





#MEMPHISAUDIO

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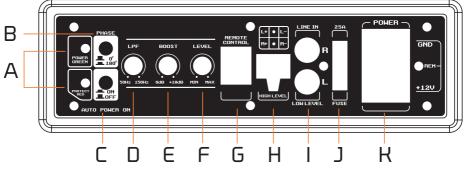


# NANO110P



# nanoboxx

NANO110P 10" Under Seat Powered Bass System



#### A. POWER STATUS LED

The LED indicator light glows GREEN when power is ON and no problems are present. If one of the protection circuits comes on, the light will change to RED

# **B. PHASE SHIFT**

Use this switch to compensate for time alignment issues. These issues are usually the result from having the subwoofer at a different distance from the listener than the other speakers in the system.

## C. AUTO POWER ON

The AUTO POWER ON (ON/OFF) is for high level (speaker-level) connections. When the switch is in the ON position, the subwoofer will AUTO POWER ON when there is signal input present. If the amplifier does not detect a signal, the amplifier will auto turn OFF. If you prefer to use the remote turn on/off connection, switch can be changed to OFF.

NOTE: If you experience a POP noise from the subwoofer when powering ON/OFF, confirm you have it wired to the remote output of the head unit as shown in FIGURED 4.

# D. LOW PASS FILTER

This control allows for the adjustment of the frequency range you want the subwoofer amplifier to receive. The subwoofer will reproduce all sounds BELOW the frequency you set on the LPF.

NOTE: The low pass filter frequency can be higher or lower than the standard. There is a +/- 20% tolerance.

# E. BASS BOOST

The BASS BOOST feature will increase the sound level in the bass frequencies.

#### F. INPUT GAIN CONTROL

After you've installed your system, turn this control to a minimum.

Turn the head unit ON (the subwoofer will turn on via the remote connection). Turn the head unit volume to 2/3 full level.

Slowly turn up the subwoofer input gain control until you hear a small amount of distortion. Begin reducing the level until the distortion is completely gone. Level the control at this setting.

#### G. REMOTE LEVEL CONTROL

Attach the included remote level control to control the volume level of the subwoofer independently.

# H. HIGH LEVEL (SPEAKER LOW) INPUTS

If your head unit does not have RCA outputs, you can use the speaker outputs for the audio source for the subwoofer. Use the supplied cable and wire harness to connect the outputs properly as shown in the connection diagram in this manual.

## I. LOW LEVEL RCA INPUTS

Low level inputs are the recommended way to introduce the audio signal to the subwoofer. If RCA outputs are present on your head unit or other signal source (processor etc) this is the preferred way to connect your NANOROXX

# J. FUSE

DO NOT USE A FUSE WITH A DIFFERENT VALUE. and NEVER replace the fuse with a wire, coin or anything other than the recommended fuse rated for this device.

# K. POWER INPUT TERMINAL

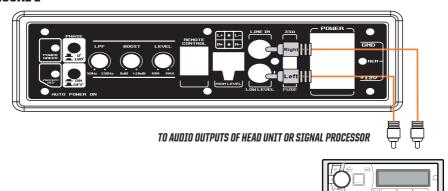
Be certain all power connections are mounted securely and use the correct gauge wire for the NANOBOXX.

#### LOW LEVEL INPUT WIRING

Low-level RCA input wiring is preferred for the best audio performance. Always use a high quality RCA cable to carry the signal to your NANOBOXX for the best quality performance. Memphis Connection wires are the preferred choice to feed your system the high performance signal you need.

NOTE: Do NOT connect BOTH the high level and low level inputs from your receiver to your amplifier at the same time!

#### FIGURE 1

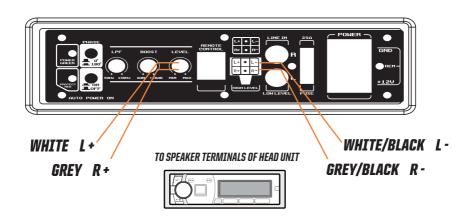


#### HIGH LEVEL INPUT WIRING

The high level input(s) should only be used when your head unit lacks RCA outputs. If the RCA outputs are not present, connect the speaker outputs from the receiver to the high level input connector of the amplifier. Be sure to observe polarity to avoid audio phase issues.

NOTE: Do NOT connect BOTH the high level and low level inputs from your receiver to your amplifier at the same time!

#### FIGURE 2



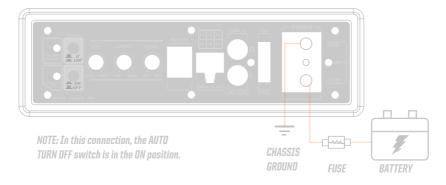
#### POWER CONNECTIONS

Connect the ground terminal to the closest point on the chassis of the vehicle. Keep this ground wire to less than 39" ir length. Use 8 gauge or heavier wire.

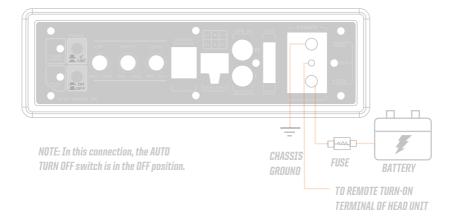
Connect the remote terminal to the remote output of the head unit using 16 Gauge or heavier wire.

Connect an empty fuse holder within 18" of the car battery. Run 8 gauge or heavier cable from this fuse to the amplifier location. Connect the fuse holder to the BAT+ (+12V) connection on the subwoofer rear panel. .

## FIGURE 3

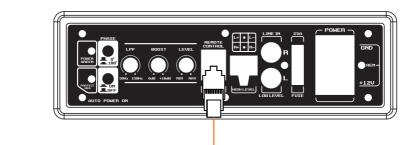


# FIGURE 4



# REMOTE LEVEL CONTROL CONNECTION

# FIGURE 5



REMOTE LEVEL CONTROL

NOTE: Install the remote control securely under the dash in a similar location where it will not distract the driver.

# **SPECIFICATIONS**

RMS POWER	180W
THD	<0.4%
SIGNAL-TO-NOISE RATIO	>90dB
FREQUENCY RESPONSE	20Hz - 150Hz
HIGH LEVEL INPUT SENSITIVITY	1.0 - 9.0v
LOW LEVEL INPUT SENSITIVITY	0.1 - 6v
LOW PASS FILTER	50Hz - 150Hz
BASS BOOST	0 to +18dB
SUBSONIC FILTER	20Hz
FUSE RATING	25A
DUMMY WOOFER	206 x 52
SUBWOOFER SIZE	10"
DIMENSIONS L x W x H	345 x 275 x 70

# TROUBLE SHOOTING

(ALTERNATOR WHINE)

If you experience operation or performance problems with this product, first double check you have it wired according to the diagrams in this manual. If problems persist, see troubleshooting guide below.

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AMPLIFIER DOES NOT POWER ON	Check ground is connected properly Check the Remote input (turn on) has at leas 5V DC. Check that there is battery power on the + terminal Check that there is at least 12V Check all fuses, replace as needed Be sure the Protection LED is not illuminated. If it is lit, shut off the amplifier briefly and then re-power it.
PROTECTION LED COMES ON WHEN Amplifier is powered on	Check for short circuits on speaker leads Turn down the volume control on the head unit to prevent overdriving remote speaker leads and reset the amplifier. If the protection LED still turns on, the amplifier is faulty and needs service.
NO OUTPUT	Check all fuses are okay. Replace if necessary. Check unit is properly grounded Check the remote input (turn on) has at least 5V DC Check the RCA audio cables are plugged into the proper inputs Check all speaker wiring.
LOW OUTPUT	Reset the level control Check the crossover control settings.
HIGH HISSING SOUND	Disconnect all RCA inputs to the NANOBOXX. If the hiss disappears, then plug the components in one by one to establish which component is causing the hissing noise. It is best to set the amplifiers input level control as low as possible. Try to set the head unit as high as possible (without distortion) and the amplifier input level as low as possible.
SQUEALING NOISE IS PRESENT	Check for improperly grounded RCAs
DISTORTED SOUND	Check that the input level control is set to match the signal level of the head unit.  Always try to set the input level as low as possible.  Check that all crossover frequencies are properly set  Check for short circuits on the speaker lead.
AMPLIFIER GETS HOT	Check that the minimum speaker impedance for the amp model is correct.  Check that there is good circulation around the amplifier. If proper circulation is not present you may need to add an axillary fan to help cool the device.
ENGINE NOISE (STATIC TYPE)	This is usually caused by a poor quality RCA cable which can pick up radiated noise. We recommend Memphis Connection RCA cables.
ENGINE NOISE	Check that the RCA grounds are not shorted to the vehicle chassis.

Check that the head unit is properly grounded.

