

OWNER'S MANUAL

SUNDOWN AUDIO

Mono Blocks:

SALT - 2

SALT - 3

SALT - 4

SALT - 6

SALT - 8

SALT - 12

Multi - Channels:

SALT - 200.2

SALT - 400.2

SALT - 200.4

SALT - 300.4

SALT - 500.4

SALT - 1700.5

SALT - 2000.6

DIGITAL MONOBLOCK FEATURES

- Digital Class-D Linkable Mono Block Amplifier
- Dual MOS-FET PWM Power Supply
- 1 Ohm Stable Load
- 24 dB/Octave - Variable Low Pass Filter
- 24 dB/Octave - Variable Subsonic Filter
- 9 dB/Octave - Variable Bass Boost
- 180 Degree Variable Phase Shift
- 4 Way Protection Circuit (Thermal, Voltage
Speaker short and DC Offset)
- Wired Remote Control with Voltage &
Temperature display and Clipping Indicator.

DIGITAL MONOBLOCK SPECIFICATIONS

Rated Power Output (Tested Voltage 14.4Volts)						
	SALT-2	SALT-3	SALT-4	SALT-6	SALT-8	SALT-12
- RMS Power - 2ohms Linked :	4000w	6000w	8000w	12000w	16000w	N/A
- RMS Power - 1ohm Mono :	2000w	3000w	4000w	6000w	8000w	12000w
- RMS Power - 2ohm Mono :	1000w	1500w	2000w	3000w	4000w	6000w
- RMS Power - 4ohm Mono :	500w	750w	1000w	1500w	2000w	3000w
Low Pass Frequency Crossover :	35 Hz - 250 Hz					
Subsonic Filter :	10 Hz - 50 Hz					
Bass Boost - 45Hz :	0 - 9 dB					
Phase Shift Control :	0 - 180 Degree					
Input Sensitivity (+/- 5%) :	6 - 0.2 Volts					
Frequency Response (+/- 1dB) :	10 Hz - 250 Hz					
Signal Noise Ratio :	90 dB					
Damping Factor :	400 <					
Working Voltage :	9 - 15.5Volts					
T.H.D - 4ohms :	< 0.1%					
Efficiency - 4ohms :	90% <					
Recommended Fuse Rating :	200A	300A	400A	600A	800A	2000A
Unit Length (Inches) :	15.74*	19.68*	22.05*	26.78	30.71	37.80
(8.67 W x 2.80 H) Inches *						
(10.08 W x 2.96 H) Inches						

All features are subject to change in the continuing effort to improve the products without notice.

FULL RANGE DIGITAL FEATURES

- Full Range Digital Amplifiers
- High Efficiency Digital Multi-Channel Design
- Stable - 2ohm Stereo / 4ohm Bridged
- 12 dB/Octave - Variable Subsonic Filter
- 12 dB/Octave - Variable High Pass Filter
- 12 dB/Octave - Variable Low Pass Filter
- Crossover Multipliers - X1 / X10
- Clipping Indicator
- 4 Way Protection Circuit (Thermal, Voltage Speaker short and DC Offset)
- Optional Wired Remote Control with Voltage & Temperature display and Clipping Indicator.

FULL RANGE DIGITAL SPECIFICATIONS

RATED POWER OUTPUT					
(Tested Voltage 14.4Volts)	SALT-200.2	SALT-400.2	SALT-200.4	SALT-300.4	SALT-500.4
-RMS Power - 4ohm Mono :	700W x 1	1300W x 1	700W x 2	1000W x 2	1400W x 2
-RMS Power - 2ohm Stereo :	325W x 2	650W x 2	325W x 4	500W x 4	700W x 4
-RMS Power - 4ohm Stereo :	200W x 2	400W x 2	200W x 4	300W x 4	500W x 4
Subsonic Filter :	10 Hz - 500 Hz				
High Pass Filter :	50 (500) Hz - 500 Hz (5 KHZ)				
High Pass Filter Multiplier :	X1 / X10				
Low Pass Filter :	50 (500) Hz - 500 Hz (5 KHZ)				
Low Pass Filter :	X1 / X10				
Frequency Response (+/-1dB) :	10 Hz - 25 KHz				
Input Sensitivity (+/-5%) :	6 - 0.2 Volts				
Signal Noise Ratio :	105 dB				
T.H.D - 4ohms :	< 0.1%				
Efficiency - 4ohms :	75% <				
Recommended Fuse Rating :	60A	100A	120A	150A	300A
Unit Length (Inches) :	7.88*	11.82*	11.82*	13.39	14.96
(6.85 W x 2.66 H) Inches *					
(8.67 W x 2.80 H) Inches					

All features are subject to change in the continuing effort to improve the products without notice.

FULL RANGE DIGITAL FEATURES

- Full Range Digital Amplifiers
- High Efficiency Digital Multi-Channel Design
- SALT-1700.5 : CH1- CH4 2ohm stereo stable & CH5 1ohm stable monoblock.
- SALT-2000.6 : CH1- CH4 2ohm stereo stable & CH5 & CH6 1ohm stereo stable.
- 12 dB/Octave - Variable Subsonic Filter
- 12 dB/Octave - Variable High Pass Filter
- 12 dB/Octave - Variable Low Pass Filter
- Mode selector
- Clipping Indicators
- 4 Way Protection Circuit (Thermal, Voltage Speaker short and DC Offset)
- Wired Remote Control with Voltage & Temperature display and Clipping Indicator.

FULL RANGE DIGITAL SPECIFICATIONS

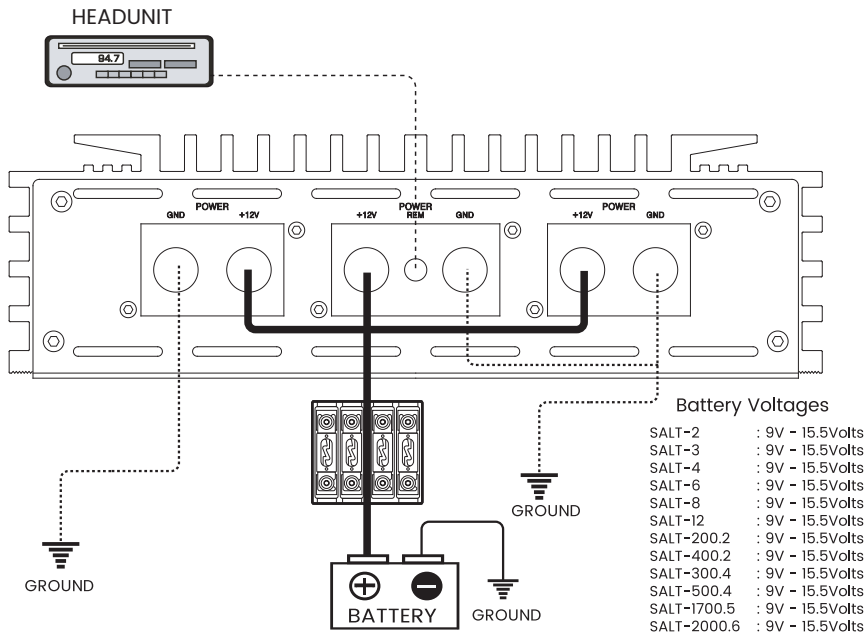
Rated Power Output

(Tested Voltage 14.4Volts)	SALT-1700.5	SALT-2000.6
-RMS Power - 1ohm Stereo :	1300W x 1	550W x 2 (CH5&6 Only)
-RMS Power - 2ohm Stereo :	220W x 4 + 800W x 1	200W x 2 + 250W x 2 + 350W x 2
-RMS Power - 4ohm Stereo :	125W x 4 + 480W x 1	100W x 2 + 150W x 2 + 200W x 2
CH1&2 High Pass Filter :	20 Hz - 5 KHz	50 Hz - 500 Hz
Low Pass Filter :	50 Hz - 5 KHz	N/A
CH3&4 Subsonic Filter :	N/A	10Hz - 500Hz
High Pass Filter :	20 Hz - 5 KHz	N/A
Low Pass Filter :	50 Hz - 5 KHz	50 Hz - 5 KHz
CH5&6 Subsonic Filter :	10 Hz - 100 Hz	10 Hz - 100 Hz
Low Pass Filter :	50 Hz - 500 Hz	50 Hz - 500 Hz
Bass Boost :	0 - 9dB	N/A
Phase :	0 - 180 Degree	N/A
Frequency Response (+/-1dB) :	10 Hz - 25 KHz for CH1&4 10Hz - 500 Hz for CH5	10 Hz - 25 KHz
Input Sensitivity (+/-5%) :	6 - 0.2 Volts	6 - 0.2 Volts
Signal Noise Ratio :	105 dB	105 dB
T.H.D - 4ohms :	< 0.1%	< 0.1%
Efficiency - 4ohms :	75% <	75% <
Recommended Fuse Rating :	200A	170A
Unit Length (Inches) :	14.96	14.17

(8.67 W x 2.80 H) Inches

All features are subject to change in the continuing effort to improve the products without notice.

POWER CONNECTIONS



⚠ Caution

SALT-2, SALT-3, SALT-4, SALT-6, SALT-8, SALT-12, SALT-200.2, SALT-400.2, SALT-200.4, SALT-300.4, SALT-500.4, SALT-1700.5 & SALT-2000.6 are not supplied with internal fuse in themselves. Make sure you install in-line fuse holder from Positive terminal of Battery

+12V Battery

You need to connect a power wire to the vehicle's positive battery terminal. This connection must be tight and secure to ensure proper connectivity. This wire has to be fused appropriately (see each amplifier's fuse rating under specifications) within 12 to 16 inches for safety. You will then need to connect the power wire to the 12+ terminal of the amplifier with a Phillips screw driver. Do not install the fuses until installation is complete.

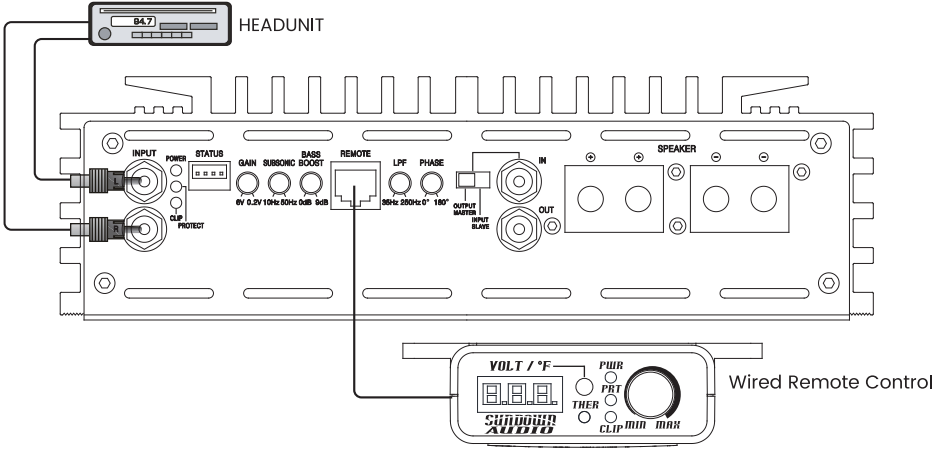
Ground Connection

The ground connection must be made to the vehicle's chassis and should be kept as short as possible, while accessing a solid piece of sheet metal in the vehicle. The surface should be sanded at the contact point to clean rust, paint or grime so a metal-to-metal connection between the chassis and the termination of the ground wire is effective. You will then need to connect the ground wire to the GND terminal of the amplifier with a Phillips screw driver.

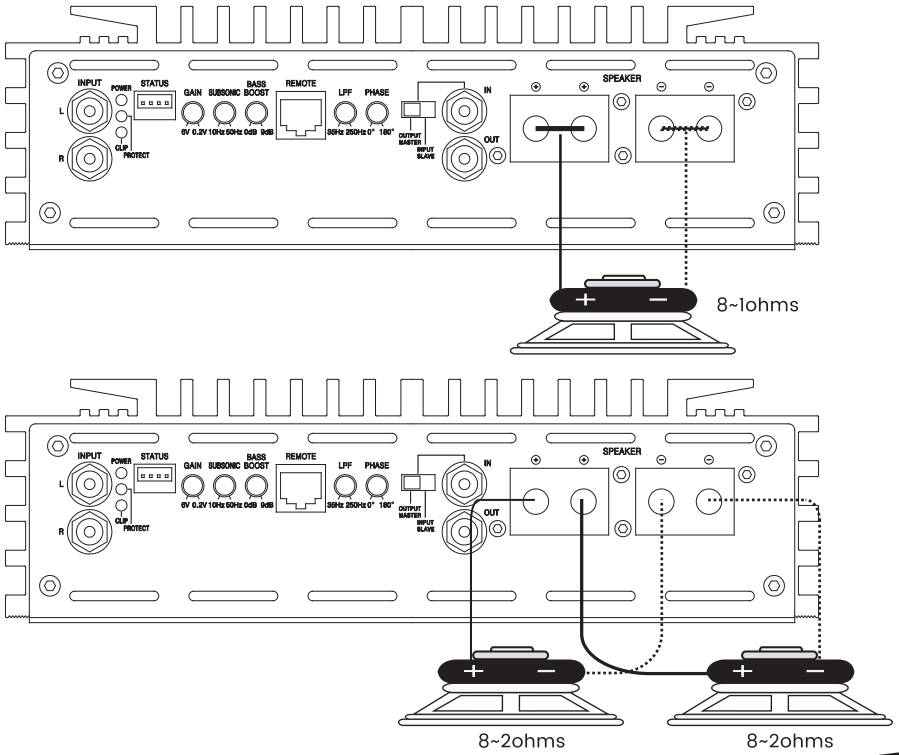
Remote

The +12V remote turn-on wire is typically controlled by the source unit's remote turn-on output. The amplifier will turn on when +12V is present at its remote (REM) input and turn off when +12V is switched off. Connect the remote wire using 12 to 16 gauge wire to the REM connection of the amplifier with Phillips screw driver, then connect the other end of the remote wire to either the source unit's turn on output or ignition switch circuit

DIGITAL MONOBLOCK INPUT CONNECTION

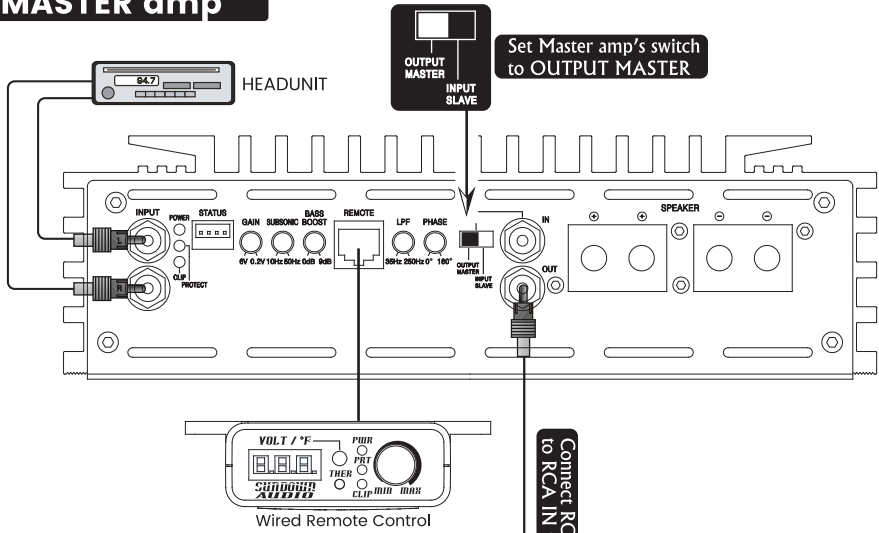


DIGITAL MONOBLOCK SPEAKER CONNECTIONS



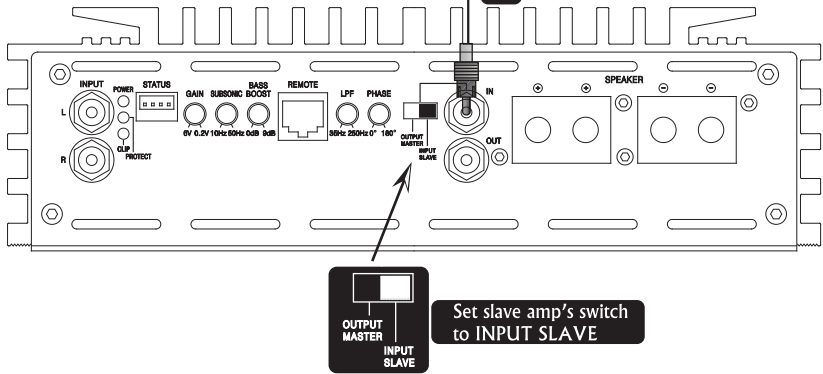
DUAL AMP INPUT CONNECTION (MASTER & SLAVE)

MASTER amp



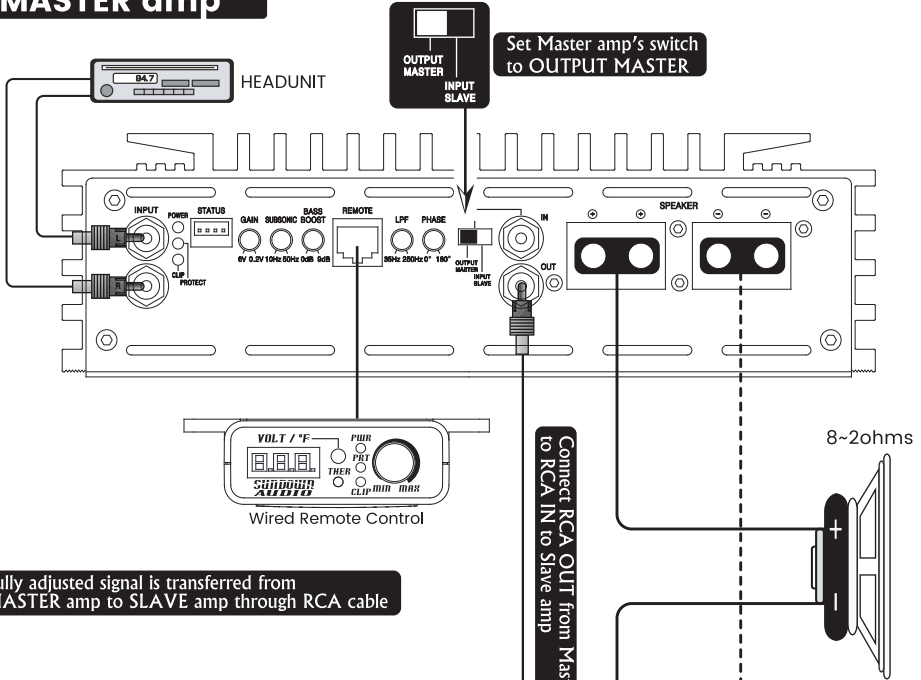
Fully adjusted signal is transferred from MASTER amp to SLAVE amp through RCA cable

SLAVE amp

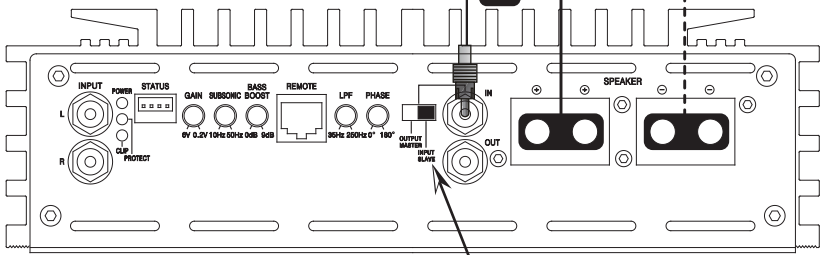


DUAL AMP CONNECTION (MASTER & SLAVE)

MASTER amp



SLAVE amp

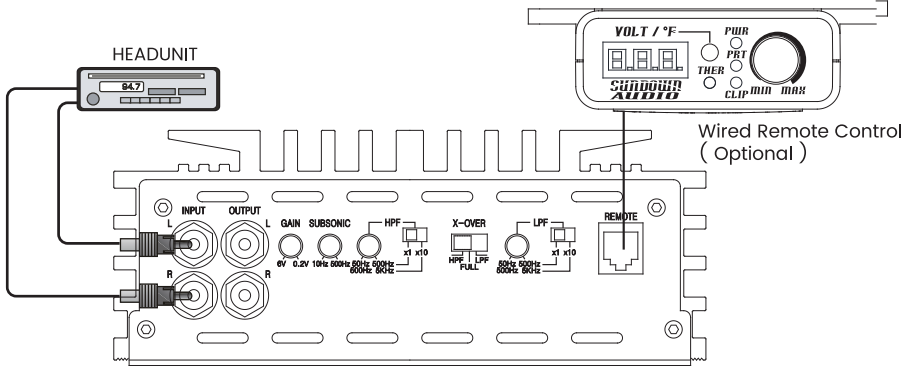


⚠ Caution !!

When Strapped / Linked, Minimum working impedance is 2 ohms. Any load less than 2 ohms may damage the drivers.

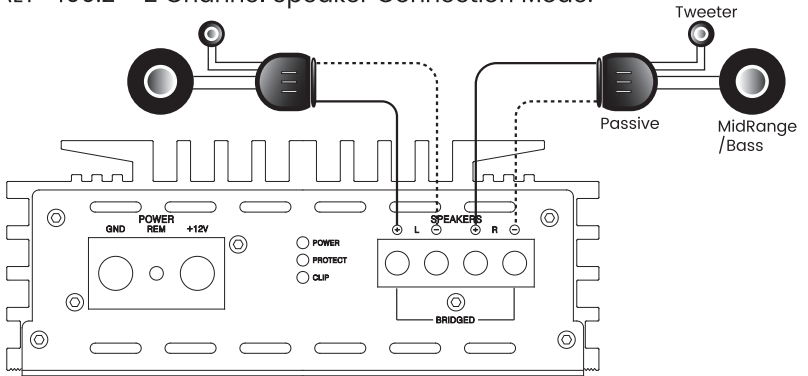
Using a dual amplifier configuration, the MASTER amplifier has total control over the SLAVE amplifier. When using dual amplifier to operate subwoofer, the positive terminal of the subwoofer's voice coil must be connected to the positive terminal of the MASTER amplifier and the negative terminal of the subwoofer's voice coil must be connected to positive terminal of the SLAVE amplifier. When hooking two amplifiers to it, please check the power handling capabilities of your subwoofers, to may sure you are not exceeding it.

FULL RANGE DIGITAL 2CH INPUT CONNECTION

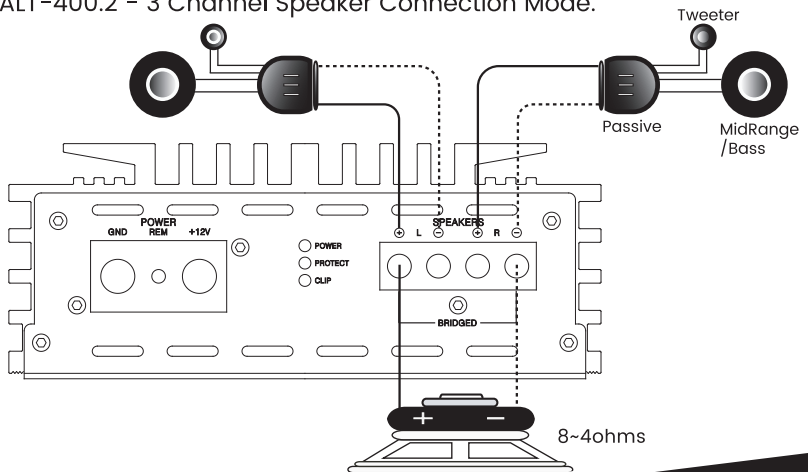


FULL RANGE DIGITAL 2CH SPEAKER CONNECTION

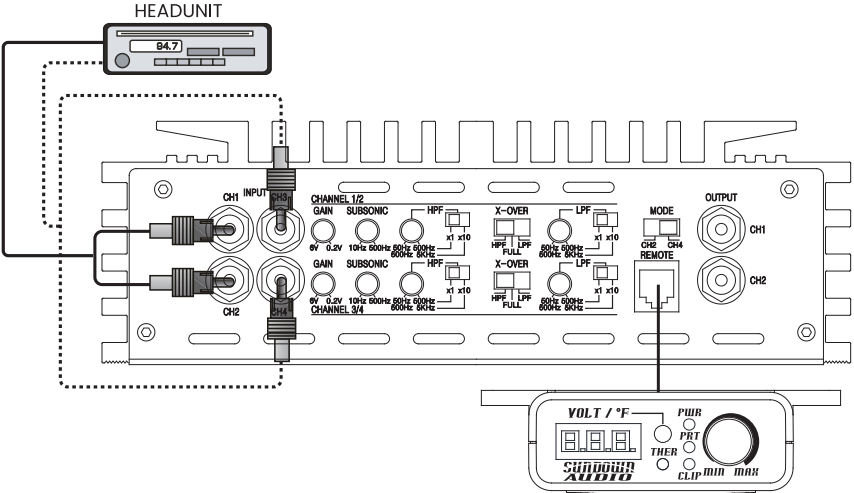
SALT-200.2 & SALT-400.2 - 2 Channel Speaker Connection Mode.



SALT-200.2 & SALT-400.2 - 3 Channel Speaker Connection Mode.



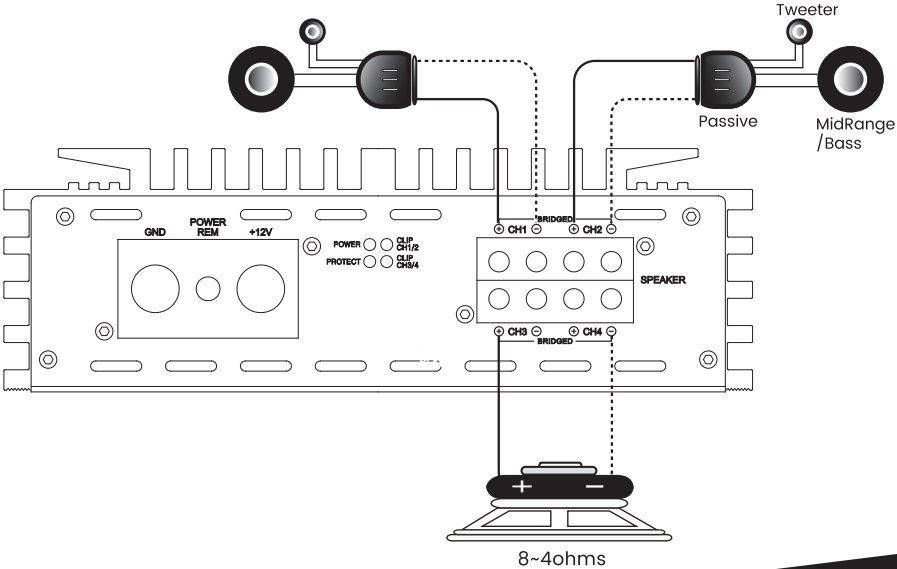
FULL RANGE DIGITAL 4CH INPUT CONNECTION



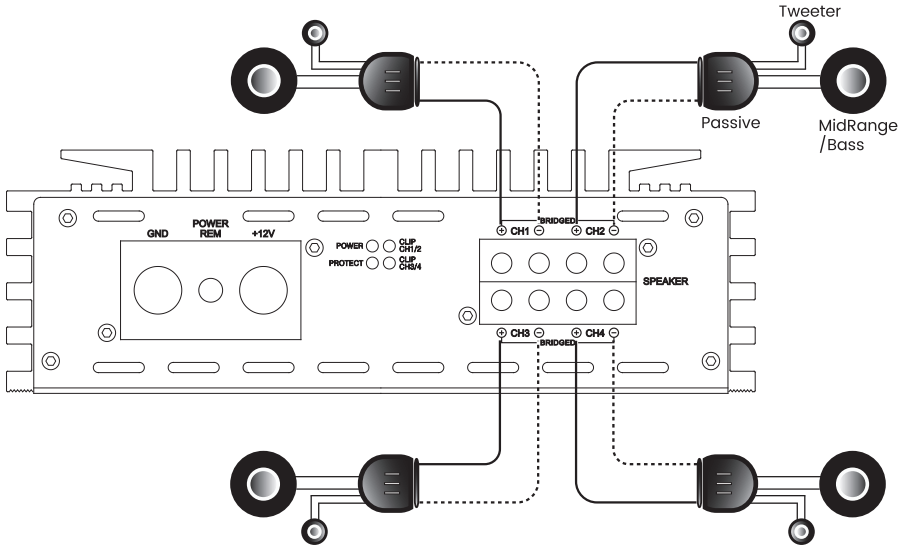
Wired Remote Control (Optional)

FULL RANGE DIGITAL 4CH SPEAKER CONNECTION

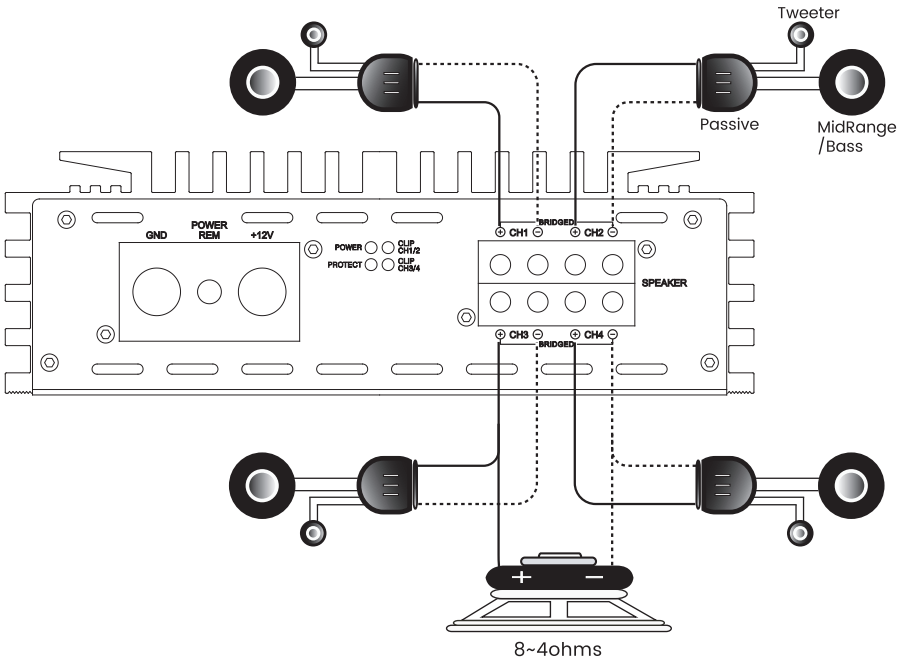
SALT-200.4, SALT-300.4 & SALT-500.4 - 3 Channel Speaker Connection Mode.



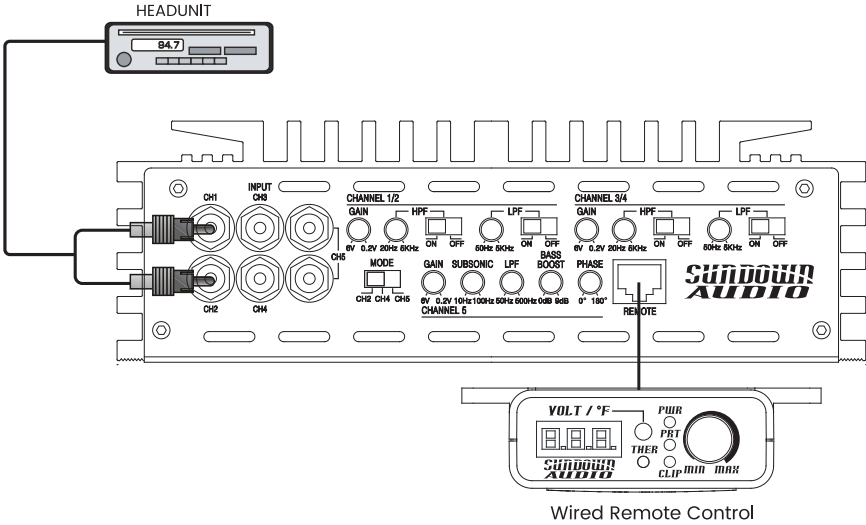
SALT-200.4, SALT-300.4 & SALT-500.4 - 4 Channel Speaker Connection Mode.



SALT-200.4, SALT-300.4 & SALT-500.4 - 5 Channel Speaker Connection Mode.



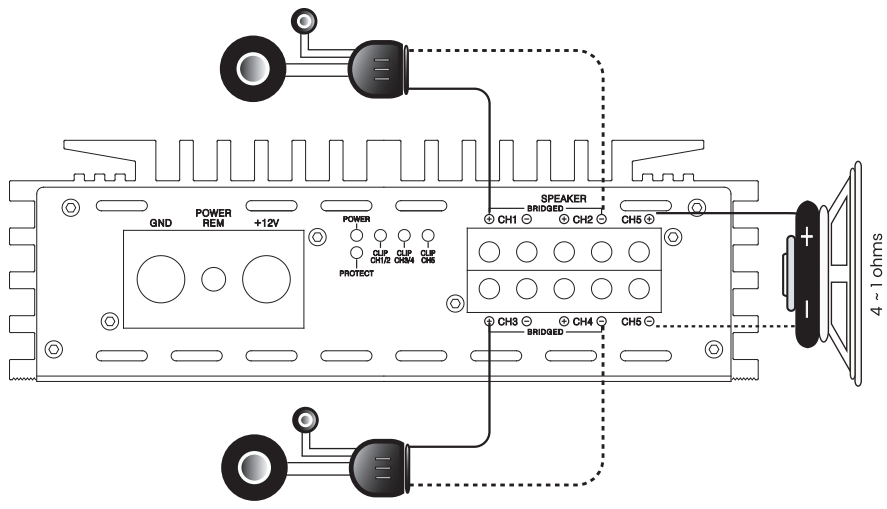
SALT-1700.5 5CH INPUT CONNECTION



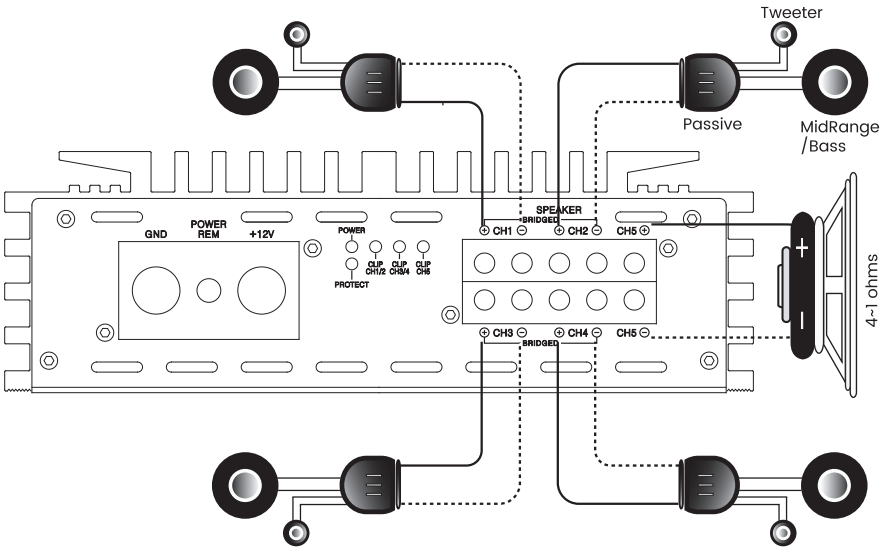
Wired Remote Control

SALT-1700.5 5CH SPEAKER CONNECTION

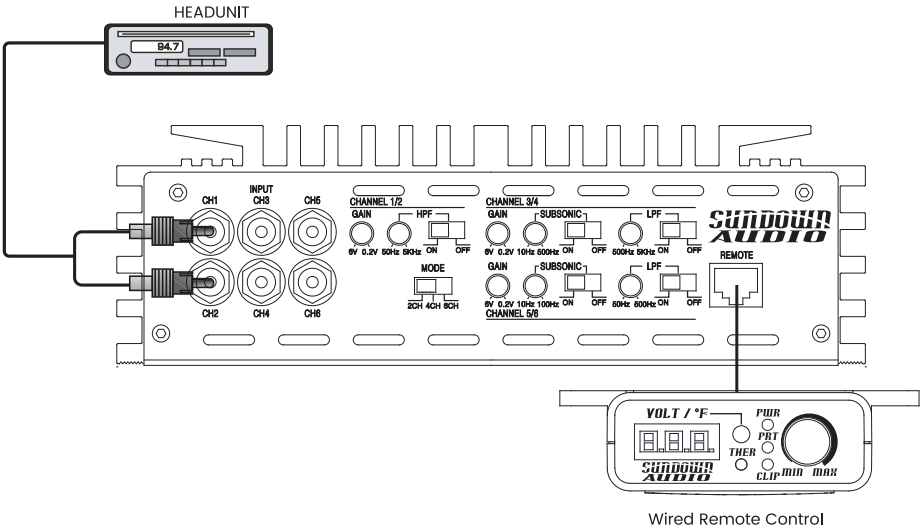
SALT-1700.5 - 3 Channel Speaker Connection Mode.



SALT-1700.5 - 5 Channel Speaker Connection Mode.

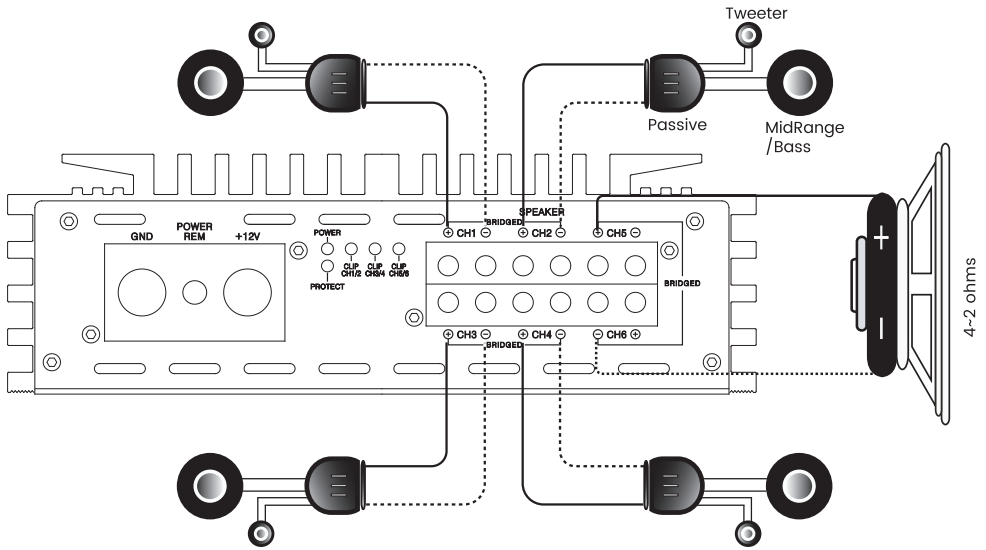


SALT-2000.6 6CH INPUT CONNECTION

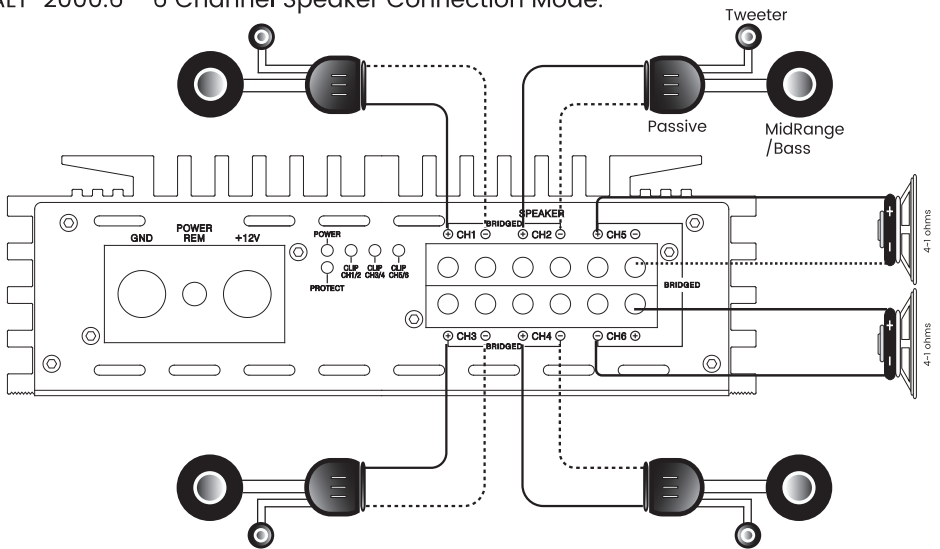


SALT-2000.6 6CH SPEAKER CONNECTION

SALT-2000.6 - 5 Channel Speaker Connection Mode.



SALT-2000.6 - 6 Channel Speaker Connection Mode.



TROUBLE SHOOTING

All Sundown Audio amplifiers have multi-layer protection features to prevent damage from misuse or faulty conditions to ensure long lasting life of your investment. If the unit senses excessive heat, short circuited speakers, overload, or voltage fluctuation outside of the working range the protection indicator light will turn red and the unit will turn off. In order to solve this problem, you should turn all levels down, power off the unit, then carefully check the installation for wiring mistakes or shorts. If the amplifier is excessively warm the protection light will not turn on as the unit will turn off to protect itself from overheating. Let the unit cool down for 30 minutes and try again. If the unit works, try moving the amplifier or make sure nothing is covering it so it can vent heat off of the heatsink. Before you remove or uninstall the amplifier, refer to the list below for suggested solutions.

Amplifier Doesn't Turn On or No Output

- Check the fuse(s), not just visually, but with a continuity meter and all 12+ volt, remote and ground connection. Make sure you have 13+ volts. It is possible for a fuse to have poor internal connections, take the fuse out of the holder for the testing.
- Check the input signal from the source unit using an AC voltmeter to measure the voltage while it's being played. The voltage should be from 0.2 to 6.0 volts from the RCA cables.
- Check the output of the amplifier, test for output at the speaker outputs of the amplifier.
- Check to ensure that the speaker wires are making a good connection to the amplifier and the subwoofers.

Amplifier Goes Into Protection

- Check shorts on speaker wires or open coil.
- Check input voltage from RCA, if DC signal is over 4 volts, the amplifier will go into protect. Remove and reset the power to the unit to check if it will turn on.
- Check impedance to make sure it's over the minimum load. SALT-2, SALT-3, SALT-4, SALT-6 and SALT-8 have a working impedance of 1 ohm or 2ohms strapped. SALT-12 working impedance is 1ohm. SALT-200.2, SALT-400.2, SALT-200.4, SALT-300.4 and SALT-500.4 working impedance is 2ohm stereo or 4ohm bridged. SALT-1700.5 working impedance is CHI-CH4 2ohm stereo, CH5 is 1ohm. SALT-2000.6 working impedance is CHI-CH4 2ohm stereo and CH5-6 is 1ohm stereo or 2ohm bridged.
- Check input voltage. SALT-2, SALT-3, SALT-4, SALT-6, SALT-8, SALT-12, SALT-200.2, SALT-400.2, SALT-200.4, SALT-300.4, SALT-500.4, SALT-1700.5 and SALT-2000.6 have a working range of 9 to 15.5 volts.
- Check chassis ground and remote using same ground.

Distorted / Attenuated / Noise Sound

- Check the chassis ground connections of all audio equipment.
- Check amplifier controls for errors, input level or crossover setting.
- Check the speaker wires for a possible short, either between the positive and negative leads or between a speaker lead and the vehicle's chassis ground.
- Check the nominal load impedance to verify that the amplifier is driving a load equal to or greater than 1 ohm for SALT-2, SALT-3, SALT-4, SALT-6, SALT-8 & SALT-12. 2ohm stereo or 4ohm bridged for SALT-200.2, SALT-400.2, SALT-200.4, SALT-300.4 & SALT-500.4. CHI-CH4 2ohm stereo and CH5 is 1ohm for SALT-1700.5. CHI-CH4 2ohm stereo and CH5-6 is 1ohm stereo or 2ohm bridged for SALT-2000.6
- Check the input signal and input signal cables to make sure signal is present at the amplifier inputs and the cables are not pinched or loose. It may be helpful to try a different set of cables and / or a different signal source to be sure.
- Check speaker wiring for reverse polarity.

SUN~~DOWN~~ AUDIO

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