

 **BLAUPUNKT**



VELOCITY POWER

MPA **480**

MPA **680**

MPA **11500**



Enjoy it.

Operating and Installation Instruction

CAUTIONS

Proper system planning is vital in order to maximize the device's performance and road safety. Plan your installation carefully to avoid compromising performance reliability of the system. Consult an authorized Blaupunkt dealer for installation or repairation. Read the manual carefully before operating the device for the first time.

Safety Notes

Ensure to follow below safety notes during installation and wiring connection :-

- Disconnect the negative terminal of the battery. Refer to the safety notes of vehicle manufacturer.
- Ensure positions of the holes are nowhere near the vehicle component to avoid any damage during drilling.
- Ensure cross section of the cable is no less than 2.5mm² if the positive and negative cables are too long.
- Incorrect installation may result in malfunction of the device or the car sound system.

Installation and Connection Instructions

- The amplifier is designed to use 4-8 AWG power and ground cable.
- Select a dry and well-ventilated location to install the device.
- The device must not be installed in overly exposed location such on the rear shelf, rear seat etc.
- The installation location must be suitable for screw holes and have stable ground support.
- Ensure to connect the ground wire of the unit properly the vehicle chassis.
- Ensure to use leads that is larger than 10-gauge (AWG 10) when connecting to +12V and GND terminals.
- Connect the +12V power input lead only when the rest of the connections has been properly set.

Disclaimer

- In no event shall Blaupunkt be liable for any direct, indirect, punitive, incidental, special consequential damages, to property or life, improper storage, whatsoever arising out of or connected with the use or misuse of our products.
- USA & CANADA : Product not intended for sale in the United States and Canada. If purchased in the U.S. or Canada, this product is purchased as-is. No warranty, express or implied is provided in the U.S. and Canada.

Voltage Supply

- Use the supplied power extension cable to connect to the positive battery terminal.
- Firmly and carefully connect the ground lead to a bare metal point on the vehicle chassis.
- The control of the device should be a two-channel control, either via the preamplifier outputs or the loudspeaker, output of the car sound system.
- A control solely via the right or left channel is also possible since the low-frequency portion of the music is generally identical on both channels.

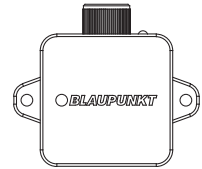
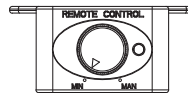
Integrated Fuse

The integrated fuse in the device protects the output voltage and the entire electrical system in case of malfunction. Do not replace damaged fuse with higher current.

Switching On/Off

This device will automatically turn on if a music signal is detected. The device will also automatically turn off if no music signal is received.

Remote Control

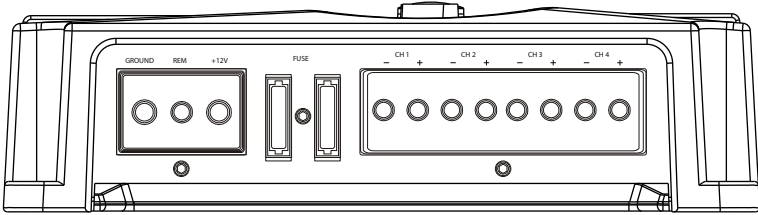
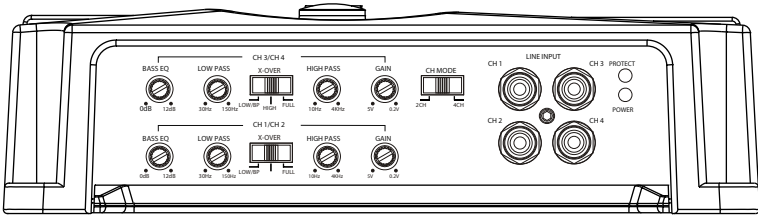


Recycling and Disposal



Please dispose responsibly.
Subject to change.

MPA 480 FUNCTION CONTROLLING DIAGRAM



SPECIFICATION

Power

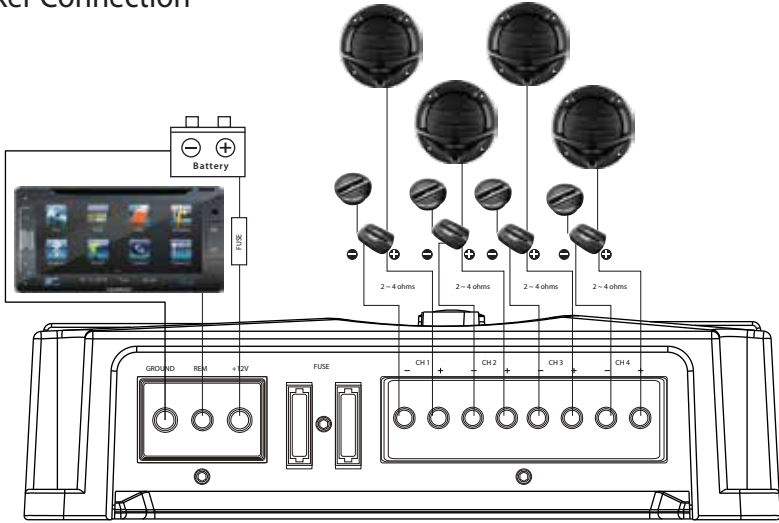
- Voltage Supply 14.4V
- Idling Current 1.1A
- Fuse 30A x 2
- Consumption @ 2Ω, 14.4 VDC (Max Musical Power) 40A

Amplifier

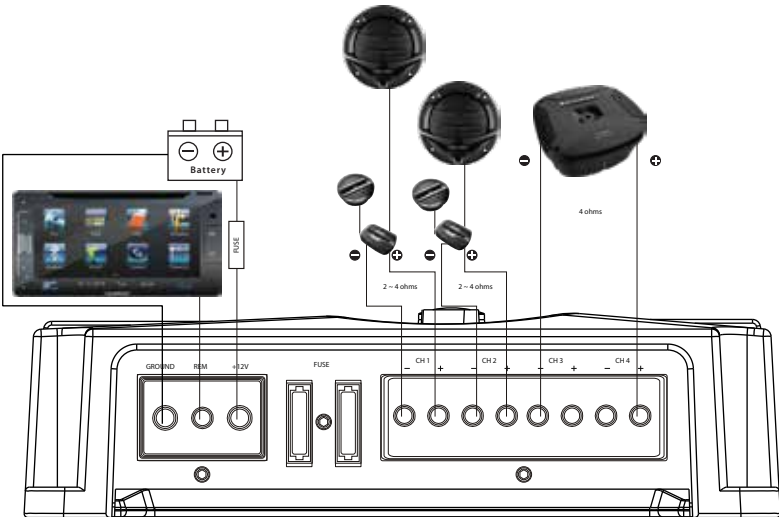
- Amplifier Class CLASS D
- Channel 4
- PCB Layer Double
- Max Output Power @ 4 ohms 120W x 4
- RMS Power 4 ohms 90W x 4
- RMS Power 2 ohms 150W x 4
- RMS Power 4 ohms Bridge 300 x 2
- Signal-To-Noise Ratio 95dB
- Frequency Range 5-35kHz
- Gain Adjust 0.5-5V
- Bass Boost Frequency 45Hz
- Bass Boost Level 12dB
- Total Harmonic Distortion 0.06%
- Crossover Frequency 30-150Hz (L), 10Hz - 4kHz (H)
- Dimension (W x H x D) 242 x 192 x 52mm
- Net Weight 2.2kg

MPA 480 WIRING DIAGRAM

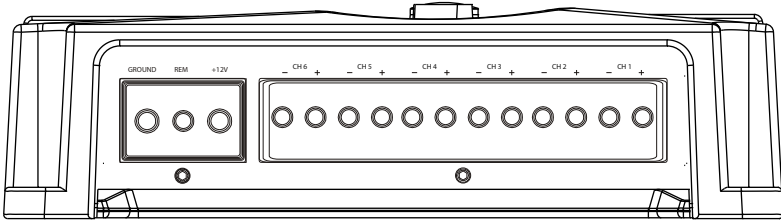
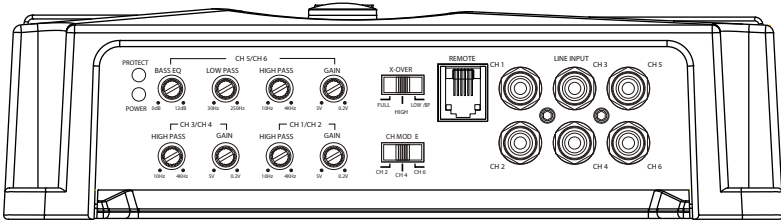
Speaker Connection



Speaker & Subwoofer Bridged Connection



MPA 680 FUNCTION CONTROLLING & WIRING DIAGRAM



SPECIFICATION

Power

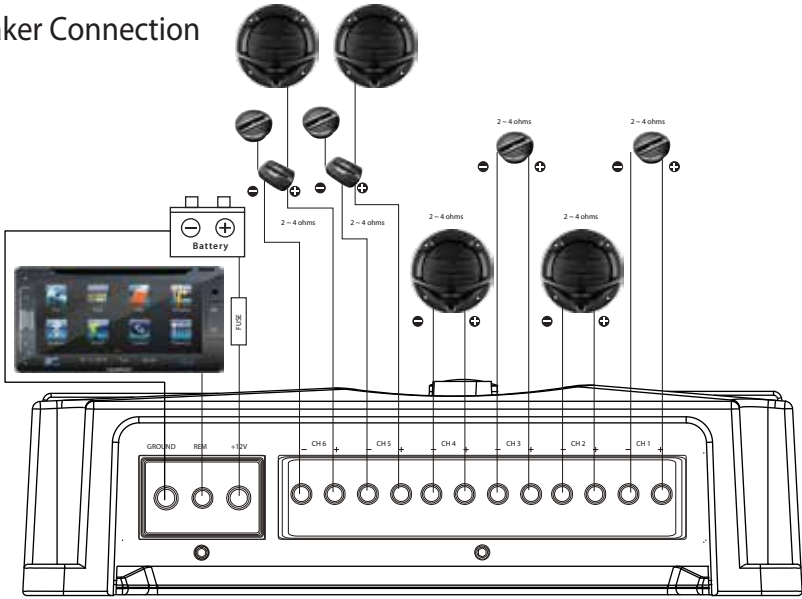
• Voltage Supply	14.4V
• Idling Current	1.5A
• Fuse	40A x 2
• Consumption @ 2Ω, 14.4 VDC (Max Musical Power)	50A

Amplifier

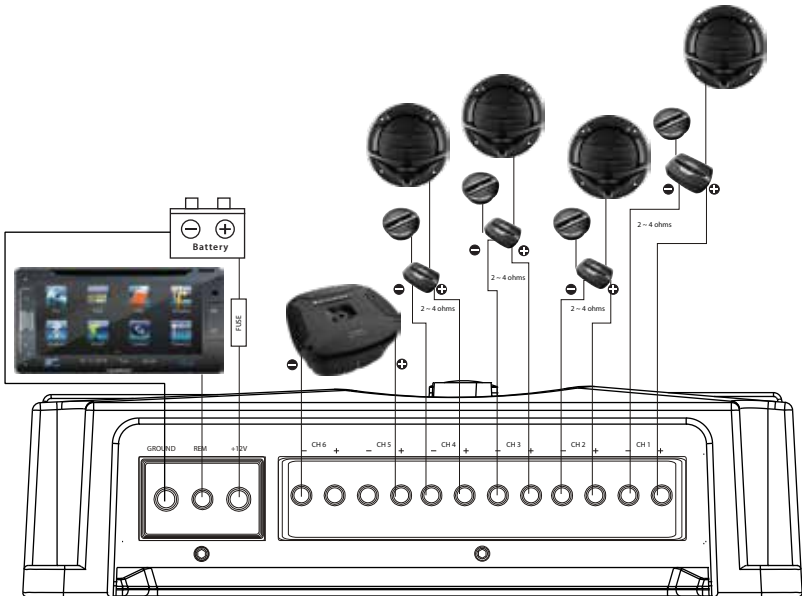
• Amplifier Class	CLASS D
• Channel	6
• Layer PCB	Double
• Max Output Power @ 4 ohms	110W x 6
• RMS Power 4 ohms	80W x 6
• RMS Power 2 ohms	135W x 6
• RMS Power 4 ohms Bridge	300 x 2
• Signal-To-Noise Ratio	95dB
• Frequency Range	5-35kHz
• Gain Adjust	0.5-5V
• Bass Boost Frequency	45Hz
• Bass Boost Level	12dB
• Total Harmonic Distortion	0.06%
• Crossover Frequency	30-250Hz (L), 10Hz-4kHz (H)
• Dimension (W x H x D)	337 x 192 x 52mm
• Net Weight	3.1kg

MPA 680 WIRING DIAGRAM

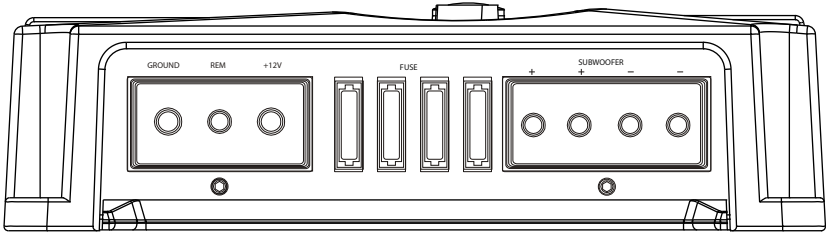
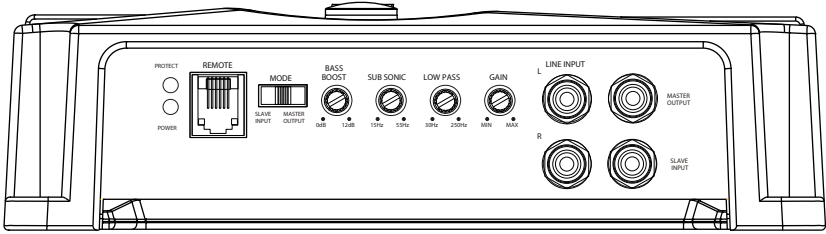
Speaker Connection



Speaker & Subwoofer Bridged Connection



MPA 11500 FUNCTION CONTROLLING & WIRING DIAGRAM



SPECIFICATION

Power

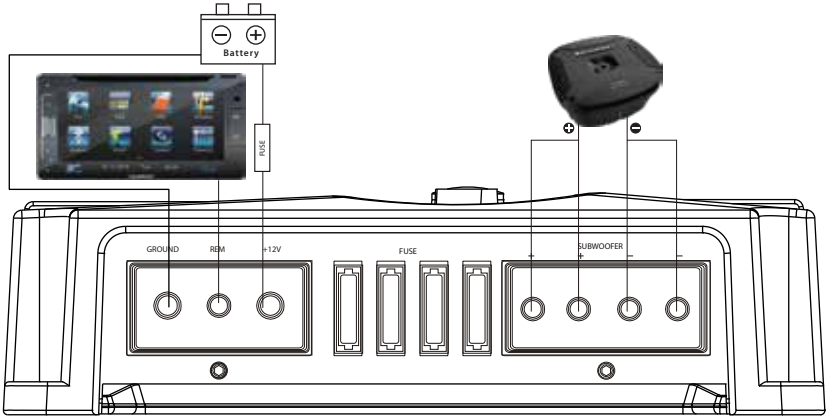
• Voltage Supply	14.4V
• Idling Current	1.4A
• Fuse	40A x 4
• Consumption @ 2Ω, 14.4 VDC (Max Musical Power)	70A

Amplifier

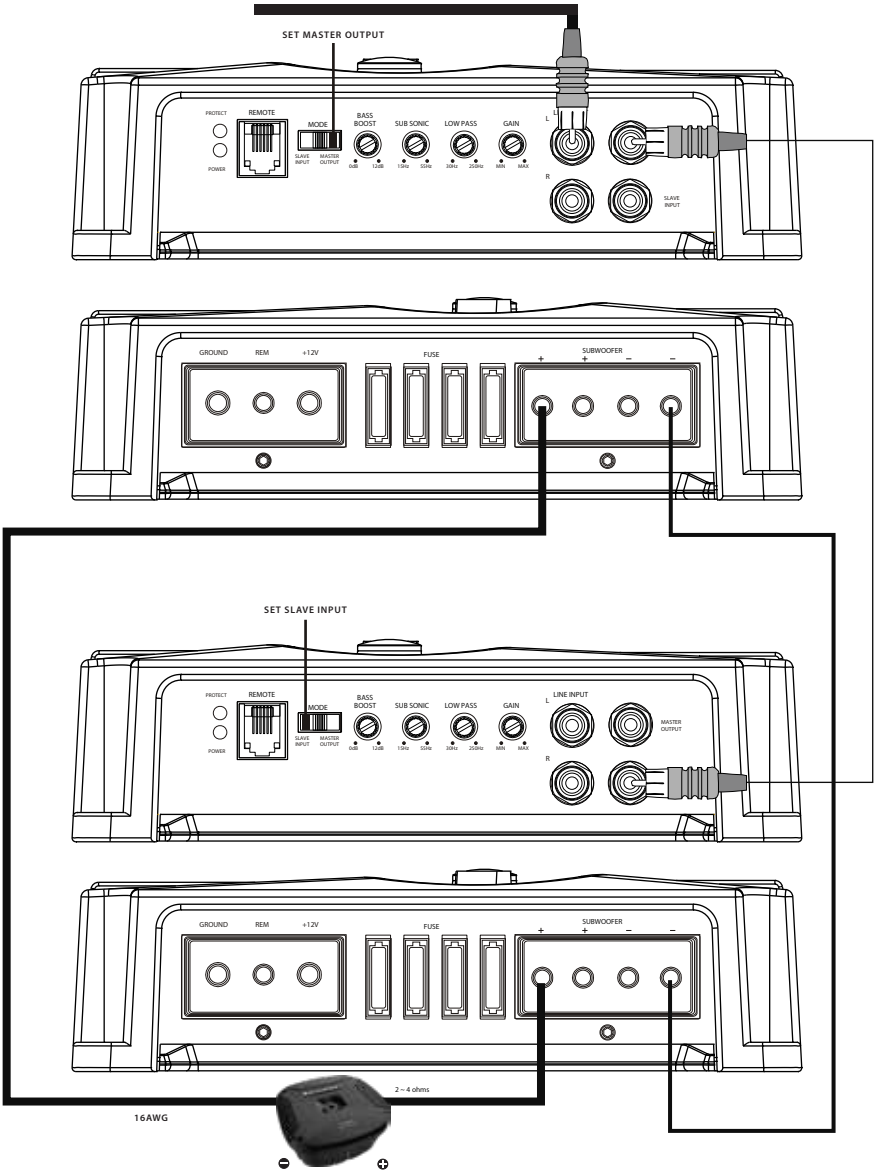
• Amplifier Class	CLASS D
• Channel	1
• Layer PCB	Double
• Max Output Power @ 4 ohms	900W x 1
• RMS Power 4 ohms	640W x 1
• RMS Power 2 ohms	1000W x 1
• RMS Power 1 ohms	1500W x 1
• Signal-To-Noise Ratio	104dB
• Frequency Range	10-250Hz
• Gain Adjust	0.2-5V
• Bass Boost Frequency	45Hz
• Bass Boost Level	12dB
• Total Harmonic Distortion	0.03%
• Crossover Frequency	30-250Hz (L), 15-55kHz (H)
• Dimension (W x H x D)	370 x 192 x 52mm
• Net Weight	3.5kg

MPA 11500 WIRING DIAGRAM

Speaker Connection



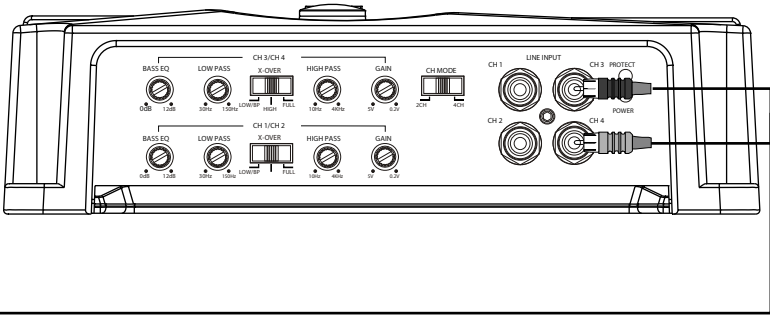
PARALLEL WIRING DIAGRAM



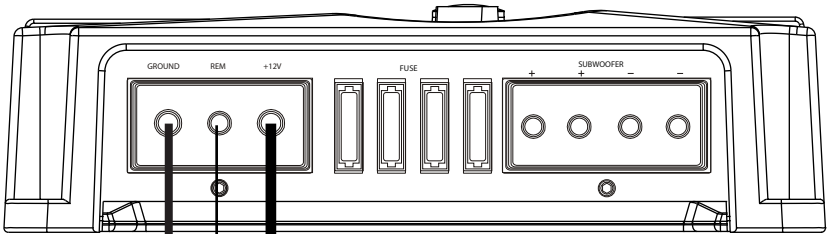
Using a dual amplifier configuration, the main unit amplifier has total control over the sub-unit amplifier. When using dual amplifier to operate subwoofer, the positive terminal of the subwoofer voice coil must be connected to the positive terminal of the main unit amplifier and the negative terminal of the subwoofer voice coil must be connected to the positive terminal of the sub-unit amplifier. Dual amplifier setup will release high output power, please ensure subwoofers are capable of handling such output.

Speakers load cannot be lower than 2 ohms when configuring the dual amplifier. Low impedance load may damage the device and void warranty.

MPA AMPLIFIER STANDARD WIRING DIAGRAM



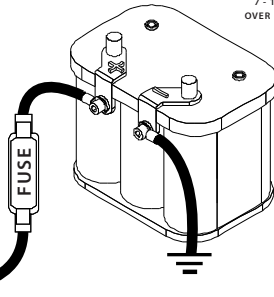
RCA OUTPUT



KEEP GND WIRE SHORT OR LESS THAN 18"

REMOTE TURN ON

+12V WIRE
5 - 7ft USE 10AWG
7 - 15ft USE 8AWG
OVER 15ft USE 4AWG



MPA AMPLIFIER STANDARD WIRING DIAGRAM

Examine if your wiring diagram is correct by referring to Diagram 1 & Diagram 2 in case of device operation or performance failure. The following table indicate other possible problems and solutions. Refer an authorized Blaupunkt dealer if problem persist.

Problem	Solution
Amplifier power up failure	Examine if the ground connection is intact.
	Examine if remote input has at least 5V DC.
	Examine if battery power is connected correctly to the + terminal.
	Ensure supplied voltage is minimum 12V.
	Examine if fuse is broken and replace if necessary. Restart the device if protection LED light is on.
Protection LED lights on when amplifier turn on	Examine speaker wire had short-circuit. Turn volume down from head unit to prevent overdriving the device.
	Device might need service or repair, if protection LED light is still on after resetting the device.
No sound output	Examine fuses and replace if necessary.
	Examine ground connection is intact.
	Examine if remote input has at least 5V DC.
	Examine if RCA audio cables are connected to the right inputs. Examine if speaker wiring is intact.
Low sound output	Reset Level Control
	Examine the Crossover Control setting.
Buzzing noise	Observe if the device is still producing noise after turning on and off the amplifier. If yes, examine if the cables are correctly connected and if the cables and radio are in good condition.
	Repair or replace if the cables or the radio are not in good condition.
Squealing noise interference	Ensure RCA connections are properly connected.
Distorted sound output	Ensure input level of the device matches the signal level of the head unit.
	Always set the input level to the lowest.
	Examine if crossover frequency is set correctly. Examine if speaker wire had short-circuit.
Amplifier temperature increased	Examine the minimum speaker impedance for the amp models is correct.
	Ensure good air ventilation around the device. Add external cooling fan if necessary.
Engine noise (static sound) interference	Usually caused by poor RCA cable quality, which release noise. Use only the best quality cables and route them away from power cables.
Engine noise (alternator whine) interference	Examine if RCA cable are nowhere near or attached to the vehicle chassis.
	Examine if head unit is properly connected to the wires.

