



## **GUIDE TO CONNECTIONS**



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# GUIDE TO CONNECTIONS

This guide provides an explanation of how to connect your stereo using the 12-pin wiring harness and displays the various loudspeaker and subwoofer configurations available when using your Aquatic AV source-unit and the 12-pin wiring harness AQ-UNH-2.

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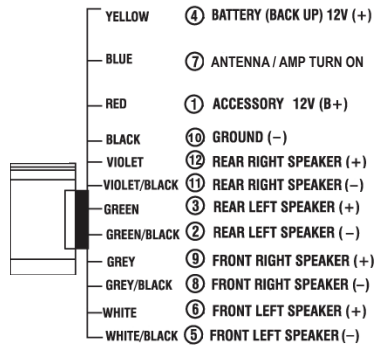
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## Using the 12-pin Wiring Harness

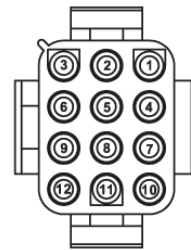
### Aquatic AV 12-Pin Wiring Harness

Aquatic AV supplies a 'female' 12-pin wiring harness (AQ-UNH-2) with each CD, DVD or Digital Media source-unit. The female connection block on the wiring harness should be connected directly to the 'male' connection block on the rear of the source-unit. The 12 wires on the female wiring harness should then be connected to speakers, battery terminals and any external device as shown below:

**AQ-UNH-2 Wiring Harness (Side)**



**AQ-UNH-2 Wiring Harness (Front)**



### Using triggered external devices

If your source-unit is equipped with Aquatic AV's 12V trigger feature you can connect the blue wire of the female wiring harness (AQ-UNH-2) to an external device such as power antenna or amplifier and use your Aquatic AV source unit to switch or 'trigger' the device on/off.

The 12V trigger provides an output of 12V DC, 350mA. Please ensure this is compatible with your external device before connecting.

If you are unsure if your source-unit provides the 12V trigger feature, or if your external device will be compatible, please contact your Aquatic AV dealer or Aquatic AV Technical Support.

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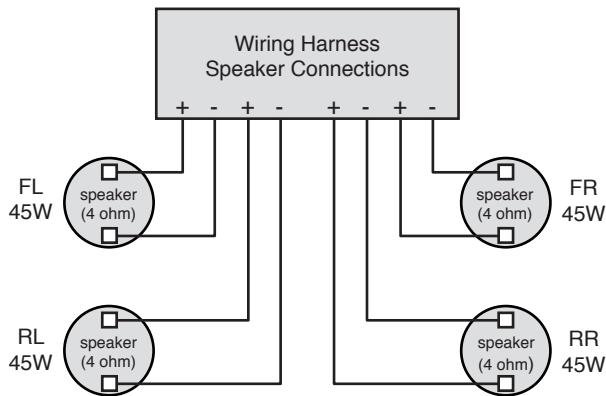
## 2 Ohm & 4 Ohm Speaker Configurations

Typically your loudspeakers and source-unit will operate on a 4 ohms configuration, providing output power of around 45W per channel (this may vary depending on source-unit model) and a maximum of 4x speakers (2x pairs) connected to the source-unit.

A 2 ohm configuration is achieved by doubling the number of speakers on each channel, allowing a maximum of 8x speakers (4x pairs) to be supported and providing an increased output power of around 72W per channel (this may vary depending on source-unit model).

While using a 2 ohm configuration increases the overall output power of the system the downside is a slight loss in fidelity. You may decide the loss of fidelity is negligible and the higher output power is preferred if using your Aquatic AV audio system where background noise levels are high, such as on a boat, spa/hot tub or vehicle. Alternatively, if audio quality is preferred, and background noise levels are low, the 4 ohm configuration may be more suitable.

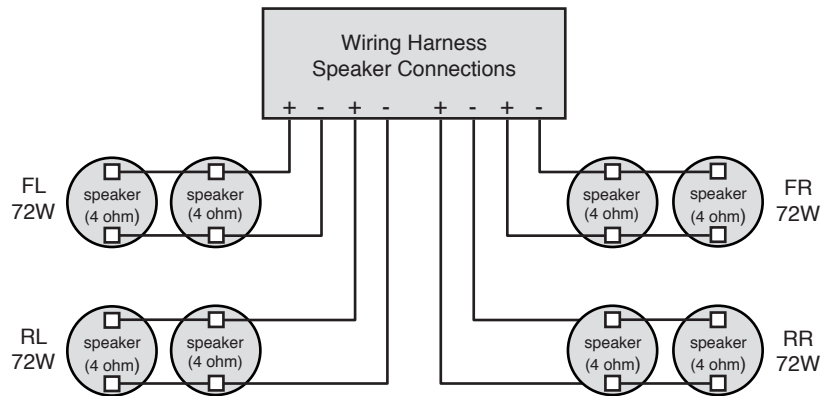
### 4 Ohm Wiring Example



#### 4 Ohm Configuration

- Total output power 180W (4 x 45W)
- provides maximum fidelity
- 4 x speakers max. (1 x per channel)
- ideal for standard installations.

### 2 Ohm Wiring Example



#### 2 Ohm Configuration

- Total output power 288W (4 x 72W)
- fidelity is compromised slightly
- 8 x speakers max. (2 x per channel)
- ideal for installations with high background noise levels.

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## 2 x Speaker Wiring Configurations

### 2 x Speaker System

- 2 x speakers (1 x stereo pair)
- 4 ohm configuration
- 90W max output power.

**Ideal for:**

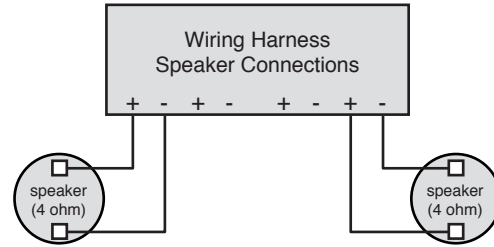
Smaller, single zone installations.

**Pros:**

Maximum fidelity.

**Cons:**

No subwoofer - may lack full body sound in high background noise installations.



### 2 x Speaker System & Passive Subwoofer\*

- 2 x speakers (1 x stereo pair)
- 1 x passive subwoofer\*
- 4 ohm configuration
- 180W max output power, inc subwoofer.

**Ideal for:**

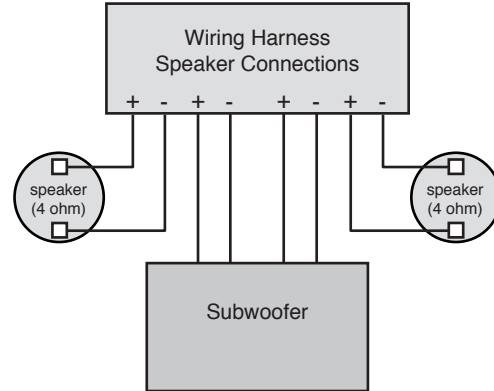
Smaller, single zone installations.

**Pros:**

Maximum fidelity. Subwoofer adds warmth, musicality and low/bass frequencies to the audio signal.

**Cons:**

Not suitable for multiple-zone installations.



\*a passive subwoofer is powered directly from a source-unit or amplifier via speaker (high-level) connections.

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## 4 x Speaker Wiring Configurations

### 4 x Speaker System

- 4 x speakers (2 x stereo pair)
- 4 ohm configuration
- 180W max output power.

**Ideal for:**

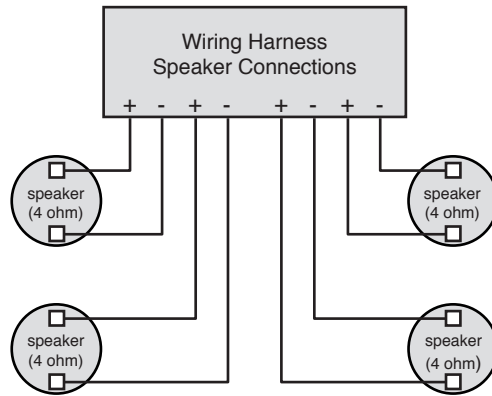
Larger, two zone installations.

**Pros:**

Maximum fidelity. Wider coverage of sound than 2 x speaker systems.

**Cons:**

No subwoofer - may lack full body sound in high background noise installations.



### 4 x Speaker System & Passive Subwoofer\*

- 4 x speakers (2 x stereo pair)
- 1 x subwoofer\*
- mixed 4 ohm/2 ohm configuration
- 234W max output power, inc subwoofer.

**Ideal for:**

Larger, two zone installations.

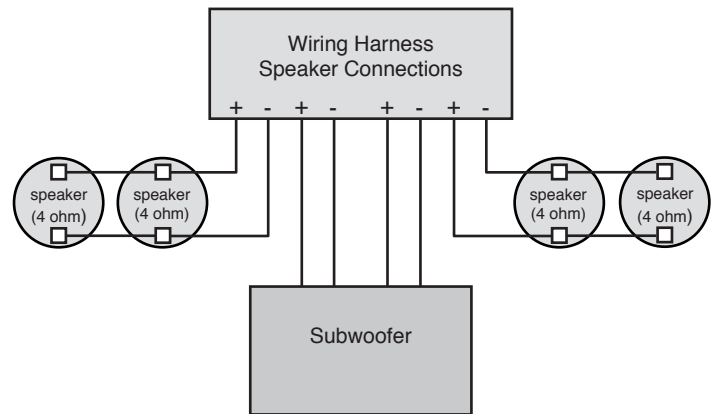
**Pros:**

Wider coverage of sound than 2 x speaker systems

Subwoofer adds warmth, musicality and low/bass frequencies to the audio signal.

**Cons:**

2 ohm configuration used for 4 x speakers results in slight loss in fidelity (negligible in high background noise installations).



\*a passive subwoofer is powered directly from a source-unit or amplifier via speaker (high-level) connections.

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## 6 x Speaker Wiring Configurations

### 6 x Speaker System

- 6 x speakers (3 x stereo pair)
- mixed 4 ohm/2 ohm configuration
- 234W max output power.

**Ideal for:**

Larger, two and three zone installations.

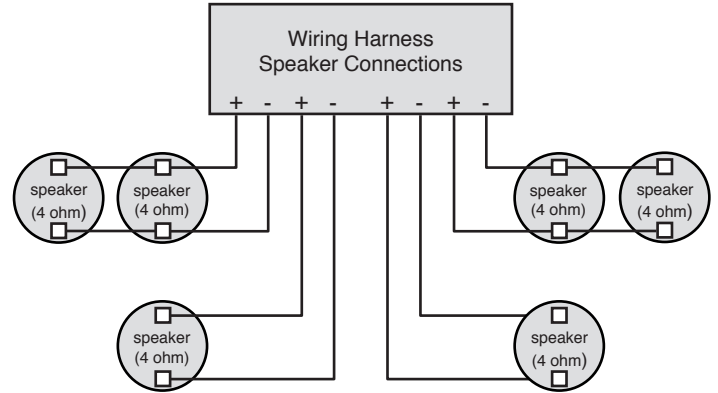
**Pros:**

Wider coverage of sound than 2-4 x speaker systems.

**Cons:**

2 ohm configuration used for 4 x front speakers results in slight loss in fidelity (negligible in high background noise installations).

No subwoofer - may lack full body sound in high background noise installations.



### 6 x Speaker System & Passive Subwoofer\*

- 6 x speakers (3 x stereo pair)
- 1 x passive subwoofer\*
- 2 ohm configuration
- 288W max output power, inc subwoofer.

**Ideal for:**

Larger, two and three zone installations.

**Pros:**

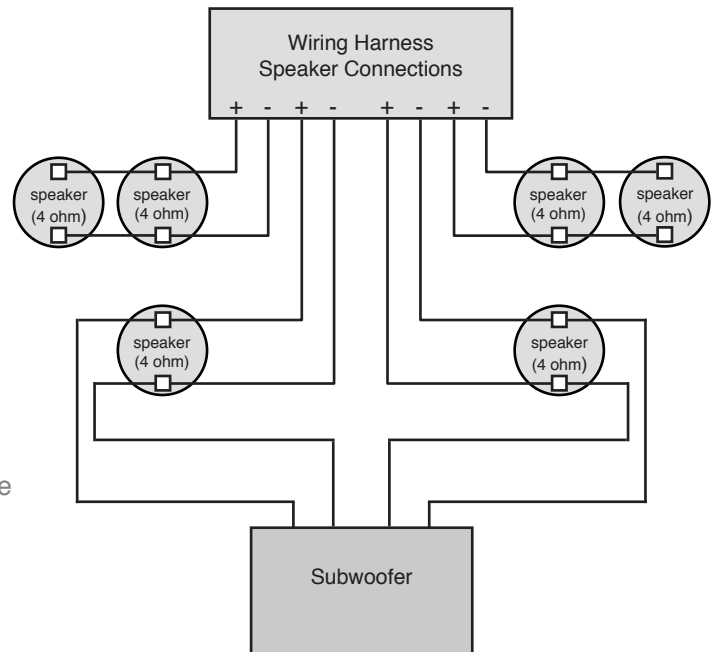
Wider coverage of sound than 2-4 x speaker systems

Subwoofer adds warmth, musicality and low/bass frequencies to the audio signal.

**Cons:**

2 ohm configuration results in slight loss in fidelity (negligible in high background noise installations).

\*a passive subwoofer is powered directly from a source-unit or amplifier via speaker (high-level) connections.



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## 8 x Speaker Wiring Configurations

### 8 x Speaker System

- 8 x speakers (4 x stereo pair)
- 2 ohm configuration
- 288W max output power.

**Ideal for:**

Large, two, three and four zone installations.

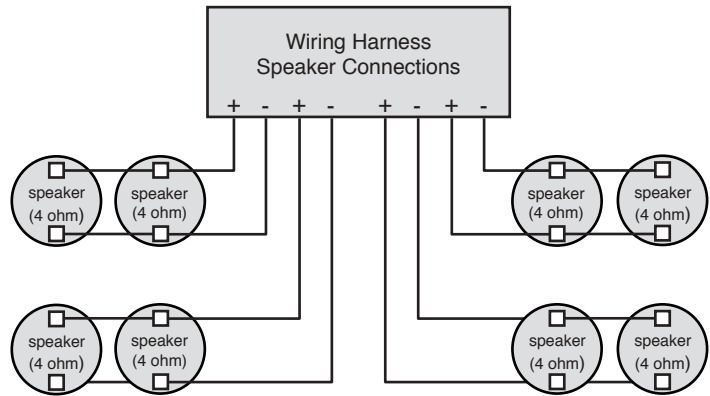
**Pros:**

Maximum power output. Wider coverage of sound than 2-6 x speaker systems.

**Cons:**

2 ohm configuration results in slight loss in fidelity (negligible in high background noise installations).

No subwoofer - may lack full body sound in high background noise installations.



### 8 x Speaker System & Active Subwoofer\*

- 6 x speakers (3 x stereo pair)
- 1 x active subwoofer\*
- 2 ohm configuration
- 288W max output power, inc subwoofer.

**Ideal for:**

Larger, two and three zone installations.

**Pros:**

Wider coverage of sound than 2-4 x speaker systems.

Subwoofer adds warmth, musicality and low/bass frequencies to the audio signal.

**Cons:**

2 ohm configuration results in slight loss in fidelity (negligible in high background noise installations).

\*an active subwoofer is powered from its own built-in amplifier and receives its signal input via the pre-out or sub-out RCA (low-level) connections on a source-unit.

