

## INPUT SENSITIVITY ADJUSTMENT

Each set of inputs (front/rear) on the 3300x are adjustable in 10 dB steps from -20 dB to +20 dB. The five (5) input gain settings allow the 3300x to accept input voltages from 100 mV to 8 V. The front and rear input sensitivity is adjusted independently by installing a jumper across the associated input voltage/pin location. Refer to the illustration on the reverse side of this document prior to setting the input sensitivity.

## CROSSOVER MODES OF OPERATION

The 3300x is equipped with independent *FRONT* and *REAR* crossovers. Each crossover is controlled by two (2) crossover mode jumpers labeled *AMP* & *LINE XOVR*. The header jumper labeled *AMP XOVR* control the crossover function as it applies to the 3300x's Front (stereo) and Rear (mono) amplifier. The modes of operation are: Position 1 = Bypass (Full Range), Position 2 = High Pass, and Position 3 = Low Pass. (See illustration)

The two (2) header jumpers labeled *LINE XOVR* control the crossover function as it applies to the 3300x's *FRONT* and *REAR* RCA Line Outputs. The modes of operation are: Position 1 = Bypass (Full Range), Position 2 = High Pass, and Position 3 = Low Pass. (See illustration)

The High and Low Pass frequencies are determined by the Frequency Modules (SIPs) installed in the four (4) SIP sockets pictured on the reverse side of this document.

## CROSSOVER FREQUENCY MODULES

The following is a chart of the available Xtant frequency module SIPs. The frequency module SIP's "ID Code" printed on the SIP and the associated frequency value is detailed below.

SIP Number	Frequency
2 2 4	5 0 H z
1 3 4	7 0 H z
1 1 4	8 0 H z
1 0 4	9 0 H z
6 8 3	1 2 0 H z
5 6 3	1 5 0 H z
2 7 3	3 0 0 H z
1 5 3	5 0 0 H z
1 0 3	7 0 0 H z
6 8 2	1 k H z
2 4 2	3 k H z
1 8 2	4 k H z
1 5 2	5 k H z

The 3300x amplifier is shipped from the factory with 90 Hz High and Low Pass frequency modules (SIP) installed. To change frequency modules, simply remove each resistor SIP and replace it with the appropriate SIP value to achieve the desired frequency.

The Low and High Pass frequencies are independent. Any combination of the available frequency modules (SIPs) may be used (ie. 80 Hz Low Pass and 120 Hz High Pass).



## INSTALLER'S REFERENCE LOG

• DATE INSTALLED: \_\_\_\_\_

• OWNER'S NAME: \_\_\_\_\_ PHONE: \_\_\_\_\_

• ADDRESS: \_\_\_\_\_

• CITY/ STATE: \_\_\_\_\_ ZIP: \_\_\_\_\_

• VEHICLE: \_\_\_\_\_ YEAR: \_\_\_\_\_

• XTANT AMPLIFIER: MODEL \_\_\_\_\_ SERIAL# \_\_\_\_\_

### INPUT SENSITIVITY (CIRCLE SETTING)

• FRONT INPUTS (2 CHANNELS)  
-20dB -10 dB 0dB +10dB +20 dB

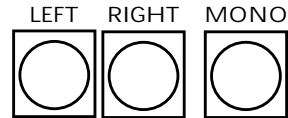
#### FRONT CROSSOVER (2 CHANNELS) CIRCLE JUMPER SETTING:

AMPLIFIER:  
ALL HIGH LOW  
RCA OUTPUTS  
ALL HIGH LOW

#### FREQUENCY VALUE (2 CHANNELS)

SIP HIGH PASS FREQUENCY \_\_\_\_\_  
SIP LOW PASS FREQUENCY \_\_\_\_\_

### OUTPUT GAIN ADJUSTMENT



### ACCESSORY MODULES (CIRCLE SETTING)

CM 24X FRONT REAR  
YES NO YES NO  
BLM-1 FRONT REAR  
YES NO YES NO

### SYSTEM COMPONENTS

SOURCE \_\_\_\_\_ SERIAL # \_\_\_\_\_

PROCESSOR(S) \_\_\_\_\_ SERIAL # \_\_\_\_\_

AMPLIFIER(S) \_\_\_\_\_ SERIAL # \_\_\_\_\_

\_\_\_\_\_ SERIAL # \_\_\_\_\_

\_\_\_\_\_ SERIAL # \_\_\_\_\_

\_\_\_\_\_ SERIAL # \_\_\_\_\_

• REAR INPUTS (MONO CHANNEL)  
-20 dB -10 dB 0 dB +10 dB +20 dB

#### REAR CROSSOVER (MONO CHANNEL) CIRCLE JUMPER SETTING:

AMPLIFIER:  
ALL HIGH LOW  
RCA OUTPUTS  
ALL HIGH LOW

#### FREQUENCY VALUE (MONO CHANNEL)

SIP HIGH PASS FREQUENCY \_\_\_\_\_  
SIP LOW PASS FREQUENCY \_\_\_\_\_

### NOISE GATE ADJUSTMENT

SWITCH: ON OFF

### THRESHOLD POSITION



(DRAW ARROW POSITION)

PQM-1 (FRONT) YES NO  
PQM-1 CHIP FREQUENCY \_\_\_\_\_  
PQM-1 (REAR) YES NO  
PQM-1 CHIP FREQUENCY \_\_\_\_\_

## xtant technologies



## INSTALLER'S REFERENCE

THIS DOCUMENT HAS BEEN CRAFTED TO MAKE INSTALLATION, SYSTEM DESIGN AND TROUBLE-SHOOTING, A QUICK AND EASY PROCESS. THE CHARTS PROVIDED, OFFER A SIMPLE METHOD OF DOCUMENTATION.

IT IS IMPORTANT THAT YOU RETAIN THIS LOG FOR YOUR RECORDS. ON PAGE 12 OF THE OWNER'S MANUAL, YOU WILL FIND THE OWNER'S REFERENCE LOG. ONCE YOU HAVE NOTATED THE FINAL SETTINGS FOR THIS 3300x, TRANSFER THOSE SETTINGS TO THE OWNER'S REFERENCE LOG. IN THE FUTURE, ANY SYSTEM EXPANSION AND/ OR PROBLEMS MAY BE REFERENCED TO THIS LOG.

## INSTALLATION SEQUENCE

- REMOVE AMPLIFIER COVER:  
Loosen allen head screws and lift-off cover. Do not remove protective covering on stainless steel lid until installation is complete.
- TEMPORARILY MOUNT AMPLIFIER:  
The amplifier is designed to be anchored through the four (4) sleeved holes located on the circuit board/base assembly. (see illustration)
- REMOVE AMPLIFIER AND MARK WIRES FOR TERMINATION:  
Determine wire lengths and mark for cutting/termination. Remove amplifier base before cutting and terminating all wires. Caution: stripping wires over the circuit board may cause product failure.
- CROSSOVER SET-UP:  
Adjust crossover mode jumpers at your work bench. Also, change crossover frequency SIP's if desired.
- INPUT SENSITIVITY:  
Make initial adjustment to input gain at your work bench. The factory setting is +10 dB / 300mv -1V. To increase input gain, place jumper in the +20 dB position. To decrease input gain, place jumper in the 0 or -10 dB position.

**MOUNT THE AMPLIFIER AND MAKE ALL CONNECTIONS:**  
Re- install the amplifier base and make all wire connections. i.e. Speaker, Power, Remote, Ground, and RCA input.

**DOUBLE CHECK ALL CONNECTIONS! TURN ON AMPLIFIER.**  
Check red LED, it should be on.

**ADJUST LEFT, RIGHT & MONO AMPLIFIER OUTPUT LEVELS.**

**ADJUST NOISE GATE THRESHOLD (IF USED):**  
Turn noise gate on and adjust the threshold by turning clockwise to increase sensitivity (gate will open with less input signal). The green LED will illuminate when the gate passes signal.

**AFTER FINE TUNING THE SYSTEM:**  
Remove protective covering from amplifier and clean per the maintenance section on page 9 of the **Owner's Manual**. Attach cover to base.



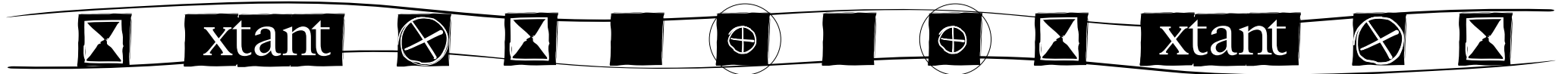
REV 11 97



xtant technologies  
7676 SOUTH 4 6TH STREET PHOENIX, ARIZONA 85040 USA  
602 431.8686

# INSTALLER'S REFERENCE

## XTANT 3300X



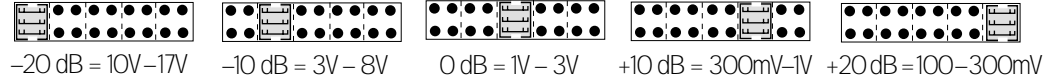
### CROSSOVER FREQUENCY SELECTION:

TO CHANGE THE FREQUENCY OF EITHER THE HIGH AND/OR LOW PASS FILTERS, REPLACE THE 90 Hz FREQUENCY MODULE (SIP) INSTALLED ON THE CIRCUIT BOARD. NOTE THAT THE IDENTITY OF THE HIGH & LOW PASS SOCKETS ARE MARKED ON THE BOARD. REFER TO THIS DRAWING FOR LOCATION & THE CHART ON THE BACK FOR THE AVAILABLE SELECTION OF SIP / FREQUENCY VALUES.

### CROSSOVER MODE JUMPERS:

- AMPLIFIER:**  
 3 - Low Pass  
 2 - High Pass  
 1 - BYPASS
- RCA OUTPUTS:**  
 3 - Low Pass  
 2 - High Pass  
 1 - BYPASS

**INPUT SENSITIVITY:** TO ADJUST INPUT GAIN, MOVE JUMPER (IF NEEDED) - AND INSTALL IT IN THE LOCATION WHICH MATCHES YOUR INPUT SIGNAL LEVEL. REFER TO THE ILLUSTRATION BELOW FOR PROPER JUMPER LOCATION / LEVEL SETTING. NOTE: -20 dB = 10V - 17V IS ONLY TO BE USED WITH BALANCED INPUT FROM A BALANCED SOURCE.

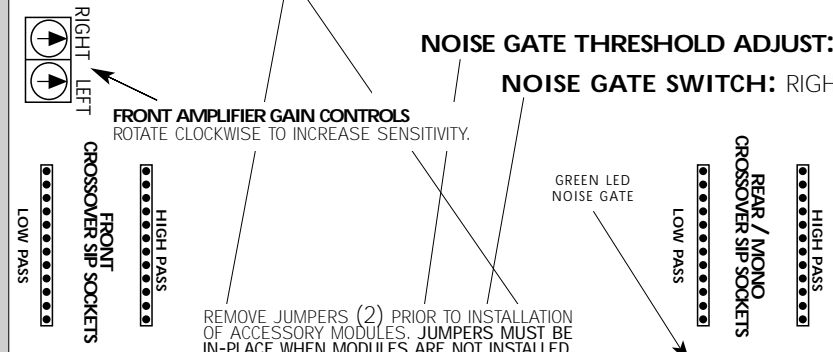


THIS SYMBOL INDICATES THE LOCATION OF THE FOUR (4) MOUNTING HOLES.



**NOISE GATE THRESHOLD ADJUST:** TURN CLOCKWISE TO INCREASE SENSITIVITY  
**NOISE GATE SWITCH:** RIGHT POSITION = ON; LEFT POSITION = OFF

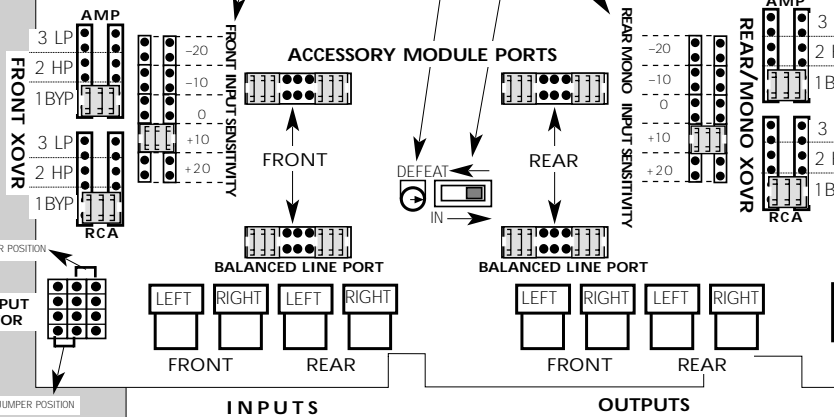
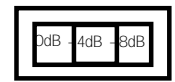
**FRONT AMPLIFIER GAIN CONTROLS**  
 ROTATE CLOCKWISE TO INCREASE SENSITIVITY.



REMOVE JUMPERS (2) PRIOR TO INSTALLATION OF ACCESSORY MODULES. JUMPERS MUST BE IN-PLACE WHEN MODULES ARE NOT INSTALLED.

**REAR / MONO AMPLIFIER GAIN CONTROL**  
 ROTATE CLOCKWISE TO INCREASE SENSITIVITY.

**PASSIVE ATTENUATION SWITCH**

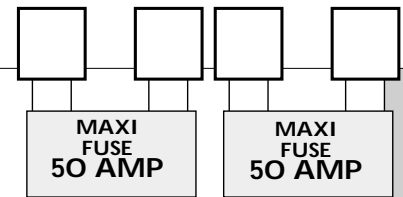
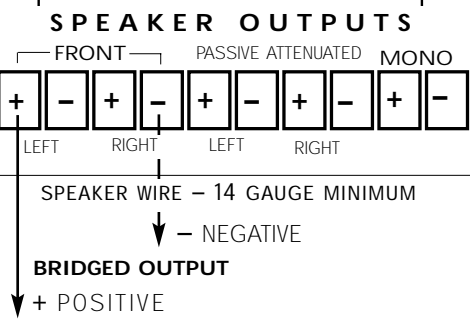


RED LED POWER ON  
 ORANGE LED THERMAL PROTECT  
 YELLOW LED LOW IMPEDANCE

**REMOTE SWITCHED 12 VOLTS**  
 16 GAUGE MINIMUM

**GROUND - 8 GAUGE MINIMUM**  
**POWER - 8 GAUGE MINIMUM**

**CAUTION: SHARP EDGES BE CAREFUL WHEN HANDLING TOP AND BOTTOM METAL.**



ADD 100 AMP FUSE AT POSITIVE TERMINAL OF THE BATTERY.