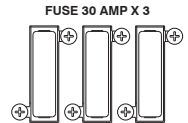


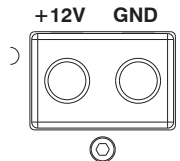
## 1 FUSES-

The ARC 1000.4 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-

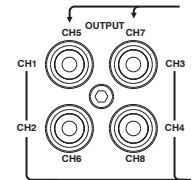
“+12V” – Main amplifier power connection. Connect this lead to the positive side of your vehicles battery using 4AWG OFC power cable. (Always remember to install a fuse within 18” of your vehicles battery with a properly rated fuse).



“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.

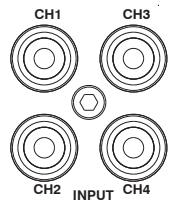
## 3 RCA SIGNAL CONNECTION (OUTPUT)-

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 1000.4 with the analog front end signal card (stock default application), CH 6-7 Outputs receive signal from the CH 1-2 RCA inputs and CH 7-8 Receive signal from the CH 3-4 RCA Signal inputs. (To get signal out on these outputs you must have signal connected to these main signal inputs)



## 4 RCA STYPE SIGNAL INPUT CONNECTORS-

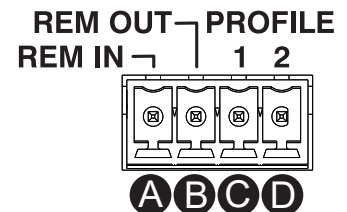
The ARC Series 1000.4 amplifier is equipped with 4 RCA style input signal connectors (When using the analog front end signal card) to connect signal source cables from your systems source unit. These inputs can accept low level signals like that found in most aftermarket source units. To connect your Low Level RCA signal cables simply plug the source unit RCA channel into the corresponding 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-

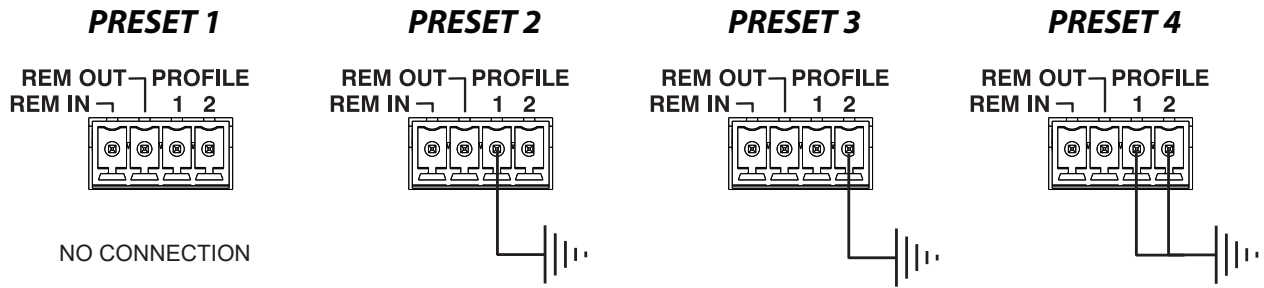
**A** REM IN”- Connect your source units “Remote out” or “Remote turn-on” lead to your ARC Series Amplifier here. Making connection to this point from your source unit tells the unit when to turn on or off. The timing on this process is customizable from within the Pro-Series DSP software utility..

**B** “REM OUT” – If you are using an external amplifier to your system to run a higher power subwoofer amplifier in your system via the “Line Out Ch 7 / CH 8) RCA signal connection, 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.)



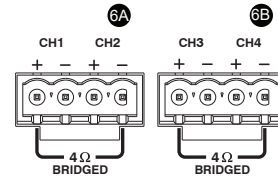
**C** “PROFILE 1” – Using a toggle switch with a latched ground signal to this point or in combination with “Profile 2” allows users to toggle between the DSP’s 4 user defined presets without the need of a controller or PC.

**D** “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.



**6 SPEAKER OUTPUT CONNECTOR-**

ARC Series amplifiers come in a variety of channel configurations ranging from 2-Channels to 6-Channels. The ARC Series 1000.4 is a 4-Channel amplifier that produces up to 250 Watts RMS per channel at 2-Ohms or 4-Ohms. Each pair of channels may also be bridged at 4-Ohms making the ARC 1000.4 a very powerful 2-Channel amplifier.



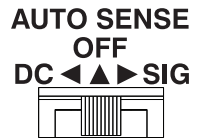
**Bridged Output Wiring Configuration-**

Channel 1 + 2 Bridged- Connect Positive Speaker Wire to CH1+ and Negative Speaker Wire to CH2-  
 Channel 3 + 4 Bridged- Connect Positive Speaker Wire to CH3+ and Negative Speaker Wire to CH4-

- 6A Channel 1+2 speaker output connection terminal
- 6B Channel 3+4 speaker output connection terminal

**7 AUTO SENSE SELECTION SWITCH-**

All ARC Series amps have 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.

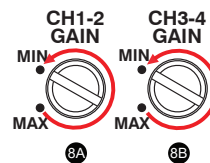


**8 CHANNEL 3-4 INPUT SELECTION SWITCH-**

The INPUT SELECT switches on Channels 3 and 4 allow for the user/installer to select on how and where these channels receive their signal from. Switched to the left ("CH 1-2") these channels will receive signal from Channels 1&2 instead of having dedicated RCA signal cables running into channels 3&4 inputs. With the switch selected to the right side ("CH 3-4") these channels will receive signal directly from the CH 3-4 RCA of the amplifier signal inputs.

**9 GAIN/SENSITIVITY CONTROLS**

- 8A Gain/sensitivity control for CH1 + CH2
- 8B Gain/sensitivity control for CH3 + CH4



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.

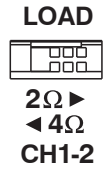
## 10 LOAD INPUT SELECTION SWITCH CH1/2

A unique feature of ARC Series Amplifiers 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.



## 11 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.

