

SOUNDSTREAM

# TARANTULA NANO



Class D Audio Amplifier

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Owner's Guide

TN1.1200D TN2.600D TN4.900D TN5.950D

## **LIMITED 90-DAY CONSUMER WARRANTY**

## **LIMITED TWO-YEAR CONSUMER WARRANTY WITH PURCHASE AND INSTALLATION BY A SOUNDSTREAM POWER AUTHORIZED DEALER**

Soundstream promises to the original purchaser, to repair or replace this product with a new or refurbished unit (at Soundstream's sole and absolute discretion) should it prove to be defective in workmanship or material under normal use, for a period of \*two-years from the date of purchase from the Soundstream authorized dealer, PROVIDED the product was purchased and installed by a Soundstream authorized dealer. During this \*two-year period, there will be no charge for product repair or replacement, PROVIDED the unit is returned to Soundstream, return shipping pre-paid, along with the required proof of installation, the bill of sale or other dated proof of purchase, and the consumer's contact information.

If the unit is installed by anyone other than a Soundstream authorized dealer, the warranty period will be 90-days from the date of purchase. This warranty is non-transferable and does not apply to any unit that has been modified or used in a manner contrary to its intended purpose, and does not cover damage to the unit caused by installation or removal of the unit. During this 90-day period, there will be no charge for the repair or replacement PROVIDED the unit is returned to Soundstream, return shipping prepaid, along with the bill of sale or other dated proof of purchase and the consumer's contact information.

This warranty is void if the product has been damaged by accident or unreasonable use, neglect, improper service or other causes not arising out of defects in materials or construction. This warranty does not cover the elimination of externally generated static or noise, or the correction of antenna problems or weak reception, damage to speakers, accessories, electrical systems, cosmetic damage or damage due to negligence, misuse, failure to follow operating instructions, accidental spills or customer applied cleaners, damage due to environmental causes such as floods, airborne fallout, chemicals, salt, hail, lightning or extreme temperatures, damage due to accidents, road hazards, fire, theft, loss or vandalism, damage due to improper connection to equipment of another manufacturer, modification of existing equipment, or Product which has been opened or tampered for any reason. Units which are found to be damaged by abuse resulting in thermally damaged voice coils are not covered by this warranty but may be replaced at the absolute and sole discretion of Soundstream. Unit must be returned to Soundstream, postage pre-paid, with bill of sale or other dated proof of purchase bearing the following information: consumer's name, telephone number, and address, authorized dealer's name and address, and product description. Please contact Soundstream warranty office at 800-724-1377 or [repairs@soundstream.com](mailto:repairs@soundstream.com) to obtain a Return Authorization number prior to shipping the product.

Note: This warranty does not cover labor costs for the removal and reinstallation of the unit. IN ORDER FOR THE TWO-YEAR WARRANTY TO BE VALID, YOUR UNIT MUST BE SHIPPED WITH PROOF OF INSTALLATION BY A SOUNDSTREAM AUTHORIZED DEALER. ALL UNITS RECEIVED BY SOUNDSTREAM FOR WARRANTY REPAIR WITHOUT PROOF OF SOUNDSTREAM AUTHORIZED DEALER INSTALLATION AND PURCHASE WILL BE COVERED BY THE LIMITED 1 YEAR WARRANTY.

BY PURCHASING THIS PRODUCT, ALL WARRANTIES INCLUDING BUT NOT LIMITED TO EXPRESS WARRANTY, IMPLIED WARRANTY, WARRANTY OF MERCHANTABILITY, FITNESS FOR PARTICULAR PURPOSE, AND WARRANTY OF NON-INFRINGEMENT OF INTELLECTUAL PROPERTY ARE EXPRESSLY EXCLUDED TO THE MAXIMUM EXTENT ALLOWED BY LAW, AND SOUNDSTREAM NEITHER ASSUMES NOR AUTHORIZES ANY PERSON TO ASSUME FOR IT ANY LIABILITY IN CONNECTION WITH THE SALE OF THE PRODUCT. SOUNDSTREAM HAS ABSOLUTELY NO LIABILITY FOR ANY AND ALL ACTS OF THIRD PARTIES INCLUDING ITS AUTHORIZED DEALERS OR INSTALLERS. BY PURCHASING THIS PRODUCT, THE CONSUMER AGREES AND CONSENTS THAT ALL DISPUTES BETWEEN THE CONSUMER AND SOUNDSTREAM SHALL BE RESOLVED IN ACCORDANCE WITH CALIFORNIA LAWS IN LOS ANGELES COUNTY, CALIFORNIA. Some states do not allow limitation on how long an implied warranty lasts. In such states, the limitation or exclusions of this Limited Warranty may not apply. Some states do not allow the exclusion or limitation of incidental or consequential damages. In such states, the exclusion or limitation of this Limited Warranty may not apply to you. This Limited Warranty gives you specific legal rights, and you may have other rights which vary from state to state.

# TN1.1200D Pre-Amp

## 1. Remote Level Control Connection

Connect the remote level control to this terminal. The remote level control allows adjustment of the subwoofer level from a remote location in the vehicle.

## 2. Low Pass Crossover

Adjust the frequency setting of the low pass crossover. The frequency range is 40Hz-220Hz. Frequencies higher than the setting will be filtered out of the audio signal.

## 3. Subsonic Crossover

Adjust the frequency setting of the subsonic crossover. The frequency range is 20Hz-38Hz. Frequencies lower than the setting will be filtered out of the audio signal.

## 4. Protection Indicator LED

If the amplifier activates protection mode, this LED will illuminate red. Refer to the Troubleshooting Guide for possible solutions if the amplifier activates protection mode.

## 5. Power Indication LED

When the amplifier is on and in proper working condition, this LED will illuminate green. Refer to the Troubleshooting Guide for possible solutions if the amplifier will not power on.

## 6. Level Sensitivity

Adjust the amplifiers pre-amp sensitivity level. The minimum sensitivity level is 200mv, while the maximum level is 6V.

## 7. RCA Audio Input Connection

Using high quality shielded stereo RCA cables, connect the source signal to the amplifier RCA inputs.

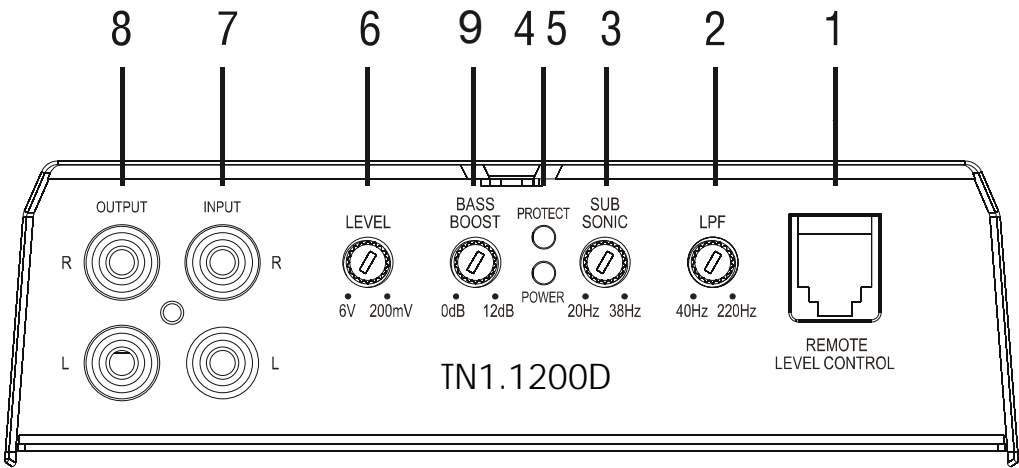
## 8. RCA Audio Output Connection

Using high quality shielded stereo RCA cables, connect the audio signal to the RCA audio inputs of additional system components.

## 9. Bass Boost

Adjust the amplifiers 45Hz Bass Boost level up to 12dB.

# TN1.1200D Pre-Amp Panel



# TN1.1200D Wire Connections

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## 1. Power Connection Terminal

**GND** Connect good quality 8ga. ground wire to the nearest vehicle chassis ground. Take a moment to properly prepare the ground location for the best ground.

**REM** Connect the remote turn-on output of the source unit to the remote terminal.

**+12V** Connect good quality 8ga. power wire to the vehicle's battery. Always protect the vehicle by using a fuse within 18" from the battery.

## 2. Fuses

The fuses protect the amplifier from internal electrical damage if overloaded. In the event they fail, replace with similar type and amperage value. Using a higher amperage value may lead to electrical damage and is not considered covered by the limited warranty.

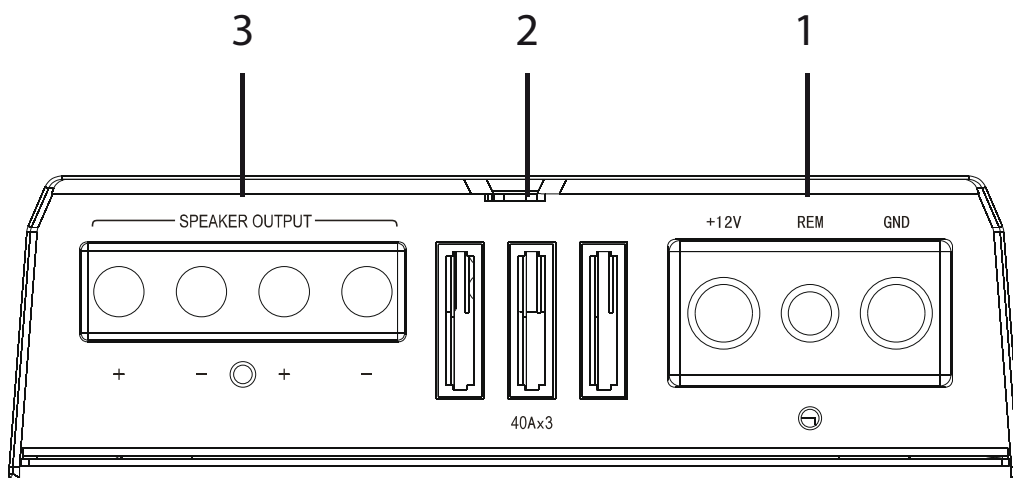
## 3. Speaker Connection Terminal

Connect the subwoofer(s) to the corresponding (+) & (-) terminals. If only one subwoofer with 1Ω is used, use only one (+) & (-) terminal. If two subwoofers are used with 2Ω each, use one (+) & (-) terminal for each subwoofer.

NOTE: Two subwoofers with 1Ω each CAN NOT be connected to separate (+) & (-) terminals. The woofers should be first series wired together for 2Ω, then use only one (+) & (-)

# TN1.1200D Wire Connections End Panel

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# TN1.1200D Specifications

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## Power Rating

RMS Output Power, 14.4V, 4Ω	580w @4 ohm
RMS Output Power, 14.4V, 2Ω	725w @2 ohm
RMS Output Power, 14.4V, 1Ω	1,000w @1 ohm
RMS Output Power, 12.0V, 4Ω	395w x 1
RMS Output Power, 12.0V, 2Ω	525w x 1
RMS Output Power, 12.0V, 1Ω	785w x 1

## Pre-Amp Features

Low Pass Crossover	40Hz-220Hz 12db
Subsonic Crossover	20Hz-38Hz 12db
Bass Boost	45Hz, 0dB-12db
Input Level Sensitivity	200mV-6V

## Technical Specifications

Idle Current Draw	1.98A
12V Ground Isolation	10k Ohm
Damping Factor	91
Input Impedance	105k Ohm
Signal-to-Noise Ratio	106dB
Fuse Rating	40A x 3
Dimensions	328.5LX172WX49.7H(MM)

# TN2.600D Pre-Amp

**1. RCA Audio Output Connection**

Using high quality shielded stereo RCA cables, connect the audio signal to the RCA audio inputs of additional system components.

**2. RCA Audio Input Connection**

Using high quality shielded stereo RCA cables, connect the source signal outputs to the amplifier RCA inputs.

**3. Level Sensitivity**

Adjust the amplifiers pre-amp sensitivity level. The minimum sensitivity level is 200mv, while the maximum level is 6V.

**4. Power Indication LED**

When the amplifier is on and in proper working condtion, this LED will illuminate green. Refer to the Troubleshooting Guide for possible solutions if the amplifier will not power on.

**5. Protection Indicator LED**

If the amplifier activates protection mode, this LED will illuminate red. Refer to the Troubleshooting Guide for possible solutions if the amplifier activates protection mode.

**6. High Pass Crossover**

Adjust the frequency setting of the High Pass Crossover. The frequency range is 20Hz-4kHz. Frequencies lower than the setting will be filtered out of the audio signal.

**7. Crossover Frequency Multiplier**

Use the frequency multiplier to change the High Pass Crossover frequency range x10.

**8. Low Pass Crossover**

Adjust the frequency setting of the Low Pass Crossover. The frequency range is 50Hz-5kHz. Frequencies higher than the setting will be filtered out of the audio signal.

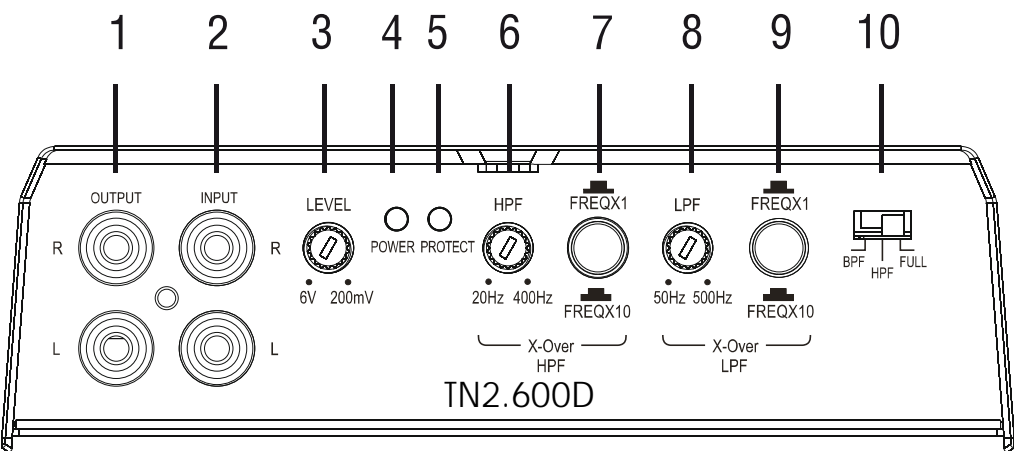
**9. Crossover Frequency Multiplier**

Use the frequency multiplier to change the Low Pass Crossover frequency range x10.

**10. Crossover Selector Switch**

Choose to activate the High Pass Crossover, Low Pass Crossover, or Band Pass Crossover. Band Pass Crossover uses the high pass and low pass crossovers simultaneously.

# TN2.600D Pre-Amp Panel



# TN2.600D Wire Connections

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## 1. Speaker Connection Terminal

Connect speaker(s) with a minimum impedance of  $2\Omega$  to the corresponding (+) & (-) terminals.

If one subwoofer with  $4\Omega$  is used, bridge the amplifier using the (R+) & (L-) terminal. If two subwoofers are used with  $2\Omega$  each, use one (+) & (-) terminal for each subwoofer.

## 2. Fuses

The fuses protect the amplifier from internal electrical damage if overloaded. In the event they fail, replace with similar type and amperage value. Using a higher amperage value may lead to electrical damage and is not considered covered by the limited warranty.

## 3. Power Connection Terminal

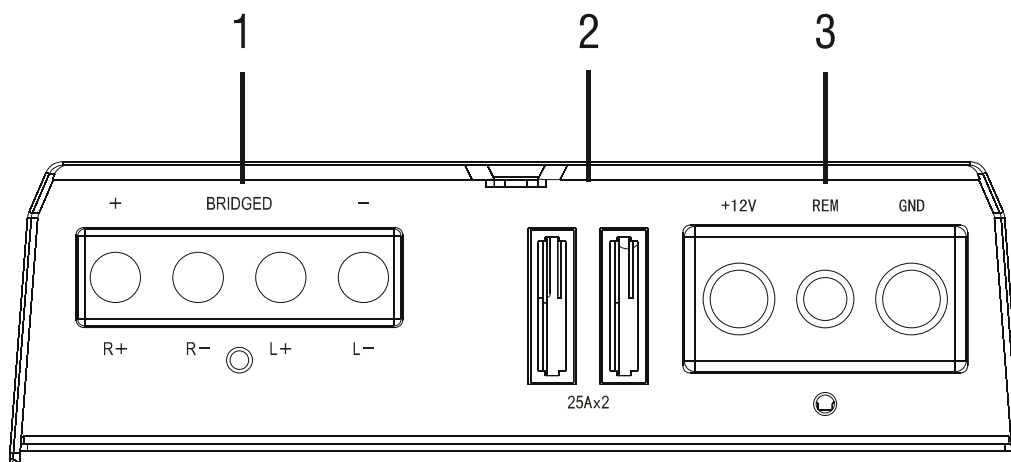
**GND** Connect good quality 8ga. ground wire to the nearest vehicle chassis ground. Take a moment to properly prepare the ground location for the best ground.

**REM** Connect the remote turn-on output of the source unit to the remote terminal.

**+12V** Connect good quality 8ga. power wire to the vehicle's battery. Always protect the vehicle by using a fuse within 18" from the battery.

# TN2.600D Wire Connections End Panel

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# TN2.600D Specifications

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## Power Rating

RMS Output Power, 14.4V, 4Ω	190w x 2@4 ohms
RMS Output Power, 14.4V, 2Ω	300w x 2@2 ohms
RMS Output Power, 14.4V, 4Ω Bridged	600w x 1@4 ohms Bridged
RMS Output Power, 12.0V, 4Ω	100w x 2
RMS Output Power, 12.0V, 2Ω	200w x 2
RMS Output Power, 12.0V, 4Ω Bridged	400w x 1

## Pre-Amp Features

Low Pass Crossover	50Hz-5kHz 12db
High Pass Crossover	20Hz-4kHz 12db
Input Level Sensitivity	200mV-6V

## Technical Specifications

Idle Current Draw	0.93A
Damping Factor	114
Input Impedance	20k Ohm
Signal-to-Noise Ratio	94dB
Fuse Rating	25A x 2
Dimensions	208.5LX172WX49.7H(MM)



## TN4.900D Pre-Amp

### 1. Front RCA Audio Input Connection

Using high quality shielded stereo RCA cables, connect the source signal to the amplifier RCA inputs.

### 2. Front Level Sensitivity

Adjust the amplifiers pre-amp sensitivity level. The minimum sensitivity level is 200mv, while the maximum level is 6V.

### 3. Front High Pass Crossover

Adjust the frequency setting of the High Pass Crossover. The frequency range is 20Hz-4kHz. Frequencies lower than the setting will be filtered out of the audio signal.

### 4. Front Crossover Frequency Multiplier

Use the frequency multiplier to change the High Pass Crossover frequency range x10.

### 5. Front Low Pass Crossover

Adjust the frequency setting of the Low Pass Crossover. The frequency range is 50Hz-5kHz. Frequencies higher than the setting will be filtered out of the audio signal.

### 6. Front Crossover Frequency Multiplier

Use the frequency multiplier to change the Low Pass Crossover frequency range x10.

### 7. Front Crossover Selector Switch

Choose to activate the High Pass Crossover, Low Pass Crossover, or Band Pass Crossover. Band Pass Crossover uses the high pass and low pass crossovers simultaneously.

### 8. Input Selector Switch

Choose ST for single stereo input. This allows the front & rear channels to receive signal from only the front RCA inputs. Choose 4CH for 4 channel input. This allows for independent front & rear RCA inputs.

### 9. Power Indication LED

When the amplifier is on and in proper working condition, this LED will illuminate green. Refer to the Troubleshooting Guide for possible solutions if the amplifier will not power on.

### 10. Protection Indicator LED

If the amplifier activates protection mode, this LED will illuminate red. Refer to the Troubleshooting Guide for possible solutions if the amplifier activates protection mode.

### 11. Rear Crossover Selector Switch

Choose to activate the High Pass Crossover, Low Pass Crossover, or Band Pass Crossover. Band Pass Crossover uses the high pass and low pass crossovers simultaneously.

### 12. Rear Crossover Frequency Multiplier

Use the frequency multiplier to change the Low Pass Crossover frequency range x10.

### 13. Rear Low Pass Crossover

Adjust the frequency setting of the Low Pass Crossover. The frequency range is 50Hz-5kHz. Frequencies higher than the setting will be filtered out of the audio signal.

### 14. Rear Crossover Frequency Multiplier

Use the frequency multiplier to change the High Pass Crossover frequency range x10.

### 15. Rear High Pass Crossover

Adjust the frequency setting of the High Pass Crossover. The frequency range is 20Hz-4kHz. Frequencies lower than the setting will be filtered out of the audio signal.

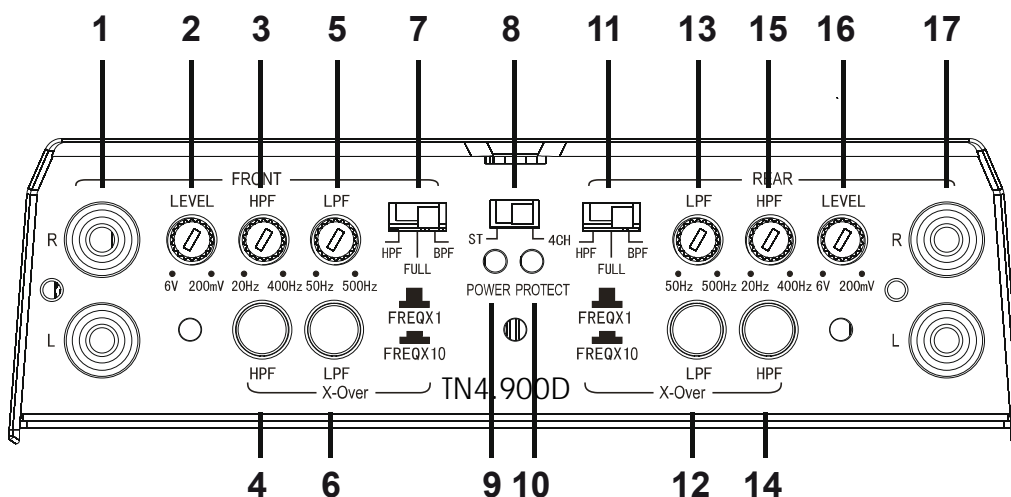
### 16. Rear Level Sensitivity

Adjust the amplifiers pre-amp sensitivity level. The minimum sensitivity level is 200mv, while the maximum level is 6V.

### 17. Rear RCA Audio Input Connection

Using high quality shielded stereo RCA cables, connect the source signal to the amplifier RCA inputs.

## TN4.900D Pre-Amp End Panel



## TN4.900D Wire Connections

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### 1. Speaker Connection Terminal

Connect speaker(s) with a minimum impedance of  $2\Omega$  to the corresponding (+) & (-) terminals.

If one subwoofer with  $4\Omega$  is used, bridge the amplifier using the (R+) & (L-) terminal. If two subwoofers are used with  $2\Omega$  each, use one (+) & (-) terminal for each subwoofer.

### 2. Fuses

The fuses protect the amplifier from internal electrical damage if overloaded. In the event they fail, replace with similar type and amperage value. Using a higher amperage value may lead to electrical damage and is not considered covered by the limited warranty.

### 3. Power Connection Terminal

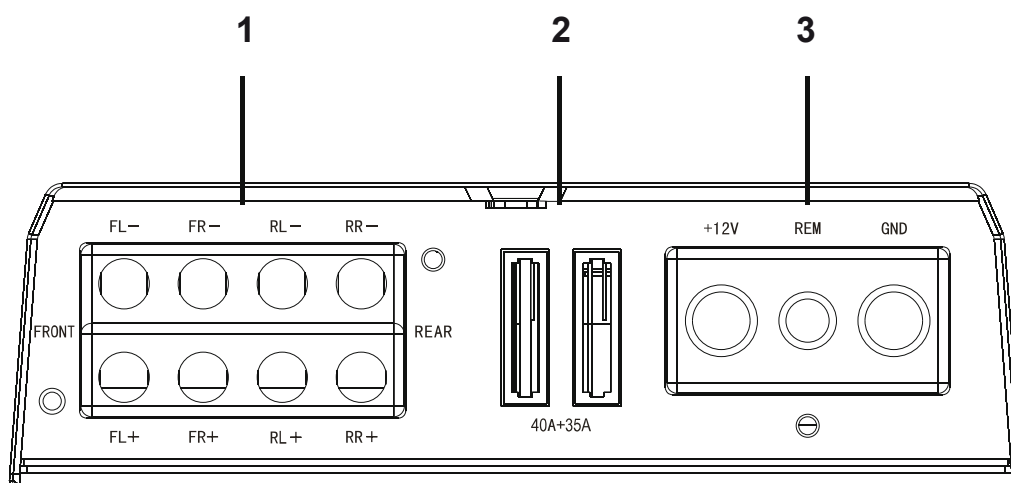
**GND** Connect good quality 8ga. ground wire to the nearest vehicle chassis ground. Take a moment to properly prepare the ground location for the best ground.

**REM** Connect the remote turn-on output of the source unit to the remote terminal.

**+12V** Connect good quality 8ga. power wire to the vehicle's battery. Always protect the vehicle by using a fuse within 18" from the battery.

## TN4.900D Wire Connections End Panel

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# TN4.900D Specifications

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## Power Rating

RMS Output Power, 14.4V, 4Ω	145w x 4@4 ohms
RMS Output Power, 14.4V, 2Ω	225w x 4 @2 ohms
RMS Output Power, 14.4V, 4Ω Bridged	450w x 2@4 ohms Bridged
RMS Output Power, 12.0V, 4Ω	100w x 4
RMS Output Power, 12.0V, 2Ω	150w x 4
RMS Output Power, 12.0V, 4Ω Bridged	300w x 2

## Pre-Amp Features

Low Pass Crossover	50Hz-5kHz 12db
High Pass Crossover	20Hz-4kHz 12db
Input Level Sensitivity	200mV-6V

## Technical Specifications

Idle Current Draw	1.34A
Damping Factor	114
Input Impedance	3.3k Ohm
Signal-to-Noise Ratio	102dB
Fuse Rating	40A+35AX1
Dimensions	277LX172WX49.7H(MM)

# TN5.950D Pre-Amp

1.

**Front RCA Audio Input Connection**

Using high quality shielded stereo RCA cables, connect the source's front signal to the amplifier RCA inputs.
2.

**Rear RCA Audio Input Connection**

Using high quality shielded stereo RCA cables, connect the source's rear signal to the amplifier RCA inputs.
3.

**Input Selector Switch**

Choose ST for single stereo input. This allows the front, rear, and subwoofer channels to receive signal from only the front RCA inputs. Choose 4CH for 4 channel input. This allows for independent front & rear RCA inputs, and the subwoofer signal is taken from the rear channel input. Select 5CH to use independent signal inputs.
4.

**Rear Level Sensitivity**

Adjust the amplifiers pre-amp sensitivity level for the rear channels. The minimum sensitivity level is 200mv, while the maximum level is 6V.
5.

**Rear High Pass Crososver**

Adjust the frequency setting of the High Pass Crossover for the rear channels. The frequency range is 50Hz-4kHz. Frequencies lower than the setting will be filtered out of the audio signal.
6.

**Rear Low Pass Crossover**

Adjust the frequency setting of the Low Pass Crossover for the rear channels. The frequency range is 250Hz-4kHz. Frequencies higher than the setting will be filtered out of the audio signal.
7.

**Rear Crossover Selector Switch**

Choose to activate the High Pass Crossover, Low Pass Crossover, or Band Pass Crossover for the rear channels. Band Pass Crossover uses the high pass and low pass crossovers simultaneously.
8.

**Front Level Sensitivity**

Adjust the amplifiers pre-amp sensitivity level for the front channels. The minimum sensitivity level is 200mv, while the maximum level is 6V.

9.

**Front High Pass Crossover**

Adjust the frequency setting of the High Pass Crossover for the front channels. The frequency range is 50Hz-4kHz. Frequencies lower than the setting will be filtered out of the audio signal.
10.

**Front Crossover Selector Switch**

Choose HPF to activate the High Pass Crossover, or select FULL to allow full range audio signal for the front channels.
11.

**Subwoofer RCA Audio Input Connection**

Using high quality shielded stereo RCA cables, connect the source's subwoofer signal to the amplifier RCA inputs.
12.

**Subwoofer Level Sensitivity**

Adjust the amplifiers pre-amp sensitivity level for the subwoofer channel. The minimum sensitivity level is 200mv, while the maximum level is 6V.
13.

**Subsonic Crossover**

Adjust the frequency setting of the subsonic crossover. The frequency range is 20Hz-38Hz. Frequencies lower than the setting will be filtered out of the audio signal.
14.

**Protection Indicator LED**

If the amplifier activates protection mode, this LED will illuminate red. Refer to the Troubleshooting Guide for possible solutions if the amplifier activates protection mode.
14.

**Power Indicator LED**

When the amplifier is on and in proper working condtion, this LED will illuminate green. Refer to the Troubleshooting Guide for possible solutions if the amplifier will not power on.
15.

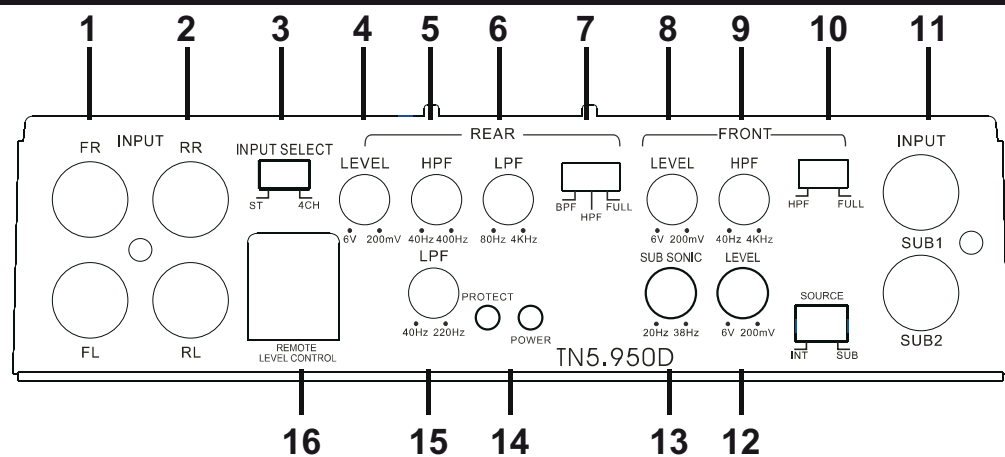
**Subwoofer Low Pass Crossover**

Adjust the frequency setting of the Low Pass Crossover for the subwoofer channel. The frequency range is 40Hz-220Hz. Frequencies higher than the setting will be filtered out of the audio signal.
16.

**Remote Level Control Connection**

Connect the remote level control to this terminal. The remote level control allows adjustment of the subwoofer level from a remote location in the vehicle.

# TN5.950D Pre-Amp End Panel



# TN5.950D Wire Connections

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## 1. Speaker Connection Terminal

Connect speaker(s) with a minimum impedance of  $2\Omega$  to the corresponding (+) & (-) terminals.

Connect a subwoofer with a minimum impedance of  $2\Omega$  to the corresponding (SUB-) & (SUB+) terminals.

## 2. Fuses

The fuses protect the amplifier from internal electrical damage if overloaded. In the event they fail, replace with similar type and amperage value. Using a higher amperage value may lead to electrical damage and is not considered covered by the limited warranty.

## 3. Power Connection Terminal

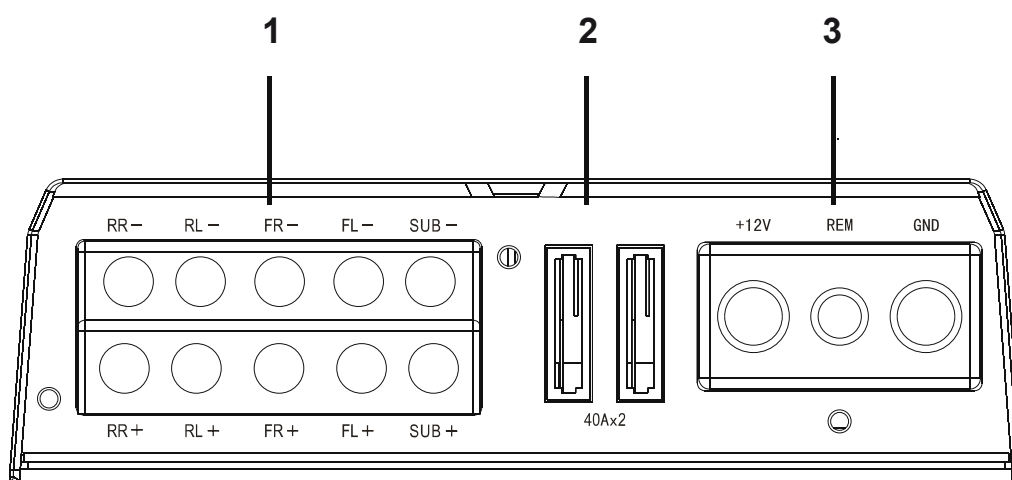
**GND** Connect good quality 8ga. ground wire to the nearest vehicle chassis ground. Take a moment to properly prepare the ground location for the best ground.

**REM** Connect the remote turn-on output of the source unit to the remote terminal.

**+12V** Connect good quality 8ga. power wire to the vehicle's battery. Always protect the vehicle by using a fuse within 18" from the battery.

# TN5.950D Wire Connections End Panel

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# TN5.950D Specifications

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## Power Rating

RMS Output Power, 14.4V, 4Ω	70w x 4 & 270 x 1@4 ohm
RMS Output Power, 14.4V, 2Ω	115w x 4 & 440 x 1@2ohm
RMS Output Power, 14.4V, 4Ω Bridged	230w x 2 & 440 x 1@4 ohm Bridgd
RMS Output Power, 12.0V, 4Ω	50w x 4 & 185 x 1
RMS Output Power, 12.0V, 2Ω	80w x 4 & 300 x 1
RMS Output Power, 12.0V, 4Ω Bridged	160w x 2

## Pre-Amp Features

High Pass Crossover - Front	50Hz-4kHz-3db
High Pass Crossover - Rear	50Hz-4kHz-3db
Low Pass Crossover - Rear	250Hz-4kHz-3db
Low Pass Crossover -CH.SUB	45Hz-450Hz-3db
Subsonic Crossover	10Hz-50Hz
Bass Boost, 45Hz - CH.SUB	0dB-12dB
Input Sensitivity	200mV-6V

## Technical Specifications

Idle Current Draw	2.2A
Damping Factor	110
Input Impedance	3.8k Ohm
Signal-to-Noise Ratio	100dB
Fuse Rating	40A x 2
Dimensions	337LX172WX49.7H(MM)

## PHANTOM Troubleshooting Guide

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Symptom	Possible Remedy
Amplifier will not power up	Check to make sure you have a good ground connection. Check that there is battery power on the (+)terminal . Check all fuses, replace if necessary . Make sure that the Protection LED is not illuminated.
Protection LED Comes on	Check for short circuits on speaker leads. Check the speaker load not beyond the minimum load. Remove speaker lead, and reset the amplifier. If the protection LED still Comes on, then the amplifier is faulty and needs servicing .
No output	Check that the RCA audio cables are plugged into the proper inputs. Check all speakers wiring. Check the headunit output and the amplifier level setting.
Low output	Reset the level Control. Check the Crossover Control settings.
High hiss in The speakers	Check the RCA cable is not shorted to power ground at a amplifier side. Check the amplifier grounding.
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 leads.
Amplifier gets Very hot	Check that the minimum load impedance for the amplifier model is correct. Check that there is good air circulation around the amplifier. In some applications, It may be necessary to add an external cooling fan.



# SOUNDSTREAM



# TARANTULA NANO



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