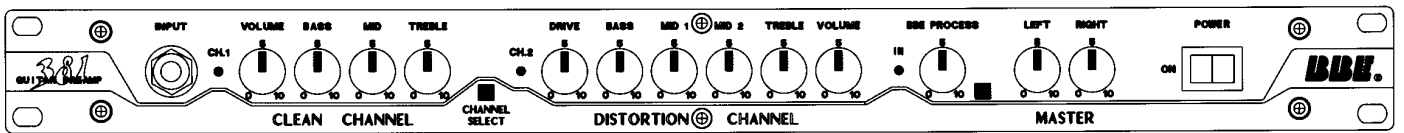
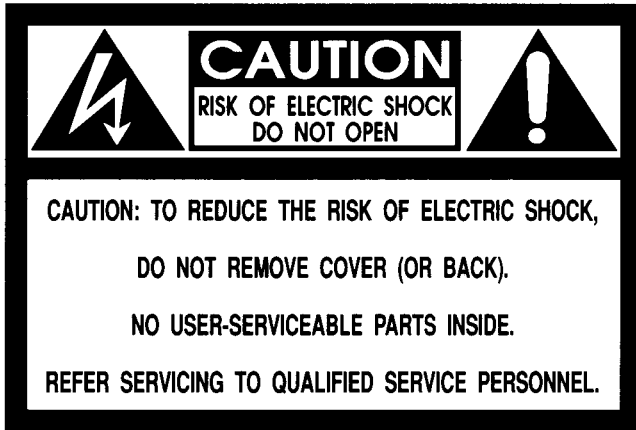


BBE
Sound Inc.

▲
MODEL 381
GUITAR PREAMP
USER MANUAL



Important Safeguards



WARNING

To prevent fire or shock hazard, do not expose the unit to rain or moisture.

ATTENTION: RISQUE DE CHOC ELECTRIC- NE PAS OUVRIIR.



The lightning flash with arrowhead symbol, within an equilateral triangle, is intended to alert the user to the presence of uninsulated "dangerous voltage" within the product's enclosure that may be of sufficient magnitude to constitute a risk of electric shock to persons.



The exclamation point, within a equilateral triangle is intended to alert the user to the presence of important operating and maintenance (servicing) instructions in the literature accompanying the appliance.

For your protection, please read these safety instructions completely before operating the appliance, and keep this manual for future reference.

Carefully observe all warnings, precautions and instructions on the appliance and described in the operating instructions supplied with the appliance.

INSTALLATION

Water and Moisture - Do not install the appliance near water: for example, near a bathtub, washbowl, kitchen sink, laundry tub, in a wet basement, or near a swimming pool.

Heat - Do not install the appliance near sources of heat such as radiators, heat registers, stoves, or other appliances that produce heat.

Ventilation - Situate the product so its location or position does not interfere with its proper ventilation. For example, you should not place the product on a bed, sofa, rug, or similar surface that might block the vent openings, or placed in a built-in installation, such as a bookcase or cabinet that might impede the flow of air through the ventilation openings.

Wall or Ceiling Mounting - If your appliance can be mounted to a wall or ceiling, mount it only as recommended.

USE

Power Source - Connect the appliance to a power supply only of the type described in the operating instructions or as marked on the appliance.

Power-Cord Protection - Route the power cord so that it is not likely to be walked on or pinched by having objects placed on it, paying particular attention to the plugs, receptacles, and the point where the cord exits from the appliance.

Grounding or Polarization - Do not defeat the grounding or polarization feature of the AC power cord. If your AC receptacle will not accept the power cord plug, contact your electrician to install a proper AC receptacle.

When not in use - Unplug the power cord of the appliance from the outlet when left unused for a long period of time. To disconnect the cord, pull it out by grasping the plug. Never pull the plug out by the cord.

AC Receptacle - Check to make sure that the AC receptacle holds the power cord plug firmly and securely. If the power cord plug is loose, contact your electrician to replace the defective and unsafe AC

Foreign Objects - Be careful that foreign objects and liquids do not enter the enclosure through openings.

SERVICE

Unplug the appliance from the wall outlet and consult qualified service personnel when:

- the power cord or the plug has been damaged.
- a solid object or liquid has fallen into the cabinet.

- the appliance has been exposed to rain or moisture.
- the appliance does not appear to operate normally or exhibits a marked change in performance.
- the appliance has been dropped, or the enclosure damaged.

Do not attempt to service the appliance beyond that described in the operating instructions. For all other servicing, refer to qualified service personnel **only**.

▲
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Congratulations on your purchase of the BBE Model 381 Guitar Pre-amp! This two channel guitar pre-amp offers flexibility unequaled in today's market place. With the BBE 381's two channels, the player is able to achieve the more traditional clean and overdrive tones while leaving room to create some unique tones of his/her own. An important advantage with the BBE 381 Guitar Pre-amp is that all of the controls are front panel mounted. This allows for an instantaneous status report of all controls, at a glance.

Additionally, the BBE 381 Guitar Pre-amp is equipped with both **Main Outputs** and **Recording Outputs** to increase its interfacing capabilities. So whether in the studio or on stage, the BBE 381 will indulge players of any style or caliber.

The BBE 381 Guitar Pre-amp is also equipped with the following features:

1. Custom BBE circuit for increased tonal quality and intelligibility with a built-in noise suppressor.
2. Passive three band tone controls for the clean channel and active four band tone controls for the distortion channel.
3. **Recording Outputs** allow the user to plug directly into a mixing console or to record direct to tape and still have that full, rich, cabinet sound that the player enjoys hearing. The importance of this feature is most evident in eliminating the need to transport a speaker cabinet or the use of microphones for sound reinforcement.
4. A **Stereo Effects Loop** to interface the BBE 381 with the most popular of effects processors.
5. Independent channel volumes to coordinate the proper level blend between the clean and distortion channels.
6. **Channel Select Footswitch** to switch between the **Clean** and **Distortion** channels.

The following sections will provide detailed information on all of the BBE 381's functions.

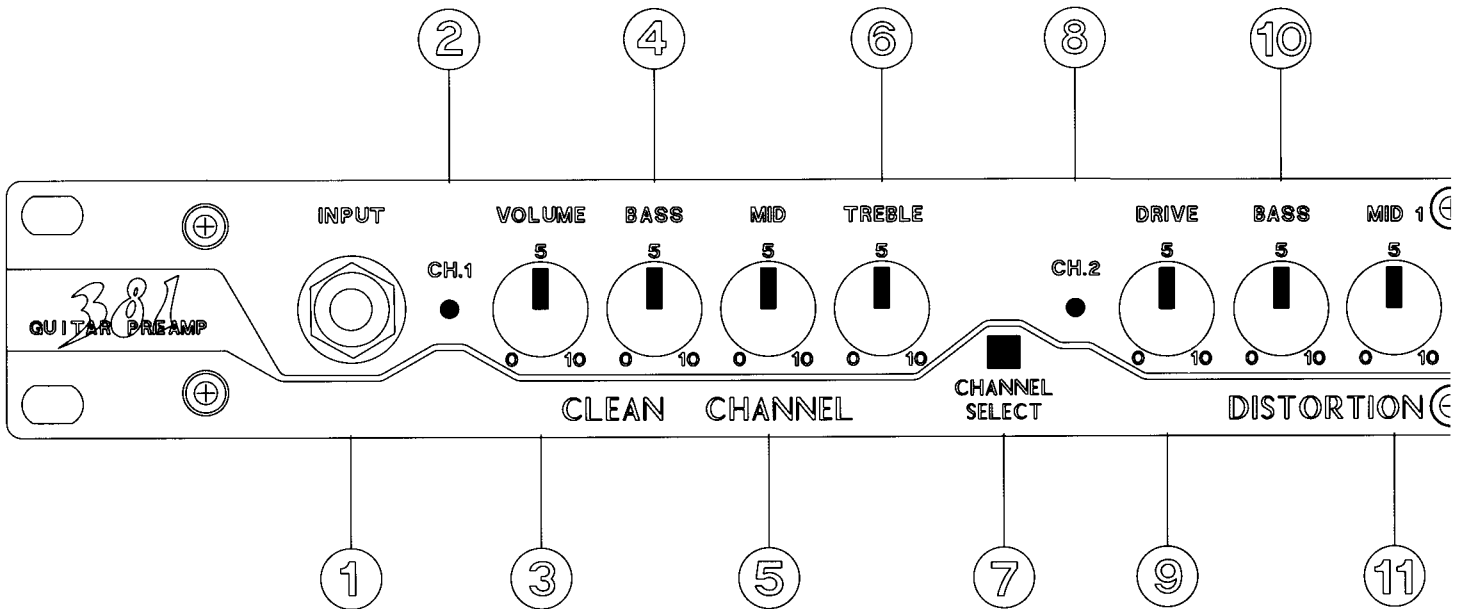
IMPORTANT

Before you begin, please check the contents of this box to insure that included are:

1. The BBE 381 Guitar Pre-amp.
2. The Channel Select Footswitch.
3. A 25' two conductor cable.
4. BBE 381 User's manual.

If any of these items are found to be missing, contact your BBE dealer from whom the unit was purchase immediately.

CONTROLS AND CONNECTION

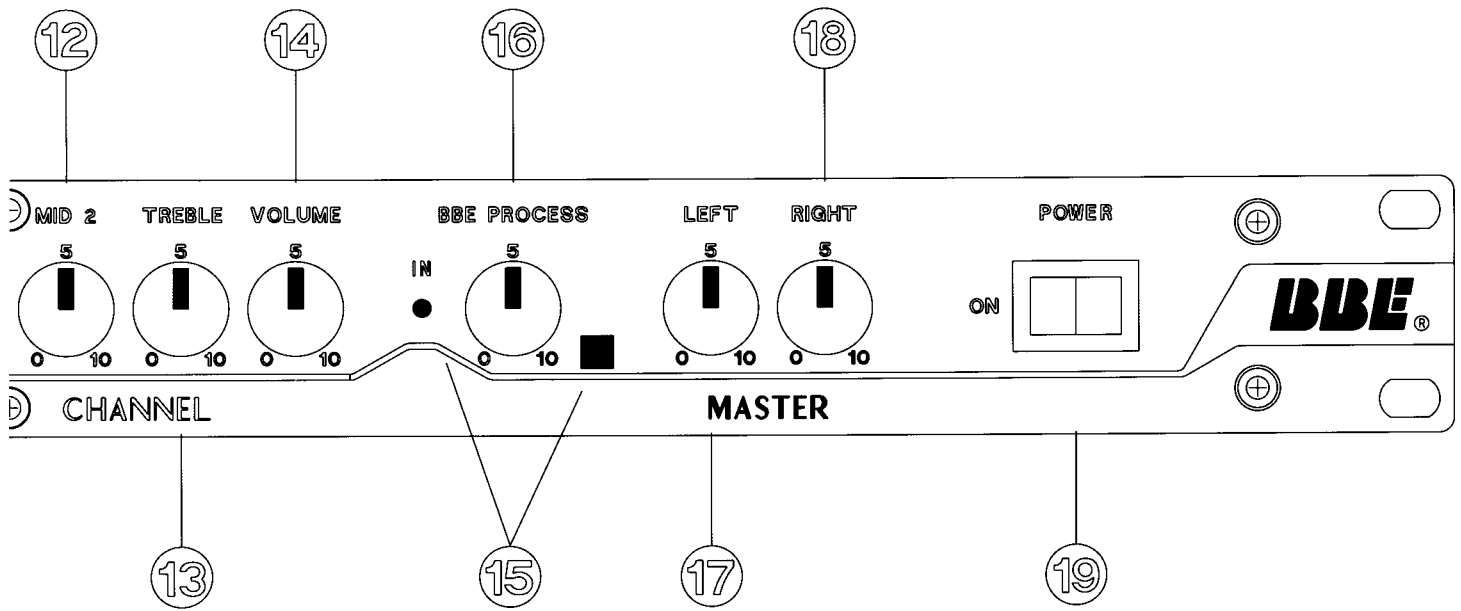


FRONT PANEL

1. INPUT: This jack allows for the connection of the guitar to the BBE 381 pre-amp.
2. CH. 1: This "GREEN" LED illuminates when the **Clean Channel** is selected.

CLEAN CHANNEL

3. VOLUME: This knob controls the level of the **Clean Channel** volume. Use this knob in conjunction with the **Distortion Channel's** volume knob to achieve the desired balance.
4. BASS: This control adjusts the amount of low frequency content, shelved at 80Hz, within the channel. Turning the knob to its maximum position (fully clockwise) boosts the low frequencies +10dBu. Turning the knob to the minimum position (fully counter-clockwise) would be flat or no change.
5. MID: This control adjusts the amount of mid range frequency content, peaked at 500Hz, within the channel. Turning the knob to its maximum position (fully clockwise) boosts the mid range frequencies +8dBu. Turning the knob to its minimum position (fully counter-clockwise) would be flat or no change.
6. HIGH: This control adjusts the amount of high frequency content, shelved at 6kHz, within the channel. Turning the knob to its maximum position (fully clockwise) boosts the high frequencies +10dBu. Turning the knob to its minimum position (fully counter-clockwise) would be flat or no change.



7. CHANNEL SELECT: This button allows for the selection between the **Clean** and **Distortion Channels**. When in the “OUT” position, the “GREEN” LED will illuminate, indicating that the **Clean Channel** has been selected. When depressed, the “IN” position, the “RED” LED will illuminate indicating that the **Distortion Channel** has been selected. This function may also be controlled by the BBE footswitch.
Note: The Channel Select switch on the front panel of the BBE 381 will be disabled while the footswitch is connected.
8. CH. 2: This “RED” LED illuminates when the **Distortion Channel** is selected.

DISTORTION CHANNEL

9. DRIVE: This knob controls the amount of “touch responsive” distortion that is applied to the second channel. Minimum distortion is achieved when the “Drive” knob is turned completely counter-clockwise. Turning this knob clockwise increases the amount of distortion and sustain. **Note: The degree of “touch response” diminishes as the “Drive” level is increased.**
10. BASS: This control adjusts the amount of the low frequency content, peaked at 130Hz, within the channel. Turning the knob to its maximum position (fully clockwise) boosts the low frequencies +15dBu. Turning the knob to its minimum position (fully counter-clockwise) would be flat or no change.
11. MID 1: This control adjusts the amount of mid range frequency content, peaked at 340Hz, within the channel. Turning the knob to its maximum position (fully clockwise) boosts the mid range frequencies +15dBu. Turning the knob to the minimum position (fully counter-clockwise) reduces the mid range frequencies -5dBu. The 10 o’clock position would be flat or no change.

12. MID 2: This control adjusts the amount of mid range frequency content, peaked at 750Hz, within the channel. Turning the knob to its maximum position (fully clockwise) boosts the mid range frequencies +15dBu. Turning the knob to the minimum position (fully counter-clockwise) reduces the mid range frequencies -5dBu. The 10 o'clock position would be flat or no change.
13. TREB: This control adjusts the amount of high frequency content, peaked at 4kHz, within the channel. Turning the knob to its maximum position (fully clockwise) boosts the high frequencies +18dBu. Turning the knob to the minimum position (fully counter-clockwise) would be flat or no change.
14. VOLUME: This knob controls the level of the **Distortion Channel** volume. Use this knob in conjunction with the **Clean Channel's** volume knob to achieve the desired balance.

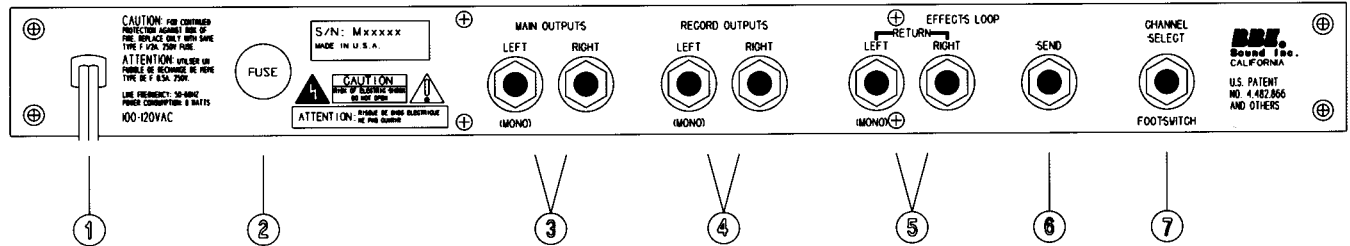
BBE PROCESS

15. IN: This switch engages the BBE process. When depressed, the "IN" position, the "GREEN" LED will illuminate. When in the "OUT" position, the "GREEN" LED will not illuminate, indicating that the BBE process has been disengaged.
16. BBE PROCESS: This control introduces the **BBE process** which has specially modified for the BBE 381 Guitar Pre-amp. The BBE process gives the user a more detailed perception of tonality, added "bite" and increased clarity. The guitar's lower tones will be tightened without losing their thunderous effect... all without adding or creating any additional noise or harmonic distortion. When the knob is in its minimum position, no process is taking effect and the circuit is in its noise suppression mode. Turning the knob clockwise will introduce the BBE process. Adjust the knob to mix the desired amount of process for your own needs. The BBE process also has its own in/out switch for comparison of the processed to unprocessed signal on the front panel of the BBE 381 pre-amp. Experiment with the process. Use the BBE as an extension of the tone controls. Please note that the BBE process is not an effect, but an improvement. A good place to start with the BBE process is to set the knob to its 12 o'clock position and adjust accordingly.
Note: The BBE process is applied before the effects send.

MASTER VOLUME

17. LEFT: This knob controls the "**Main Output**" and "**Recording Output**" levels for the "LEFT" side. This control will not change the channel balance that has been established with the respective channel volumes.
18. RIGHT: This knob controls the "**Main Output**" and "**Recording Output**" levels for the "RIGHT" side. This control will not change the channel balance that has been established with the respective channel volumes.
19. POWER: This switch applies AC power to the BBE 381 Guitar Pre-amp.

REAR PANEL



1. POWERCORD: This is a standard three-pronged AC power cable for connection to any standard grounded 110Vac outlet.
2. FUSE: Replace **ONLY** with same type Fast blow fuse.
U.S., Canadian and Japanese models: 250Vac, 1/2A Fast blow
Standard model: 250Vac, .125A Fast blow

MAIN OUTPUTS

3. LEFT & RIGHT: These stereo, **Right** and **Left** unbalanced 1/4" outputs, are for connecting the BBE 381 Guitar Pre-amp to the next subsequent component in the system. Used in conjunction with the **Master Volume**, these outputs can accommodate any required output level. **Note: The LEFT output should be used if only one output is required.**

RECORD OUTPUTS

4. LEFT & RIGHT: These stereo, **Right** and **Left** unbalanced 1/4" outputs are for connecting the BBE 381 Guitar Pre-amp to a mixing console or tape deck. They have a unique active filter which simulates a speaker cabinet, therefore eliminating any need for "Miking" the speaker cabinet or transporting any unnecessary equipment. **Note: The LEFT output should be used if only one output is required. The Master Volume will effect Record Outputs simultaneously with the Main Outputs.**

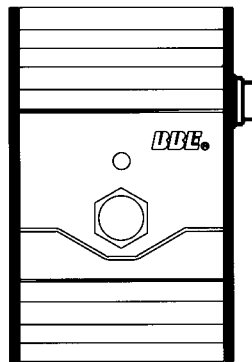
EFFECTS LOOP

5. RETURN: Use these jacks, **Left** and **Right**, to connect to an effects processor's stereo output. If the effector is monaural, use the **Left** return jack. This will cause the effected signal to be the same at both the **Left** and **Right** outputs.
6. SEND: Use this jack to connect the BBE 381 pre-amp to an effects processor's input. This level is approximately -10dBu depending upon the status of the individual channel's **Volume** and **Tone Control** settings.

CHANNEL SELECT FOOTSWITCH

7. CHANNEL SELECT FOOTSWITCH: Use this jack to connect the BBE 381 pre-amp to the **Channel Select Footswitch** via any two conductor type cable.
Note: The Channel Select switch on the front panel of the BBE 381 will be disabled while the footswitch is connected.

CHANNEL SELECT FOOTSWITCH



IMPORTANT:

The front panel channel select switch will be defeated when the footswitch is connected.

The **Footswitch** is for selecting either the **Clean** or the **Distortion Channels**. Using the front panel LED's as reference indicators, the "GREEN" LED will illuminate, indicating that the **Clean Channel** has been selected. Depressing the switch will illuminate the "RED" LED, indicating that the **Distortion Channel** has been selected. **Note: Upon connecting the Footswitch to the BBE 381 Guitar Pre-amp, the operational channel will be that of the last selection determined by the user or factory and is changeable at any time.**

SPECIFICATIONS

Power Requirements: U.S. & Canadian models: 120VAC, 50/60Hz, 8 WATTS
Standard model: 220VAC, 50/60Hz, 8 WATTS

Fuse: Replace with the same type **FAST BLOW** fuse.
U.S. and Canadian models: 250Vac, 1/2A Fast blow type fuse
Standard model: 250Vac, .125A Fast blow type fuse

Dimensions: 19"(W) x 5.5"(D) x 1.7"(H) Shipping Weight: 9lbs.

▲ GENERAL OPERATION

In order to reduce the risk of damage to any equipment, properly connect all cables and power cords before turning on any components in the system. Most important of all, **ALWAYS TURN ON THE POWER AMPLIFIER LAST TO AVOID DAMAGING THE SPEAKERS.**

Select either the **Clean** or the **Distortion** channel via the front panel switch or the **Footswitch**. Next, adjust the tone controls to achieve the desired frequency response. The tone controls are specifically tailored for their respective channels with passive circuitry for the **Clean channel** and active circuitry for the **Distortion channel** to insure accurate, no bleed through, adjustment from one tone control to the next. Used with a variety of guitars and pick-up configurations, the BBE 381 Guitar Pre-amp is able to achieve almost any tone desired.

The BBE process is a unique feature that only BBE Guitar Pre-amps possess. The BBE process, most noted for its ability to increase the clarity and the tonal quality of the music program, is achievable without adding any unwanted noise or harmonic distortion. Use this feature as an extension of the tone controls and as a means of improving the overall tonality of the guitar's signal. Use the front panel switch to compare the processed to unprocessed sound. The advantage of having the BBE process will be further emphasized when used in conjunction with effects processors.

The **Master Volume** controls are separate for each of the right and left outputs. This will allow the guitar player added flexibility when playing live. If the guitar player is utilizing the system in a stereo configuration, it is possible to achieve an adequate volume mix from side to side. Any volume differences, whether created by different impedance speaker cabinets or by an effects processor can be accommodated quickly and easily. **Note: The Master Volumes will affect the Main Outputs and Record Outputs simultaneously.**

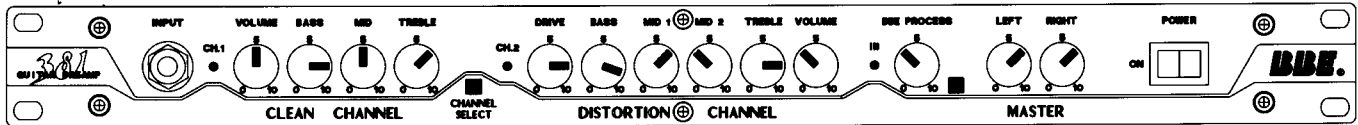
The **Record Outputs** are a welcome feature for any guitar player who is constantly mobile or where space and volume levels are prohibitive. The connection of the BBE 381 Guitar Pre-amp directly to a mixing console or tape recorder while maintaining a warm guitar cabinet sound is now possible. Additionally, the inconvenience of "miking" or transporting a guitar speaker cabinet is eliminated.

The **Effects Loop** on the BBE 381 Guitar Pre-amp will accommodate any rack-mount or pedal effects processor. The effects send level will vary depending on the tone and volume control settings.

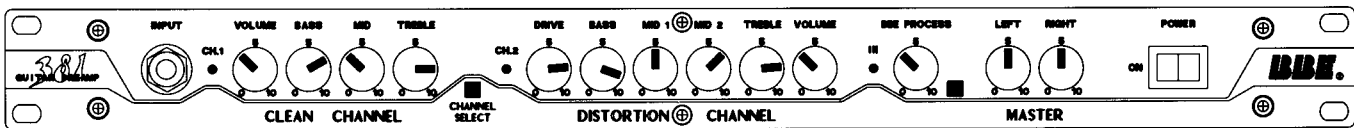
Use the following illustrations to provide elementary configurations and tone control settings.

▲
SUGGESTED TONE SETTINGS

USING THE BBE 381 GUITAR PRE-AMP WITH "SINGLE COIL" TYPE PICK-UPS



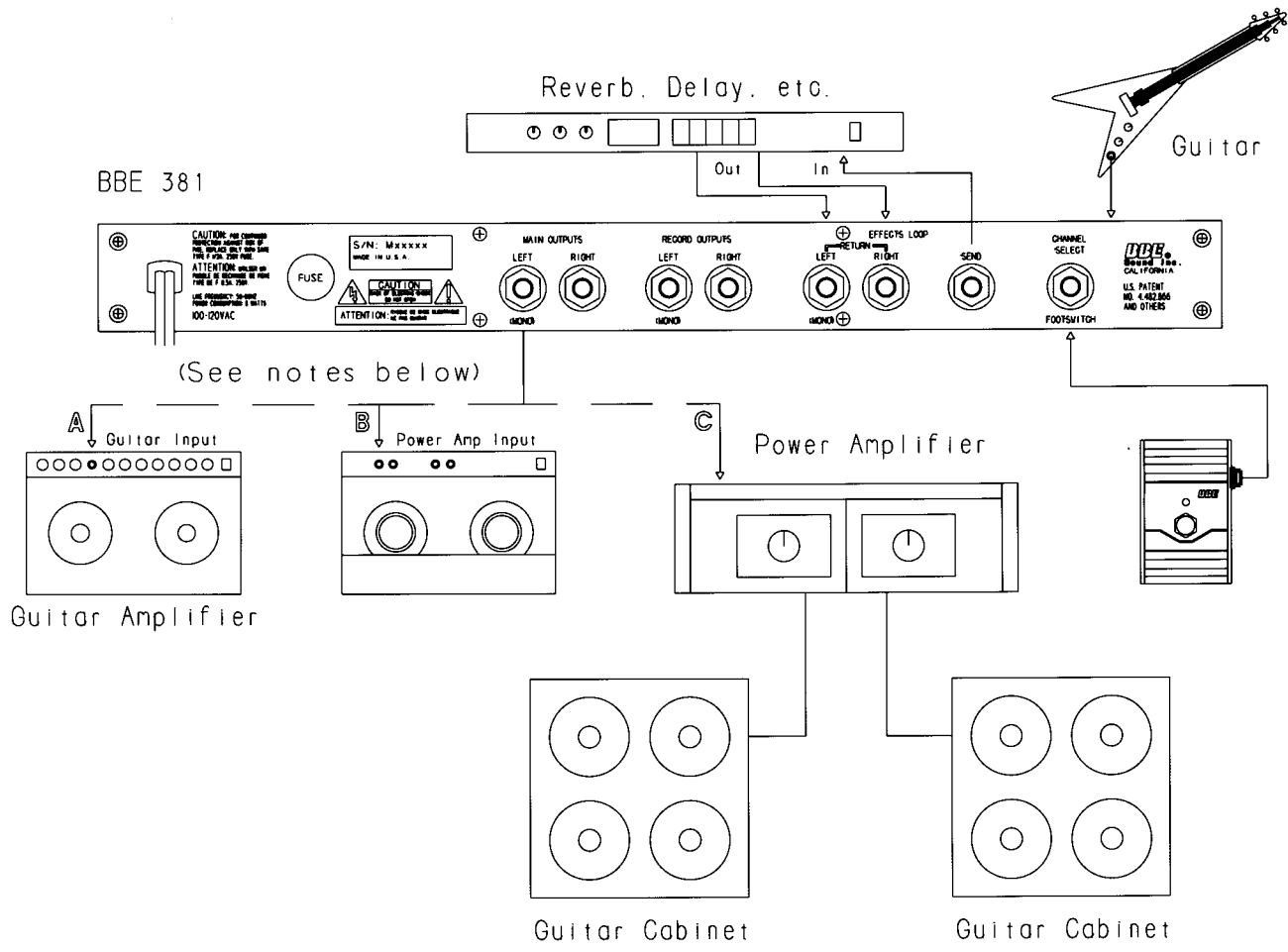
USING THE BBE 381 GUITAR PRE-AMP WITH "HUMBUCKING" TYPE PICK-UPS



Note: Use these settings as a starting point. Your final results may vary due to the guitar's unique tonal characteristics.

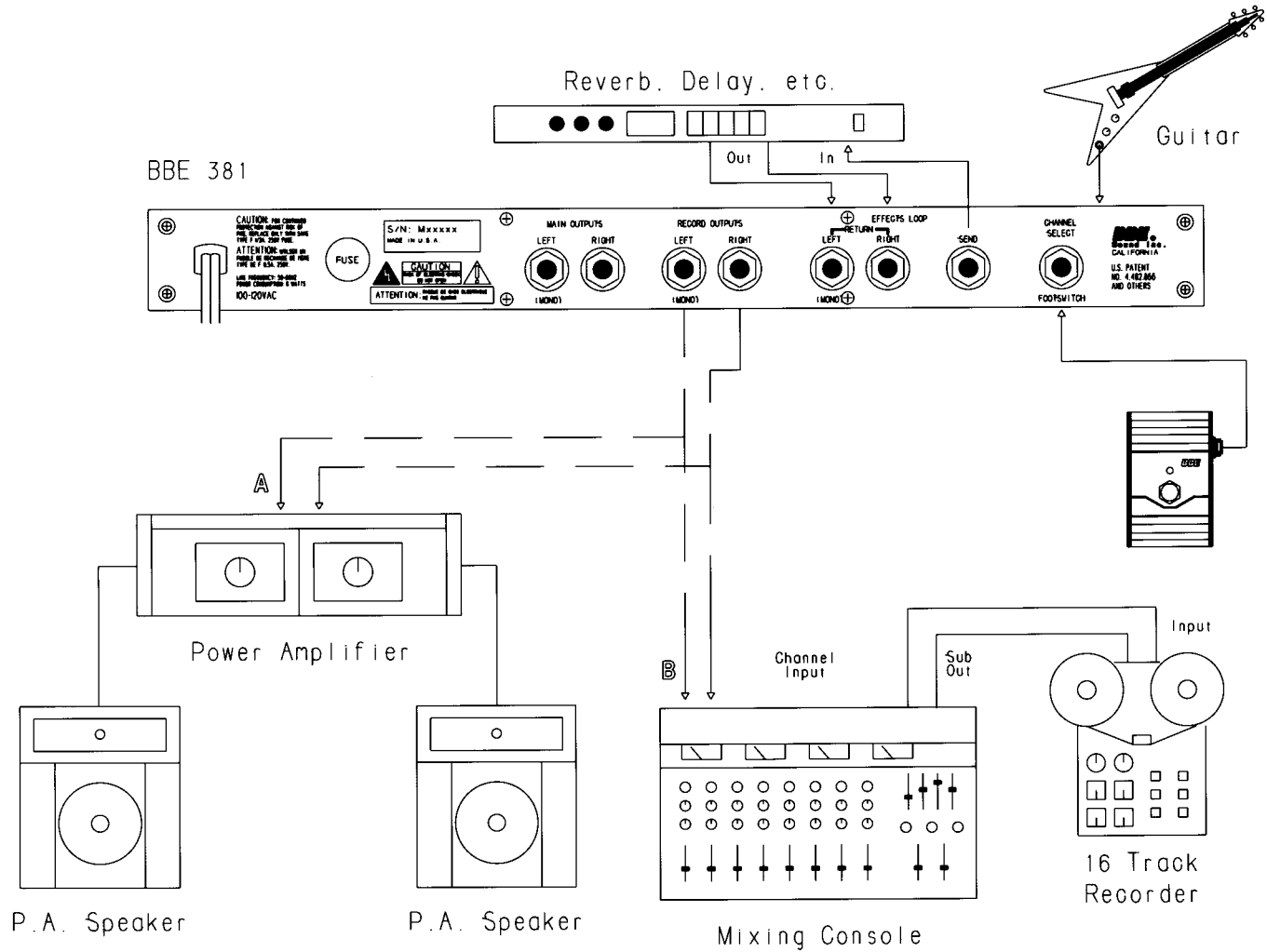
▲
SUGGESTED EQUIPMENT CONFIGURATIONS

USING THE MAIN OUTPUTS OF THE BBE 381 GUITAR PRE-AMP



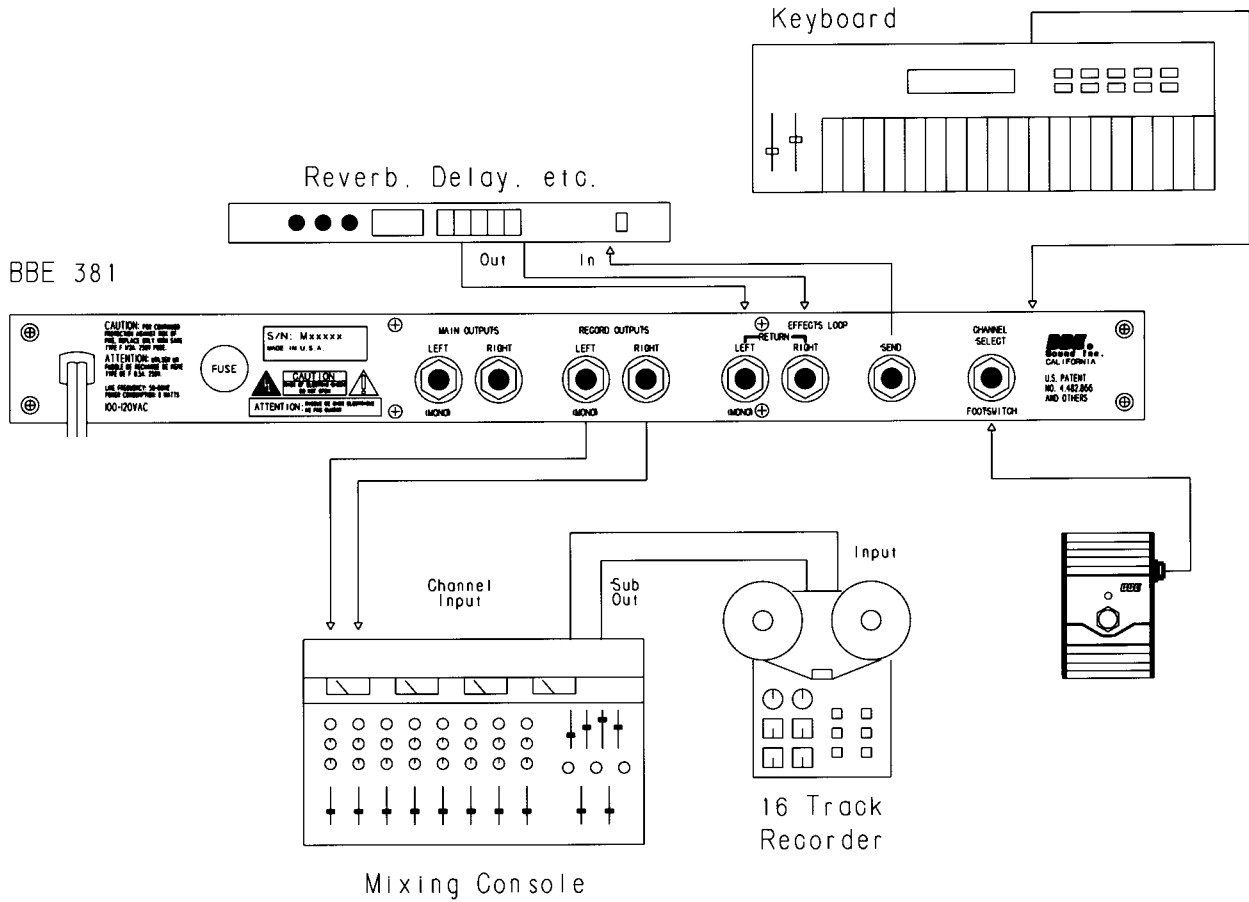
The BBE 381 can accommodate the level requirements of both the “front end” of a guitar amplifier and the input of a power amplifier.

USING THE RECORD OUTPUTS OF THE BBE 381 GUITAR PRE-AMP



In situations where “miking” a guitar cabinet is impractical, the **Recording Outputs** will alleviate that burden. Its special speaker voicing circuit will eliminate the “buzz” normally associated with plugging a guitar pre-amp directly into a mixing console.

USING THE BBE 381 GUITAR PRE-AMP WITH OTHER INSTRUMENTS



Experiment with the BBE 381 on keyboards or any other instruments to create new and exciting sounds!

▲ SERVICE

We recommend that if at all possible a BBE 381 Guitar Pre-amp which requires service be sent to our facility in Huntington Beach, CA. We request that a "RETURN AUTHORIZATION" be issued by the dealer from whom you purchased the unit. If this is not possible, call BBE Sound, Inc. directly at (714) 897-6766, to obtain a "RETURN AUTHORIZATION." Include a copy of the bill of sale with the unit when it is shipped to BBE Sound Inc., so that the service process can be expedited.

As the repair turnaround time is minimal, we request that the unit be sent BBE Sound, Inc. This helps us add reliability data to our files for use in designing future products.

WARRANTY

Warranty registration of the unit to BBE Sound Inc. is not necessary. However, it is strongly recommended that a copy of the bill of sale is retained for future reference.

IT IS THE SOLE RESPONSIBILITY OF THE END USER TO PROVIDE THE BILL OF SALE OR OTHER MEANS OF PROOF OF PURCHASE TO VALIDATE THE WARRANTY IF WARRANTY SERVICE IS REQUIRED.

The BBE 381 Guitar Pre-amp is warranted against defects in material and workmanship for a period of one (1) year from date of purchase from BBE Sound, Inc. or from an authorized dealer.

During this period, we will repair units free of charge providing that they are shipped prepaid to BBE Sound, Inc., 5500 Bolsa Ave, Suite 245, Huntington Beach, CA 92649. We will pay return UPS shipping charges within the USA. All charges related to non-US shipping, including customs clearance, will be billed. The warranty will be honored for the longer of either 90 days from the date of any service or the remainder of the original **1 Year** factory warranty.

This warranty will be considered null and void by BBE Sound, Inc. if any of the following is found:

1. The equipment has been physically damaged.
2. The equipment shows signs of abuse.
3. The equipment has been electrically damaged by improper connection or attempted repair by the customer or a third party.
4. The equipment has been modified without authorization.
5. The bill of sale indicates that the purchase date of the equipment is not within the warranty period.

All non-warranty repairs are warranted for a period of 90 days from the date of service.

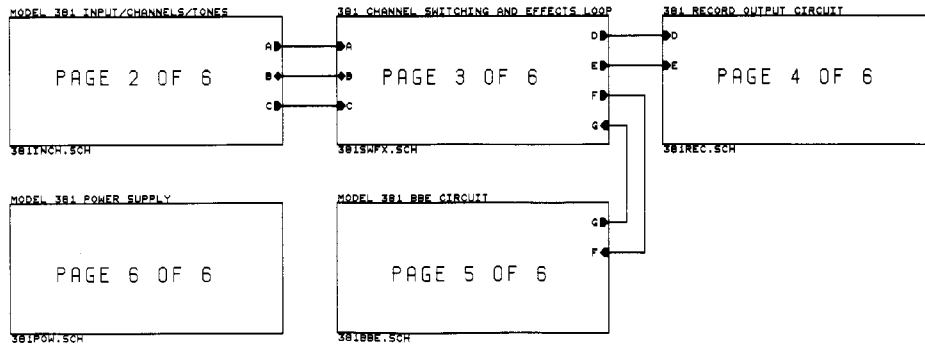
BBE Sound, Inc. is NOT LIABLE FOR CONSEQUENTIAL DAMAGES. Should the pre-amp fail to operate for any reason, our sole obligation is to repair the unit as described above.

MAINTENANCE

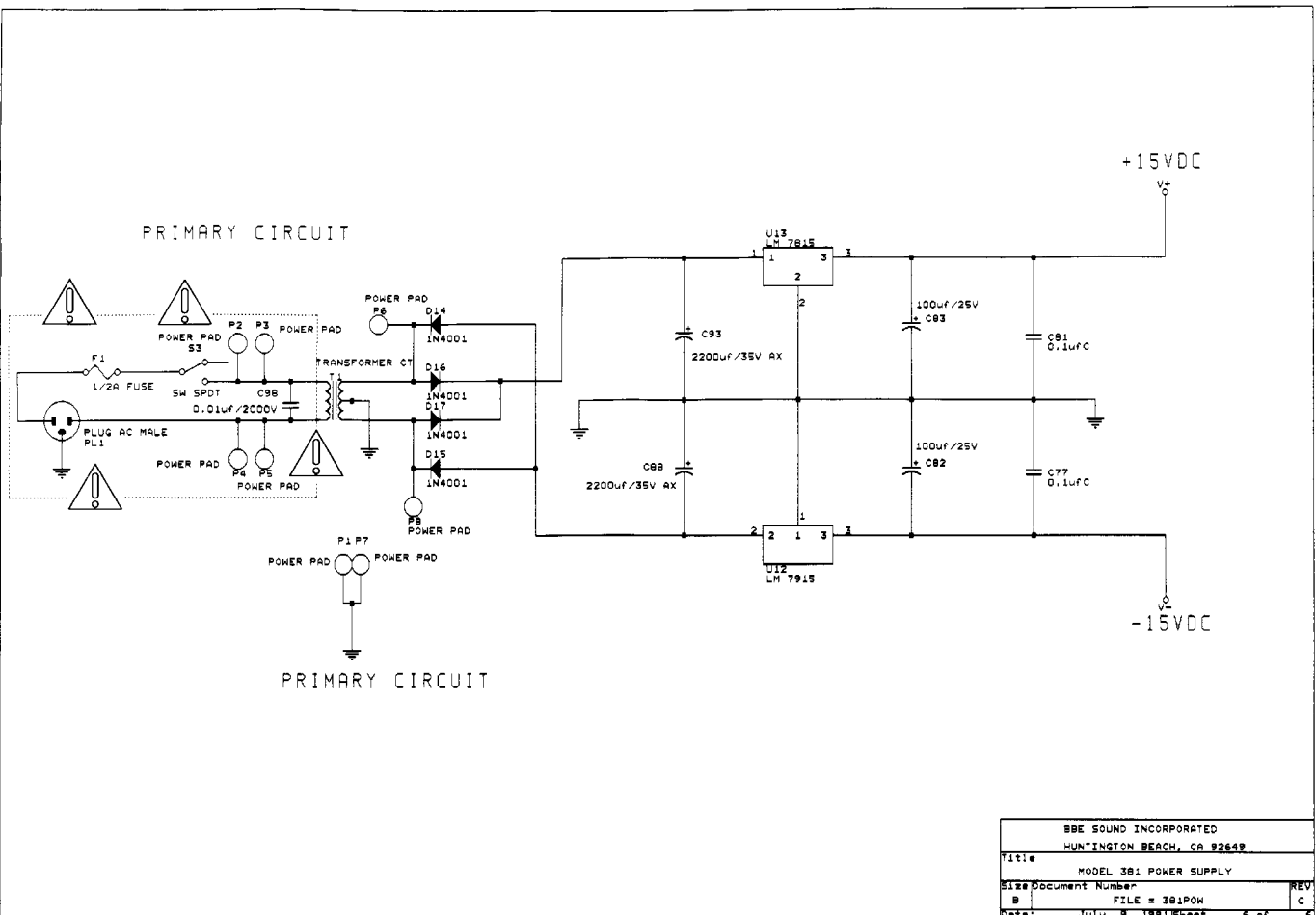
Maintenance of the BBE 381 Guitar Pre-amp is limited to proper cleaning of the unit with a mild household cleaner such as Formula 409™ or Windex™. The chassis and cover are steel finished with a durable polyurethane paint, while the front panel is an anodized aluminum extrusion.

There are no user replaceable parts and the unit should not be opened for any reason unless you are a qualified technician.

Calibration should be performed if parts are replaced or if a performance check-out indicates a problem with calibration. Long term use has shown that over the life of the unit there is little or no drift of the components in the BBE 381 which would cause a change in calibration. A conservative design philosophy has resulted in equipment which should give years of trouble-free service.

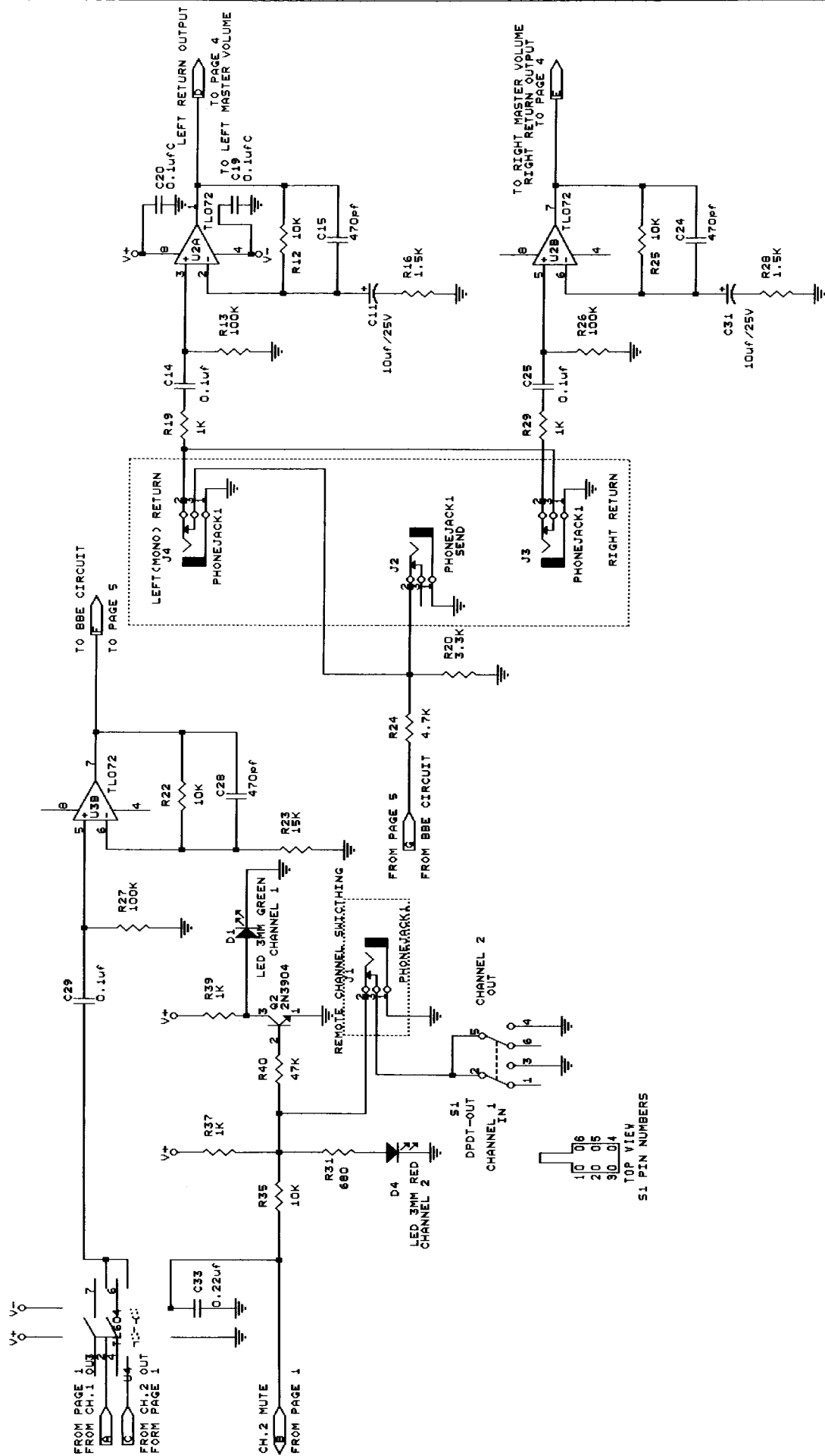


BBE Sound, Inc.		
5500 Boles Avenue Suite 0245		
Huntington Beach, California 92649		
Title Model 391 Guitar Preamp		
Size Document Number	FILE # 391C.SCH	REV
B		C
Date: July 23, 1991	Sheet	1 of 6



BBE SOUND INCORPORATED		
HUNTINGTON BEACH, CA 92649		
Title MODEL 391 POWER SUPPLY		
Size Document Number	FILE # 391POW	REV
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Date: July 9, 1991	Sheet	6 of 6

Specifications subject to change without notice.



ALL PARTS ENCLOSED IN DASHED LINES ARE PANEL MOUNTED

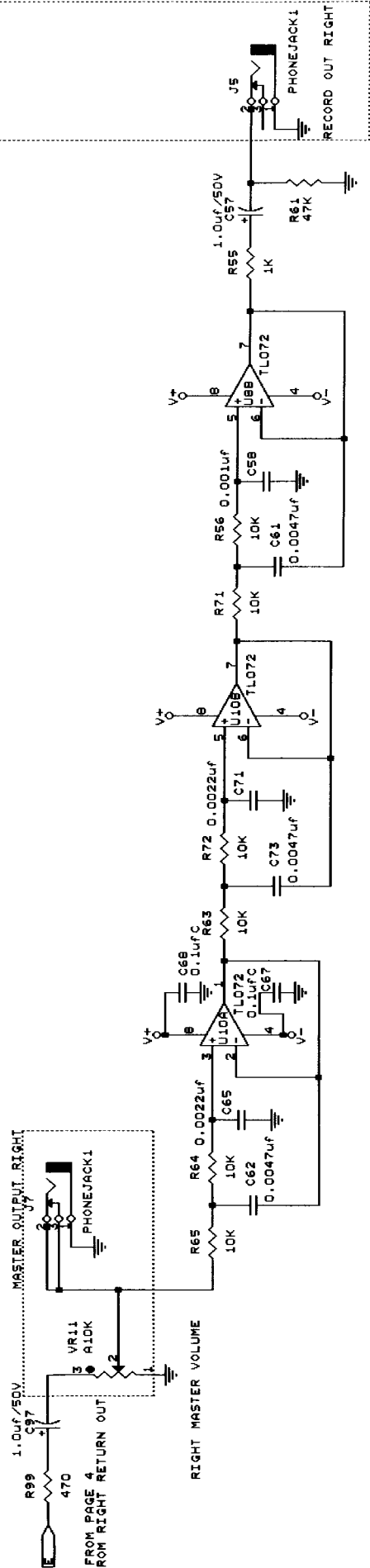
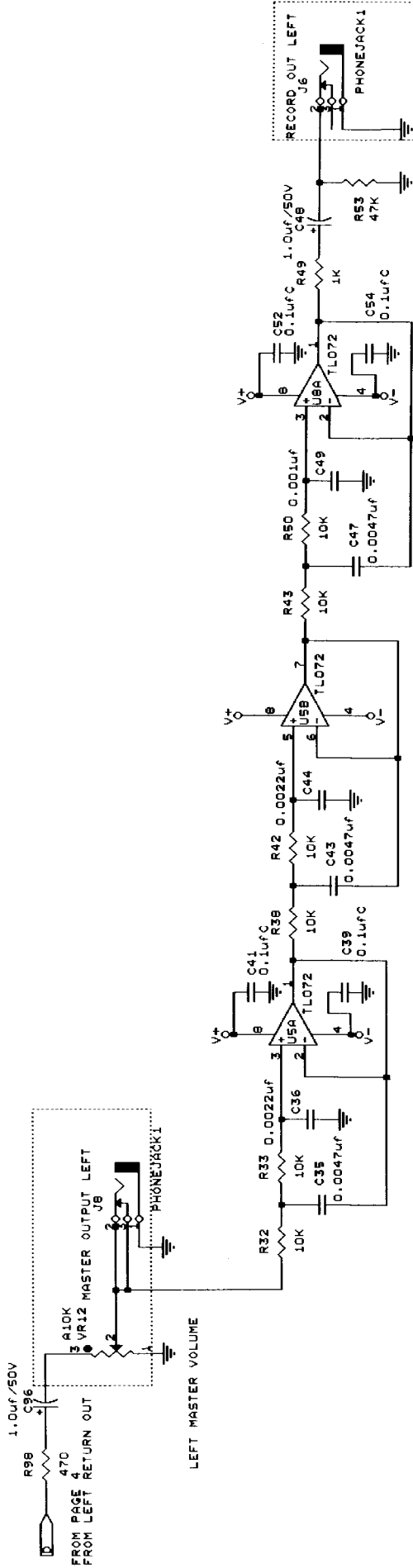
BBE Sound, Inc.
 5500 Boileas Avenue Suite #245
 Huntington Beach, California 92649

Title
 391 CHANNEL SWITCHING AND EFFECTS LOOP

Size Document Number
 B

REV
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Date: July 9, 1991 Sheet 3 of 6

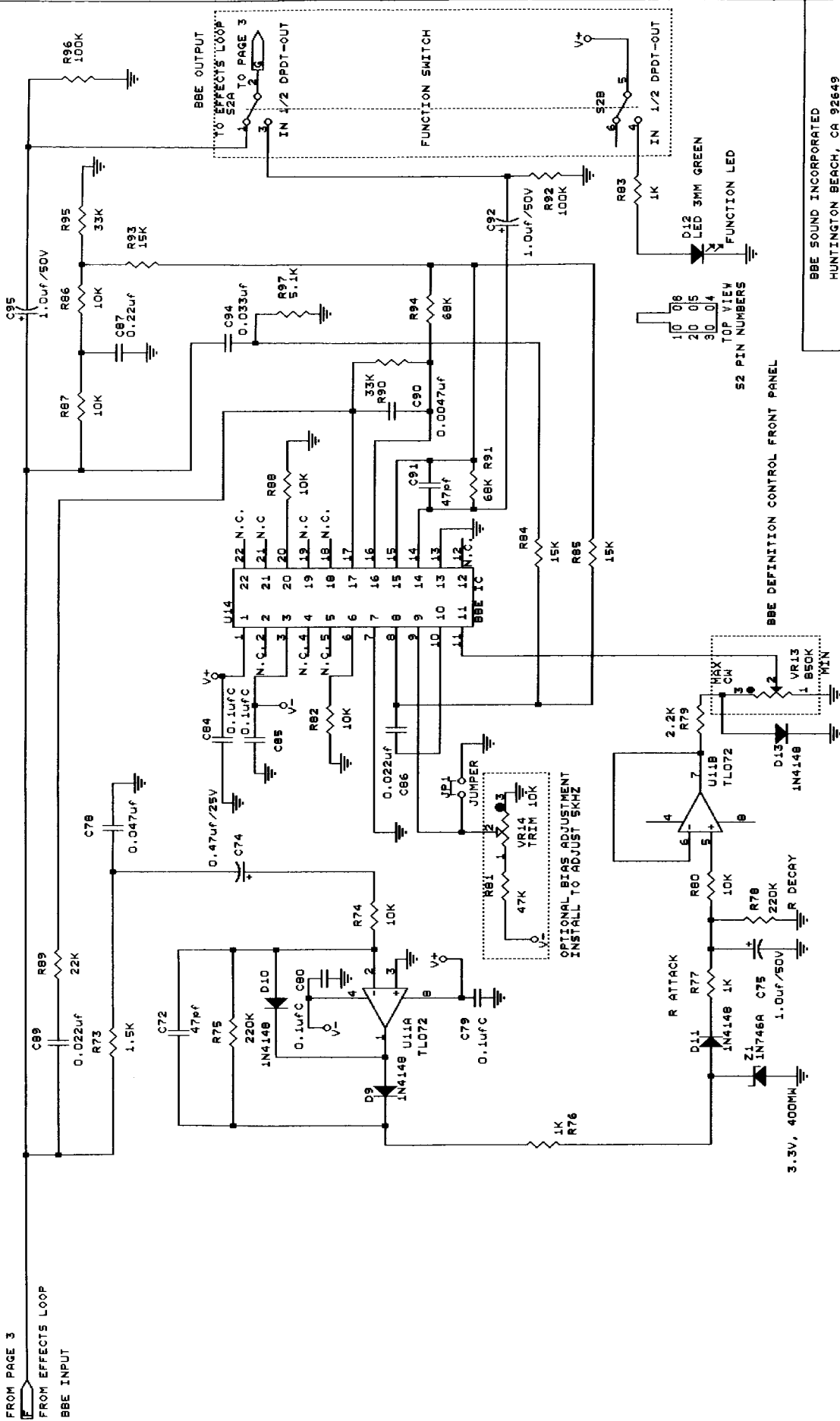


BBE Sound, Inc.	
Huntington Beach, CA 92649	
Title	MODEL 361 MASTER AND RECORD OUTPUTS
Size	Document Number
REV	B
FILE	361REC
Date	July 9, 1991
Sheet	4 of 6

FROM PAGE 3

FROM EFFECTS LOOP

BBE INPUT



BBE DEFINITION CONTROL FRONT PANEL

52 PIN NUMBERS
TOP VIEW

BBE SOUND INCORPORATED
 HUNTINGTON BEACH, CA 92649
 APPROVED BY:

Title	
381 BBE CIRCUIT	
Size Document Number	REV
B	C
Date:	FILE = 361BBE
	JULY 9, 1991
	5 of 6

