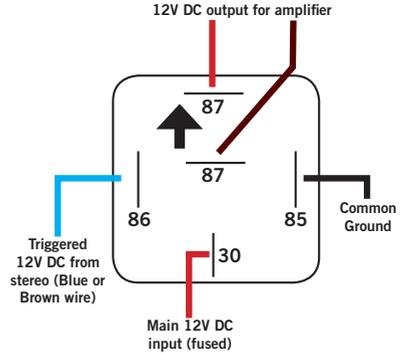
Position 86: position 86 is triggered 12V, and is sent when your stereo is powered on.

For Aquatic AV stereos position 86 can be connected to either the blue remote wire in the harness or the brown 12V trigger on the rear of the unit. The differences are below:

Blue (recommended): The blue (remote wire) provides a 12VDC output when the stereo is powered on. Meaning as soon as the stereo is powered on the blue wire sends 12VDC through the relay powering on the amplifier.

Brown: the brown (12V Trigger) provides 12VDC output when it is triggered via the lightning bolt icon on the faceplate or handheld remote. This setup is more advantageous is a more complex system with several zones, as it gives you control of when an amp is on or off.

Position 87: this is the 12VDC output that you will provide 12VDC to the remote turn on to the amplifiers in your system.



6.1 Specifications

Media

- Supported media.....Bluetooth Audio / USB / MP3 / FM / AUX
- Device charging.....via USB
- Device Control..... via Handheld RF Remote Control (included) or Wired Remote Control (sold separately)
- Remote Charging.....via cable

Inputs

- Auxiliary..... 1x stereo pair RCA
- USB.....1x USB

Outputs

- Pre-Out.....2x stereo pair RCA (4V)
- 12V Trigger.....2x 12V DC Triggers (3A)

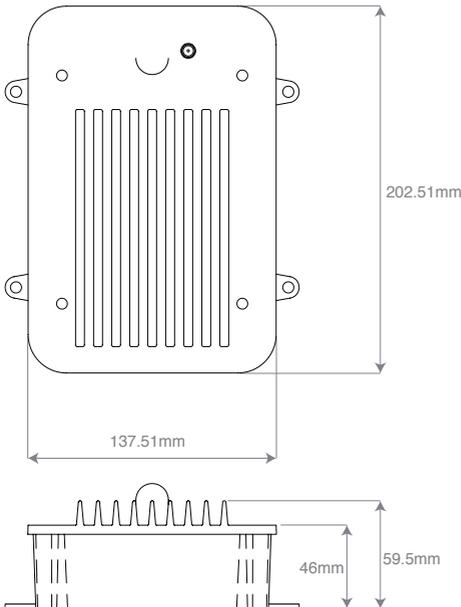
Power

- 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 draw.....6mA

Multi-Environment Certifications

- Waterproof / Dustproof.....Yes - IP65
- 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



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 BlueCube+ 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.



**California Proposition
65 Warning**



WARNING: This product contains chemicals known to the State of California to cause cancer, and birth defects or other reproductive harm.

For more information: www.P65Warnings.ca.gov

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