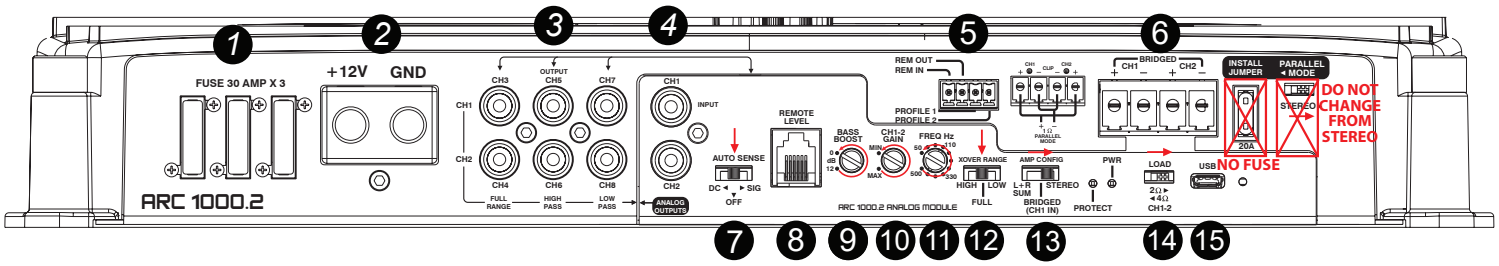
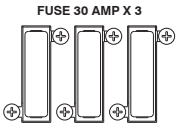
ARC SERIES 1000.2 CONNECTION GUIDE

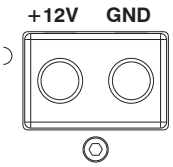


1 FUSES-

The ARC 1000.2 Amplifier uses three (3) 30-Amp ATC style blade fuses and is included with this amplifier. In the event that the fuses blow or are damaged please do not replace with any other value or type of fuse.



2 MAIN POWER CONNECTION TERMINAL-

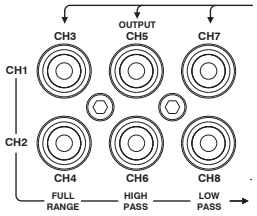


"+12V" – Main amplifier power connection. Connect this lead to the positive side of your vehicles battery using 4AWG OFC power cable. (Always remember to install a fuse within 18" of your vehicles battery with a properly rated fuse).

"GND" – Connect your amplifier with this terminal to the vehicles ground. The ground wire should be connected directly to the chassis of your vehicle via a 4 Gauge OFC ground cable. Find a clear location close to the amplifier and remove all paint and/or sound deadening. Use a #10 or larger screw to secure it. Never use a seat or seat belt bolt for grounding.

3 RCA SIGNAL CONNECTION (OUTPUT)-

When using any of the ARC Series amplifiers each model amplifier is equipped with a different number of RCA Style output connections. These connections are used to connect more than one amplifier to your system. When using the ARC 1000.2 with the analog front end signal card (stock default application), CH3-8 RCA outputs are frequency limited based on the crossover settings you have selected on the built-in analog crossovers (If the crossovers is set to full range then all three sets of RCA output channels will also be full range. If the crossover is set (for example to 500Hz) then the RCA signal output channels will pass the following signals.

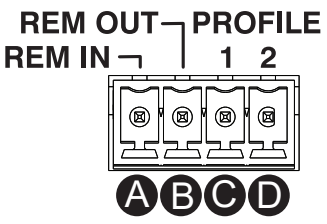


CH 1/2 - Full Range
CH 3/4 - High Pass 500 Hz and Above
CH 5/6 - Low Pass 500 Hz and Below

4 RCA STYPE SIGNAL INPUT CONNECTORS-

The ARC Series 1000.2 amplifier is equipped with 2 RCA style input signal connectors (When using the analog front end signal card) to connect signal source cables from your systems source unit. These inputs can accept low level signals like that found in most aftermarket source units. To connect your Low Level RCA signal cables simply plug the source unit RCA channel into the corosponding input channel of your choice. (NOTE: The ARC Series Amplifier line when using the analog front end signal card is not capable of accepting hi-level (speaker level) signals without the use of a signal dividing network -or- using the IPS8.8 signal processor replacement front end module.)

5 REMOTE LEAD/PROFILE SWITCH PLUG-

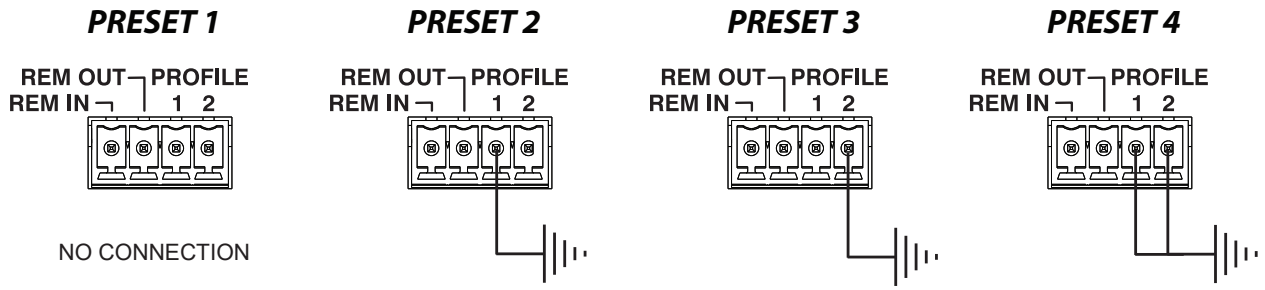


A REM IN"- Connect your source units "Remote out" or "Remote turn-on" lead to the Amplifier here. Making connection to this point from your source unit tells the unit when to turn on or off. The timing on this process is customizable from within the Pro-Series DSP software utility..

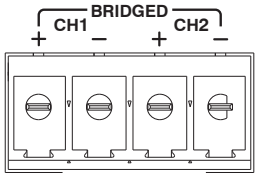
B "REM OUT" – If you are using an external amplifier to your system to run a higher power subwoofer amplifier in your system, please connect your secondary amplifiers Remote Turn-On input terminal to this point to control the amplifiers turn-on / turn-off time. (NOTE: The timing of the turn-on out signal is adjustable and can be user defined in the Pro-Series software utility.)

Ⓒ "PROFILE 1" – Using a toggle switch with a latched ground signal to this point or in combination with "Profile 2" allows users to toggle between the DSP's 4 user defined presets without the need of a controller or PC. This feature can be used by itself or in conjunction with the PSC or LR1 controller.

Ⓓ "PROFILE 2" - Using a toggle switch with a latched ground signal to this point or in combination with "Profile 1" allows users to toggle between the DSP's 4 user defined presets without the need of a controller or PC. This feature can be used by itself or in conjunction with the PSC or LR1 controller..

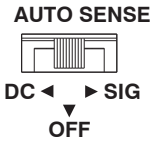


6 ***SPEAKER OUTPUT CONNECTOR-***



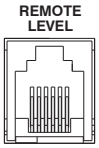
ARC Series amplifiers come in a variey of channel configurations ranging from 2-Channels to 6-Channels. The ARC Series 1000.2 is a 2-Channel amplifier that produces up 600 Watts RMS into 2-Channels or 1200 watts into a single chanel. If bridging the amplifier please pay special attention to the switch and wiring guide located at the end of this guide.

7 ***AUTO SENSE SELECTION SWITCH-***



The ARC 1000.2 has a selectable microprocessor controlled auto-sense turn on circuit for those applications where there may be no hard wired switched turn on lead available from the source unit. There is two available options on all Pro-Series processors. Users can select from a BTLD (Bridge Tied Load Detect) Turn-on circuit that offers a significant improvement in reliability over previous designs. Instead of relaying on the music to supply enough signal to turn the amplifier on. Robert Zeff's design detects the IC (chip) used in the vast majority of stock head units and amplifiers. It is important to note the DC sense will not always work. Do to the hundreds (or thousands) of different OEM system configurations, no single solution can be 100% successful which is why we also offer traditional signal sensing options "SIG" for activation with normal signal levels passing from your vehicles source. If your system does not reliably switch on and off, look for an alternative turn on source. It is possible to spend many hours trouble shooting an Auto Sense problem. This is time that could be spend enjoying your new audio system.

8 ***REMOTE LEVEL CONTROL (Bass Boost -12cut/boost)***



When using the analog front end and the onboard crossover is positioned in lowpass, users may connect the optional remote level control into this port for a 12dB level control that can be used as similiar to a bass boost level control.

9 ***BASS BOOST CONTROL-***

If you are using the amplifier in low pass mode and are not using the remote level control this control allows users to define the amount of bass boost they wish to have active in their system for subwoofer applications.

10 ***GAIN/SENSITIVITY CONTROL***

Because of the wide range of head unit output configurations available, all ARC Audio amplifiers have an adjustable input sensitivity or "Gain" control. The gain is not a volume or a power limiting control like a throttle. It makes the amp more sensitive to input from the source. With the gain up the amp will reach full output at a lower volume setting on the deck and becomes more sensitive to noise from the car's electrical system. Try to run the gain at the lowest setting possible for you system.

There is no correct gain setting. As different size and shape speakers require different amounts of power to reach the same output, the gain settings need to be adjusted to compensate for these speaker efficiency differences. If you tried to set all the gains at half way you would probably find the system didn't sound very good. Use good judgment and optimize each channel carefully as you configure the system. You want to set the gains to maximize the output of the amplifier, while producing minimal distortion for your given source unit and music selection.

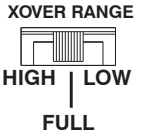
11 *CROSSOVER FREQUENCY SELECTION CONTROL-*

This control is used when selecting the crossover frequency for the selected crossovers on the ARC 1000.2. When the crossover type is not selected this control can still be used to select the crossover HP/LP separation point for the RCA outputs. When the crossover type is selected for something other than Full Pass then this control will also dictate the crossover point for the onboard amplifier.

For example, if Lowpass is selected with a crossover point of 500Hz the available signal routing will be as follows-

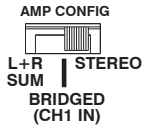
Amplifiers Speaker Outputs - Freqencies below 500Hz
CH 3/4 RCA Outputs - Full Range Signal (Based on what is being provided intothe amplifier from the RCA inputs
CH 5/6 RCA Outputs - Frequencies only above 500Hz available
CH 7/8 RCA Outputs - Frequencies only below 500Hz available

12 *CROSSOVER RANGE TYPE SELECTION SWITCH-*



Use this switch to select the type of crossover you wish to use for the output of the amplifier. Options include Full Range, High Pass and Low Pass.

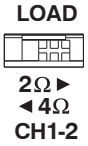
13 *AMPLIFIER CONFIGURATION SELECTION SWITCH-*



Use this switch to configure your amplifier between "L+R SUM", "Bridged CH1 IN", and "Stereo" modes.

14 *LOAD INPUT SELECTION SWITCH CH1/2*

A unique feature of ARC Series Amlpifiers is their adjustable rail voltage system on its output channels. Each pair of channels includes a LOAD SELECT switch.



Under 4Ω - Any speaker or combination of speakers with a total combined impedance between 2 and 4 Ohms (not lower than 2 Ohms) must use this position. Bridged loads down to 4 Ohms must use this position. The amplifier will make full power at 2 Ohms Stereo (4 Ohms bridged).

Over 4Ω - Any speaker or combination of speakers with a total combined impedance at or above 4 Ohms can use this position. The amplifier will make full power at 4-Ohms stereo (8 Ohms bridged).

WARNING: This amplifier will not operate and could be damaged if used with the LOAD SELECT switches in the wrong configuration. At no time can it be operated below 2 Ohms stereo or 4-Ohms when bridged.

15 *USB CONNECTION PORT*

Connect your Windows 10 based PC to this port on the analog front end signal board when using the Pro-Series DSP Software to control some of the basic features of the ARC Series amps (even when not running the DSP add-on module) such as amplifier illumination color, Remote in/out lead timing and Class-D switching frequency.
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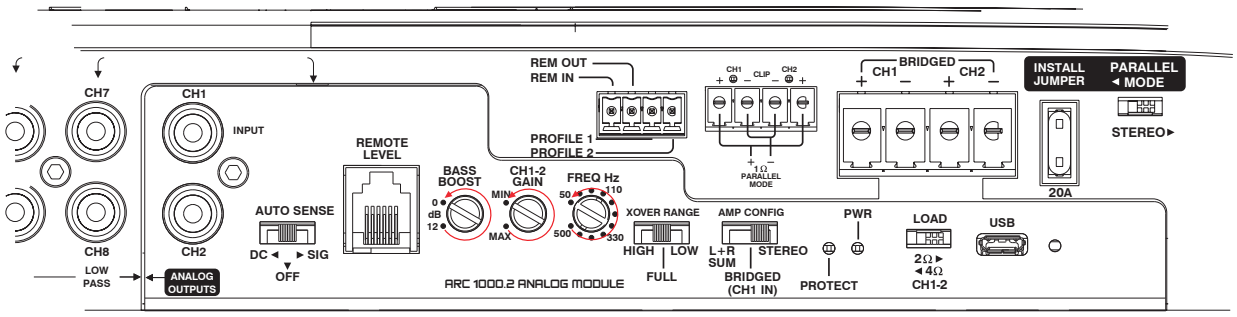
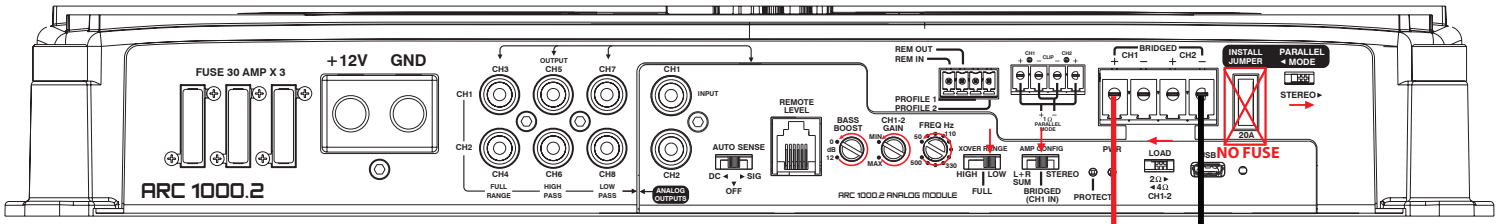


ARC 1000.2 BRIDGE MODE WIRING DIAGRAMS

The ARC 1000.2 is capable of providing full power at a wide range of final impedances from 4-ohm to 8-ohm of load at the amplifier from the connected subwoofers or speakers. Please follow the diagrams below for wiring and switch position based on your final impedance load needs.

Bridged mode (4-Ohm to 8-Ohm Operation)

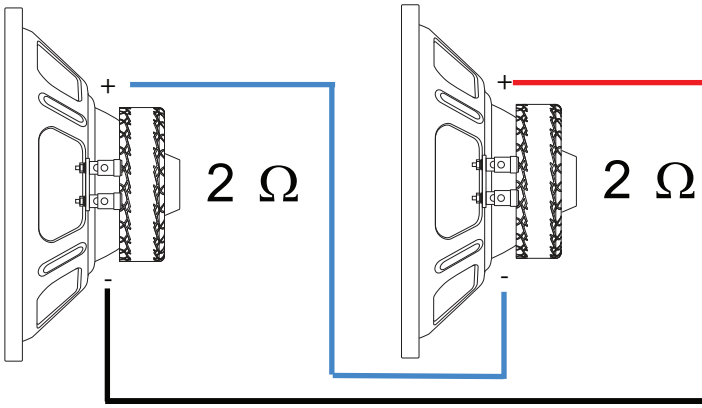


4-Ohm Final Load

Amp Config Switch- Set to "Bridged"
Load Switch- Set to 2-ohms
Parallel Mode Switch- Set to "Stereo"
Jumper- Not Installed

8-Ohm Final Load

Amp Config Switch- Set to "Bridged"
Load Switch- Set to 4-ohms
Parallel Mode Switch- Set to "Stereo"
Jumper- Not Installed



4-Ohm Final Load Example