



YR-1100x4 20HM

BRASIL

Features:

Latest Technology Full Range Digital Amplifier

High Quality 4 Layers PCB Design Support Excellent EMI performance & Super Clean Sound Quality

Variable Full Crossover: HPF/Full/BPF

Dual Surface Mount Components Technology

Three Methods Trigger on: Signal/Offset/Rem; Input: Level & High

Multi Protections: Short/Overload/Thermal Rollback/Over & Low Voltage

Two/Three/Four Channels Selectable

Specifications

YR-1100

Maximum Power Output: 1100W*4

RMS Power Output: 550WX4 @2Ohm

RMS Power Output: 300WX4 @4Ohm 1%THD

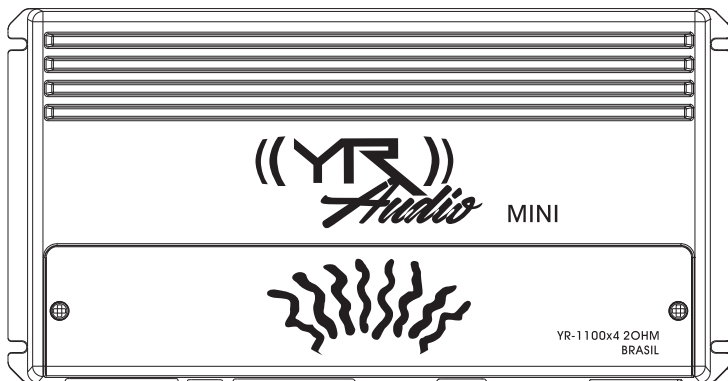
RMS Power Output: 600WX2 @4Ohm 1%THD Bridge Connection

T.H.D<0.1% & S/N Ratio>95dB

Super Slim Size, die-cast heatsink

Dimensions: 210*109*35MM

PANEL LAYOUT



TURN ON MODE

The amplifiers can be powered up by using either of:

- 1.Signal input from RCA,
- 2.Offset voltage from speaker inputs,
- 3.Ordinary switched (12V) remote.

POWER INPUTS

GND (GROUND CONNECTION) 6 GA

Connects to vehicle's chassis.Keep as short as possible (<20"/50cm).

+12V (POWER CONNECTION) 6 GA

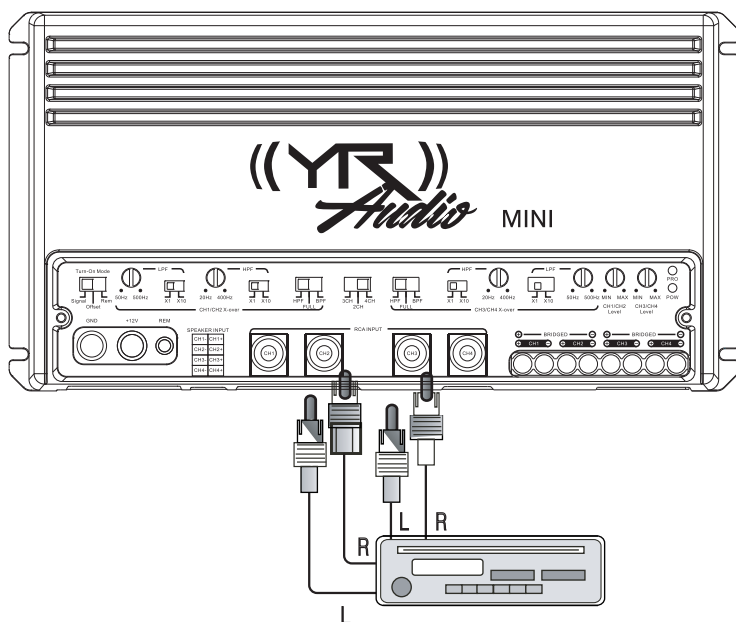
Connects to the positive terminal of the battery.Fusees shall be placed within 8" /20 cm of the battery.

HPF (20 - 4 KHZ) HIGH PASS FILTER

Adjustable crossover point for lpf with a 24 dB slope. The x10 multiplier present on the YR-1100 applies to both LFP & HPF.The BPF switch enables both LPF & HPF filters,creating a band pass filter.

INPUT SIGNAL

RCA LINE CONNECTION



SPEAKER INPUT

High level input from the vehicle's loudspeaker wires.This options is preferred in OEM installs where no RCA inputs are available.

RCA INPUT

RCA signal input for L+R (YR-1100).0.35V~5V is the operational input voltage. Voltages beyond may cause errors or damages to the input selection.

GAIN

Adjusts signal input voltage from the input source to match the amplifiers input stage.0.35V~5V is the operational voltage.

LPF (50 - 500Hz / 5 KHz) LOW PASS FILTER

Adjustable crossover point for lpf with a 24 dB slope. Frequencies below set level will be attenuated in accordance with the crossover configuration.

REM (REMOTE CONNECTION)

Run a remote turn on cable from a switched +12V source.

CHANNEL SWITCH

The YR-1100 can be used in a 2ch,3ch or 4ch config. The channel switch will make the amplifier functional on all channels using 2,3 or RCA inputs.

SPEAKER OUTPUT

Connection of loudspeakers,the min ohm load is 2 ohm on the YR-1100 and 2ohm in stereo mode on the YR-1100.

RCA line input from a Head-Unit,DSP or any source with RCA will be possible to use.The signal shall not exceed 5V and has to be at least 0.35V from the source. Using the wrong signal.can damage the input section or require excessive gain,which can lead to distortion.

Caution:Don't use the high and low level input at the same time!

SPEAKER CONNECTION



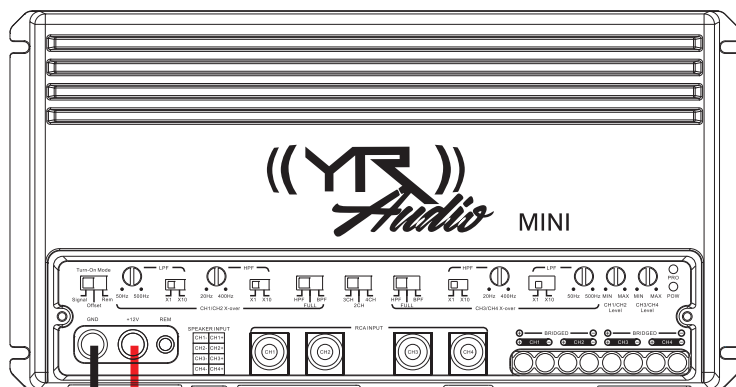
SPEAKER IMPEDANCE 4 OHM ~ 8 OHM

Loads under what is specified will cause excessive heat & the amplifier will reach thermal at a faster rate & will eventually go into protect.

Impedance load under 4 ohm is not warranted!

We recommend using minimum 12 Ga speaker cables to acquire the intended performance & efficiency. Run the speaker cables from your speakers to the amplifier's mounting location. Ensure these are ran separately and away from high current cables and if possible the RCA cables as well. In all cases where cables are penetrating the vehicle's chassis use grommets to protect the cable. Connect the speaker wires according to the terminals on the speaker (s). Strip 3/8" 1 cm of insulation of the end of each cable and twist the cable strands together tightly. Make sure there are no stray strands that could touch other cables or terminals as it can cause a short circuit. Crimp spade plugs over the end of the cable or tin the ends with solder to provide a solid terminal. Connect the cable ends to the amplifier as shown in the diagram. Bridged speaker connection will add the channels together. Bridged speaker connection impedance is 4 ohm only!

POWER TERMINALS



GROUND*

! *Keep ground as short as possible and of equal length, no longer than 20"(50cm). This drawing is for illustration purpose only!

To +12V DC

BATTERY

POWER TERMINAL

GND (GROUND CONNECTION)

Connects to the vehicle's chassis. Keep as short as possible (<20" / 50 cm). Use minimum 6 AWG cable for optimal operation.

+12V (POWER CONNECTION)

Connects to the positive terminal of the battery. For specified performance 6 AWG cable is required. Fuses shall be placed within 8" / 20 cm of the battery.

REM (REMOTE CONNECTION)

Run a remote turn on cable from the switched +12V source. This may be a toggle switch, a relay, the source unit's remote output cable or power antenna trigger cable.

Connect the remote turn on cable to the power terminal labeled as REM.

INSTALLATION

INSTALLATION CONSIDERATIONS

If you choose to install the amplifier by yourself, please read the entire owner's manual carefully. Before you start your installation, please take all steps into consideration.

PREPARATION

Disconnect the negative (-) battery cable before mounting or making any connection. Check the battery & alternator ground (-) connection. Make sure they are properly connected/dimensioned & free of corrosion. Before selecting a mounting location for the amplifier, please take cooling & safety into consideration. Avoid areas with excessive vibration & upside down installation!

In order to avoid excessive heat from the amplifier, it is recommended to find a mounting location that allows for vertical positioning of the heat sink fins. For safety purposes, install the amplifier in a dry and well ventilated location and make sure no cables or other harness of the car is interfaced with the mounting location or will present a hazard to the car's cable, control cables, fuel lines/tanks, hydraulic lines or other components of the vehicle. Route the RCA cables away from high current wires, if possible run RCA, Power and Speaker cables individually and with a good distance from each other.

POWER CONNECTORS

12V (POWER CONNECTION)

Before mounting the amplifier, disconnect the negative (-) wire from the battery to protect any accidental damage to the amplifier of the audio system. The amplifier is equipped with 6 AWG power & ground terminals. It is crucial that all terminals are used with the adequate cable to ensure correct operation. Connect the power cables to the power terminal labeled as +12V.

The amplifier is not equipped with fuses, so external fuses are required at both the battery and the amplifier. Connect one end of the fuse holder to the power cable. The same shall be done at the other end of the cable that connects to the amplifier. The fuses will protect the system and the vehicle against the possibility of a short circuit in the power cable. Make sure that the fuses and the fuse holder is according to the system requirements.

GND (GROUND CONNECTION)

Locate a secure grounding connection as close as possible to the amplifier. Make sure the location is clean and provides a direct electrical connection to the chassis of the vehicle. Connect one end of an equal sized cable as the positive cable to the location of ground. It is important that the ground cable is as short as possible, but no longer than 20" / 50 cm at maximum. Run one end of the cable to the grounding point. Run the other end of the cable to the mounting location. Connect the ground cable to the terminals labeled as GND.

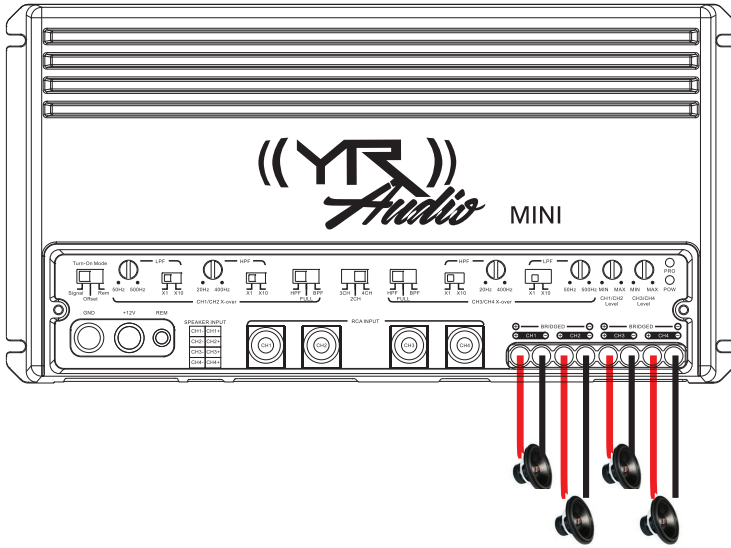
REM (REMOTE CONNECTION)

Run a remote turn on cable from the switched +12 V source. This may be a toggle switch, a relay, the source unit's remote output cable or power antenna trigger cable. Connect the remote turn on cable to the power terminal labeled as REM. The REM out terminal is mainly intended for connection of another amplifier ran in a chain, but it can also be used for other units.

INPUT (RCA CABLE)

Run the RCA cables away from the high current cables / speaker cables and connect to the amplifier. Use high quality cables with a secure grounding point to avoid amplifier malfunction and / or alternator whine.

SPEAKER CONNECTION



SPEAKER IMPEDANCE 2 OHM ~ 8 OHM

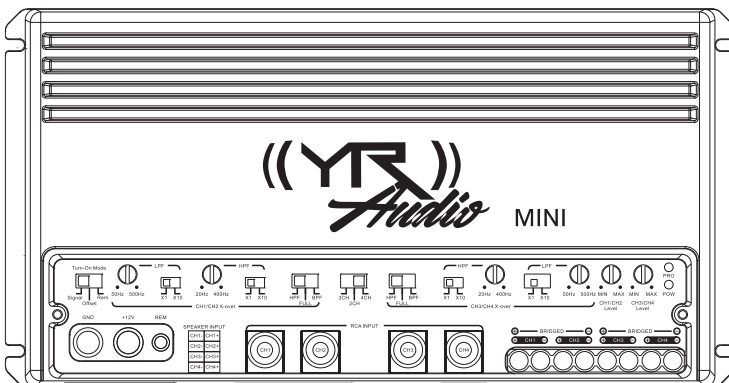
Loads under what is specified will cause excessive heat & the amplifier will reach thermal at a faster rate & will eventually go into protect.

Impedance load under 2 ohm is not warranted!

We recommend using minimum 12 Ga speaker cable to acquire the intended performance & efficiency. Run the speaker cables from your speaker to the amplifier's mounting locating. Ensure these are ran separately and away from high current cables and if possible the RCA cables as well. In all cases where cables are penetrating the vehicle's chassis use grommets to protect the cable. Connect the speaker wires according to the terminals on the speaker (s). Strip 3/8" / 1 cm of insulation of the end of each cable and twist the cable strands together tightly. Make sure there are no stray strands that could touch other cable or terminals as it can cause a short circuit. Crimp spade plugs over the end of the cable, or tin the ends with solder to provide a solid terminal. Connect the cable ends to the amplifier as shown in the diagram. Bridged speaker connection will add the 2 channel to single channel. If all channels are bridged, the YR-1100 will then become a 2 channel amplifier. If only one pair is bridged, then the amplifier will become a 3 channel. Setting the CH switch accordingly to speaker configuration mode, provides a signal output to all channels from a pair of RCA inputs. Bridged load is minimum 4 ohm for the YR-1100.

INPUT SIGNAL

HIGH LEVEL CONNECTION



High level input from loudspeaker wires, this option is only preferred if there is no RCA connection available. This will provide a signal input from the oem wire harness in the car. The provided adapter cable can then be spliced and connected with the car's harness.

Caution: Don't use the high and low level input at the same time! Do check if the vehicle has an active (amplified) system, as it may not be compatible with an aftermarket amplifier, without modification.

TROUBLESHOOTING

The protection circuits of the amplifier prevents severe damages from faulty conditions & improper use. The protection indicator will switch on due to short circuit connection & speaker overload, thus the amplifier will be turned off. Prior to inspecting the occurred problem, turn all levels down & all power off, then carefully check the installation for wiring mistakes, shorts or faulty ground (GND). If the amplifier shuts down due to excessive heat, the protection indicator will light up; please allow time for the unit to be cooled off. Before removing your amplifier, refer to the list below and follow the suggested procedures step by step. If not at ease, contact an authorized installer which can assist you.

AMPLIFIER DOESN'T TURN ON

- Measure voltage on the +12V terminal.
- Ensure that the remote terminal has min. 13.8V DC remote connection.
- Recheck the ground (GND) connection. Inspect the in-line fuses.
- Check the protection LED is not on.

PROTECTION LED IS LIT ONCE THE AMPLIFIER IS TURNED ON

- Check shorts on speaker wires & the connected load / impedance. Check power cables & GND.
- Disconnect the speaker cables and reset the amplifier,
- High / Low voltage, operation voltage is 10V ~ 16V. Voltages below / beyond this will cause the amplifier to go into protect.

FUSE BLOWING

- Measure the speaker impedance & that it is in accordance with the configuration.
- Inspect the power cable for shorts along with vehicle chassis.

OVERHEATING

- Measure the speaker impedance & that it is in accordance with the configuration.
- Check speaker shorts.
- Ensure airflow around the amplifier is sufficient & that the amplifier is not installed in areas of excessive vibration & upside down.

AUDIO OUTPUT INSUFFICIENT - DISTORTED SOUND

- Ensure that the gain settings on the amplifier is matched with the output level of the head unit.
- Adjust the head unit volume.
- Check speaker shorts.
- Adjust the crossover frequencies in accordance with the setup.
- If no output at all, check the RCA connections & the cable itself.

TURN ON THUMP

- Disconnect the signal input to the amplifier, then turn it on and off.
 - a) If the noise is cancelled, then connect a delay turn on module on the REM wire running from the source unit to the amplifier.
 - b) Use another 12V source for REM lead to the amplifier. If the noise is cancelled, use a relay to isolate the amplifier from the turn on thump.

HIGH HISS-ENGINE NOISE IN SPEAKERS

- Ensure that all signal transferring wires (RCA, speaker cables etc) are kept separately / away from the power and the ground wires.
- Bypass all electrical components between the Head unit and the amplifier.
Connect the Head unit directly to the amplifier's input. If the noise is eliminated, the unit bypassed is the one causing the noise.
- Remove the existing ground wires for all electrical components installed. Ensure that the point of ground is 100% metal which has been grinded free of rust, paint etc.
- Replace the ground cable from the OEM battery / alternator and ensure it is grounded accordingly.
- Test the battery and alternator load (can be carried out by a professional).
Ensure that the vehicle's electrical system is in a good condition, this includes distributor, alternator, spark plugs / wires, voltage regulators etc.

