Electro·Voice®
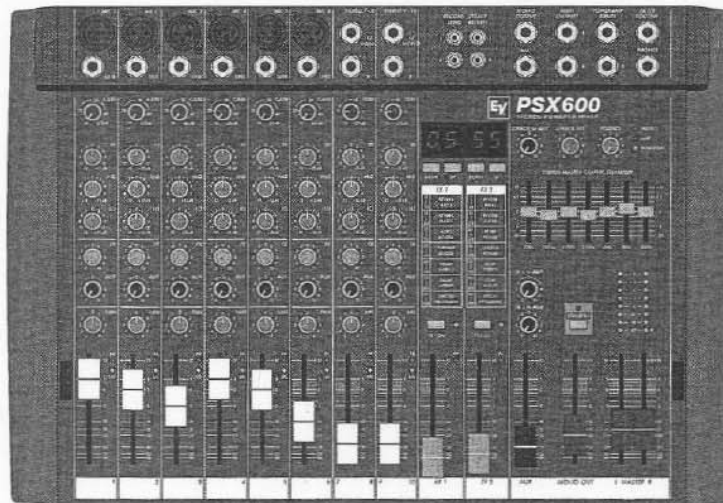## PSX600 STEREO POWERED MIXER

OWNER'S MANUAL

IMPORTANT SAFETY INSTRUCTIONS

CAUTION
RISK OF ELECTRIC SHOCK
DO NOT OPEN

WARNING: TO REDUCE THE RISK OF FIRE OR ELECTRIC SHOCK,
DO NOT EXPOSE THIS APPLIANCE TO RAIN OR MOISTURE.
AVIS: RISQUÉ DE CHOC ELECTRIQUE. NE PAS OUVRIR.

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 an equilateral triangle is intended to alert the user to the presence of important operating and maintance (servicing) instructions in the literature accompanying the appliance.

1.   Read these instructions.
2.   Keep these instructions.
3.   Heed all warnings.
4.   Follow all instructions.
5.   Do not use this apparatus near water.
6.   Clean only with a damp cloth.
7.   Do not block any of the ventilation openings.
     Install in accordance with the manufactures instructions.
8.   Do not install near any heat sources such as radiators, heat registers, stoves, or other apparatus that produce heat.
9.   Only use attachments/accessories specified by the manufacturer.
10. Refer all servicing to qualified service personnel. Servicing is required when the apparatus has been damaged in any way, such as power-supply cord or plug is damaged, liquid has been spilled or objects have fallen into the apparatus, the apparatus has been exposed to rain or moisture, does not operate normally, or has been dropped.

For US and CANADA only:

Do not defeat the safety purpose of the grounding-type plug. A grounding type plug has two blades and a third grounding prong. The wide blade or the third prong are provided for your safety. When the provided plug does not fit into your outlet, consult an electrican for replacement of the absolete outlet.

IMPORTANT SERVICE INSTRUCTIONS

CAUTION: These servicing instructions are for use by qualified personnel only. To reduce the risk of electric shock, do not perform any servicing other than that contained in the Operating Instructions unless you are qualified to do so. Refer all servicing to qualified service personnel.

1. Security regulations as stated in the EN 60065 (VDE 0860 / IEC 65) and the CSA E65 - 94 have to be obeyed when servicing the appliance.
2. Use of a mains separator transformer is mandatory during maintenance while the appliance is opened, needs to be operated and is connected to the mains
3. Switch off the power before retrofitting any extensions, changing the mains voltage or the output voltage.
4. The minimum distance between parts carrying mains voltage and any accessible metal piece (metal enclosure), respectively between the mains poles has to be 3 mm and needs to be minded at all times.
    The minimum distance between parts carrying mains voltage and any switches or breakers that are not connected to the mains (secondary parts) has to be 6 mm and needs to be minded at all times.
5. Replacing special components that are marked in the circuit diagram using the security symbol (Note) is only permissible when using original parts.
6. Altering the circuitry without prior consent or advice is not legitimate.
7. Any work security regulations that are applicable at the location where the appliance is being serviced have to be strictly obeyed This applies also to any regulations about the work place itself.
8. All instructions concerning the handling of MOS - circuits have to be observed.

Note: SAFETY COMPONENT (HAS TO BE REPLACED WITH ORIGINAL PART ONLY)

CONTENTS

FIRST OF ALL, WE WOULD LIKE TO THANK YOU AND CONGRATULATE YOU TO YOUR PURCHASE OF A ELECTRO-VOICE POWER MIXER.

The design of the PSX 600 compact power mixer is based on decades of experience, research and development as well client inter-communication in the professional audio market. With the PSX you own a power mixer that offers a wide range of functionality in a very compact frame. All the troubling experiences with cabling and matching mixers, amplifiers, FX units, and equalizers is history. You now own a device with optimally matched components.

The mixer's ergonomic shape and clearly structured controls allow instant access at all times. Also during the transport you will quickly learn to appreciate the PSX's superiority: recessed handles on both sides, compact dimensions and low weight. Additionally, a sturdy dust hood protects the controls against damaging.

Through its multiple functions, its high dynamic capacity, and extremely low-noise design in combination with the 18bit-Dual-Stereo effects unit and the high-performance 2x300W/4ohms power amplifier, the PSX is best equipped for universal use. No matter, whether on-stage, in a home recording environment or in a permanent installation, Electro-Voice's PSX is the ideal partner to meet your expectations of a professional audio device - effective and reliable.

Of course, you want to operate your new PSX as quickly as possible. But please, take your time to read about all connections, functions, and controls, first. Every section is explained systematically and in detail within this owner's manual: the input channels, the effects and the master section as well as the built-in power amplifier. Through the careful perception of the manual you will learn a great deal about all functions and find some useful and practical tips for the daily operation of the PSX. Even more important, you will find some adjustment instructions that should be painstakingly carried out; plus the description of a typical sound reinforcement installation, the block diagram, specifications, connection guidelines, etc... So, take your time and keep on reading.

UNPACKING AND WARRANTY

Open the packaging and take out the PSX. Detach the protective foil of the FX unit's display. In addition to this owner's manual you will find the mains supply cord and the warranty card. Please check, if the warranty registration form is filled out correctly. Only when this form is completed, you will be able to apply for warranty claims. We grant 36 months of warranty, starting with the date of purchase. Therefore, we ask you to also keep the original certificate of purchase together with the warranty certificate.

INSTALLATION AND CONNECTIONS

Always install the PSX on an even surface to allow for sufficient airflow during the operation. The device is equipped with electronically controlled fans to protect the power amplifier against thermal overload. The direction of the airflow is front to rear. Fresh, cold air enters the mixer at its front side and warm air leaves the device through the ventilation louvres in the rear panel. Do not cover the frontal or the rear ventilation louvres, since otherwise, the PSX would automatically enter the protect mode to prevent the occurrence of thermal overload. When the protect mode is engaged, the device is not going to be damaged. But during this period of time regular operation is not possible.

Before establishing the mains connection, please make sure that the device matches the voltage and frequency of your local mains supply. Check the label next to the mains switch. When switching the power on, the internal ventilators will run for about 2 seconds at full speed to give you an acoustical signal that the PSX entered the operation mode. In addition dust particles that might have gotten into the enclosure are blown out.

The SPEAKER OUTPUTS on the rear panel of the PSX are provided through professional standard Speakon connectors which offer an absolutely secure connection. The pin assignment of these sockets is 1+ (hot) and 1- (cold).
CAUTION: When closing the protective cover for transportation, make sure to pull the channel faders of the channels 1, 2, 3 and the master faders L/R and Mono all the way down. Otherwise, and because of the extremely compact size of the PSX 600, it is possible that those faders get damaged, when pressing the snap-lock. Please also refer to the instructions inside the cover.
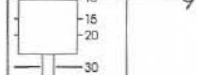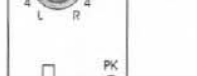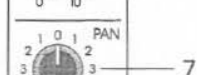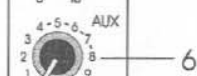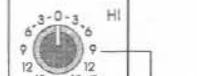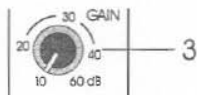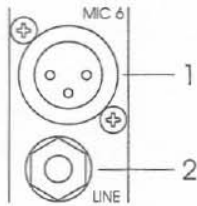
1. MIC

Electronically balanced XLR-type inputs for the connection of low impedance microphones, likewise the ones that are featured in major studio and live mixing consoles. This type of input stage provides extraordinary low noise signal conversion at an extremely low distortion rate (typical .002%) even in the high frequency range.

Generally, any type of microphone can be connected as long as its pin assignment is in accordance to the diagram shown aside. Connecting condenser microphones is no problem. The microphone gets its operational power supply (+24) through the mixer and you can forget about battery replacement times.

+24V PHANTOM
PIN 1: SHIELD
PIN 2: a, +
PIN 3: b, -

The connection of condenser type microphones and dynamic microphone models at the same time is possible and does generally not lead to any trouble. Before you do so, please refer to the owner's manual of the microphone.

The MIC input is laid out for levels between -60dBu ... +11dBu - depending on the setting of the corresponding gain control. Because of their low impedance design and the phantom power these XLR-type inputs are not meant for cascading other mixing consoles or the connection of FX units, keyboards or other electronic equipment. When connecting this kind of equipment, please utilize the LINE level inputs.
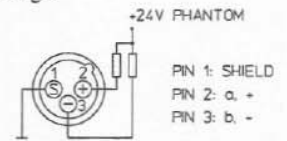
2. LINE

Electronically balanced inputs for the connection of electronic instruments, such as keyboards, drum computers, E-guitars and E-basses with an active output, as well as all other high level signal sources, like additional mixers, FX units, CD player, etc.

The LINE input is laid out for levels between -40dBu ... +30dBu. The connection of balanced or unbalanced signal sources is established through monaural or stereo phone plugs, assigned according to the diagram below. If the device that you are going to connect provides a balanced output stage, using balanced cables with stereo phone plugs is certainly preferable. This type of connection is greatly insensitive to the induction of external noise or HF interference.

UNBALANCED
SHIELD
+ SIGNAL

BALANCED
SHIELD - SIGNAL
+ SIGNAL
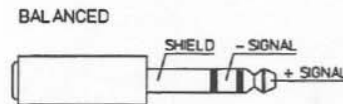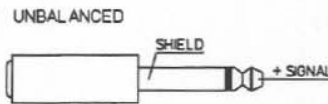
Do not connect signal sources to a channel's MIC and the LINE inputs at the same time, since the signals cause mutual interference, resulting in a level reduction.

One more note: If possible, please, do not connect E-guitars or E-basses with passive, high impedance outputs directly to one of the mixing console's LINE inputs. The LINE inputs of the PSX - like the Line level inputs of mixers from other manufacturers - are meant for the connection of relatively low source impedance as they are found with electronic instruments. The reproduction of the instrument's original sound characteristics will be unsatisfactory - unless this effect is intended. Those instruments should be connected using a special transformer or pre-amplifier with very high input impedance. Musical instruments that are equipped with an active electronic output stage (battery) can be connected without second thoughts.

When connecting signal sources, please make sure that the corresponding channel faders or at least the master faders are at their minimal settings or that the STANDBY button is engaged. This will save you, your audience, and the equipment from extensive wear from unpleasant knacking noise.

3. GAIN

Rotary control to adjust the MIC or LINE inputs' sensitivity. These controls let you optimally adjust the incoming signals to the mixer's internal operation level. Cautious adjusting offers the benefits of an improved S/N-ration and provides you with the full bandwidth of the PSX's outstanding sound capabilities. On the XLR-type connectors an amplification of +10dB is achieved when the control is set all the way to the left and +60dB when the control is set to its maximum position to the right. Especially when dealing with very low input levels, like they occur during vocal recordings or when the sound source is located in a distance, the high gain is extremely profitable. Using the LINE-input, the signal is generally attenuated by -20 dB, while the total adjustment range of 50dB is maintained. The LINE-input's unity gain - no amplification (0 dB) - is achieved at the 20dB mark.

The following is meant as a short note for your assistance on how to determine the correct input level:

Note on how to adjust the input level:

1. Set the gain control and the corresponding channel fader to their lowest setting.
2. Connect the desired sound source (microphone, musical instrument, etc.) to the corresponding MIC or LINE input.
3. Play the sound source at its highest volume setting - respectively, sing or speak as loud as possible directly into the microphone.
4. While you are playing the sound source or singing into the microphone, adjust the input level using the gain control, so that during the loudest passages the PEAK LED is just not lit, but the SIGNAL-present LED lights constantly. This is the basic channel setting, leaving you with at least 6dB of headroom. Which means, you have at least a range of 6dB before signal clipping.

   In case you intend to make further adjustments to the channel's EQ setting, you should perform steps 3. and 4. again afterwards, since changes in the sound shaping section also influence the channel's overall level.

4. EQ SECTION

The mixer's EQ section allows very differentiated shaping of the incoming audio signal within miscellaneous frequency bands. Turning one of the EQ level controls to the right enhances/amplifies the corresponding frequency range while turning it to the left lowers/attenuates the signal of the specific frequency band. Before you begin to alter the sound, all EQ controls should be set to their neutral position; that is: their markers point straight up (detent position). Do not set the EQ controls to extreme positions. Usually, minor changes are totally sufficient and produce the best results in the overall sound. You should use the natural reproduction as an orientation mark and rely on your musically trained ear, being the perfect instrument to judge the sound quality. The moderate use of the MID control is the best remedy to avoid acoustical feedback. Especially in this frequency range you should try to avoid excessive enhancement. Lowering the level more or less in this band will provide you with high amplification rates without feedback.

The EQ section's LO- and HI-controls are designed to work equally effective on both - MIC and LINE -level input sources.

The MID-control is most effective in a relatively wide band around the center frequency of 2.4 kHz. As a matter of fact, especially in microphone applications this specific band turned out to be a critical range. Thus, with almost any microphone it is good advice to slightly reduce the level in this range to gain optimal results.

5. FX

The FX-controls are used to adjust individual amounts of the channel signals to be routed to the FX1 and/or the FX2 unit. The split point of the "dry" signal is POST FADE or in other words: the fader setting also influences the signal that is fed to the FX units.

Before you start to establish the effect mix, these controls should be set at their center position. From this point you can increase or reduce the effect's intensity, depending on your personal preferences.

Please monitor the PEAK LEDs in the FX1/2 channels during a performance. The indicator should only light briefly at the occurrence of high program peaks. If the indicator is constantly lit, please lower the affected channels' send levels at their FX controls. For further information, please refer also to the paragraphs on the FX1/2 units.

6. AUX

The AUX-control is primarily meant for establishing a monitor mix. The signal is split PRE FADER. The resulting mix - controlled via the AUX-controls and present at the AUX-output in the master section - is not affected by the setting of the channel faders. Especially in microphone applications, operating with moderate AUX-control settings prevents that the monitor signal is acoustically fed back to the microphones.

7. PAN

This control determines the position of the corresponding input signal within the stereo image. When this control is set at its center position, the audio signal is fed with equal levels to the left and the right master busses. Through the extensive PAN section circuitry the essential sound pressure level always stays the same, no matter to what position within the stereo image the PAN control is set.

8. SIGNAL / PEAK indicator

The Signal / Peak indicator has a key function during input level adjustment of the corresponding channel, offering optical information of the actual signal level. It provides the possibility to detect the risk of occurring overdrive before you would actually hear the distortion; unlike the mixers of many other manufacturers that either only provide a PEAK indicator or no channel indicator at all.

As described before, the SIGNAL "present" LED should blink in the rhythm of the incoming signal. If this is not the case, you have to increase the gain. If the PEAK LED, on the other hand, blinks frequently or lights up constantly, the corresponding channel is likely to enter clipping and you have to reduce amplification using the gain control. The signal "present" LED lights at levels -30dB below clipping while the peak LED lights at a level of -6dB below the occurrence of overdrive.

It is also a good idea to keep an eye on these indicators during a performance, to prevent the mixing console's input channels form clipping caused by increasing volumes.

9. VOLUME

The channel fader is used to set the volume of a single channel and to establish an accurately proportioned mix of all input signals. The channel faders should be positioned within the range of -5dB to 0dB, leaving you with a degree of control that allows precise matching of relative big differences in the channels' level settings. The overall volume is set through the use of the master faders.

Even though the channel faders offer an additional gain of +10dB, it is good advise not to exceed the +5dB mark. Despite its special negative gain structure, if the PSX's main bus gets "overloaded" with too many "high level" input channels, the summing amplifier could be driven into clipping. It is more reasonable to lower the setting of all faders by about -5dB and increase the overall output level by elevating the master faders. The proportion of the mix and the overall volume stay the same while the risk of clipping is prohibited.
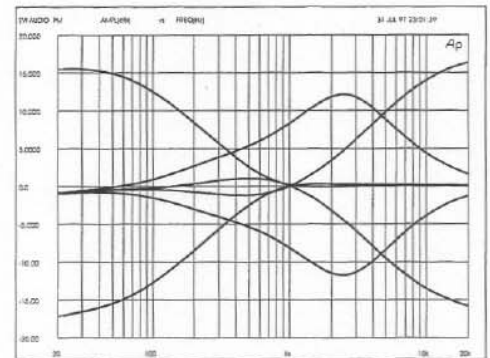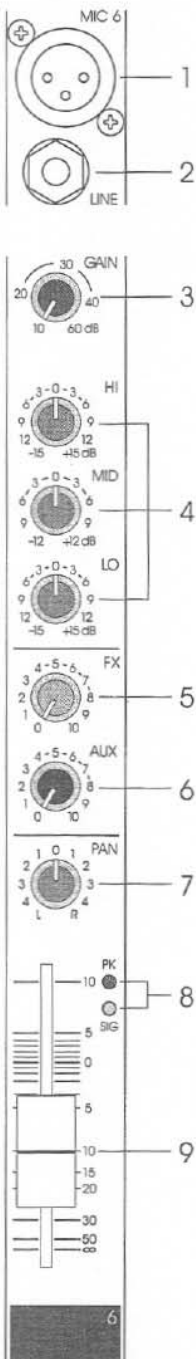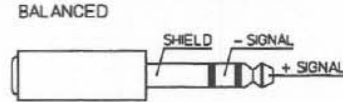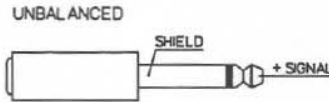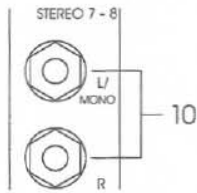
10. STEREO INPUT L/MONO R

Electronically balanced inputs for the connection of musical instruments with stereo output, like keyboards, drum computers, E-guitars and E-basses with an active output as well as any equivalent sound source that provides a high level output; like additional mixing consoles, effect units, compact disc players, etc.

The stereo LINE input is meant for balanced or unbalanced sound sources with levels between –20dBu and +30dBu. For the connection of external devices you can use monaural or stereo phone plugs which are in accordance to the diagram below. If the external appliance is equipped with a balanced output stage, you should preferably use balanced cables and plugs, since this type of connection provides better shielding against RF induction and external noise.

UNBALANCED   BALANCED

In case you want to connect a monaural signal source to one of the stereo input channels, you just have to plug it into the L/MONO input. The signal is internally linked to both channels.

11. LINE TRIM

These controls serve to match the incoming line level signals of a stereo channel to the PSX's internal operation level. The total adjustment range is 30dB. Unity gain – no amplification (0 dB) – is achieved at the 0dB mark. The control allows to attenuate or amplify the signal level in the range of -10dB to +20dB. This range is sufficient for matching most professional, semi professional, and even hi-fi signal sources.

Adjustment is performed in accordance to the description of the gain control within the monaural input channel.

If you are using a keyboard as signal source and you have it connected to one of the stereo inputs, please make sure not to set split zones or layers with channel separation. Otherwise the stereo channel mapping will appear like it is set on the keyboard and you will not have the opportunity to re-position the sound in the overall stereo image, using the controls of the mixer. The better alternative to connect a keyboard with pre-programmed channel mapping is to use two adjacent monaural input channels, leaving you the option of placing the sound in the final mix via the PAN controls.

12. TONE CONTROL SECTION

The mixer's tone control section allows very differentiated shaping of the incoming audio signals within miscellaneous frequency bands. Turning one of the EQ level controls to the right enhances/amplifies the corresponding frequency range while turning them to the left lowers/attenuates the signal of the specific frequency band. Before you begin to alter the sound, all tone controls should be set to their neutral position; i. e.: their marker points straight up (detent position). Do not set the EQ controls to extreme positions. Usually, minor changes are totally sufficient and produce the best results in the overall sound. You should use the natural reproduction as an orientation mark and rely on your musically trained ear, being the perfect instrument to judge the sound quality.
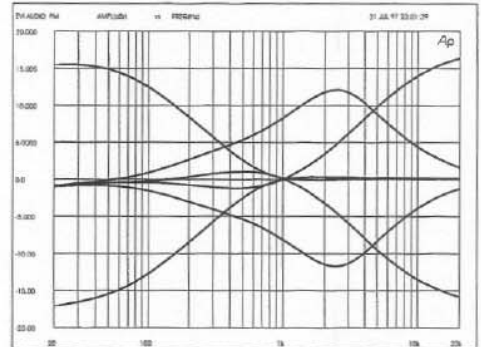
13. FX

These controls determine the amount of the summed L and R signals that are sent to the FX bus. The signal split is POST FADER. For more details on the functioning of these controls, please refer to the INPUT/MONO section of this owner's manual.

14. AUX

These controls determine the amount of the summed L and R signals that are sent to the AUX bus. For more details on the functioning of these controls, please refer to the INPUT/MONO section of this owner's manual.

15. BAL

The function of the stereo channels' BAL controls is equivalent to the PAN controls' function of the monaural channels. If you turn the rotary control all the way to the right, the right signal is outputted to the right output while the signal of the left channel is entirely muted. When the control is set to its center position, the L/R signals are present with their equal intensity on the corresponding outputs. Whenever stereo signal sources are connected to a stereo channel, it is good advice to leave the BAL controls at their center position or make only minor adjustments in either direction. In case a microphone or another monaural audio signal source is connected, the BAL controls function absolutely identical to the PAN controls of the monaural input section.

16. SIGNAL/PEAK

For the stereo SIGNAL/PEAK indicator function, the left and the right channels are monitored independently. The respective highest level reading is indicated, assuring that neither one is already driven into clipping. For further descriptions on how to use this indicator most efficiently, please refer to the previous chapter – INPUT/MONO.

17. VOLUME

The channel fader is used to simultaneously adjust the two volume levels of the stereo signal simultaneously. The functioning is totally identical to the monaural channel fader, as described in chapter INPUT/MONO.
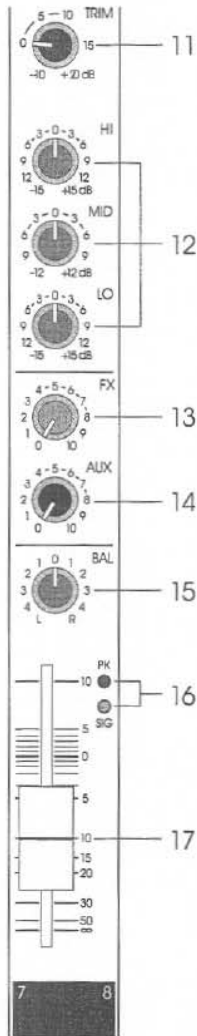
effect types. The programs within each preset group are sorted in ascending order where higher numbers provide the same FX type with increased intensity. The presets 1 - 20 offer high quality reverberation effects that are equally suited for the use during a live performance, in the recording studio or your home recording environment. The program numbers 21 - 40 provide mixed effect types of echo/reverb and chorus/reverb while the numbers 41 - 60 offer different delay effects. The last group from 61 - 99 provides different flanger, chorus, and doubling presets as well as special delay and reverb programs. During the initialization of the FX units, when turning the PSX's power on, the preset 05 (Large Hall 3 Bright) is selected for the FX1 while the FX2 unit is set to preset 55 (Delay Mono 250ms). These two effects are equally suitable for live performances and recording applications. They can be used separately or together. Please, also refer to the supplementary information form **"EFFECT PRESETS"** for a more detailed description of all effect presets. This listing contains all preset names together with the corresponding program profiles, their individual characteristics, and a description of how and in what combination to use them. Take your time to test all presets and select the ones that are best suited for your specific application. The program number "0" lets you select a Slap Back Echo effect that is mainly meant for service and testing purposes. That is the reason why it is not included in the effects listing.

Additionally, we would like to pay some attention to the FOOT SWITCH connector. It is provided to allow the connection of a foot switch pedal to remote control the FX units' EFFECT ON/OFF function. If your foot switch features a LED – like the Electro-Voice FS 11 does – this indicator will light when the effect is activated.
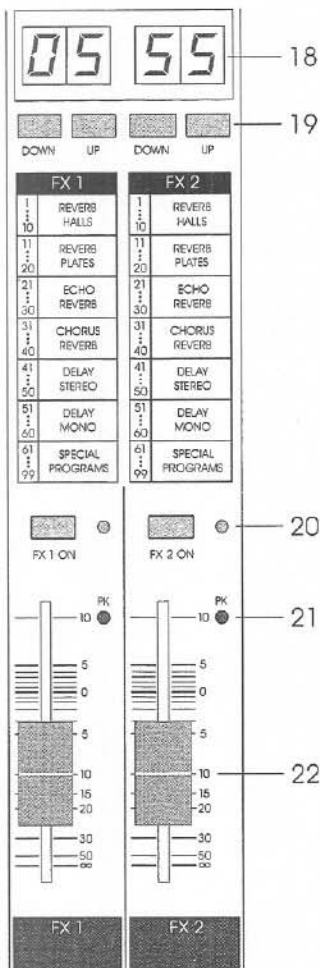
FX1/FX2						
1.......10	11.......20	21.....30	31.......40	41.......50	51.......60	61.......99
REVERB HALLS	REVERB PLATES	ECHO REVERB	CHORUS REVERB	DELAY STEREO	DELAY MONO	SPECIAL PROGRAMS

18. DISPLAY
The display shows always the actual preset number selected for the corresponding effect unit.

19. UP/DOWN buttons
The UP/DOWN buttons are used to select the effect presets. Keeping a button pressed constantly lets you step quickly through the program numbers in either direction.

20. FX ON
These switches are used to activate the internal FX units – the green LED is lit. Please keep in mind that you also can use an external foot switch to turn the FX units on. Also when using a foot switch, the LED shows the actual state of operation. If you want to use a foot switch, the FX ON switch has to be engaged first. The corresponding FX unit is activated and you can use the foot switch to turn the selected effect program on or off.

21. PEAK LED
These indicators signal if the input stages of the internal FX units are driven into clipping. To achieve an adequate S/N ratio, please adjust the FX units' input level as follows:

Note on how to adjust the FX input signal:
1. Establish a "dry" mix – without effect settings – according to the previous descriptions.
2. Set the FX-return fader of the corresponding effect channels to its -5dB position.
3. Use the UP/DOWN buttons to select the desired FX program preset.
4. Press the FX ON switch.
5. Play the sound source of the desired input channel and adjust the desired amount of the FX signal, using the FX controls of the input channel until the resulting effect mix meets your requirements. Repeat this step for all input channels that you want to include in the effect mix.
6. Please make sure that the PEAK LED only lights frequently at highly dynamic signal peaks.
7. Use the FX to AUX controls to add the effect mix to the monitor mix. Use the FX return faders to change the desired amount of the FX signal in the main mix.

It is good advice to pay some attention to the peak indicators when operating your PSX to be able to quickly interact when the signal levels exceed the normal range and enter clipping.
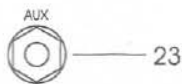
22. EFFECT RETURN FX1 / FX2
These stereo faders are used to determine the effect amount of the main mix.
In case you have to set these faders at a position above the +5dB mark, please check if the FX units input signals are adjusted properly. Otherwise use the FX SEND controls to increase the input levels.

Generally, the AUX channel is used as monitor bus.
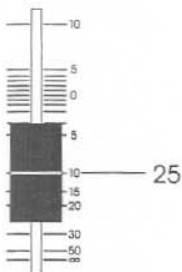
23. AUX SEND

This output serves for the connection of a monitoring power amplifier or active stage monitors. Using the AUX fader, the output level can be adjusted in a wide range up to +20dBu. The AUX send output is designed in Ground Sensing technology to prevent the induction of external noise, even when longer cables are involved.
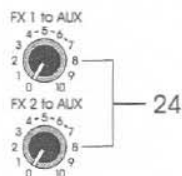
24. FX1/2 to AUX

These controls allow to add the effect signal that is set at the corresponding effect unit to the AUX bus. In case you are using the AUX bus for monitoring purposes, you are able to include the effect signals at the desired levels in the monitor mix. The experience in mixing has shown that the effect level in the monitor mix has to be lower than the level in the main mix, since the distance between the monitor speakers and the artists is much shorter.

25. AUX VOLUME

This fader controls the AUX SEND output level. So when the AUX bus is used for monitoring, this fader lets you control the monitor system's overall volume setting.

26. MONO OUTPUT

At the monaural output the summed, "post-fade" L/R signal of the master is present. It can be used for additional monitoring, side fill, "next door" and Mono-Pa applications, or to establish a delay-line.
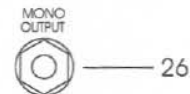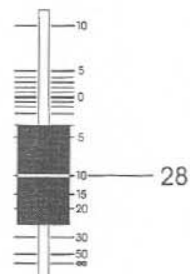
CAUTION:

The outputted signal is affected by the setting of the MONO OUT fader as well as the MASTER faders' setting.
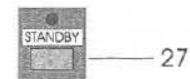
In case you would prefer to control the MONO OUTPUT signal independent from the MASTER faders' setting, this can be achieved by some minor internal modification.
Please consult your dealer for assistance.

27. STANDBY

Pressing the STANDBY button mutes all outputs to which amplifiers could be connected to the PSX. Because this interrupts the signal flow between the mixing stage and the MAIN OUTPUTS, the internal power amplifier's signal is also muted. The STANDBY LED indicates that the stand-by mode is engaged and the input channel signals are not heard over the speaker systems. But, the 2Track Return signal is still fed to the power outputs, providing you with a very comfortable solution to play intermission music during performance breaks.
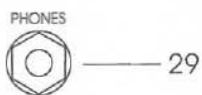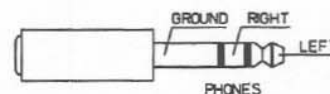
28. MONO OUT VOLUME

This fader controls the output level of the summed L/R master signal at the MONO OUTPUT.
The output level is also influenced by the setting of the MASTER faders.
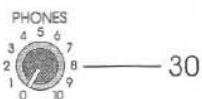
29. PHONES

Stereo phone jack for the connection of headphones with an impedance of 32 – 600 ohms which lets you listen to the PFL master signal.

30. PHONES

This control is used to adjust the headphone's volume.
CAUTION: Make sure to turn the control all the way to the left (minimum setting) before connecting the headphones.

31. RECORD SEND L/R

These RCA-type connectors carry the "pre-fader" master L/R signal. The signal is not affected by the setting of the master faders and therefore mostly used for the connection of cassette decks, open reel tape decks or DAT recorders for recording purposes. The nominal level of the outputs is –10dBV which matches the professional industry standard and home recording applications. Nevertheless, you should use the input gain control of your recording device - as far as it is provided.
CAUTION: On most tape decks the incoming signal is directly carried through to the PLAYBACK outputs. In case you have connected the REC. SENDS and the 2TRACK RETURNS and the PSX's 2TRACK to MASTER control is set to anything but its lowest setting, the recorded signal is again included into the main mix. The delay difference in delay of the two signals is responsible for occurring drop-outs and a general degradation of the sound. In the worst case, activating the RECORD button on your tape deck could lead to very unpleasant feedback noise. To prevent this from happening make sure to set the 2TRACK to MASTER and the 2TRACK to AUX controls to their lowest settings during a recording.
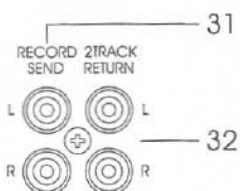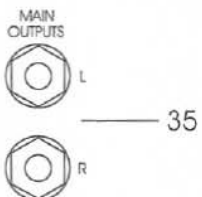
32. 2TRACK RETURN L/R

These connectors let you connect a tape deck, a CD player, an open reel or an additional SUB-mixer. The signal is post master fader and post STANDBY switch providing you with the possibility to play intermission music during performance breaks or check the mix during the rehearsal, using the headphones. You just have to engage the STANDBY switch to mute all channel signals at the main outputs and the monitor bus.

33. 2TRACK to AUX

The signal coming from the 2TRACK RETURNS is internally summed and can be added to the AUX or the monitor bus. The signal's level is set with the 2TRACK to AUX rotary control. Signal summing is done pre-fader to the 2TRACK to MASTER control, i. e. the signal is fed to the AUX output without being influenced by the 2TRACK to MASTER control's setting.

34. 2TRACK Return

This control is used to mix the 2TRACK signal to the main mix (MASTER); post-fader of the master controls.
CAUTION: When adjusting the level of the device that is connected to the 2TRACK RETURNS – CD player, tape deck, etc. – always start with the control adjusted at its minimal setting. Otherwise, depending on the quality of the recording, the outputted volume can cause relative high levels at the power amplifier outputs.

35. MAIN OUTPUTS

The signals at the MAIN OUTPUTS are post L/R master fader and post the 7-band stereo EQ. They are mainly utilized for the feeding of additional, external power amplifiers. Through these outputs it is also possible to establish a two way active system set-up by either connecting an active frequency crossover or active sub woofers. If you want to use the internal power amplifier to supply the high frequency cabinets, the treble signal coming from the crossover has to be fed back to the PSX via the POWER AMP IN connectors.
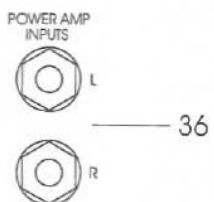
36. POWER AMP INPUTS

These inputs are provided via electronically balanced phone jacks with breaker function. When inserting a phone plug, the signal path is split up between the master and the internal power amplifier. This provides the opportunity to operate the internal power amplifiers from the POWER AMP INPUTS.

37. FX1/2 FOOTSW.

Phone jack for the connection of a Electro-Voice FS11 foot switch, to switch the internal FX units on or off. To accomplish this function, the switches FX1 and FX2 have to be engaged.

38. STATUS INDICATOR

These indicators are to inform you about the momentary operational status of the PSX's internal power amplifier.

The **POWER ON** indicator is always lit when the PSX is in operational mode - i. e. it is switched on. If, after switching on the power, the LED is not lit, please make sure that the PSX's mains cord is plugged in correctly. If this is the case and the LED is still not lit, please contact your dealer.

The **LIMIT** indicator signals that your operating the PSX at the internal amplifier's limit. Frequent blinking of the LED is acceptable, since the amplifier's incorporated limiter prevents the occurrence of distortion. Continuous lighting indicates that a degradation in the outputted sound is likely to happen. In that case, the master level should be reduced.

The **PROTECT** indicator lights when one of the power amplifier's extensive protection functions – against thermal overload, HF-induction, DC at the outputs, and SOAR-protection – is activated. When the PSX is in protect mode, the speaker outputs are muted and the inputs of the power amplifier are short-circuited to prevent the amplifier from being damaged. In this case you should first check if the frontal and/or rear ventilation louvres are blocked. Another cause could be, that you have connected more than three 8ohms speaker systems per power output. Please also disconnect the SPEAKON connectors and check the speaker cables for short circuits.

During the power-on operation, the PROTECT LED always lights for about two seconds. This is normal. It indicates that the PSX's protection circuitry is operational.
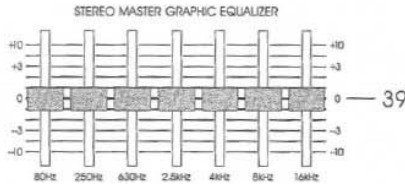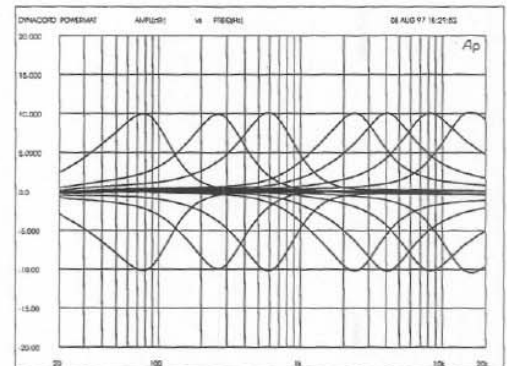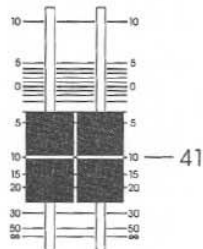
39. 7-BAND STEREO GRAPHIC EQUALIZER

The PSX600's integrated 7-band stereo graphic equalizer is located in the L/R master channel section. The seven frequency bands - each providing ±10dB amplification/attenuation - offer the possibility to optimally match the overall sound to the acoustic conditions of different locations or shape it according to your personal taste.

The frequency ranges as well as the characteristics of the EQ-faders are designed very praxis-oriented. In case you intend to have a clear and highly intelligible sound, which, as a side effect, provides the cymbals with more crisp, you should increase the level setting of the 8kHz or 16kHz band a bit. If the MIDs are nasaling, try attenuating the mid range by some decibels. If you like to provide your sound with more bass and the kick drum with more punch, you have to boost the low frequency range, using the 80Hz or the 250Hz controls. On the opposite, if the overall sound is undefined with too much bass, lowering the levels of these two frequency bands will solve the problem. Especially when using the equalizer, you should be aware of the fact that in most cases less adjustment provides the better result. Thus, your first choice should be to establish the mix without involving the graphic EQ, using only the tone controls in the input channels and see if you get a satisfactory result.
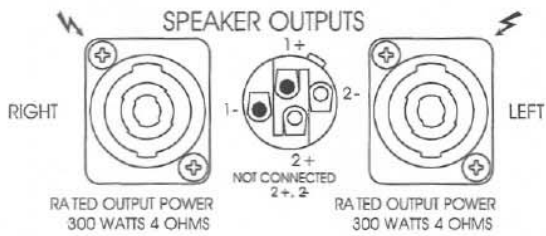
40. MASTER LED-DISPLAY

The PSX offers two 8-segment LED-chains to monitor the output levels of the L/R master signals. The LED-meter's indication range is 33dB, displaying the levels in dBu which are present at the MAIN OUTPUT respectively at the POWER AMP INPUT. In other words: the meter's 0dB mark is referenced to an output signal of 0dBu at the POWER AMP INPUT. Further increasing this level, the power amplifier's maximum input level is reached at the +6dB mark, which equals an output power of 300 watts at 4 ohms per channel. Higher levels are not displayed, since the power amplifier's processor limits the signal at this point which is indicated by the lighting of the LIMIT LED in the status indicator section.

41. MASTER L + R

Level controls to adjust the output signals of the left and right main outputs (MASTER).
NOTE:
Please, make sure that the corresponding input channel faders or at least the master faders are set to their minimal position or the STANDBY switch is engaged, before connecting an external signal source to one of the inputs of the PSX. This will save you, your audience, and the equipment from unnecessary stress resulting from switching or feedback noise.

RIGHT

SPEAKER OUTPUTS

LEFT

1+
1-   2-
2+
NOT CONNECTED
2+, 2-

RATED OUTPUT POWER
300 WATTS 4 OHMS

RATED OUTPUT POWER
300 WATTS 4 OHMS

SPEAKER OUTPUTS   RIGHT / LEFT

The PSX 600 provides professional SPEAKON connectors, offering an electrical and mechanical secure connection which complies to all security regulations allowing the use of high quality speaker cables with a diameter of up to $4 \times 2.5\text{mm}^2$.

The Electro-Voice accessory assortment includes all recommended cables and connectors.

1+
1-   2-
2+
NOT CONNECTED
2+, 2-

POWER

ON

MAINS FUSE
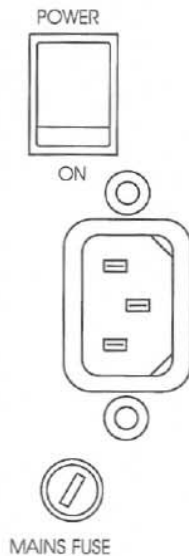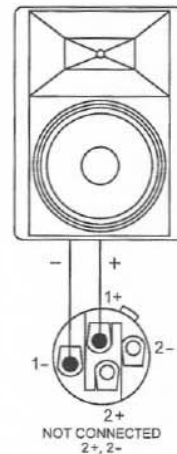
POWER

mains switch to switch the PSX on or off.

The PSX is operational when the POWER ON - LED lights and the power outputs of the power amplifier are activated.

Please make sure to set the master faders to their minimal position or engage the STANDBY switch before turning the power on. This will save you, your audience, and the equipment from unnecessary stress (switching and/or feedback noise).

In case additional external equipment - like an effect unit - is connected to the PSX, please proceed in the following order when switching your equipment on:

1. **external effect unit**
2. **PSX**
3. **external power amplifiers**

When switching the power off, please proceed in the opposite order.

STANDARD INSTALLATION

CABLING

The mains cord is supplied with your PSX. The quality of all other cables is left to your responsibility. Carefully chosen high quality cables are the best precaution to prevent problems from occurring during the later operation. In the following we would like to provide you with some recommendations for the trouble-free operation of your setup.

SPEAKER CABLES

Our experience as a manufacturer of loudspeaker systems has taught us that flexible cables with a rubber jacket and a diameter of 2.5mm2 per conductor, used in combination with SPEAKON plugs and sockets, are the best choice to guarantee the optimal connection of loudspeaker systems. The connection of the SPEAKON plugs to the corresponding connectors on the PSX's rear panel has to be in accordance to the corresponding diagram. We recommend the use 4-wire cables where also the pins 2+ and 2- are connected through. This provides you with the possibility to use these cables in an active 2-way system configuration, as well. Electro-Voice speaker cables with SPEAKON connectors and all other cables, plugs, and sockets are available at your professional audio dealer.

LF-CABLES – BALANCED OR UNBALANCED?

For LF-cabling – all the low current wiring – your best choice are balanced cables (2 signal conductors + ground shielding) with XLR-type connectors or stereo phone jacks and plugs. The cables should be step proof, shielded, and never longer than absolutely necessary. Too many too long cables mostly lead to confusion and generate unnecessary problems.

Of course, you can also connect unbalanced cables with monaural phone plugs to the PSX's in- and outputs and because of its superb grounding managing system, in most cases no interference will occur. Still, there is a minimal risk that problems could arise. Generally spoken, if you have the choice, balanced LF-cables are always the better solution and they should be preferred. Today's modern audio equipment – like amplifiers, equalizers, FX units, mixing consoles, and even some keyboards – offers balanced in- and outputs. In a balanced signal path, the cable screen provides a gapless connection of all metal parts, offering efficient shielding against the induction of external noise. The balanced cabling in conjunction with the common-mode rejection of the PSX's input stage effectively eliminates even existing artifacts of interference. All inputs of the PSX provide balanced audio connections and high common-mode rejection. The mixing stage outputs – AUX, MAIN, etc. – are laid out in GND-SENSING technology – a special, impedance-balanced pin assignment of the output jacks, offering all advantages of the balanced signal transmission, but lets you also connect monaural phone plugs, without a problem. Nevertheless – as mentioned above – when longer cables are involved, using stereo phone plugs and balanced cables are the better alternative. The diagrams below show the pin assignments of plugs and cables like they can be used with the PSX.

12
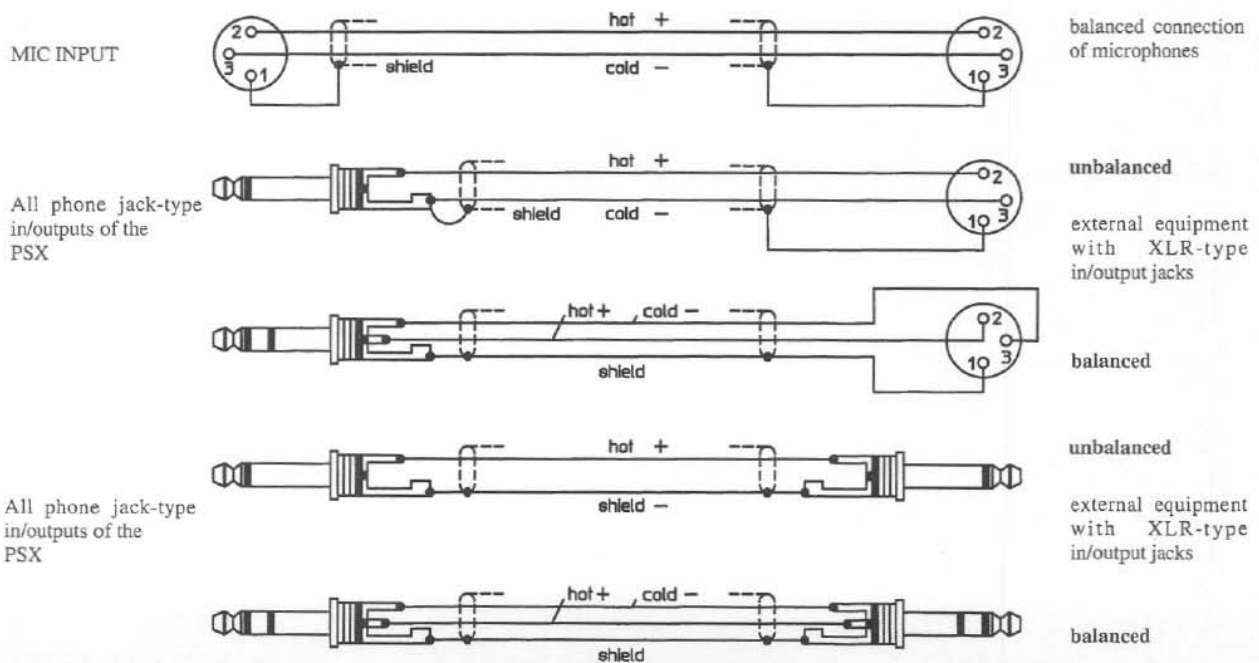
In the following we would like to explain to you how to install a typical sound reinforcement system in passive configuration with incorporated stage monitors. The necessary equipment is:

1 PSX 600
1 Power amplifier for the monitor signal
2 Hi cabinets
2 Lo cabinets
2 Speaker pole-stands or 2 connection rods
2 Stage monitor speakers systems
4 SPEAKON cables (8m) and 2 SPEAKON cables (2m)
1 LF-cable with a stereo phone plug on one and an XLR-type connector on the other end
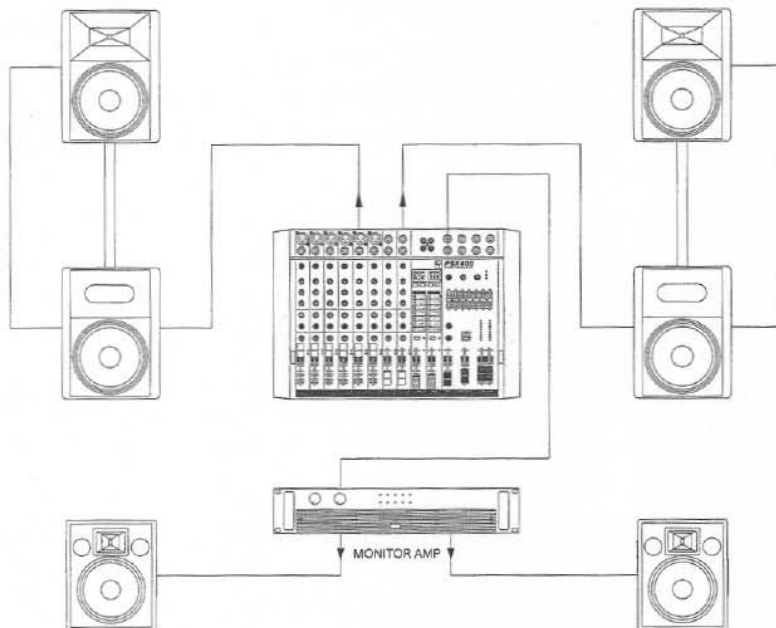
Setting up

- Place the PSX and the external monitor power amplifier in a way that allows their unobstructed operation and connect the mains cord.

- Try to locate the best position for the loudspeaker systems. If possible, the woofers should be placed on the floor while the Hi cabinets' most favorable position is above the Lo cabinets. Please keep in mind, that it is important to have the lower edge of the Hi cabinets approximately at the same height level as the heads of the audience. Either use the connection rods to mount the Hi cabinets on top of the woofers or, if this kind of installation is not possible or if your application does not employ woofers, use separate speaker pole-stands.

- Do not place the left and the right speakers further apart than necessary. The less distance there is between the two speaker "clusters" – the more compact the sound.

- According to the above diagram, use the SPEAKON cables to connect the woofers and the monitor speakers to the PSX and the monitor power amplifier respectively. Make sure not to confuse the channels by accident. Use the short SPEAKON cables to connect the Hi cabinets to the woofer outputs (parallel connection). The two monitor speakers are connected to either one output of the external power amplifier. Set the amplifier inputs to parallel or monaural operation. The amplifier's volume controls provide the possibility to adjust the output levels independently.

- Try to avoid the positioning of the main loudspeaker systems behind the imaginary line of the microphones. Otherwise, if you have to drive the system at higher sound levels, the risk of feedback is very likely.

- After you have installed all microphone stands and all artists have found their seat on the stage, the best place to install the monitor speakers is up front facing the musicians. Nevertheless, please make sure that no microphone is directly pointing in the direction of a monitor. You should also be aware of the individual characteristics of the utilized microphones.

Using the stereo plug-to-XLR-type connector NF-cable, connect the AUX output of the PSX with the external amplifier's input.

STANDARD INSTALLATION

- Connect all microphones – preferably to the monaural inputs of the PSX – and the keyboards and other comparable audio signal sources to the rest of the available inputs.

- Pull all faders down and engage the PSX's STANDBY button. This measure prevents unwanted feedback noise when switching the equipment on.

- First, switch the PSX on and then the external amplifier.
  Then activate the PSX's operational mode through pressing the STANDBY button again.

SOUND CHECK

- First, adjust the input levels of the microphones that are connected to the monaural inputs of the PSX.

  Please proceed as follows:

  1. Set the corresponding gain controls and the channel faders to their lowest position.
  2. Speak or sing as loud as possible into the microphone.
  3. Use the gain control to adjust the level, so that even at loud passages the red PEAK LED is not lit but the green SIGNAL present LED lights constantly.

- In case you are also using the stereo input channels, you can adjust their levels as follows:

  1. Set the LINE TRIM controls and the channel faders to their lowest setting.
  2. Play the corresponding signal source at the highest volume that is to be expected during the performance.
  3. Use the LINE TRIM control to adjust the level, so that even at loud passages the red PEAK LED is not lit but the green SIGNAL present LED lights constantly.

- For adjusting the EQ of the input channels, please proceed as follows:

  1. Slide the channel fader and the master faders a bit up, so that you can hear the sound over the main speakers.
  2. Adjust the EQ controls at their center position.
  3. Play the corresponding signal source.
  4. Starting from the center position, you can adjust the controls until the sound is to your liking. Please, keep in mind that major alteration of the EQ-setting does not necessarily result in an improvement of the overall sound.
     Especially when sound shaping is concerned, less can be more.
  5. Repeat the steps 2 - 4 for all input channels in use.

- If you have musical instruments connected directly to the monaural inputs, follow the descriptions above for the adjustment of the microphones.

- Make sure, that all channel faders, gain controls, and LINE TRIM controls of unused input channels are at their minimal setting. In this way you avoid unnecessary noise at the output.

MAIN MIX

Position the master faders in the range between –30dB ... –20dB.

- Establish a basic mix, using the channel faders, so that the individual sound levels relate to each other according to your personal taste.

- The best range for the channel faders to be set to is in the area of –5dB to 0dB. In this way you are provided with sufficient tolerance for later adjustments.

- Use the master faders to adjust the overall volume of your sound system.

- In case you are using the FX units, please proceed as follows:

  1. Adjust the FX1 return fader at the –5dB mark.
  2. Use the UP/DOWN buttons to select the desired effect preset.
  3. Press the FX ON button.
  4. Play the signal source of the desired input channel and adjust the desired amount of the FX signal, using the FX controls of this specific input channel. Repeat this step for all input channels that you want to include in your effect mix.
  5. Please make sure that the effect channel Peak LEDs only light frequently at highly dynamic signal peaks.
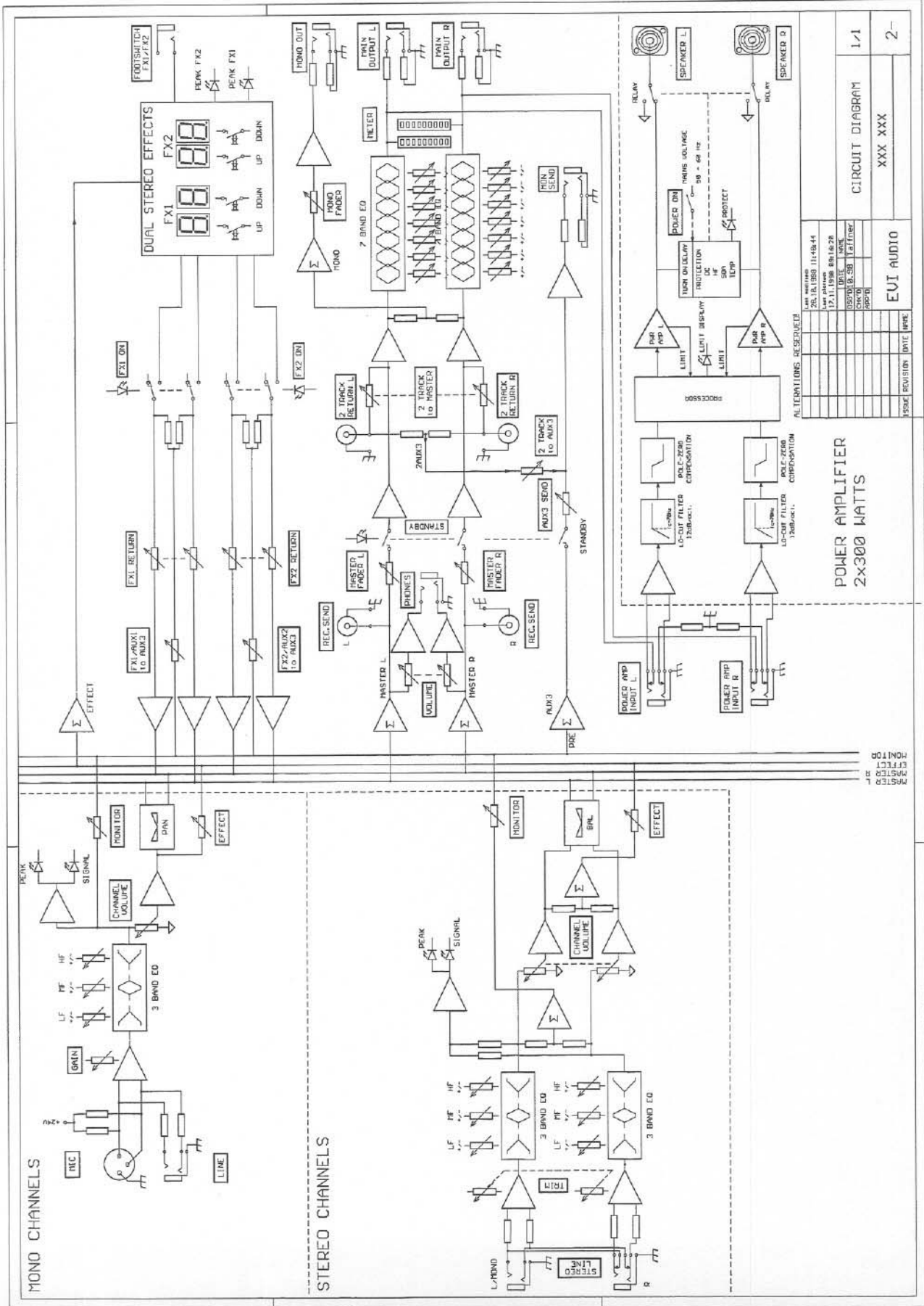
If necessary, repeat steps 1 - 5 for the second internal FX unit (FX2).

Technical Specifications PSX600 Mixing desk in rated condition, Unity Gain (MIC Gain 20 dB), all faders position 0 dB, all pots in mid position, Master fader + 6dB, amplifier rated output power into 8 ohms, one channel driven, unless otherwise specified.

Maximum Midband Output Power, 1 kHz, THD ≤ 1%
into 4 ohms	2 x 340 W
into 8 ohms	2 x 200 W

Rated Output Power, 20 Hz ... 20 kHz, THD ≤ 0.2%
into 4 ohms	2 x 300 W
into 8 ohms	2 x 150 W
Maximum Output Voltage of power amplifier, no load	43 Vrms

THD at 1kHz, MBW=80kHz
MIC input to Main L/R output, +16 dBu	< 0.006%
Power amplifier input to Speaker L/R output	< 0.08%
DIM 30, power amplifier	< 0.03%
IMD-SMPTE, power amplifier, 60Hz, 7 kHz	< 0.2%

Frequency Response, -3dB ref. 1kHz
Any input to any Mixer output	15Hz ... 60kHz
Any input to Speaker L/R output	30Hz ... 40kHz

Crosstalk, 1kHz
Fader and AUX-Send attenuation	> 80 dB
Channel to channel	> 70 dB
CMRR, MIC input, 1kHz	> 80 dB

Input Sensitivity, all level controls in max. position
MIC input	-74 dBu (155 µV)
LINE Input (Mono)	-54 dBu (1.55 mV)
LINE Input (Stereo)	-34 dBu (15.5 mV)
Power Amplifier Input	+6 dBu (1.55 V)

Maximum Level, mixing desk
MIC inputs	+ 11 dBu
Line inputs	+ 30 dBu
All other inputs	+ 20 dBu
Record Send output	+ 14 dBu
All other outputs	+ 20 dBu

Input Impedances
MIC	1.8 kΩ
2 Track Return	10 kΩ
All other inputs	> 15 kΩ

Output Impedances
Record Send	1 kΩ
Phones	47 Ω
All other outputs	75 Ω

Equivalent Input Noise, MIC Input, A-weighted, 150 Ω	-130 dBu
Noise, Channel inputs to Main L/R outputs, A-weighted	
Master fader down	-90 dBu
Master fader 0 dB, Channel fader down	-89 dBu
Master fader 0 dB, Channel fader 0 dB, Channel gain unity	-83 dBu
Signal/Noise-Ratio, power amplifier, A-weighted	105 dB

Equalization
LO Shelving	± 15 dB / 60 Hz
MID Peaking	± 12 dB / 2.4 kHz
HI Shelving	± 15 dB / 12 kHz
Master EQ, 2x7-band, Stereo	± 10 dB
Phantom Power, all MIC inputs	+24 Vdc
Power Requirements, 50Hz....60Hz	120V
Power Consumption at 1/8 maximum output power, 4 Ω	450 W
Dimensions, (WxHxD), mm	455,5 x 175,8 x 340,6
Weight, including lid	13 kg

Optional
Rack-Mount-Kit PM600, (NRS90239)	112 741
Wall-Mount-Kit PM600, (NRS90242)	112 742
Footswitch FS11	110 693

BlOCK DIAGRAM

Dimensions in mm (inch)

455,5 (17.93")

313,1 (12.33")

175,8 (6,92")

340,6 (13.41")

178,2 (7.02")

160 (6,3")

Electro-Voice®

600 Cecil Street, Buchanan, Michigan 49107, Phone 616/695-6831, Fax: 616/695-1304

1. Use appropriate speaker pole-stands to mount the **loudspeaker systems** on the left and right side. The height in which the speakers are mounted should be clearly "above the audience". This ensures that the volume in the front is not too loud, while still achieving sufficient intelligibility in the back.

2. Turn the **loudspeaker systems** slightly towards "the center". This enables the performing artists to monitor their performance even without separate stage monitors.

3. **Microphones** should not be positioned directly in front of the sound reinforcement system's loudspeaker cabinets. Otherwise, unwanted feedback could occur; when the amplified sound coming from a speaker is directly fed back to the microphone.

4. Make sure to set **all** rotary controls on the PSX 600 to their center (12 o'clock) position.

5. Make sure to set **all** faders in the console's lower area to their minimum position.

6. Make sure to set **all** the graphic EQ's smaller faders (top right) to their center position.

7. When connecting the **loudspeaker systems** to the power outputs that are located on the rear panel of the PSX 600, be sure to use Speakon® cables. When establishing the connection, make sure to hear the Speakon® connectors click into place. Otherwise no secure connection is achieved.

8. **Start with connecting a single microphone to Input 1.** Use only heavy duty, highly flexible microphone cables. Thin and inflexible cables – although cheaper – lead to accidents on the stage and are mostly the reason for constant annoyance during setting up of the equipment.

9. Switch the mains supply of the **PSX 600** on, using the Power-On switch on the rear of the appliance. It is possible to employ dynamic as well as condenser type microphones. Phantom power is automatically supplied to all microphone inputs which makes additional batteries for the operation of condenser microphones dispensable. During the system starts the FX unit 1 is pre-set to the Reverberation effect No. 5 and the FX unit 2 is pre-set to the Echo effect No. 55.

10. **In case** the red "StandBy" indicator on the right bottom lights, press the Stand-By switch to activate the appliance.

11. Test the microphone by speaking some loud words while holding it close to your mouth. The green signal present indicator (LED) of channel 1 will light. Turn the "Gain Control" of channel 1 – the control all the way on the top of the channel's module – to the right until the red peak LED briefly blinks. Turning the Gain Control back a little bit to the left sets the optimal signal level for this channel.

12. **Set** the fader of channel 1 to the 0 dB mark in the upper third of the fader path.

13. **Press** the FX1 On and the FX2 On buttons on the right bottom, above the blue faders.

14. **Position** the FX1 and FX2 faders at the "–10 dB mark".

15. Increase the output level by **carefully pushing up** the master output controls (right bottom), while at the same time speaking into the microphone. Your voice is reproduced through the loudspeakers, being enhanced by a echo and reverberation effect. You can change the intensity of either one effect, according to the desired amount, by re-adjusting the FX1 and FX2 faders. You are also able to change the reverberation intensity or the delay time by pressing the Up/Down buttons below the display to select another effect. Within one group of effects the intensity and depths/delay increases with the increasing preset numbers. Individual settings for each input channel are achieved through the use of their separate FX controls.

16. **Once you have followed all instructions mentioned so far, your sound system should function without problem and sound decent, without the need for further adjustment.**

17. **In case** the sound does not fulfill your expectations, it is because of the quality of the employed loudspeakers or microphones. How to find out, if the speakers or the microphones are the cause for the degraded overall sound?

18. **Connect** a CD Player to the 2Track Input (RCA type jacks on the right top of the front panel). Play some tracks of different CDs. If the sound is natural and clear, your loudspeaker systems do not cause the trouble, but the connected microphone. In case the sound is still either damped, screeching or nasaling, test the PSX with another speaker model.

19. **When testing the equipment, trust** mainly your own pair of ears and not just an analyzer – no matter if it is a cheaper or an expensive model. Adjusting sound reinforcement installations with analyzing equipment is not only extremely complicated and time consuming, in most cases actual acoustical results are far from being satisfactory, since normal measuring and analyzing equipment is not capable of computing all the necessary parameters at the same time. The human ear on the contrary does it all in real-time and without additional expenses.

20. **Now, feel free** to test the effect that the sound shaping controls of each channel provide you with. Turn the bass and the treble controls carefully and listen to the changing sound. While the bass control changes "resonance" and "body" of the human voice, the treble control alters its "vivid character" and "intelligibility". Normally, only minor adjustments are necessary to match the individual personal taste.

21. Mid controls are provided **between** the bass and treble controls of the microphone channels. The mid-EQ controls are useful to provide more "presence" to the voice of the lead singer. But be extremely careful. A wrong setting results mostly in a dramatically "bad" sound. Try to experiment with this control to get a feeling for the way it lets you influence the sound.

22. **The master channels** embody a graphic equalizer to match the overall sound to varying locations. Normally, minor changes in the setting will provide you with the intended improvement. Extreme positioning of the EQ-faders mostly results in a degradation of the overall sound.

23. **A note** on the microphone selection. Vocals are best picked up, using dynamic microphones with cardioid polar pattern. These models provide a high proximity effect and good off-axis rejection. Additionally, they are relatively insensitive to popping sounds and feedback. On the other hand, when recording acoustical instruments, such as an acoustic guitar or for the overhead pick-up of a drum-set, vocal microphones are the wrong choice. Here, only condenser type microphones will provide a useful solution. This means, you need at least two different microphone models when recording the performance of a band, including vocals, horns and drums. The only way to find the right choice of microphones is testing, since the degradation in sound, resulting from a wrongly chosen microphone can not be compensated on the mixer.

24. **Finally,** a word on incorporating external third-octave or octave equalizers. They are mainly used in major sound reinforcement installations to compensate for acoustical problems within multiple speaker systems or to eliminate acoustical feedback. Adjusting these equalizers is not only a very complex matter but also extremely time consuming and the overall sound improvement is mostly minimal. If a system does not sound right, testing different loudspeaker systems and microphone models, until a proper sounding combination is found, will provide you on the long run with more satisfaction. On the contrary, if external sound shaping equipment is used, the risk of faulty adjustment causing overall sound degradation is by far greater than the chance for improvement.

PSX 600   Effect - presets

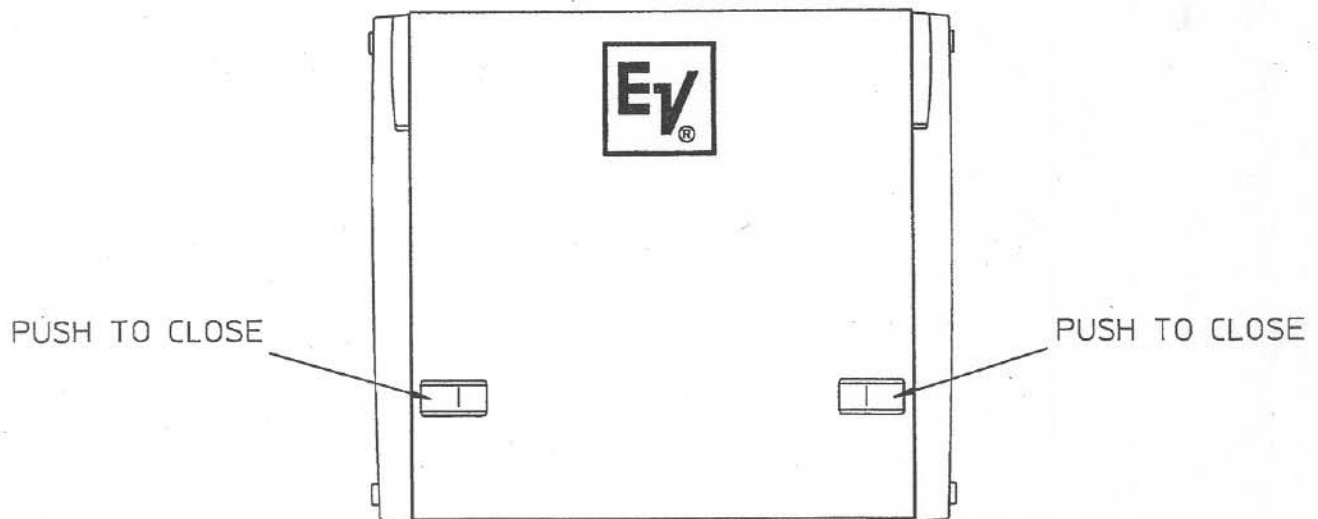| No.:	Effect group:	Description:	Preferably used with:
01 - 10	Reverb Halls	bright reverb, concert hall, church, cathedral	vocals, horn, strings
11 - 20	Reverb Plates	bright plate, no audible reflections	piano, guitar, drums, vocals
21 - 30	Echo/Reverb	bright echo/reverb mix	specially for "Live" vocals, strings, horns
31 - 33	Chorus 1	"light" chorus	piano, guitar, bass, Rhodes, strings
34 - 36	Chorus 2	"deep" chorus	organ, piano, guitar, bass, Rhodes, strings
37 - 39	Chorus 3	"deep" chorus with fading echo	organ, guitar, strings
40	Jet Flanger	real "late sixties" jet flanger	drums, percussion, bass, strings, vocals
41 - 50	Stereo Delay	L/R echoes	combined with a reverb effect good suited for vocals, horns, strings
51 - 60	Mono Delay	centered echoes slowly fading	combined with a reverb effect well suited for vocals, horns, strings
61 - 70	Special Reverb Halls	extremely smooth reverb, concert hall, church, cathedral	vocals, horns, strings, home recording
71 - 80	Special Plates	smooth plate, no audible reflections	piano, guitar, drums, vocals, home recording
81 - 90	Special Delay Mono	centered echoes, vastly fading	fast fading slap back echoes for vocals, percussion. Combined with a reverb effect well suited for vocals, horns, strings
91 - 92	Special Doubling 1	doubling effect without coloration	vocals, horns, strings, organ
93 - 96	Special Doubling 2	doubling effects	snare drum, kick drum
97 - 98	Special Reverse	reverse reverb	snare drum, kick drum
99	Slap Back Short	fast slap back echo without repeats	vocals, kick drum, snare drum
00	Slap Back Long	slow slap back echo without repeats	vocals, kick drum, snare drum

Electro-Voice®

INFORMATION

When transporting the PSX, it is always a good idea to use the metal protective cover that came with the unit to guard against damaging the control shafts.

The cover attaches to the chassis with two plastic knobs immediately behind the input / output section of the panel and with two shaped metal plates that fil and lock into openings on the right and left sides of the control section.

IMPORTANT.

To prevent the cover from falling off or becoming dislodged, it must be correctly affixed. The locks on each side of the cover must be engaged according to ihe drawing below. Please make sure it is securely attached.

PUSH TO CLOSE

PUSH TO CLOSE