



## **XT SERIES**

### **OWNERS MANUAL AND INSTALLATION GUIDE**

"Special Treat to Your Ears"

# **XTERMINATOR**



## CONGRATULATIONS

on your selection of a **U.S.Amps** XT series amplifier. We take pride in manufacturing our products and you can expect your new amplifier to give you years of trouble-free service.

To make your installation as easy and reliable as possible, **please read this manual carefully before beginning.**

If you need more information, your **U.S.Amps** Dealer will be glad to help.

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## CAUTION!

Jump starting your vehicle can cause large voltage spikes within your automobile's electrical system. To prevent damage to your stereo system, make sure the entire system is shut down until full battery charge has been reached and jumper cables have been removed from the battery.



## FEATURES

### POWER SUPPLY

- High-current MOSFET devices
- MMT-regulated Power Supplies
- 35 nanosecond Switching Diodes
- High capacity Power Transformer
- Multiple Bypass Capacitors on incoming 12V supply
- Time Delay Turn-on with Opto-coupled Muting Circuits
- Power supplies use Pulse-width Modulation
- Thermal and Reverse Polarity Protection

### AMPLIFIERS

- High efficiency Class D design(2000D/4000D)
- Output stages utilize high-current MOSFET devices
- High speed, audio-grade components in all low-level stages
- Active Constant Current Bias Tracking Circuit
- Platinum-plated RCA inputs and connectors
- Wide range of sensitivity accepts signal from any head unit
- 24dB/octave Subsonic Crossover
- 24dB/octave Lowpass Crossover
- True Line Output
- Auto Bridge feature
- Short Circuit Protection

## INSTALLATION

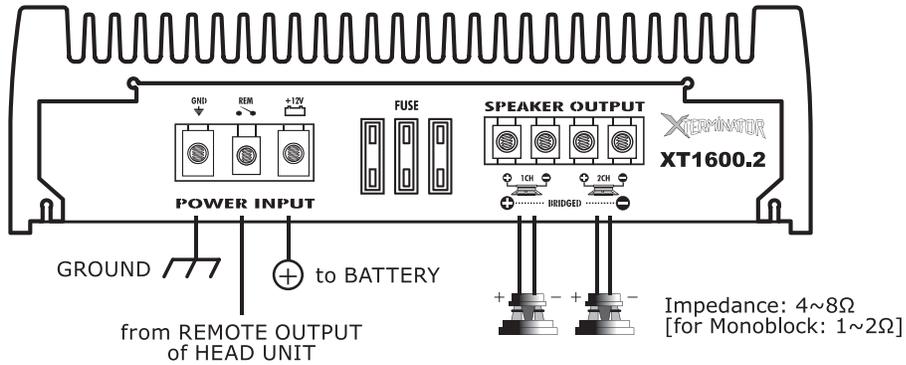
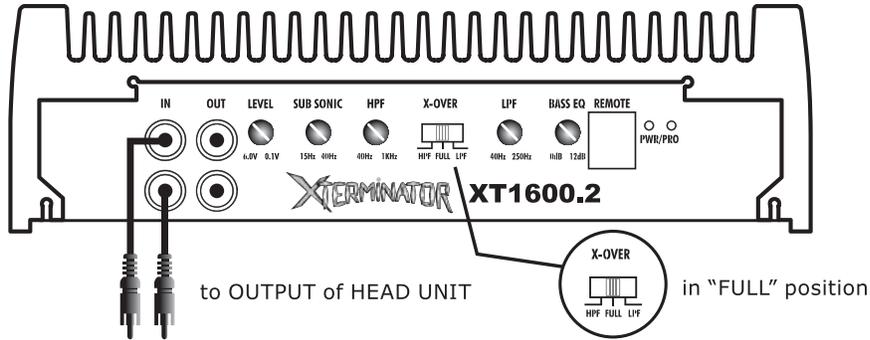
- Use at least #8 wire for power and ground connections
- Use at least #12 wire for speaker connections
- Use at least #16 wire for remote connection
- Mount the amplifier where it can receive the best ventilation
- Use the shortest ground connection to the chassis of the vehicle and make sure that the paint is removed at the connection point
- Connect the remote input to the remote/antenna output of the head unit
- Mount the fuse holder within 200mm(8") of the vehicle's battery. Use a fuse equal to that specified for your amplifier if a large, single +12V line is run which feeds more than one amplifier add up all required fuse ratings and use the total rating for the fuse
- Connect the speaker to the amplifier observing the correct phasing. Make sure that none of the speaker connections can touch the vehicle chassis
- Connect the RCA inputs to the appropriate signal source using only the highest quality RCA cables
- Make sure that the RCA and speaker cables do not run parallel to the +12V wiring



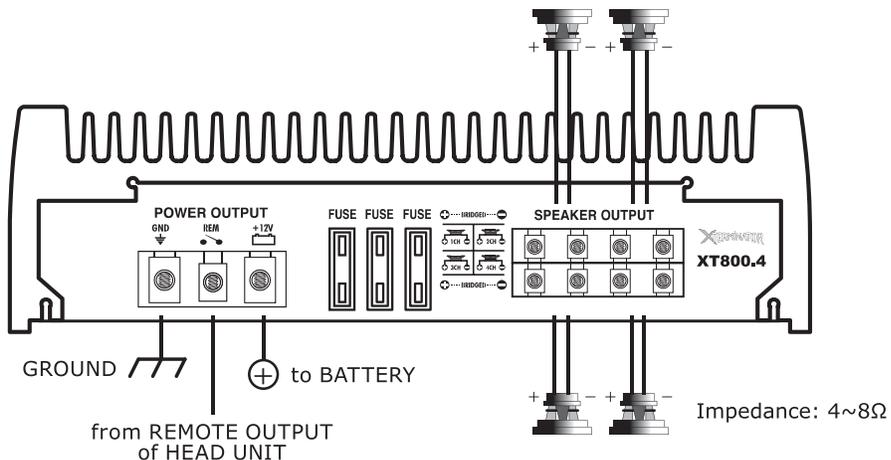
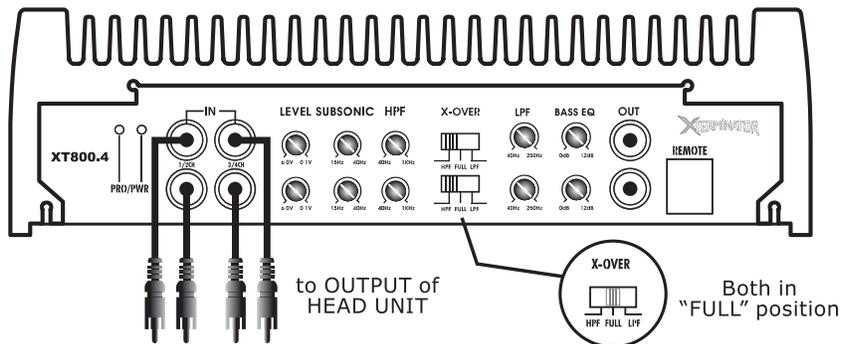
# CONNECTIONS

## [BASIC WIRING]

### ▲ 2-CHANNEL [800.2 & 1600.2] AND MONOBLOCK [1000D/2000D/4000D] AMPLIFIERS



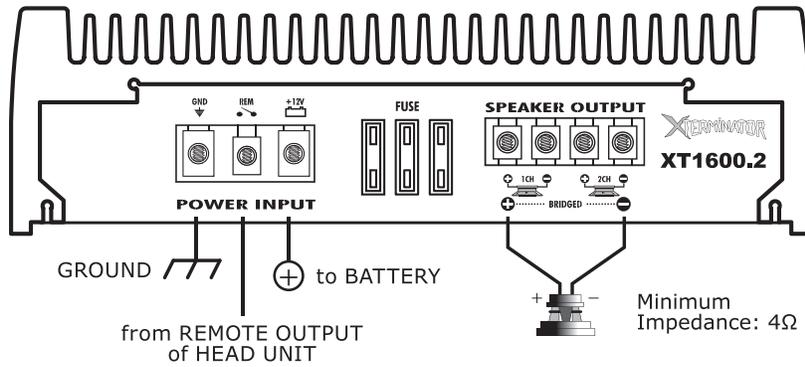
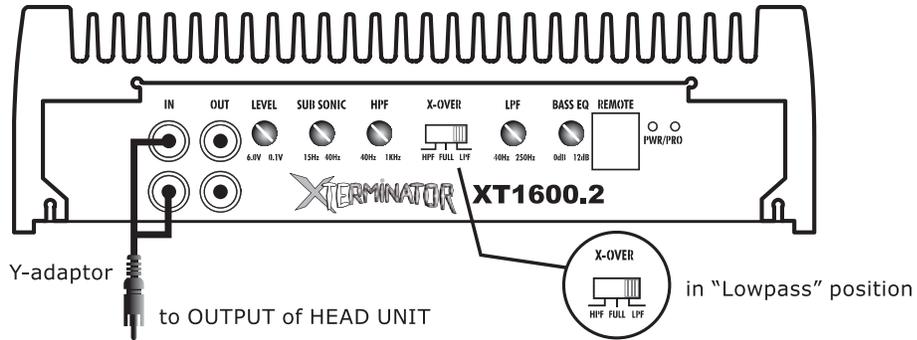
### ▲ 4-CHANNEL [800.4 & 1600.4] AMPLIFIERS



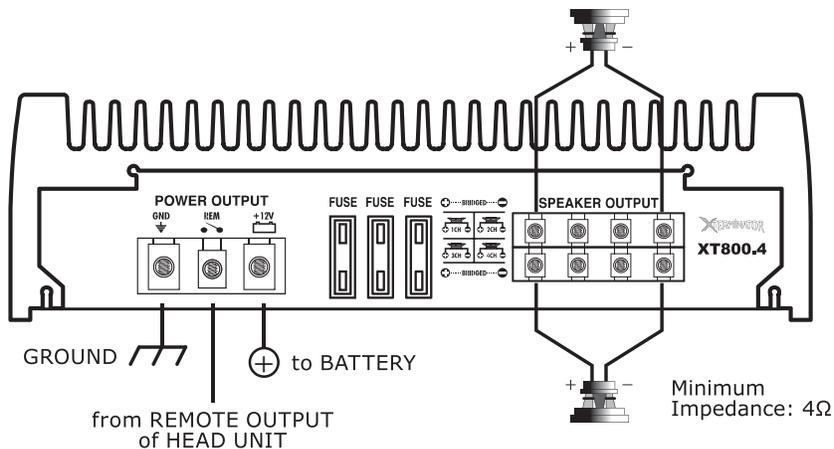
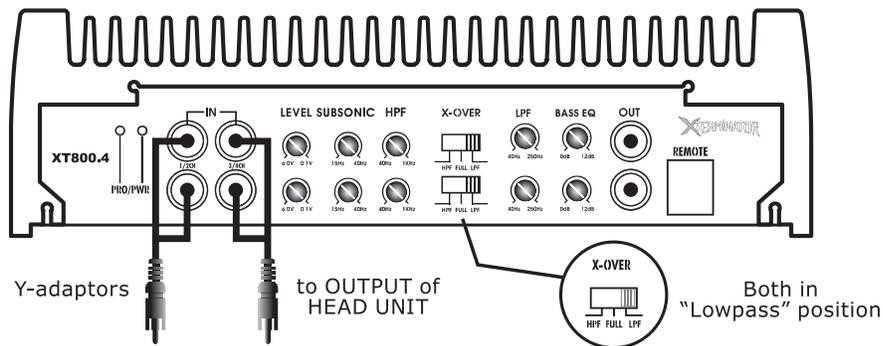
# CONNECTIONS

## [BRIDGED WIRING]

### ▲ 2-CHANNEL [800.2 & 1600.2] AMPLIFIERS



### ▲ 4-CHANNEL [800.4 & 1600.4] AMPLIFIERS



# SPECIFICATIONS

		800.2	1600.2	800.4	1600.4	1000D	2000D	4000D
Power Output (RMS)	1KHz	2 x 100	2 x 200	4 x 50	4 x 100			
	100Hz					1 x 75	1 x 150	1 x 200
	4Ω							
at full frequency (10Hz~40KHz) (before clipping)	1KHz	2 x 200	2 x 400	4 x 100	4 x 200			
	100Hz					1 x 150	1 x 300	1 x 450
	1Ω							
Total Harmonic Distortion	4Ω mono	1 x 400	1 x 800	2 x 200	2 x 400			
	4Ω	0.03	0.03	0.03	0.03	•••	•••	•••
S/N Ratio	4Ω	100	100	100	95	80	80	80
Channel Separation @ 4Ω RMS	Input Short	58	55	58	50	N/A	N/A	N/A
Frequency Response		10~50K	10~50K	10~50K	10~50K	20~500	20~500	20~500
		10	10	10	10	•••	•••	•••
Power Band Width (Frequency Response)	-1dB	50	50	50	50	•••	•••	•••
Crossover Frequency	Low Pass	40~250	40~250	40~250	40~250	40~250	40~250	40~250
	Subsonic	15~40	15~40	•••	15~40	15~40	15~40	15~40
	High Pass	40~1K	40~1K	40~1K	40~1K	•••	•••	•••
Bass Boost Control @ 45Hz		0~12	0~12	0~12	0~12	0~12	0~12	0~12
Wired Remote Control		optional	optional	No	No	optional	optional	optional
Bridged Mono Capable		4	4	4	4			
Master Slave Capable								
Gain Control		Yes	Yes	Yes	Yes	Yes	Yes	Yes
Input Sensitivity	Low Level	100/6.0	100/6.0	100/6.0	100/6.0	100/6.0	100/6.0	100/6.0
	High Level							
Input Impedance	Low	10	10	10	8	22	22	22
	High							
Damping Factor		250	250	250	250	95	95	95
Dimensions [(W) 2.5/63.5(H) x 8.75/222(D)]		9.75/248	14.5/368	14.5/368	15.75/400	9.75/248	14.5/368	15.75/400
Fuse Rating		25A x 1	20A x 3	20A x 3	25A x 3	40A x 1	30A x 3	25A x 3
Protection (thermal/overload/short circuit/dc offset)		Yes	Yes	Yes	Yes	Yes	Yes	Yes
Power Voltage Range		12~18V	12~18V	12~18V	12~18V	12~18V	12~18V	12~18V



# TROUBLESHOOTING

**Before removing your amplifier, refer to the list below and follow the suggested procedures. Always test the speakers and their wires first.**

## NO OUTPUT

- Confirm that all terminal strip connections are secure and tight.
- Check both in-line and built-in fuses.
- Confirm that the audio signal source (car radio, equalizer, etc) is connected and is supplying output signal. To check if the amplifier is supplying signal, unplug the RCA cables from the signal source (but leave them plugged into the amp) and briefly tap the center pin of each of the disconnected RCA plugs with your finger. This should produce a noise (feedback) in your speakers.

## ONLY ONE CHANNEL WORKS

- Confirm that all terminal strip connections are secure and tight.
- Check the "BALANCE" control on the head unit (or other source) to verify that it is set to its mid point.
- If you are using the low-level RCA input, reverse the input plugs at the amplifier (switch the R with the L). If the channel which is silent switches to the other side, the problem is either in the head unit/other source or the connecting cables.

## WEAK OUTPUT

- Re-adjust the Input Level Control to better suit the input signal.

## NOISE IN THE AUDIO

- If the noise is a "whine" whose pitch follows the engine speed, confirm that the amplifier and any other signal sources (head unit, equalizer, etc) are properly grounded.
- If the noise is a "clicking" or "popping" noise whose rate follows the engine speed, this usually means that the vehicle is equipped with resistor spark plugs and wires, or that the ignition is in need of service.
- Check the routing of the speaker and input wires to make sure they are not adjacent to wires which interconnect with lights and other accessories.
- If the above steps fail to improve or clear noise interference, the system should be checked by a authorized **U.S.Amps** Dealer.



### ***Limited Warranty:***

U.S.Amps warrants all manufactured electronic products to be free from defects in material and workmanship for a period not to exceed ONE YEAR from the date of purchase.

**IMPORTANT WARRANTY NOTICE: U.S.Amps will only warrant and service products displaying valid U.S.Amps serial numbers. WARRANTY SERVICE WILL ONLY BE PERFORMED WHEN THE UNIT IS ACCOMPANIED BY A COPY OF THE ORIGINAL SALES RECEIPT FROM AN AUTHORIZED DEALER. All product returned to U.S.Amps for service MUST be accompanied by a Return Authorization Number, issued by U.S.Amps in advance of shipment. The Return Authorization Number must be clearly and conspicuously displayed on the shipping carton or U.S.Amps will refuse delivery.**

For Return Authorization Numbers, first call your U.S.Amps dealer you purchased the products from. The dealer will help you to obtain Return Authorization Numbers.

This warranty extends only to the original purchaser and is not transferable. Defective equipment must be returned within the warranty period, freight prepaid, to the U.S.Amps Factory or an Authorized U.S.Amps Warranty Station.

This warranty covers only defects in materials and workmanship of manufactured electronic products (amplifiers).

Incidents of misuse, abuse, neglect, or unauthorized modification will not be covered within the terms of this warranty.

U.S.Amps reserves the right to refuse warranty service under such conditions.

**U.S.AMPS WILL NOT BE RESPONSIBLE FOR ANY DAMAGES, WHETHER INCIDENTAL OR CONSEQUENTIAL, RELATED TO THE USE OF THIS OR ANY OTHER PRODUCT BEARING OR SOLD UNDER THE U.S.AMPS BRAND NAME. USE THIS PRODUCT AT YOUR OWN RISK. IMPROPER USE OF THIS PRODUCT CAN RESULT IN PROPERTY DAMAGE, BODILY HARM, AND OR OTHER DAMAGE. U.S.AMPS ASSUMES NO RESPONSIBILITY FOR YOUR HEALTH OR SAFETY.**

