

## INPUT SENSITIVITY ADJUSTMENT

Each set of inputs (front/rear) on the 604x are adjustable in 10 dB steps from -20 dB to + 20 dB. The five (5) input gain settings allow the 604x to accept input voltages from 100 mV to 8.5 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 604x is equipped with independent *FRONT* and *REAR* crossovers. Also includes Left and Right line out crossovers. Each crossover is controlled by four crossover mode jumpers labeled, FRONT CHAN XOVER MODE, LINE OUT MODE SELECT, REAR CHAN XOVER MODE, LINE OUT MODE SELECT. The header jumper labeled FRONT CHAN XOVER MODE controls the crossover function as it applies to the front channels. The header jumper labeled REAR CHAN XOVER MODE controls the crossover function as it applies to the rear channels. (See illustration)

The two header jumpers labeled LINE OUT MODE SELECT, control the crossover function as it applies to the front and rear, left and right line outputs. (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 604x 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 (FRONT CHANNELS)  
 -20dB -10 dB 0dB +10dB +20 dB

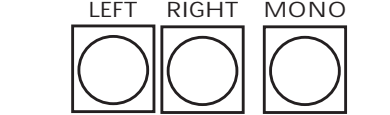
### FRONT CROSSOVER (FRONT CHANNELS)

CIRCLE JUMPER SETTING:  
**AMPLIFIER:**  
 BYP HIGH LOW BND  
**RCA OUTPUTS**  
 BYP HIGH LOW BND

### FREQUENCY VALUE (FRONT CHANNELS)

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

### OUTPUT GAIN ADJUSTMENT



### ACCESSORY MODULES (CIRCLE SETTING)

PQM-1 (FRONT)	YES	NO
PQM-1 CHIP FREQUENCY	_____	
PQM-1 (REAR)	YES	NO
PQM-1 CHIP FREQUENCY	_____	
ACCESSORY MODULES		
LFQ45	YES	NO
RGM1	YES	NO

XTANT SELECT DEALER \_\_\_\_\_  
 PHONE \_\_\_\_\_  
 INSTALLATION SPECIALIST \_\_\_\_\_  
 DATE INSTALLED \_\_\_\_\_

• REAR INPUTS (REAR CHANNELS)  
 -20 dB -10 dB 0 dB +10 dB +20 dB

### REAR CROSSOVER (REAR CHANNELS)

CIRCLE JUMPER SETTING:  
**AMPLIFIER:**  
 BYP HIGH LOW BND  
**RCA OUTPUTS**  
 BYP HIGH LOW BND

### FREQUENCY VALUE (REAR CHANNELS)

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

### NOISE GATE ADJUSTMENT

SWITCH: ON OFF  
**THRESHOLD POSITION**



### BALANCED LINE INPUT

FRONT REAR  
 ENABLE DISABLE ENABLE DISABLE

### PASSIVE OUTPUTS

RM4	YES	NO	RM8	YES	NO
RM12	YES	NO	RM16	YES	NO

## 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 604x, 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.

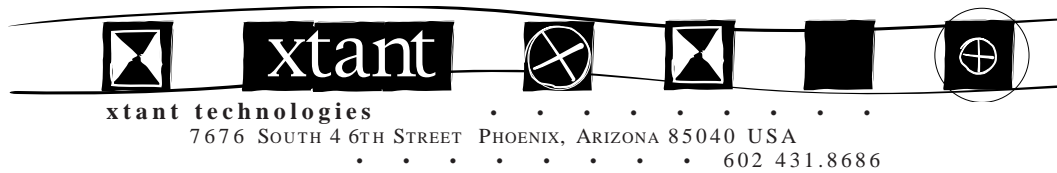
**MOUNT THE AMPLIFIER AND MAKE ALL CONNECTIONS:**  
 Re- install the amplifier base and make all wire connections. i.e. Speaker, Power, Remote, Ground, and RCA input.

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

**ADJUST LEFT, RIGHT FRONT AND LEFT, RIGHT REAR AMPLIFIER OUTPUT LEVELS.**

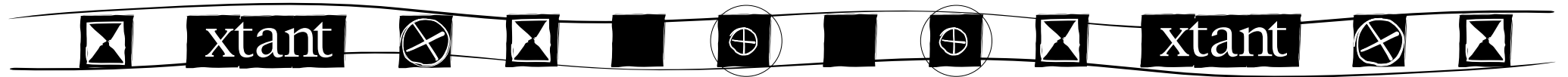
**ADJUST NOISE GATE THRESHOLD (IF USED):**  
 Turn noise gate on and adjust the threshold by turning clockwise to increase sensitivity (gate will open with less input signal). The green LED will illuminate when the gate passes signal.

**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.



# INSTALLER'S REFERENCE

## XTANT 604X



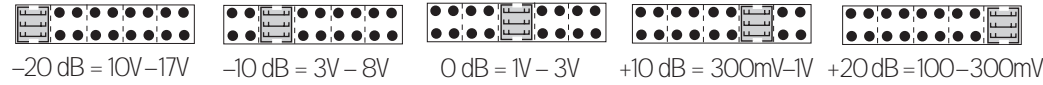
### CROSSOVER FREQUENCY SELECTION:

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:

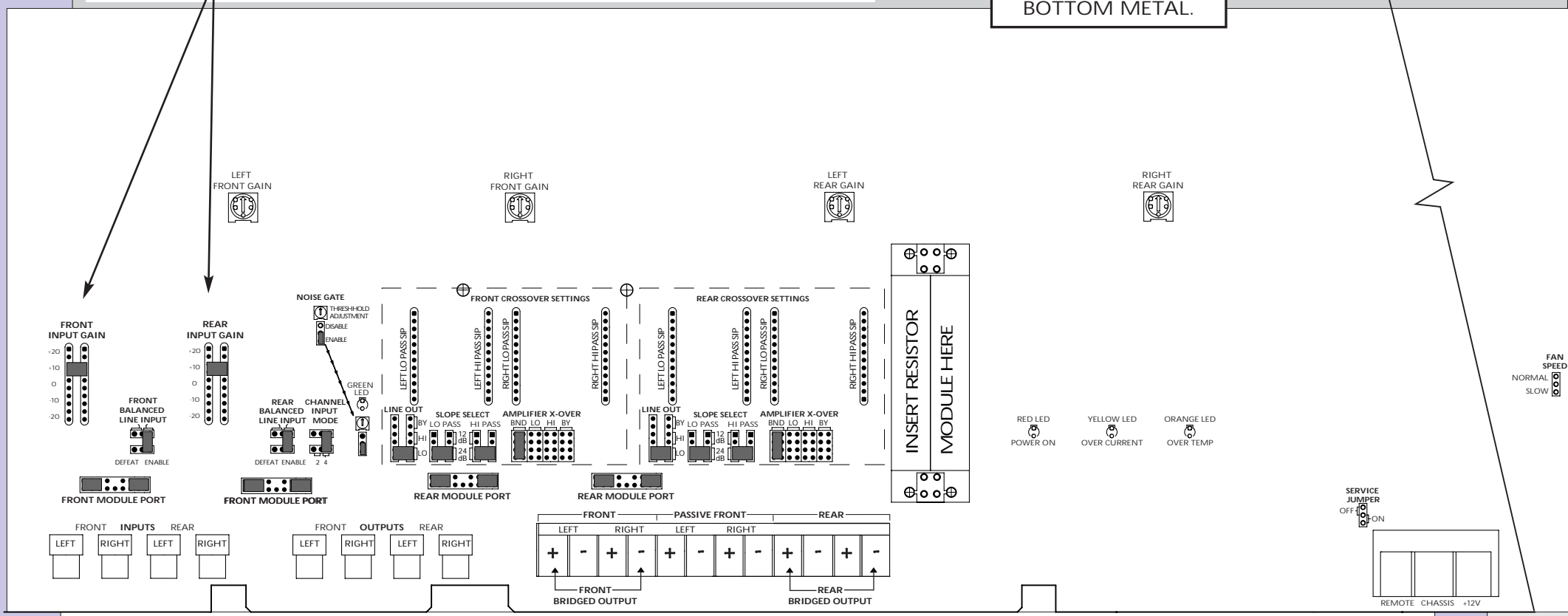
**AMPLIFIER:**  
BND=BANDPASS  
LO = Low Pass  
HI = High Pass  
BY= BYPass

**RCA OUTPUTS:**  
BND=BANDPASS  
LO = Low Pass  
HI = High Pass  
BY= BYPASS



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

FAN



**RECOMMENDED LOAD:**  
2Ω STEREO  
4Ω BRIDGED