

USER'S MANUAL 2000.4 EV/3

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Dear Costumers,

Congratulations for purchasing a product of the highest quality and technology! SounDigital's products are developed to ensure maximum efficiency and reliability in your audio system.

Class D Amplifiers:

Class D amplifiers have audio quality, efficiency, application versatility, and compact design as their main features. Here are the advantages of these characteristics:

Audio Quality – In the past, Class D products had limited response and for higher frequencies, Class AB products performed better, but their efficiency was very low. The new technologies introduced by SounDigital resulted in a Class D amplifier with high efficiency and performance superior to Class AB.

Efficiency – SounDigital Class D amplifiers have a total efficiency (Output + Source) higher than 70%, which ensures lower battery consumption and less heating.

Versatility of Application – The flat response in all frequencies of the SounDigital amplifiers allows them to be used in all automotive sound systems. They meet the demands with extreme quality.

Compact Design – The high efficiency and high technology applied allows SounDigital amplifiers to be very compact, facilitating installation in vehicles where space is limited.

IMPORTANT INFORMATION

Read this manual carefully and follow precisely all the information contained herein, which are very important and allow your amplifier to work optimally. If you think it necessary, do not hesitate to contact our technical support by e-mail **sac@soundigital.com** or by **SAC +55 (51) 3042-9001.**

PACKAGE CONTENT

- 1 EVO5 Amplifier
- 1 Quick installation guide with warranty certificate
- 1 Promotional sticker

To prevent injury to the user or damage to the amplifier, read all the safety instructions contained in this manual;

If you feel insecure about installing the equipment, contact SounDigital technical support or a qualified professional in automotive sound installation;

Before proceeding with the installation of any electrical equipment in the vehicle, disconnect the negative (-) terminal of the battery to avoid fire, injury or damage to the amplifier;

Use your sound system safely, continuous exposure to sound pressures above 85 decibels may cause irreversible hearing damage;

This equipment is for use with automotive batteries of DC voltage between 12.6 and 14.4 volts. Before installing the equipment, check the voltage of the batteries;

Do not install the amplifier in the engine compartment or in places exposed to water, humidity, dust or dirt;

Install the amplifier in a ventilated place and prevent the side ventilation windows from being obstructed;

Fix the amplifier in a proper and firm manner. Avoid the fixation on metallic parts, as this procedure may cause ground "Looping" (noise);

Use rubber "O-rings" when passing the wires in metallic walls in order to prevent them from being cut and causing short-circuit;

Make sure that the place chosen for installation of the amplifier does not hinder the operation of the vehicle;

During the use of this product, the aluminum housing/dissipator may reach temperatures higher than 60°C. Before touching the amplifier, be sure that it is cold;

To maintain the efficient thermal dissipation, periodically clean the dissipator, removing dust and impurities with the help of a brush and/or dry cloth;

Be very careful when drilling holes in the vehicle, make sure not to pierce the fuel tank, brake lines, electrical cables, etc;

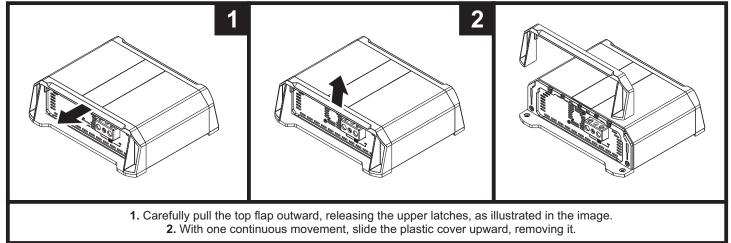
Make sure that all cables are properly secured throughout the entire installation;

Wear gloves, safety goggles, and all necessary safety equipment during the installation of the SounDigital amplifiers.

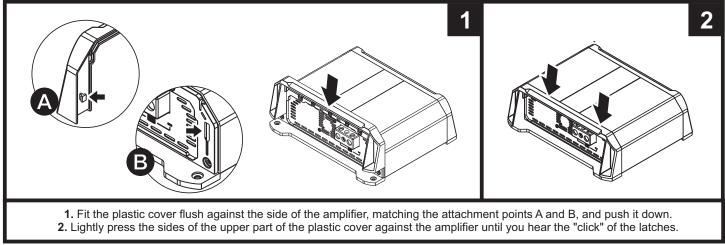


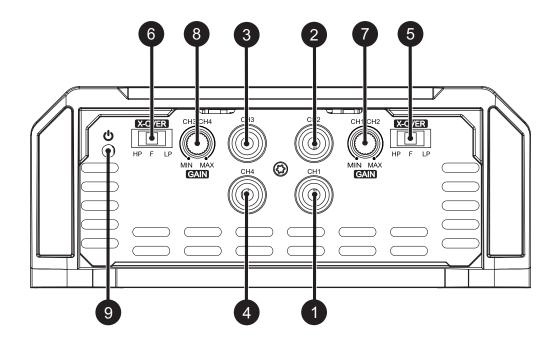
This symbol alerts the user to the presence of important instructions. Failure to comply with these instructions may result in damage to the amplifier or the user. The plastic covers have the function of giving finishing and hiding the amplifier's fixation screws. To remove and replace them, follow the instructions below.

DISASSEMBLING THE COVER

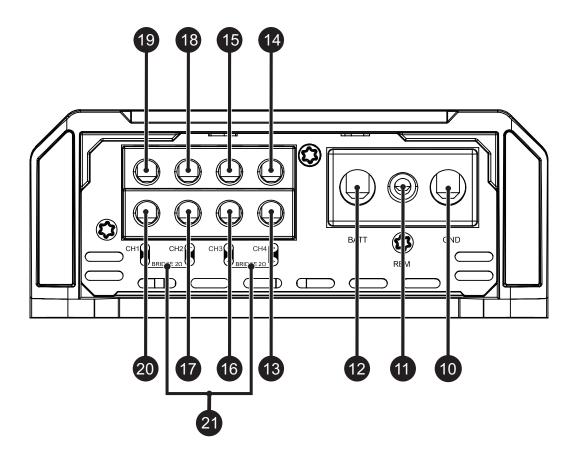


COVER ASSEMBLY





	CH1	1
RCA audio input	CH2	2
RCA audio input	СНЗ	З
	CH4	4
Crossover Selector Switch	CH1/CH2	5
High Pass - Full - Low Pass	CH3/CH4	6
Variable gain control	CH1/CH2	7
Variable gain control	CH3/CH4	8
Power On" Indicator LED (Blue)	-	9



10	-	Negative power connector (GND)
11	-	Remote power connector (REM)
12	-	Positive power connector (+12VDC)
13	CH4	Positive audio output connector (+)
14	CH4	Negative (-) audio output connector
15	СНЗ	Conector de saída de áudio positivo (+)
16	CH3	Positive audio output connector (+)
17	CH2	Negative (-) audio output connector
18	CH2	Positive (+) audio output connector
19	CH1	Positive (+) audio output connector
20	CH1	Negative (-) audio output connector
21	-	Minimum impedance for BRIDGE connection

ELECTRICAL SIZING

For a correct operation of your SounDigital amplifier, it is necessary to properly size the electrical system and the cables used.

In the table below you can determine the minimum proper section of the grounding, positive + 12VDC, and audio output cables according to the amplifier power.

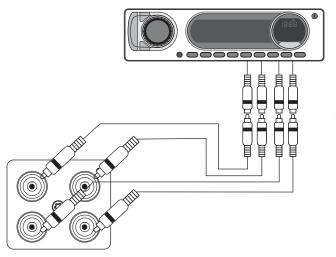
2000 WRMS	POSITIVE CABLE (+12VDC) NEGATIVE CABLE (GND)	21mm² - 4 AWG
	AUDIO OUTPUT CABLE	2 x 2mm² - 12 AWG

For the connections from the battery to the amplifier and to ground, use good quality copper cables.

CCA cables should not be used.

AUDIO INPUT

RCA Entry



All RCA inputs must be connected for all 4 channels to work.



BEFORE INSTALLING ANY ELECTRICAL EQUIPMENT IN THE VEHICLE, DISCONNECT THE NEGATIVE (-) TERMINAL OF THE BATTERY TO AVOID FIRE, DAMAGE TO THE AMPLIFIER AND TO THE USER HIMSELF.

Fix the amplifier so that there is access to the connectors.

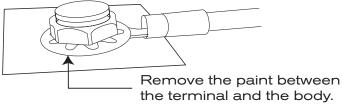
Install the power cables in the vehicle in a proper way, starting from the battery up to the fuse holder or circuit breaker, use the cable with the proper section. Make all connections, install fuse holders or circuit breakers, but without placing the fuses or with the circuit breakers in the "off" position.



THE FUSE/PROTECTIVE CIRCUIT BREAKER MUST BE INSTALLED NO MORE THAN 30CM FROM THE BATTERY.

Connect the power supply to the amplifier with the correct polarity. Connect all positive terminals (+) coming from the fuse holders or circuit breakers to the amplifier positive connectors, and all negative cables (GND) coming from the grounding point to the amplifier negative.

The grounding should be as short as possible and should be connected to the vehicle chassis and the battery negative;



Install the input signal cables properly, the input signal cables should be installed away from the power cables.

Connect the RCA cables to the main unit and the amplifiers.

Install the audio output cables, with the appropriate cross-section, in a proper manner and away from the power and audio input cables.

Connect the audio output cables to the amplifier and speakers respecting the positive (+) and negative (-) polarities;

Install next to the power cables the remote power cable with section of 1.5mm² or larger.

Connect the remote power cable to the "REM" terminal of the amplifier to the remote power output of the main unit (when not using the high-level signal inputs);

After the cable connections, before powering up the system, check that all connections are correct and that there are no shorts between cables and ground cables;

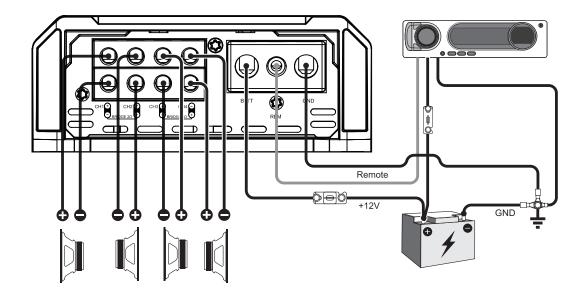
Reconnect the battery ground;

Make sure the main unit is off and then set the fuses or turn on the circuit breakers;

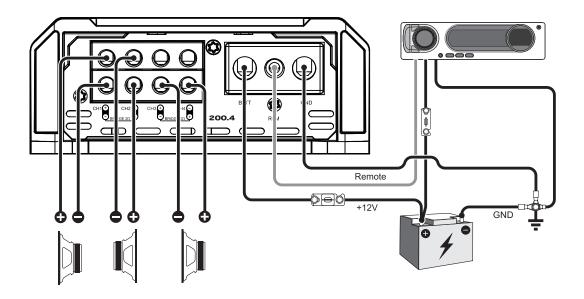
Power up the main unit and the amplifier will turn on the "On" indicator LED indicating that it is operating.

4-CHANNEL CONFIGURATION

See "Audio Input" on page 8



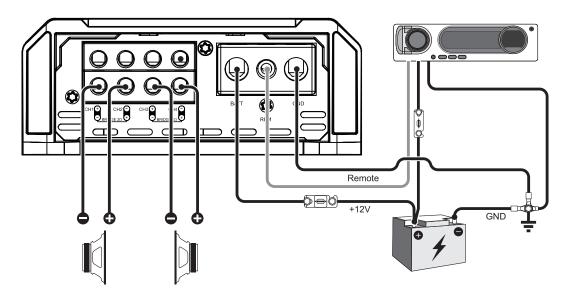
3-CHANNEL CONFIGURATION



See "Audio Input" on page 8

2-CHANNEL CONFIGURATION

See "Audio Input" on page 8



GAIN ADJUSTMENT

Equipment required

Woltmeter capable of measuring AC voltage;

Media with 60Hz sinusoidal signal recorded at 0Db

Adjustment Procedure

This procedure is the same for both gain controls;

Set the gain control to minimum;

Disconnect the speakers from the amplifier output;

Furn off or set to "0" all audio processing (bass, treble, loudness, EQ, etc.);

Set the volume of the main unit to approximately 3/4 of the total.total.

Set the audio positioning controls in the center (fader and left and right controls);

Set the crossover to "F";

Play 60Hz media on the main unit

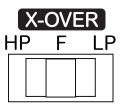
Measure, with the aid of a voltmeter, the output voltage of the amplifier at the terminals where the speakers were connected;

Furn the gain control clockwise until the voltage observed in the table below is reached;

After adjustment, turn off the main unit and reconnect the speakers.

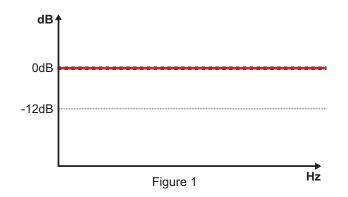
Download the media for regulation at https://soundigital.com/downloads/

MODEL	STEREO / POWER	BRIDGE / POWER	STEREO OUTPUT VOLTAGE	BRIDGE OUTPUT VOLTAGE
2000.4 ∈√⊃ <mark>5</mark> 2Ω	1Ω/ 1000W	2Ω/ 2000W	31.6 V	63.2 V
2000.4 ∈√ ⊃5 4Ω	2Ω/ 1000W	4Ω/ 2000W	44.7 V	89.4 V

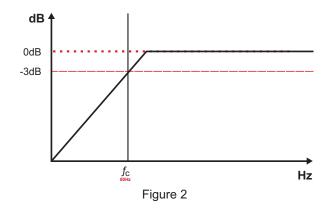


"F" All frequencies will be played back "LP" Frequencies below 80Hz will be played "HP" Frequencies above 80Hz will be played

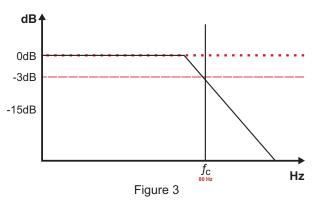
> Select the key in position "F" - All frequencies will be played as in "Figure 1";



> Select the switch in the "HP" position - All frequencies above 80Hz will be played as in "Figure 2";



> Select the key in the "LP" position - All frequencies below 80Hz will be played as in "Figure 3";

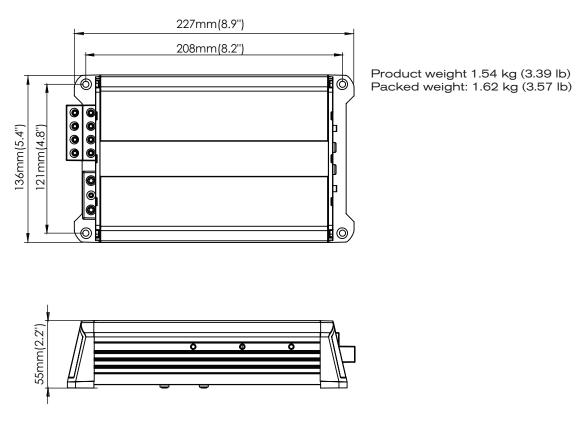


PARAMETERS	2000.4 ∈√)≣ 2Ω	2000.4∈√ጋ≣ 4Ω
Bridge RMS power @ 2Ω*	2 X 1000W	N/A
Bridge RMS power @ 4Ω*	2 X 660W	2 X 1000W
RMS power @ 1Ω*	4 X 500W	N/A
RMS power @ $2\Omega^*$	4 X 330W	4 X 500W
Frequency response (-3dB)	10Hz ~ 22kHz	10Hz ~ 22kHz
Low Pass Filter (LP -12dB/8)	80Hz	80Hz
High Pass Filter (HP -12dB/8)	80Hz	80Hz
Supply voltage	8V ~ 16V	8V ~ 16V
SNR	90dB	90dB
Input sensitivity	0.2 ~ 4V	0.2 ~ 4V
Consumption with musical signal	91A	91A
Consumption with resistive load (1kHz @ 12.6V)	182A	182A
Total Efficiency	87%	87%
Damping Factor (@100Hz impedância nominal)	200	200
Minimum Impedance per stereo channel	1Ω	2Ω
Minimum Impedance per Bridge	2Ω	4Ω
Fuse (music use)**	100A	100A
Recommended Battery (minimum)	100Ah	100Ah

*Power at 12.6V @ 60Hz with maximum THD of 1%.

**It is mandatory to install the fuse at a maximum distance of 30cm from the battery.

DIMENSIONAL DATA





YOUR MUSIC. YOUR POWER.











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