

# MUSWAY

MUSIC IS THE WAY

# SW-A7

POWERED SUBWOOFER SYSTEM

**Please read the user's manual carefully before the installation and the first operation of the amplifier.**

**SPECIFICATIONS****SW-A7**

Subwoofer	170mm
Output Power RMS	1 x 80 W
Output Power Max	1 x 600 W
Frequency Range	22-150Hz (-3 db)
Lowpass Filter	50 – 150 Hz
PHASE	0° / 180°
Bass Boost	0 – 12 dB @ 45 Hz
Operating Voltage	+12 V (9 – 15 V), negative ground
Fuse Rating	15 A
Dimensions (B x H x L)	200 x 74 x 272 mm

*All Specifications are subject to change*

## IMPORTANT NOTES PRIOR TO INSTALLATION

- This device is only suited for a 12 volt system with negative ground.
- The radiated heat while operation requires sufficient air circulation at the place of installation. It is very important that the heat sink fins do not have contact with any metal parts or any surfaces which could impair air circulation. The amplifier may not be installed in small closed location or spaces without air circulation. We recommend the installation in the vehicle's trunk. Ensure sufficient protection against vibrations, dust and dirt.
- Ensure that the input and output cables are sufficiently separated from the power supply cables. Otherwise interferences may occur.
- Ensure the accessibility of the fuse and the operating elements after installation.
- The reliability and performance of the amplifier depends on the quality of installation. Preferably consult an expert to install the system.
- Avoid any damage or removing of the components of the vehicle like wires, cables, board computer, seat belts, gas tank or the like.

## POWER SUPPLY AND TURN-ON-CONNECTION

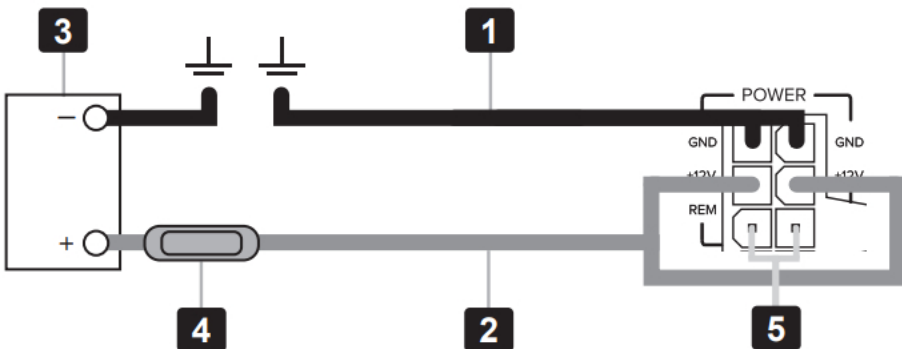
**ATTENTION:** Before you start with the installation, disconnect the ground connection from the vehicle's battery in order to prevent short circuits. Use the enclosed cable plug to connect each terminal.

The power wiring which is usually installed in on-board car networks is not sufficient for a power amplifier's demands. Make sure that the power wires to GND and to the +12 V terminal has been sufficiently specified.

First connect the GND terminal [ 1 ] of the amplifier to an appropriate ground connection at the chassis. To ensure a good connection, residue dirt and dust from the connection point. A loose connection may cause malfunctions or interferences noise and distortion.

Then connect the +12 V terminal [ 2 ] of the amplifier with the battery by using an appropriate cable including an in-line fuse. This fuse [ 4 ] should be located very close to the battery [ 3 ]; for safety reasons not more than 30 cm away. Only insert the fuse when the installation, including the connection of the loudspeakers, has been accomplished.

Then connect the remote turn-on-wire [ 5 ] from the head unit with the amplifier's REM terminal. A cable with a cross-section of 0.5 mm<sup>2</sup> is adequate.



## AUDIO SIGNAL CABLES

When installing the audio cables between the RCA outputs of the head unit and the RCA inputs of the amplifier [ 6 ], the audio and power supply cables should, if possible, not be routed along the same side of the vehicle. We recommend a separated installation, e.g. routing the power cable through the cable channel on the left side and the audio cables through the cable channel of the vehicle on the right side or vice versa. This prevents interferences due to crosstalk into the audio signal.



## HIGH LEVEL INPUTS & AUTO ON

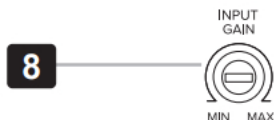
The high level inputs under HI LEVEL IN [ 7 ] is suitable to connect the device input with speaker wires, if your head unit is not equipped with pre-amplifier RCA outputs. Extend therefor every regarding speaker cable from your head unit with appropriate speaker cables from your car audio retailer to the mounting location of the amplifier. Then connect the each matching loudspeaker cable with the cables of the included High Level Input jack.

**CAUTION:** Never use the high level inputs and the RCA inputs at the same time. This may damage the device seriously. Use the enclosed cable plug to connect each terminal.



## INPUT SENSITIVITY

Turn the INPUT GAIN [ 9 ] controller of the amplifier to the MIN position. Then turn the volume controller of the head unit to 80 - 90% of its full setting. Now turn INPUT GAIN [ 9 ] clockwise until you hear some distortion. Then turn back INPUT GAIN [ 9 ] slightly until you hear a cleaner sound.



## VARIABLE BASS BOOST

By using the BASS BOOST controller [ 10 ] you are able to increase the bass enhancement from 0 to 12 dB. **ATTENTION:** Use the BASS BOOST wisely!



## PHASE SWITCH

The PHASE switch [ 11 ] allows to switch the phase from 0° to 180° to match the output signal with the vehicle's interior acoustic.



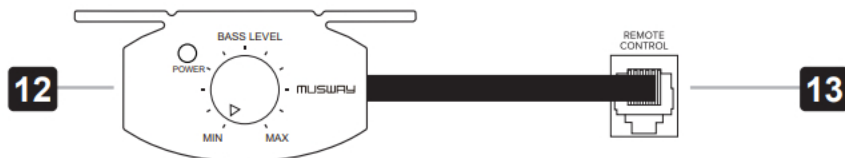
## VARIABLE LOW PASS FILTER

Set the desired crossover frequency by using the controller LOW PASS [ 12 ]. Thus to that only the frequencies below the chosen crossover frequency will be amplified and the subwoofer plays more precisely and efficient.



## BASS LEVEL REMOTE CONTROLLER

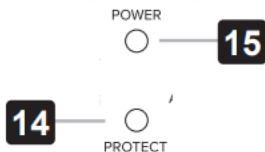
With the included bass level cable remote controller [ 13 ] allows to adjust the bass level e.g. out of the driver's seat. Connect the remote controller and the REMOTE CONTROL terminal [ 14 ] with the enclosed cable.



## PROTECTION CIRCUIT

The PROTECT LED [ 15 ] lights up red, when the amplifier is overheated, or a short circuit occurs respective a too low impedance load is connected to the speaker outputs. If this events, the internal built-in protection circuit shuts down the amplifier automatically. The amplifier should work again properly after you have solved the problems.

The POWER LED [ 16 ] lights up green, if the amplifier is in operation.



## TROUBLESHOOTING

If you are having problems after installation follow the Troubleshooting procedures below.

### Procedure 1:

Check Amplifier for proper connections.

Verify that POWER LED lights up green. If this is the case, skip to Step 3, if not continue.

1. Check in-line fuse on battery positive cable. Replace if necessary.
2. Check fuse(s) on amplifier. Replace if necessary.
3. Verify that Ground connection is connected to clean metal on the vehicle's chassis. Repair/replace if necessary.
4. Verify there is 9 to 16 Volts present at the positive battery and remote turn-on cable. Verify quality connections for both cables at amplifier, stereo, and battery/fuse holder. Repair/replace if necessary.
5. Check that the AUTO ON switch is in the ON position and the HI LEVEL IN is connected correctly, if you don't use the RCA inputs LINE INPUT.

### Procedure 2:

PROTECT LED lights up red.

1. If the PROTECT LED lights up, this is a sign of driving the device at very high power levels without adequate airflow around the device. Shut off the system and allow device to cool down. Check that the vehicle charging system is maintaining proper voltage. If the previous items do not solve the problem, a fault may be in the device.

### Procedure 3:

Check Amplifier for audio output.

1. Verify good RCA input connections at stereo and amplifier. Check entire length of cables for kinks, splices, etc. Test RCA inputs for AC volts with stereo on. Repair/replace if necessary.

### Procedure 4:

Check Amplifier for a popping noise while turning on.

1. Disconnect input signal to amplifier and turn amplifier on and off.
2. If the noise is eliminated, connect the remote lead of amplifier to source unit with a delay turn-on module.

### Procedure 5:

Check Amplifier if you experience excess Engine Noise.

1. Route all signal carrying wires (RCA, speaker cables) away from power and ground wires.

OR

2. Bypass any and all electrical components between the head unit and the amplifier(s). Connect stereo directly to input of amplifier. If noise goes away the unit being bypassed is the cause of the noise.

OR

3. Remove existing ground wires for all electrical components. Reground wires to different locations. Verify that grounding location is clean, shiny metal free of paint, rust etc.

OR

4. Add secondary ground cable from negative battery terminal to the chassis metal or engine block of vehicle.

OR

5. Have alternator and battery load tested by your mechanic. Verify good working order of vehicle electrical system including distributor, spark plugs, spark plug wires, voltage regulator etc.