



DSPA10D

OWNER MANUAL DSP CAR POWER AMPLIFIERS



- Please read this quick guide before using the product
- For detailed tuning operations and settings, please refer to the DSPA10D user manual on the website
- <https://www.awaveaudio.com>



Warning

This symbol indicates important instructions. Failure to pay attention may result in serious injury or death to persons.

If a problem occurs, stop using it immediately

Failure to do so may result in personal injury or damage to this product. Please return the product to an authorised dealer or to the nearest service centre for repair.

This product is only suitable for use in vehicles with a negative 12V ground

Failure to do so may cause a fire or other accident.

Wiring and installation by professionals

Wiring and installation of this product requires specialist skills and experience. For safety reasons, please contact the dealer from whom you purchased the product for installation.

Do not disassemble or modify

Failure to do so may result in an accident, fire or electric shock.

Small objects such as bolts or screws should be kept out of the reach of children

Swallowing small objects can lead to serious injury. If swallowed, seek immediate medical attention.

Do not use any function that will distract you while driving

Any function that interferes with your concentration should only be used when the car is fully stopped. If you wish to use these functions, park the vehicle in a safe place first. Failure to do so may result in an accident.

It is important to keep the volume at a level where you can still hear the noise outside the vehicle while driving.

Not being able to hear emergency vehicle sirens and road warnings (train crossings etc.) is very dangerous and can lead to accidents. In addition, excessive noise levels can lead to hearing damage.



Note

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Product cleaning

Please use a dry, soft cloth to clean the product regularly. If the pollution is difficult to remove, please use water to wet the soft cloth. Other electronics cleaners can also be used.

Temperature

Make sure the temperature in the car is between +60 and -20°C before switching on the machine.

Repairs

If you encounter a problem, do not repair it yourself. Please take the product to your authorized dealer or a nearby service centre for repair.

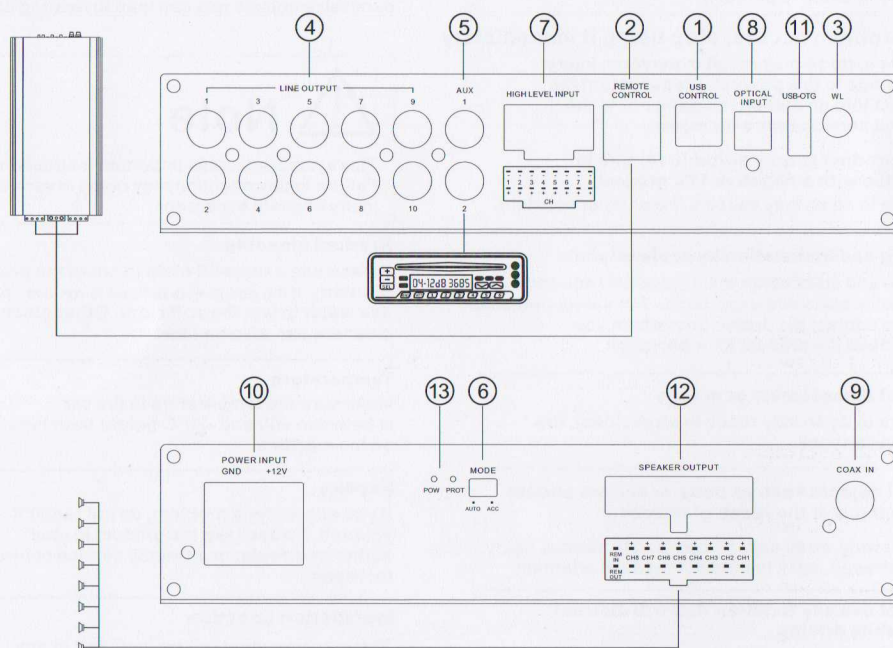
Installation Location

The machine must not be installed in any of the following locations.

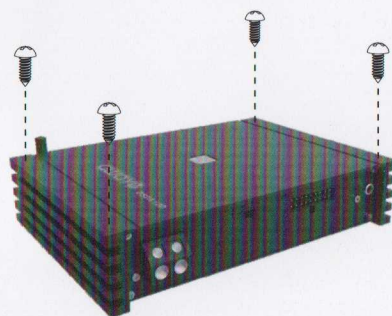
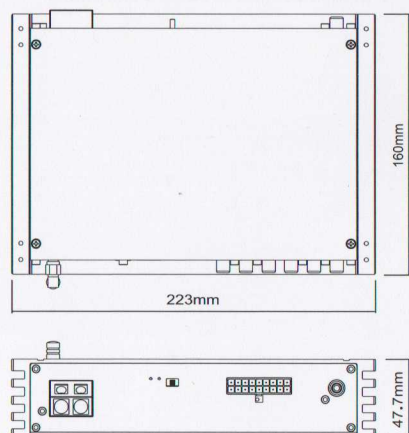
- near direct sunlight and heat sources
- Places with high temperatures and near water sources
- Dusty places
- places subject to severe vibrations

Machine Introduction

Machine interface illustration



Dimension Installation instruction



*The machine has built-in Bluetooth

Introduction to machine interfaces and functions

① USB port

It can be connected to a PC via USB cable for detailed tuning operations and settings.

② DRC controller input

③ WL

Bluetooth function

④ RCA audio output connector

8 sets of RCA audio signal outputs for connection to external amplifiers.

⑤ LINE INPUT audio input connector

LINE INPUT audio signal inputs, can be connected to the LINE INPUT audio signal output of the car CD/DVD player.

⑥ Input selector switch

When the switch is set to "ACC", the machine is started by ACC; when the switch is set to "AUTO", the machine is started by the high level input signal FL-/FL+.

⑦ High level input

⑧ OPTICAL INPUT

⑨ Coaxial input

⑩ GND +12V

⑪ OTG input interface, USB input

⑫ SPEAKER OUTPUT

⑬ Indicator Light

1 INPUT +	1 INPUT -
2 INPUT +	2 INPUT -
3 INPUT +	3 INPUT -
4 INPUT +	4 INPUT -
5 INPUT +	5 INPUT -
6 INPUT +	6 INPUT -
7 INPUT +	7 INPUT -
8 INPUT +	8 INPUT -

SPEAKER OUTPUTS
CH1~CH8

REMIN	REMOUT
CH8 OUT +	CH8 OUT -
CH7 OUT +	CH7 OUT -
CH6 OUT +	CH6 OUT -
CH5 OUT +	CH5 OUT -
CH4 OUT +	CH4 OUT -
CH3 OUT +	CH3 OUT -
CH2 OUT +	CH2 OUT -
CH1 OUT +	CH1 OUT -

Accessory list

The following accessories should be included in the DSPA10D box. If there is any shortage, please contact the authorized supplier

Accessories	Quantity
Input output line	2 unit
Fixing bracket	4 pcs
Instruction manual	2 books

Specification

Hi-End level components	AKM7735 high-performance DSP chip
Input channel	8 high-level inputs, 2-channel RCA input Fiber optic input, coaxial input, OTG input, USB input, Bluetooth input(5 choose 1)
High level input combined frequency	Each channel supports up to 8 independent input combined frequencies
Bluetooth	Bluetooth 5.0
Output channel	8 high-level outputs, 10 RCA outputs
Amplifier output	6X50w/4Ω+2x90w/2Ω (CH1-CH6)+(CH7-CH8)
Signal to noise	≥100dB
Total ramp distortion	≤0.01%
Input sensitivity	RCA/Cinch : 1-8V High level: 8-32V
Input impedance	RCA/Cinch : 22k High level: 3.3-100Ω
RCA output voltage	1.5v
Operating Voltage	9~17V
Input channel equalizer	Each input channel has an independent 5-segment equalizer Filter type: ALLPASS (all pass filter) Center frequency point: 20Hz~20KHz Q value: 0.3~15 Gain: -15db~+15db
Output signal divider	Each channel is independently adjustable Filter type: Butterworth/Nink-Rein/Bessel Filter frequency: 20Hz~20KHz Filter slope: 6dB/Oct~48dB/Oct
Output channel equalizer	Each channel has an independent 31 segment equalizer Filter type: ALLPASS (all pass filter) Center frequency point: 20Hz~20KHz Q value: 0.3~15 Gain: -15dB~+15dB
Equalizer joint debugging mode	Independent adjustment / absolute linkage adjustment / relative linkage adjustment / crossover point linkage adjustment
Output polarity	Each channel is independently adjustable: positive/negative
Output delay	Independent adjustment for each channel: 0~20ms
Intelligent mixing	Intelligent recognition and automatic switching of save modes corresponding to any multiple input audio sources

Output volume	Single channel output volume: mute, -40dB~0dB Single channel subwoofer: mute, -40dB~0dB Total volume of subwoofer: mute, -40dB~+12dB Total volume adjustment: mute, -40dB~+12dB
Line control extend	Mode selection, total volume control, bass total volume control
Computer tuning	Windows system, XP system, USB interface, no drive required

Harmful substance composition

Name and content of harmful substances or elements in the product.

Component name	Harmful substance or element					
	Pb	Hg	Cd	Cr(VI)	PBB	PBDE
Circuit board components	X	O	O	O	O	O
Housing components	O	O	O	O	O	O
Display components x	X	O	O	O	O	O
Accessories x	X	O	O	O	O	O

This form is prepared in accordance with the requirements of SJ/T 11364
 O: Indicates that the content of the hazardous substance in all homogeneous materials of the part is below the limit requirements specified in GB/T 26572
 X: means that the content of the hazardous substance in at least one homogeneous material of the part exceeds the limit specified in GB/T 26572.
 Components marked with an "x" have been found to exceed the limit because there is currently no proven alternative technology available to the industry.

Repair Station Information

- For inquiries regarding repairs, please refer to the "Repair Station Information" below.
- The name, telephone number and address of the repair station are subject to change.

No	Repair Station	Address	Contact person	Phone number
01	Foshan, China	602, 6th Floor, Building 1, Nanlian East U Valley Headquarters Economic Port, Guicheng Street, Nanhai District, Foshan City, Guangdong, China	Miss Deng	19866009958