FREDERIC WOOD THEATRE

MAIN AUDIO SYSTEM

BASIC OPERATING INSTRUCTIONS

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FREDERIC WOOD THEATRE

MAIN AUDIO SYSTEM

Notes:

- System power switches are on two power bars located on the back of the equipment racks, at eye level. Please switch them on and off in the order indicated.
- For normal use, remove all patch cords from the patch panels, both front and rear of the racks.
- For in-booth listening, recording and editing, the power amplifiers at the bottom of both racks (Amps 1 & 2, 3 & 4, 5 & 6, 7 & 8) should be turned off.
- Leave the two amplifiers (Console Monitor and Stage Monitor) at the top of the left rack turned on. Please do not adjust compressor/limiter #1 which is part of the stage monitor system.
- Proper use of the graphic equalizers, compressor/expander, digital delays and reverb units is too complex to cover in these notes.
- Manuals for system components are to be found in the green loose-leaf binder.
- Please read the accompanying rules for Sound Booth use.

Mixer Terminology: The mixing console consists of ***Input channels*** (1 - 16) through which signals are brought in from ***sources*** (mics, cassettes, CD's, etc.) The input controls (***Gain***, ***EQ***, ***Fader***) set the ***level*** (volume) and ***equalization*** (tonal quality) of the signal, after which it can be sent out through the various ***output channels*** by means of ***assignment buttons*** labeled 1-2, 3-4, and Mix. The ***output*** controls (the faders on the right with blue or yellow knobs) set the volume of the output signal and send it to various tape recorders, mini-disks and amplifiers.

Many of the mixer controls are “push-on, push-off” buttons which remain depressed until pushed a second time. In these notes, a push-button is ON if it is depressed, and OFF if it is up.
Clearly there are lots of controls to adjust, but a means has been provided whereby you can listen to sound cues very easily, through the use of the PFL (pre-fader listen) buttons, which bypass most of the other controls and send the signal directly to the console monitor system.

To listen to a CD:

System:	Power switches	**On**
	Amps 1 - 8	**Off**
CD Player:	Power	**On** (30 sec. warm up)
	Press	***Play***

Mixer: Start with all faders down

Input # 16 (CD)

Gain (red knob)	**12 o’clock**
Line B	**Off**
EQ	**Off**
PFL	**On**

Monitor volume (red knob at right of console) adjust as required.

Trouble-shooting. If sound not audible, make sure that:

CD display is counting time
2-TRK button under monitor volume is OFF
Booth monitor amp has power ON, volume at 10 o’clock.

To listen to a cassette:

Cassette: Power **On**
Monitor switch **On** (red LED is on)
Output fader **7.5**

Press ***Play***

(you should see signal on the recorder LED bargraphs)

Mixer: Input 15 (cassette)

Gain **12 o'clock**
Line **Off**
EQ **Off**
PFL **On**

To listen to a mini-disk:

Mini-disk: ` Power **On**

Press ***Play***

(you should now see signal on the Mini-Disk bargraphs)

Mixer: Inputs 9 + 10 (Mini-Disk)

Gains **12 o'clock**
Line **On**
EQ **Off**
PFL **On** (both inputs)

To play a " tape:

4 - Track deck: Power **On**
reel size **Small** (7" reels)
speed **71/2**
output **repro**
output faders set at "**cal**"

Press ***Play***

(you should see signal on the VU meters)

Mixer; Inputs 11 - 14 (4-track)

Gains	**12** o'clock
Line	**On**
EQ	**Off**
PFL	**On** (4 inputs)

To play an LP or 45 record:

Phono turntable:

speed	**33 or 45**
pitch	**quartz lock**
press	***Start***

lower stylus gently onto record

Mixer: Input 2 (cass/phono)

Gain	**12** o'clock
Line B	**On**
EQ	**Off**
PFL	**On**

Recording:

Notes: Start by switching off all mixer input channels except the inputs from your source. Feedback and other recording noise may occur if you don't.

Never raise the channel ***Gain*** control to the point of making the "peak" LED flash (its above the channel fader). Channel and output faders should not be so high that the output bargraph above the yellow faders goes into the red.

Recording levels: Each recording medium has an ideal signal level for optimal recording quality. Too low, and there will be noise audible during playback; too high, and distortion results, often making the recording unusable. Our equipment incorporates LED bargraphs and VU meters to help you find the right setting.

All equipment is set up so that the maximum level should be "0 dB" or "0 VU", which is usually found near the top of the scale(!) Lower levels are denoted by negative numbers, for example, " minus 20 dB".

Adjust your levels so that, on the cassette or _" recorder, the loudest signals just reach 0, and only momentarily. On digital equipment, overloading is a more serious problem, so be sure that signals never go above -5dB.

Procedure:

Set up as above to listen to the source, then, on whichever mixer input channel(s) you are using:

PFL	**Off**
On button	**On**
Mix	**On**
fader	set to "**0"** on scale (not off)

Mixer output: -**20** yellow (mix) faders

You should now hear the signal again. If not, adjust monitor volume, channel gain controls and mix faders to hear it comfortably.

On mini-disk: input **Bal**
Analog Input **Cal**

press ***Record + Ready***

You should see signal on the bargraphs. If raising gain control and faders doesn't give enough signal level, try switching analog input to uncal and raising the input level controls.

Try to avoid setting some of the level controls in the signal path very high and others very low. It is better for all of them to be at more or less equal settings.

To begin recording ***Press*** ***Play***

To play back recording:

Mixer channels 9 & 10

PFL **On**

On cassette deck:

monitor button **Source** (no LED)
Rec. level faders **7.5**

You should see signal on the bargraphs. Adjust levels as necessary to obtain proper signal.

To begin recording ***Press*** ***Record + Play***

To play back tape:

monitor button **Tape** (LED lit)

Mixer chan. 15: PFL **On**

To record onto _" tape:

Tape deck: input faders set to "**cal**"
record enable press **on** for desired tracks
output selectset at "**input**"
input mic/line **up** (no LEDs)

Mixer: Ensure channels 11 -14 are **off** or have their faders down.

On whichever input channel(s) you are using:

assign buttons 1-2 & 3-4 **ON**

blue "Group" faders 1 - 4 **-15**

You should now see signal on the tape deck meters. Adjust various level controls as required.

To begin recording ***Press Record + Play***

To play back the recording:

select output **Repro**

Mixer channels 11 - 14 :
PFL **On**

To use a microphone in the booth for recording:

Find the "Adapter" box on a cable at the rear of the racks.
Plug a microphone into one of the connectors labeled "Adapter 1".

On the front patch panel: run a patch cord between the jacks labeled "Adapters 1" and "Console microphone inputs A"

Mixer: set monitor level control way down

Input 4 (Mic A):

Line	**Off**
Gain	**9 o'clock**
PFL	**On**

Sneak monitor level up slowly to avoid feedback.

To record: Input 4:

Mix, On, 1-2, 3-4	**On**
PFL	**Off**

Proceed as with previous recording instructions, raising whichever output faders (blue or yellow) send signal to the desired recording device.

To use a microphone on the stage:

Plug the mic into one of the outlets on the proscenium S/L or S/R.

Patch panel: No patch cords are necessary. Each mic line is automatically connected to the console mic input jack directly below it. Determine which console input (A-E) you need, then proceed as above.

Note: To avoid feedback when recording, make sure that power amps are turned off before raising console faders.

To send sound to auditorium and stage:

The same mixing console outputs which feed signals to the recorders also feed the power amps. The amps in turn are normally connected to speakers (or outlets for speakers) backstage or in the house.

Standard configuration:

Console fader	Amp Channel	Speaker Location
Group 1 (blue)	3	U/S/R Gallery (outlet)
Group 2 (blue)	4	U/S/L Gallery (outlet)
Group 3 (blue)	5	House wall S/R
Group 4 (blue)	6	House wall S/L
Mix L (yellow)	1	Proscenium S/R
Mix R (yellow)	2	Proscenium S/L

No patch cords are necessary unless it is desired to change these assignments. The console-to-amplifier connections are on the front patch panel; the amplifier-to-speaker patching is done on the rear panel.