

# OWNER'S MANUAL

Super Natural Sound High Performance Technology



SP-1500.2 dbPRO

SP-2000.2 dbPRO

SP-2300.2 dbPRO

## **FEATURES**

## [SP-1500.2 dbPRO]

- 2/1 Channel Bridgeable Class A/B Amplifier
- MOSFET PWM Power Supply
- Stable into 1 Ohm Load Workable
- 24dB Octave Crossover Slope
- Variable Low Pass Filter (LPF)
- Variable High Pass Filter (HPF)
- HPF/FULL/LPF Selectable Switch
- Variable Bass Boost
- On/Off Subsonic Switch
- RCA Line Input and Output
- Multi-Way Protection circuitry (Thermal/Over Current/Speaker Short /Speaker DC protection)
- Tested Voltage & THD:14.4V & Less than 0.05% THD
- Operating Voltage : DC10V~15.5V Power Input
- Wired Remote Controller

## [SP-2000.2 dbPRO]

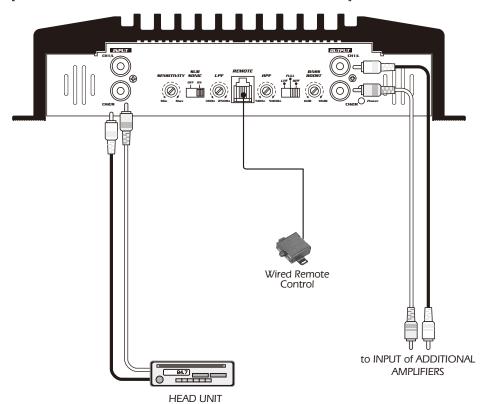
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## [SP-2300.2 dbPRO]

- 2/1 Channel Bridgeable Class A/B Amplifier
- MOSFET PWM Power Supply
- Stable into 1 Ohm Load Workable
- 24dB Octave Crossover Slope
- Variable Low Pass Filter (LPF)
- Variable High Pass Filter (HPF) HPF/FULL/LPF Selectable Switch
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# **RCA CONNECTION**

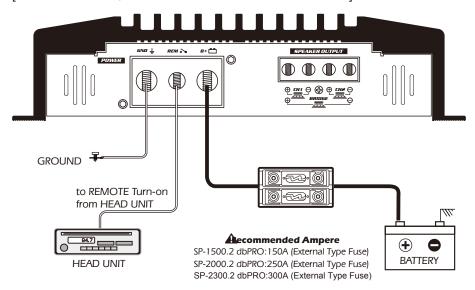
[SP-1500.2 dbPRO / SP-2000.2 dbPRO / SP-2300.2 dbPRO]



The amplifier is equipped with RCA type signal input for low level input. To adjust input levels and to balance both channels, use both channels' gain controls.

## **POWER CONNECTION**

[SP-1500.2 dbPRO / SP-2000.2 dbPRO / SP-2300.2 dbPRO]



## +12V Power

Connect B+ terminal of the amplifier to the + terminal of the battery using the wire that has the same diameter of the ground cable.

Make sure you install in-line fuse holder approximately 300 to 400 mm away from the + terminal of the battery. Please ensure that there is no fuse in the battery holder.

### **GROUND**

Disconnect the battery and connect the GND (ground) terminal to the cars chassis. Keep this cable as short as possible (no longer than 500 mm). Making sure that the connection with the chassis is rust free and clear of paint or grime.

## REMOTE

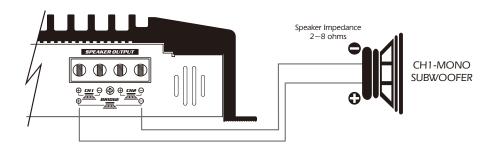
Connect the REM terminal of the amplifier to the power antenna terminal in the car ignition switch using 12 or 16 ga. electrical wire.

## **A** Caution

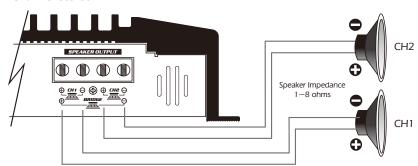
First make the ground connection, then +12V wire connection, and finally the remote connection. Furthermore, the +12V wire must always be fused at the battery to protect the amplifier from possible damage. If you need to replace the power fuse, replace it with a fuse of the same value. It may cause serious damage to your amplifier and/or your vehicle if you use fuses with different type or rating.

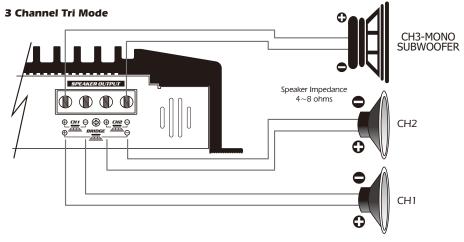
# **SPEAKER CONNECTION**

[SP-1500.2 dbPRO / SP-2000.2 dbPRO / SP-2300.2 dbPRO ] 1 Channel Bridged



### 2 Channel Stereo





## **TROUBLE SHOOTING**

This power amplifier has protection features to prevent damage from misuse or faulty conditions. If the unit senses excessive heat, short circuited speakers or overload, protection LED will light up and system will be turned off. Prior to checking the wiring for any fault, you should turn all level controls down and turn off power. If the amplifier shuts down due to excessive heat, protection LED will not light up. In this case, simply allow the amplifier to cool down. Before removing your amplifier, refer to the list below and follow the troubleshooting instructions. Always test the speakers and their wires first.

### **AMPLIFIER DOES NOT POWER UP**

- Check if at least +12V DC is available on the battery power terminal.
- Check if at least +13.8V DC is available on the remote terminal.
- Check if a good ground connection is present. Check all fuses.
- Check if protection LED is not lit.

### PPROTECTION LED LIGHTS UP WHEN AMPLIFIER IS POWERED UP

- Check if speaker wires are short-circuited.
- Remove speaker wires and reset the amplifier.
  If protection LED still lights up, then the amplifier is faulty.

### **FUSE BLOWING**

- Check the value of minimum speaker impedance.
- Check for short-circuits on power cable and vehicle chassis...

## **OVERHEATING**

- Check the value of minimum speaker impedance.
- Check speakers for short-circuits.
- Check if there is good airflow around the amplifier.

## **SOUND TOO LOW-DISTORTED SOUND**

- Check if the input level control has been set to match the output level of the unit.
- Check the volume of head unit.
- Check speakers for short-circuits.
- Check if crossover frequencies have been properly set.

### **HIGH HISS-ENGINE NOISE IN SPEAKERS**

- ullet Check if a good ground connection is present and check speakers for short-circuits.
- Disconnect all RCA inputs from the amplifier. If hissing / engine noise disappears, replace the RCA connectors and re-check. Then check the component driving the amplifier.

# **SPECIFICATIONS**

## [SP-1500.2 dbPRO]

Rated power output	
-RMS power, 4 ohm stereo	280W x 2CH
-RMS power, 2 ohm stereo	500W x 2CH
-RMS power, 1 ohm stereo	750W x 2CH
-RMS power, 4 ohm bridged	950W x 1CH
-RMS power, 2 ohm bridged	1500W x 1CH
Signal to Noise Ratio	>98dB
Low Pass Crossover	30Hz ~ 250Hz
High Pass Crossover	50Hz ~ 500Hz
Subsonic Seletable @ on	30Hz
Bass Boost @ 45Hz	0~18dB
Frequency Response	10Hz ~ 40KHz (+/-1dB)
THD@RMS Watts	0.05%
Channel Separation	75dB
Fuse Rating	150A (external type fuse)
Input Sensitivity	200mV~5V (+/- 5%)
Dimensions	256(W) x 61(H) x 434(L)mm

## [SP-2000.2 dbPRO]

Rated power output	
-RMS power, 4 ohm stereo	400W x 2CH
-RMS power, 2 ohm stereo	700W x 2CH
-RMS power, 1 ohm stereo	1200W x 2CH
-RMS power, 4 ohm bridged	1500W x 1CH
-RMS power, 2 ohm bridged	2400W x 1CH
Signal to Noise Ratio	>98dB
Low Pass Crossover	30Hz ~ 250Hz
High Pass Crossover	50Hz ~ 500Hz
Subsonic Seletable @ on	30Hz
Bass Boost @ 45Hz	0~18dB
Frequency Response	10Hz ~ 40KHz (+/-1dB)
THD@RMS Watts	0.05%
Channel Separation	75dB
Fuse Rating	250A (external type fuse)
Input Sensitivity	200mV~5V (+/- 5%)
Dimensions	256(W) x 61(H) x 600(L)mm

## [SP-2300.2 dbPRO]

2300.2 dbi NOj	
Rated power output	
-RMS power, 4 ohm stereo	600W x 2CH
-RMS power, 2 ohm stereo	900W x 2CH
-RMS power, 1 ohm stereo	1500W x 2CH
-RMS power, 4 ohm bridged	1800W x 1CH
-RMS power, 2 ohm bridged	3000W x 1CH
Signal to Noise Ratio	>98dB
Low Pass Crossover	30Hz ~ 250Hz
High Pass Crossover	50Hz ~ 500Hz
Subsonic Seletable @ on	30Hz
Bass Boost @ 45Hz	0~18dB
Frequency Response	10Hz ~ 40KHz (+/-1dB)
THD@RMS Watts	0.05%
Channel Separation	75dB
Fuse Rating	250A (external type fuse)
Input Sensitivity	200mV~5V (+/- 5%)
Dimensions	256(W) x 61(H) x 660(L)mm

