Introduction

Thank you for purchasing an FXR—and congratulations: You now own one of the most sophisticated pieces of audio signal-processing technology available. Offering a level of processing resolution and sound quality of units that can cost thousands of dollars, the FXR uses specially designed integrated circuits and a straightforward user interface that quickly and easily gives you access to all of its features.

Features

- 255 studio effect presets
- Two separate processors
- Up to four studio effects combinations per preset
- Stereo inputs and outputs
- One-touch control—no programming necessary
- Plate, room, chamber, and hall reverb
- Forward and reverse gated reverb
- Stereo chorus and flanging
- Stereo delays and panning
- Slapback and tapped delay
- Stereo echoes
- Designed and manufactured in the United States of America

The FXR provides you with 255 of the finest studio multiple effects combinations, plus it's incredibly simple to use. With the power to create up to four simultaneous effects, you may choose rich combinations of chorus, delay, reverb, flanging, tapped delays, gated reverbs, reverse reverb, panning, special effects, and much more. ART designed a combination of powerful processing and ease of use into the FXR. We strongly suggest that you read and refer to this manual while getting used to your new processor.

Fill in the following information for your reference:

Date of purchase _____

Purchased from _____

Serial number _____

423-5004-101

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Quick Start Instructions

You're probably in a hurry to get your FXR up and running, and you don't want to read the manual (at least, not right now). Okay, we understand. Here are the basics, laid out in simple form. It should take only a couple of minutes for you to read through them, and then you'll be ready to fire up your FXR. Refer to this section if you have any difficulty. And later, when you want to get into more of the details of your FXR, check out the rest of the manual.

Quick Setup

Insert the the supplied AC adapter's plug into the input labeled PWR on the FXR's back panel.

Turn the Input and Output knobs to their full counterclockwise positions.

With a mixer: Connect two cords with 1/4" plugs between your mixer's reverb sends and the FXR's Line Inputs. Connect two more cords between the FXR's Line Outputs and your mixer's returns. Set the FXR's mix control to its midpoint.

Straight into an amp: If you're patching the FXR into a guitar (or other instrument) amplifier, use one cord between the instrument and the FXR's left Line Input. Run a second cord from the left Line Output to the amp's input. If the amp has stereo input capabilities, connect another cord between the FXR's right Line Out and the amp's second-channel input. You can also plug a second output from your instrument (or the output from another instrument) into the FXR's right Line In.

In an amp's effects loop: If you're patching the FXR into a guitar (or other instrument) amplifier's effects loop, and it's mono, use one cord between the amp's effects send jack and the FXR's left Line Input. Run a second cord from the left Line Output to the amp's Effects Return jack. (If the amp has stereo returns, use another cord to connect the FXR's right Line Output to the amp's other effects return jack.) Set the FXR's mix control to its midpoint.

Note: If you need further help doing your initial hook-up, refer to the diagrams and information on pages 12 through 16.

Plug the FXR's AC adapter into the wall socket (the FXR is now powered up). Now turn on your mixer or amp and your monitor amplifier.

Make sure that your mixer's or amp's send level control is turned up and that signal is being sent to the FXR. Turn the FXR's Input knob clockwise until the FXR's Signal LEDs glow. If the FXR's Clip LED glows constantly, turn down its Input level—the Clip LED should only glow when a really loud instantaneous signal reaches the FXR.

Now turn up the FXR's Output level, and raise the return level on your mixer or amp. You should be hearing the FXR's effect. If not, check your connections and your monitor amp (you did remember to turn it on, didn't you?).

Select program banks with the Bank Selector (at the left end of the front panel) and the presets with the Bank Selector (in the middle of the panel). For a list of the presets, arranged according to bank and number, see page 17.

Hammer your keyboard. Wail on your guitar. Mix your entire album. And, of course, try all of the presets. Don't hold back. And when you're ready, check out the rest of this manual.

FXR FRONT PANEL CONTROLS & INDICATORS

Bank Selector

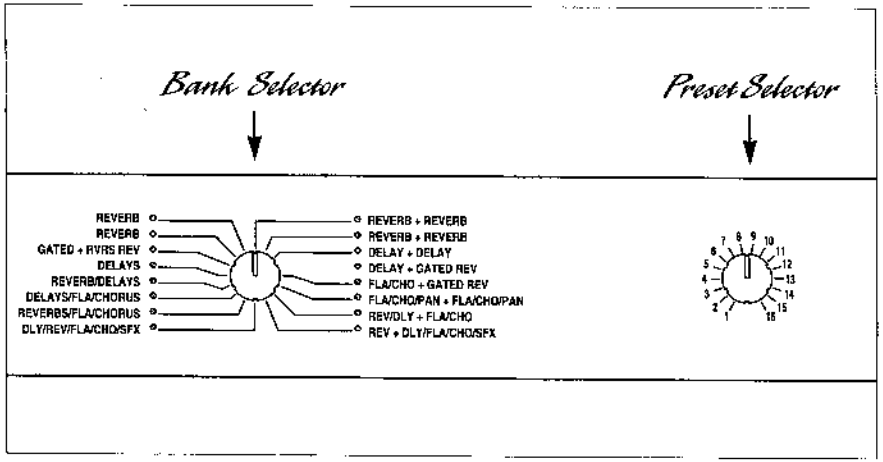
The Bank Selector on the left side of the front panel selects from the 16 banks of studio-quality effects combinations. Note that it doesn't stop turning once you reach the first or sixteenth bank. Therefore, you can switch directly from the sixteenth to the first bank (or vice versa) by continuing to turn the knob, rather than turning back through the other banks in between.

Preset Selector

The Preset Selector in the front panel's middle selects one of the 16 presets in each Bank. Like the Bank Selector, the Preset Selector lets you switch from the sixteenth to the first preset (or vice versa) by continuing to turn the knob.

Clip & Left Channel/Right Channel Signal LEDs

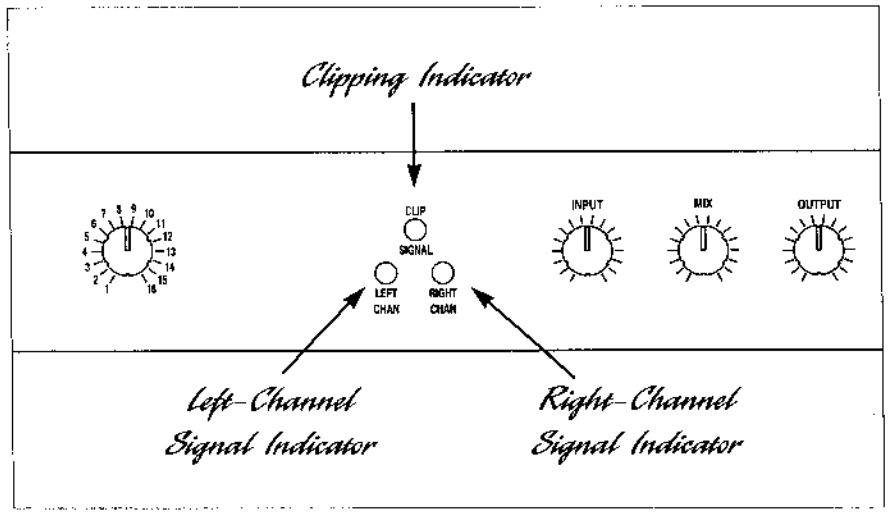
Three front-panel LED indicators show the status of the input signal level as it enters the digital processor. The Left Channel and Right Channel Signal LEDs indicate the presence of an audio signal. If the Clip LED is lit, it indicates that the digital processor is getting too much input, resulting in undesirable distortion, also known as clipping. For maximum dynamic range, the Signal LEDs should be on most of the time, with the Clip LED briefly flashing only on transients (high-energy bursts, such as loud snare drum hits).



Input

The Input knob lets you govern the signal intensity reaching the FXR's input circuitry so that you can set the optimum level. This is important, since a signal's level at this stage has a bearing on the signal-to-noise ratio and the amount of distortion present in the final output. A little experimentation will give you a good feel for the controls. Too little signal results in a disproportionate amount of noise, while too much (indicated by a constantly glowing Clip LED) sounds distorted and gritty. Use the Signal and Clip LEDs to help guide you, but use your ears, too.

Note: The Input knob's setting is global, meaning that it affects the FXR's input level, regardless of what program is engaged.



Mix

You can vary the mix of dry (unprocessed) and wet (processed) signals with this knob. When the Mix knob is set fully counterclockwise, no effect is present in the outputs, while turning it fully clockwise produces effects only. At the midpoint, the mix contains approximately equal parts effect and dry signal.

To obtain the strongest effect from flanging, chorusing, and panning presets, set the Mix to full effect.

If you employ the FXR in a mixer's reverb send/return loop, you'll probably want to turn the mix control to its effects-only setting, since you'll already have plenty of dry signal in the mixer to work with. If you patch the FXR into one of the mixer's input channel effects loops, though, you will likely need to use the mix control, since most mixers are configured so that the channel's entire signal passes through this loop. Consult your mixer's manual for further information.

Note: When the FXR is placed in a guitar or other instrument amp's effects loop, it may be necessary for some dry signal to be present in the FXR's output. (Consult the amp's manual to determine the correct setting.)

Output

The Output control governs the amount of signal leaving the FXR. Depending on the type of equipment connected to the unit, and its input needs, it's almost mandatory to experiment in order to find the optimum level. Check your other equipment's manual for hints on setting appropriate input levels, or follow the tips outlined in the section above. Use your ears as a guide, too.

Like the Input knob, the Output knob's setting is global, meaning that it affects the FXR's output level, regardless of what preset is engaged.

INSTALLATION

The FXR may be used in a variety of setups including: mixing consoles with reverb send and return facilities, and in the effects loop of an instrument or P.A. amplifier. Self-contained in an all-steel, single-height 19" rack-mount enclosure, the FXR is designed for continuous professional use. Because the unit is compact and lightweight, mounting location is not critical. However, for greater reliability we recommend that you not place the FXR on top of power amps, tube equipment, or other sources of heat.

Powering The FXR

The FXR is powered by an external AC adapter. Always make sure that its output jack is securely plugged into the rear of the FXR, and that the adapter is held firmly in an electrical outlet. Never operate the FXR or AC adapter in the rain or in wet locations. If the AC adapter's cord is ever cut, discontinue using it and replace the adapter with a new one. To prolong its life, unplug the adapter when not in use. Alternatively, if the FXR is mounted in a rack, plug the adapter into a switched power strip so that you can conveniently turn it off with your other gear. Refer to the label on the adapter for proper operating voltages.

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INPUTS & OUTPUTS

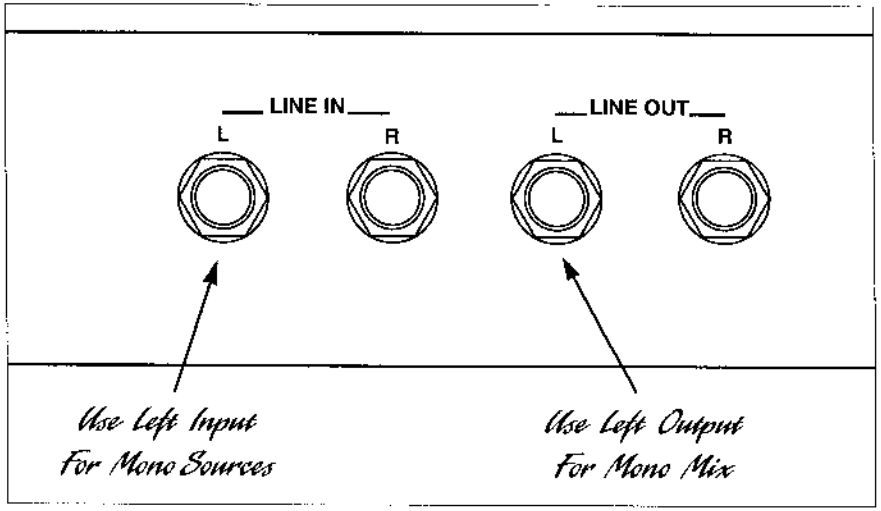
Despite the FXR's sophistication, it's easy to interface the unit with other equipment. All inputs and outputs are located on the rear panel. Standard 1/4" inputs and outputs make patching simple. Note: For best audio quality, always use high-quality cables.

Because the FXR is designed for line-level or instrument operation, we don't recommended plugging microphones directly into it. Instead, either use a preamp, a mixer, or an amp's preamp section to boost the level first (use the effects loop output or reverb send from a mixer or amp). The higher signal level from a preamp or effects loop assures an optimum signal-to-noise ratio in the FXR, keeping hiss and distortion to a minimum.

Line In L & R

The Left and Right inputs are single-ended (unbalanced) with an impedance of 500k ohms. True stereo processing is accomplished by using both inputs in a left/right application. If only one input is used, plug into the left channel; then the signal is automatically routed to both channels' inputs.

Note: Programs that provide panning are most effective if you only send a signal into the left input, since the processor takes that signal and distributes it between the two outputs.



Line Out L & R

The Left and Right outputs are single-ended (unbalanced) with a source impedance of 1k ohm, and can provide a stereo or mono output. When a true stereo signal is applied to the inputs, the resulting output is true stereo. That is, the left and right channels behave as if they were two separate signal processors. If both outputs are used and the FXR receives a mono input signal, a stereo image is produced. If you're only supplying the FXR with a mono input, use the FXR's Left input. And if you use only one output, choose the Left output, because using this output jack alone with either a mono or stereo input provides a signal combining the processed information from both outputs.

Note: When only the Left output is used, the effect output is a processed combination of both the left and right input signals (the outputs are summed).

If you're only using one input and don't want an output that contains the combined effects from both channels, you can do the following: (1) Plug the cord coming from your audio source (mixer's reverb send, keyboard's output, etc.) into the FXR's left Line In. (2) Connect a cord between the FXR's left Line Out to wherever you want the signal to go (mixer's reverb return, an amp, etc.). (3) Insert a dummy plug into the FXR's right Line In. You can use a 1/4" phone plug with or without a cord attached as a dummy plug. By using a dummy plug in this way, the Left Out has only the left channel's effects.

If you want to use only the right channel instead of the left, follow the same directions, but run your signal through the FXR's right Line In and right Line Out and place the dummy plug into the left Line in.

A variety of input/output combinations may be used with the FXR. One in/one out (mono), one in/two out (stereo image), two in/one out (summed mono), and two in/two out (true stereo) may be achieved.

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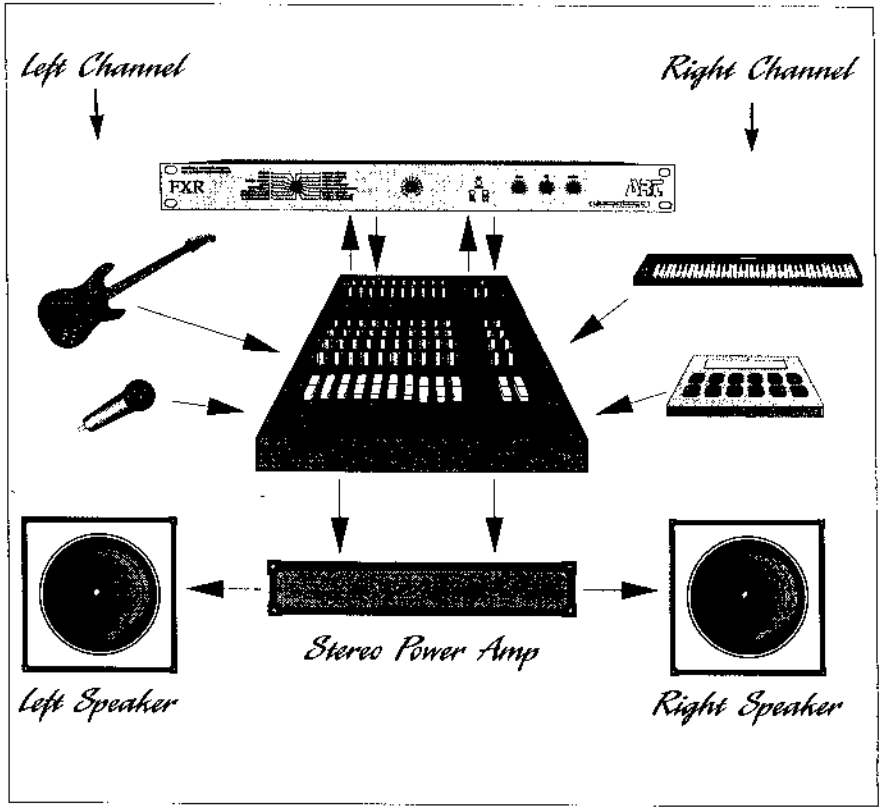
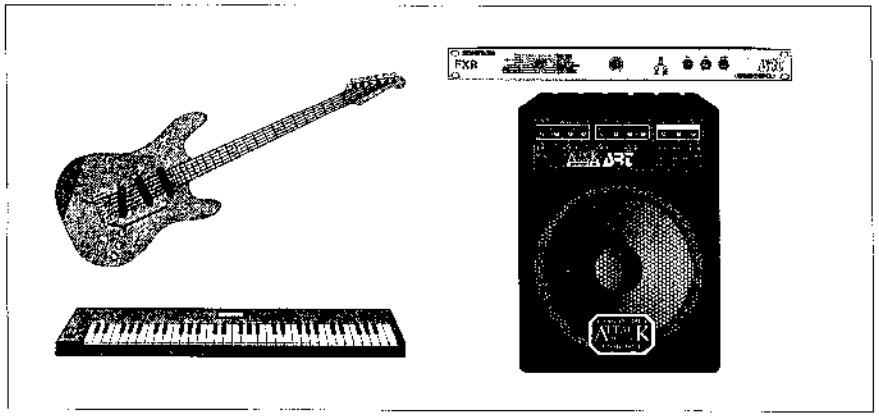
True Stereo Operation

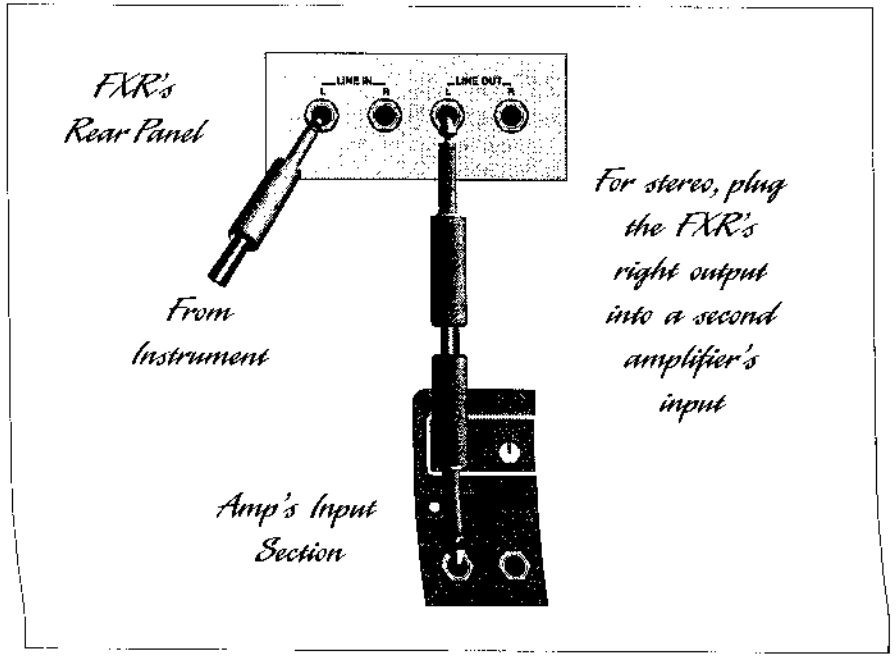
The FXR is designed so that many of its presets operate in true stereo. When in true stereo mode, each channel functions separately from the other, offering a wider variety of effects. Notice in the preset list on pages 17 through 27 that many presets have a letter "D" after their preset number, indicating that they're true stereo presets with isolated left and right audio paths. They are configured with one grouping of effects for the left channel and one for the right. These separate combinations can be a powerful tool for mixing multiple instruments, as shown below. For example, guitar and vocals can be given one treatment (say, a 2.5 second Dark Plate reverb) while the keyboard and drum machine in the other channel receive a different treatment (a 0.8 second Bright Plate). For a single instrument in stereo, different ambient or delay treatments on the left and right channels can provide extra size and presence.



PLUGGING DIRECTLY INTO AN FXR & AMP



When plugging a guitar, keyboard, or other instrument into the FXR Elite, make sure that there is sufficient signal level coming from the instrument. Pay attention to the Signal LEDs on the FXR Elite's front panel, and use the FXR Elite's input knob and the instrument's volume control to get the best level and signal-to-noise ratio.



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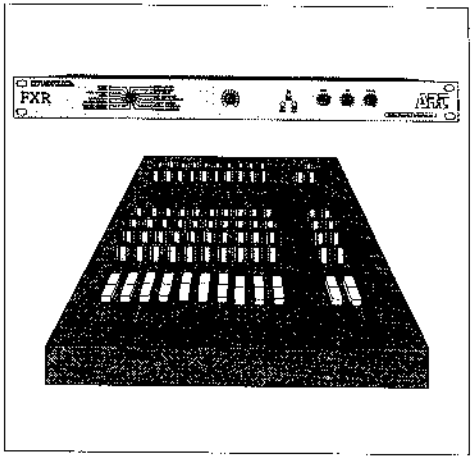
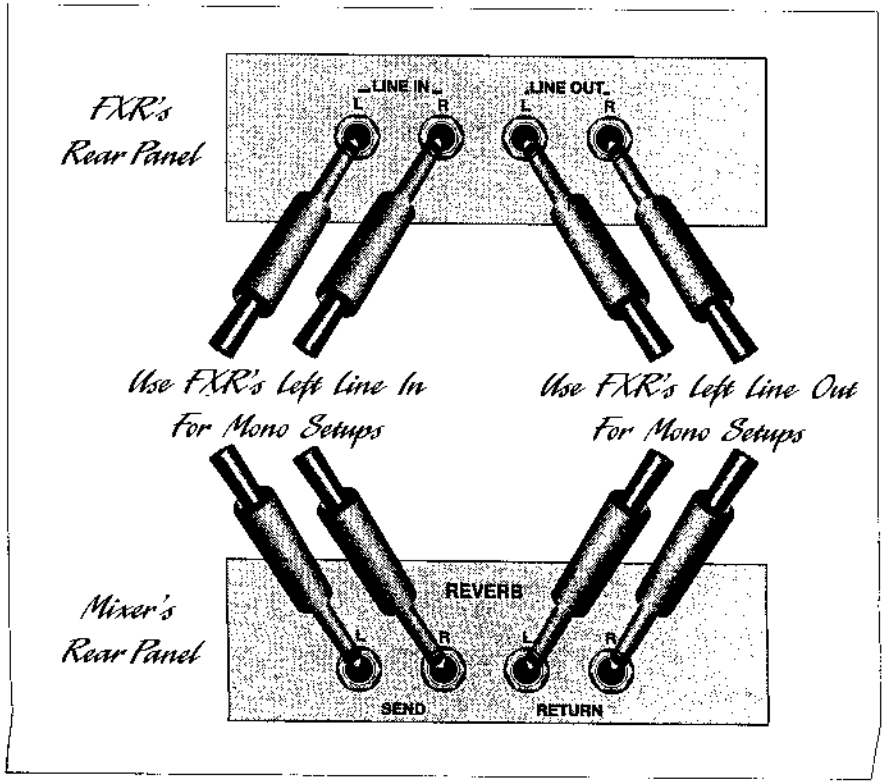
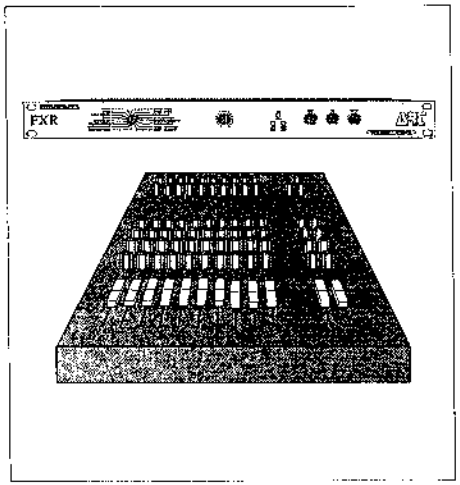
PATCHING THE FXR INTO A MIXER'S REVERB SEND/RETURN LOOP



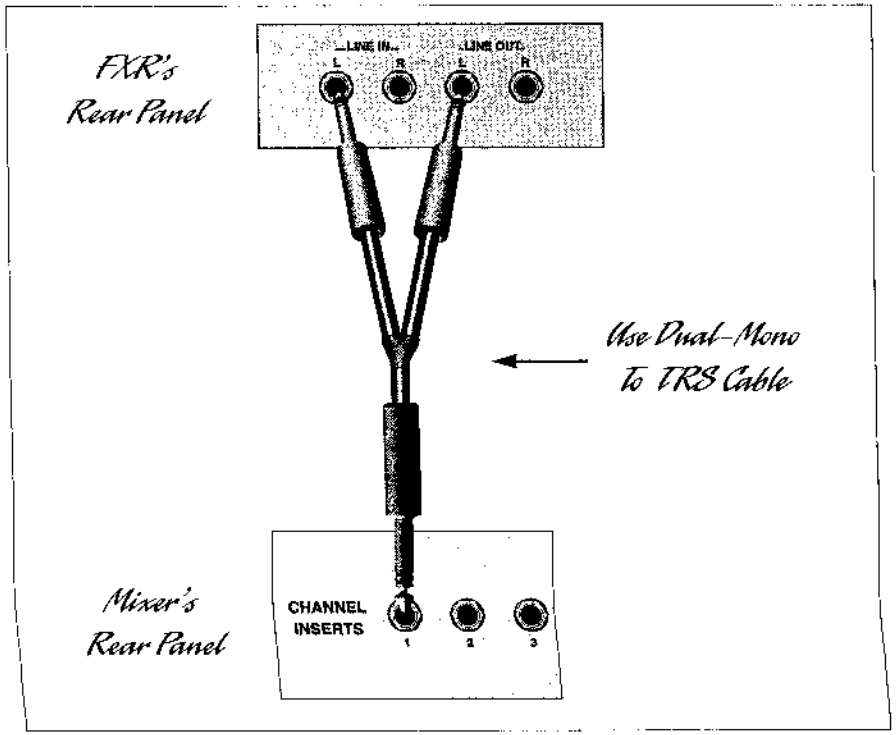
To connect the FXR into the reverb send/return loop of a mixer, follow the diagram below. If the mixer has only one input and one output (mono), connect them to the FXR's left Line In and left Line Out only. If the mixer has two reverb return jacks for stereo operation, you may connect a second cord between the FXR's right Line Out and the mixer's second return jack.



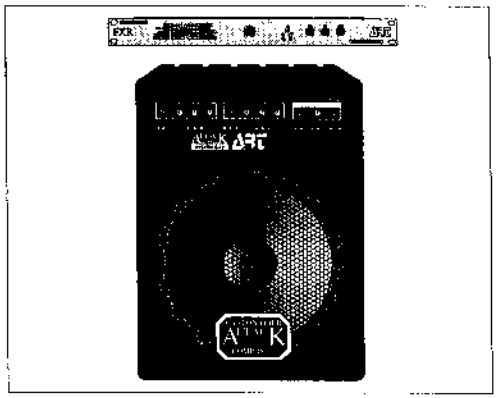
PATCHING THE FXR INTO A MIXER'S INPUT CHANNEL LOOP



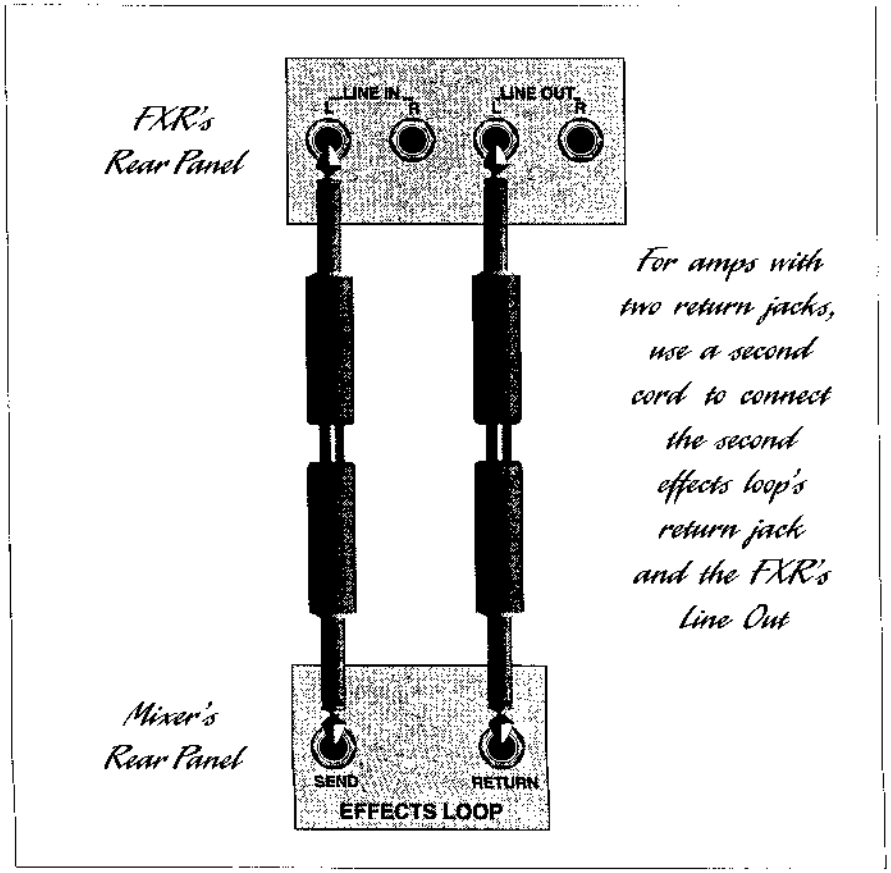
Some mixers are designed to accommodate effects on each input channel via "channel inserts," or "patch points." These often consist of a single 1/4" phone jack acting as both send and return, requiring a dual-mono-to-TRS (tip/ring/sleeve) plug configuration. Check your mixer's owner's manual to determine which plug of the dual-mono-to-TRS cable acts as a send, and which acts as a return. If the mixer has individual send and return jacks, simply use two standard cables.



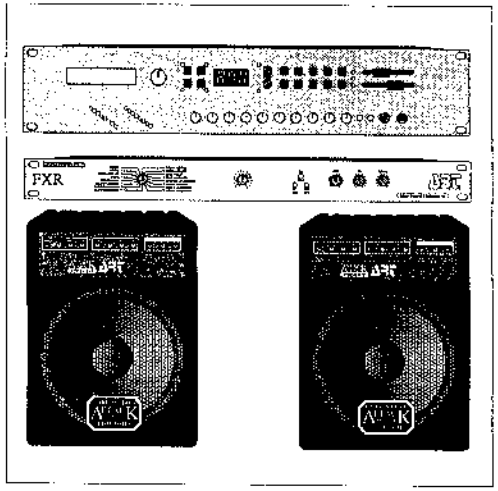
USING THE FXR IN AN AMP'S EFFECTS LOOP



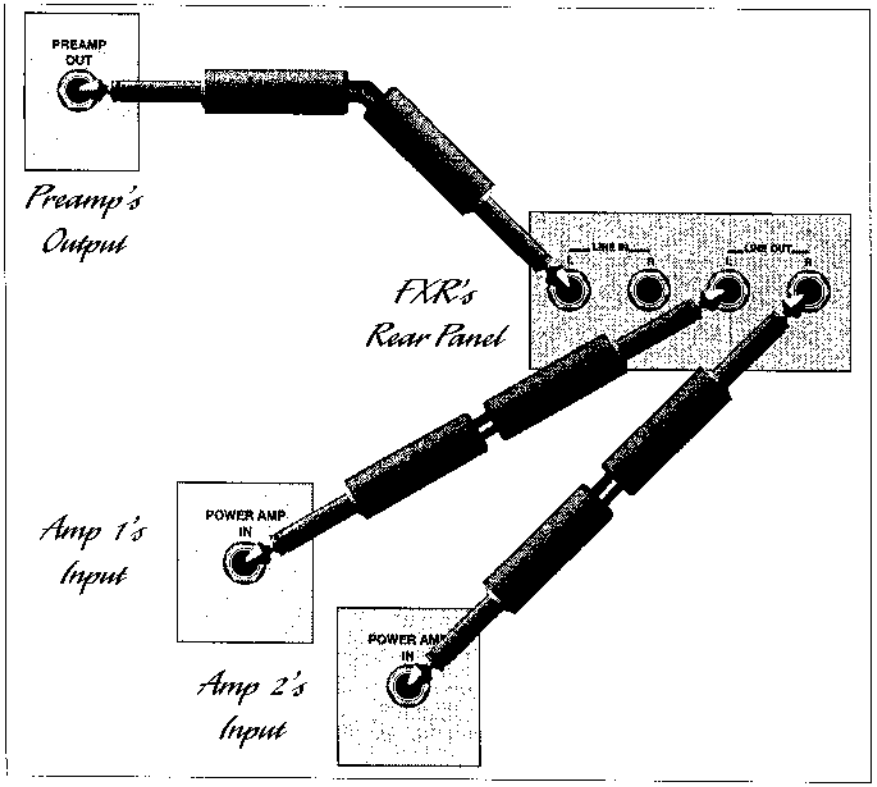
Patch the FXR into the effects loop of an instrument amplifier as shown below (for mono set-ups, use the FXR's left Line In and left Line Out jacks). If the amp has two effects-loop return jacks for stereo operation, you may connect a second cord between the FXR's right Line Out and the amp's second return jack.



USING THE FXR IN STEREO WITH A PREAMP & TWO AMPS



Patch the line output from a preamp such as an ART SGX 2000 into the FXR's left Line In (if the preamp has stereo outputs, patch the second into the FXR's right Line In). Connect the FXR's Line Outs to the power amp inputs on two instrument amplifiers. You can also plug directly into the amps' front-panel inputs, but you will need to adjust the FXR's output level and the amps' gain controls accordingly.



FXR Preset List

Programs are organized into 16 banks, each with 16 presets. Each line of the following list is laid out as follows ("D" denotes dual, meaning two fully independent channels):

Bank Name (Bank Number)

Preset D Left (or mono) process(es) Right process(es)

The Bank Name is selected with the left knob; the preset is selected with the right knob.

Abbreviations in the list include:

D	The letter "D" between the preset number and the preset's description signifies a dual function. That is, the preset may be used as two independent channels. The first two banks, though listed as complementary, are slightly different so that when they're mixed together, they don't cancel, but rather become lush, sweet-sounding reverbs.
DDL	digital delay
Flat	for tapped delay, this means that the delay times between taps are of equal duration; for gated reverb, it means that the reverb does not decay, but rather is cut off abruptly by the gate
ms	milliseconds (1/1000ths of 1 second)
regen	regeneration, or feedback
s	seconds
Sloped	for gated reverb, it means decaying before an abrupt cutoff
tap	tapped delay

Reverb (Bank 1)

1	D	Bright 0.5 Small Room
2	D	Warm 0.5 s Small Room
3	D	Bright 0.8 s Small Room
4	D	Bright 1.2 s Medium Room
5	D	Warm 1.2 s Medium Room
6	D	Warm 1.5 s Medium Room
7	D	Bright 1.5 s Medium Room
8	D	Dark 1.5 s Medium Room
9	D	Warm 2.0 s Large Room
10	D	Bright 2.0 s Large Room
11	D	Warm 2.5 s Large Room
12	D	Bright 2.5 s Large Room
13	D	Dark 2.0 s Medium Hall
14	D	Bright 2.0 s Medium Hall
15	D	Dark 3.5 s Medium Hall
16	D	Warm 3.5 s Medium Hall

Reverb (Bank 2)

1	D	Bright 3.5 s Large Hall
2	D	Warm 3.5 s Large Hall
3	D	Bright 5.0 s Large Hall
4	D	Warm 5.0 s Large Hall
5	D	Warm 10.0 s Large Hall
6	D	Bright 10.0 s Large Hall
7	D	Bright 1.2 s Chamber
8	D	Warm 0.8 s Chamber
9	D	Bright 1.5 s Chamber
10	D	Bright 2.5 s Chamber
11	D	Bright 0.5 s Soft Attack Plate
12	D	Bright 0.5 s Hard Attack Plate
13	D	Warm 0.8 s Hard Attack Plate
14	D	Warm 1.5 s Soft Attack Plate
15	D	Warm 2.5 s Soft Attack Plate
16	D	Warm 2.5 s Hard Attack Plate

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Gates and Reverse Reverbs (Bank 3)

1	50 ms Flat Dark
2	50 ms Flat Bright
3	50 ms Sloped Bright
4	50 ms Reverse Bright
5	100 ms Flat Bright
6	100ms Sloped Dark
7	100 ms Sloped Bright
8	100 ms Reverse Medium
9	150 ms Flat Bright
10	150 ms Sloped Dark
11	150 ms Sloped Bright
12	150 ms Reverse Medium
13	200 ms Flat Bright
14	200 ms Sloped Dark
15	200 ms Sloped Bright
16	200 ms Reverse Medium

Delays (Bank 4)

1	D	Left 50 ms/Right 100 ms 50% regen
2	D	Left 75 ms/Right 150 ms 50% regen
3	D	Left 120 ms/Right 190 ms 50% regen
4	D	Left 180 ms/Right 320 ms 50% regen
5		50 ms 5 tap Sloped multitap L/R/L/R/L
6		75 ms 3 tap Flat R/L/R
7		100 ms 3 tap Sloped L/R/L
8		125 ms 3 tap Sloped R/L/R
9	D	Left 25 ms/Right 35 ms Slap
10	D	Left 35 ms/Right 50 ms Slap
11	D	Left 65 ms/Right 80 ms Slap
12	D	Left 100 ms/Right 120 ms Slap
13		80 ms ping pong delay L/R/L 75% regen
14		120 ms ping pong delay L/R/L 75% regen
15		160 ms ping pong delay L/R/L 75% regen
16		175 ms ping pong delay L/R/L 75% regen

Reverb/Delays (Bank 5)

1	0.5 s Room Bright w/100ms Slap DDL
2	0.8 s Room Bright w/125 ms Slap DDL
3	1.2 s Room Bright w/175 ms 33% regen DDL
4	1.5 s Room Bright w/200 ms 50% regen DDL
5	2.0 s Hall Warm w/50 ms double DDL
6	2.5 s Hall Bright w/100 ms double DDL
7	3.5 s Hall Warm w/175 ms 33% regen DDL
8	5.0 s Hall Bright w/200 ms 50% regen DDL
9	1.5 s Chamber Bright w/100 ms Slap DDL
10	2.0 s Chamber Warm w/150 ms Slap DDL
11	2.5 s Chamber Warm w/175 ms 33% regen DDL
12	5.0 s Chamber Warm w/225 ms 50% regen DDL
13	0.5 s Plate Bright w/75 ms double DDL
14	1.0 s Plate Bright w/125 ms double DDL
15	2.5 s Plate Bright w/75 ms double DDL
16	3.5 s Plate Bright w/125 ms double DDL

Delays/Flanger and Chorus (Bank 6)

1	D	Slow wide flange 33% regen
2	D	Medium flange 33% regen
3	D	Tremolo flange 25% regen
4	D	Slow wide chorus
5	D	Medium wide chorus
6	D	Tremolo chorus
7	D	Slow wide flange w/150ms 20% regen DDL
8	D	Medium flange w/125 ms 40% regen DDL
9	D	Tremolo flange w/100 ms 20% regen DDL
10	D	Slow wide flange w/200 ms 33% regen DDL
11	D	Medium wide flange w/75 ms Slap DDL
12	D	Slow wide chorus w/50 ms 33% regen DDL
13	D	Medium wide chorus w/75 ms 30% regen DDL
14	D	Medium wide chorus w/125 ms 25% regen DDL
15	D	Tremolo chorus w/70 ms Slap DDL
16	D	Tremolo chorus w/200 ms 33% regen DDL

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Reverbs/Flanger or Chorus (Bank 7)

1	Slow wide flange w/0.8 s Medium Bright Chamber reverb
2	Medium slow wide flange w/0.8 s Medium Bright Plate reverb
3	Medium wide flange w/0.8 s Medium Bright Plate reverb
4	Tremolo flange w/0.8 s Medium Bright Room reverb
5	Slow wide chorus w/0.8 s Medium Bright Room reverb
6	Medium slow wide chorus w/1.0 s Medium Bright Hall reverb
7	Medium wide chorus w/1.5 s Medium Bright Hall reverb
8	Tremolo chorus w/0.8 s Medium Bright Plate reverb
9	Slow wide flange w/2.0 s Medium Warm Room reverb
10	Medium slow wide flange w/1.5 s Medium Warm Room reverb
11	Medium wide flange w/1.0 s Medium Warm Room reverb
12	Tremolo flange w/0.5 s Small Warm Room reverb
13	Slow wide chorus w/1.5 s Medium Warm Room reverb
14	Medium slow wide chorus w/2.0 s Medium Warm Hall reverb
15	Medium wide chorus w/2.0 s Medium Bright Hall reverb
16	Tremolo chorus w/1.0 s Medium Warm Room reverb

Delay/Reverb/Flanger or Chorus/Special Effects (Bank 8)

1		0.8 s Bright Room reverb + Left 175 ms/Right 200 ms 40% regen DDL + medium wide chorus
2		1.5 s Warm Room reverb + Left 45 ms/Right 55 ms Slap DDL + medum wide chorus
3		2.5 s Warm Room reverb + Left 80 ms/Right 120 ms 30% regen DDL + slow wide chorus
4		3.0 s Sizzle Plate reverb + Left 45 ms/Right 55 ms Slap DDL + Tremolo chorus
5		0.5 s Bright Plate reverb + Left 200 ms/Right 175 ms 40% regen DDL + medium wide flange
6		1.5 s Warm Room reverb + Left 45 ms/Right 55 ms Slap DDL + medium wide flange
7		2.5 s Warm Room reverb + Left 80 ms/Right 120 ms 30% regen DDL + slow wide flange
8		3.0 s Sizzle Plate reverb + Left 45 ms/Right 55 ms Slap DDL + Tremolo flange
9	D	Slow panner
10	D	Medium panner
11	D	Fast Panner
12		1.5 s Bright Hall reverb w/Slow panner
13		1.5 s Bright Hall reverb w/Medium panner
14		1.5 s Bright Hall reverb w/Fast panner
15		2.5 s Bright Hall reverb + 200ms DDL + medium panner

Reverb + Reverb (Bank 9)

1	D	0.5 s Dark Plate	0.5 s Bright Plate
2	D	0.5 s Dark Room	0.8 s Bright Room
3	D	0.5 s Dark Chamber	1.2 s Bright Chamber
4	D	0.5 s Dark Plate	1.8 s Bright Plate
5	D	0.8 s Dark Room	0.5 s Bright Room
6	D	0.5 s Dark Chamber	0.8 s Bright Chamber
7	D	0.5 s Dark Plate	1.2 s Bright Plate
8	D	0.5 s Dark Room	1.8 s Bright Room
9	D	1.2 s Dark Chamber	0.8 s Bright Chamber
10	D	0.8 s Dark Plate	0.8 s Bright Plate
11	D	0.8 s Dark Room	1.8 s Bright Room
12	D	0.8 s Dark Chamber	2.5 s Bright Chamber
13	D	1.2 s Dark Plate	0.8 s Bright Plate
14	D	1.2 s Dark Room	1.2 s Bright Room
15	D	1.2 s Dark Chamber	1.8 s Bright Chamber
16	D	1.2 s Dark Hall	2.5 s Bright Hall

Reverb + Reverb (Bank 10)

1	D	1.8 s Dark Plate	0.8 s Bright Plate
2	D	1.8 s Dark Room	1.2 s Bright Room
3	D	1.8 s Dark Chamber	1.8 s Bright Chamber
4	D	1.8 s Dark Hall	2.5 s Bright Hall
5	D	2.5 s Dark Plate	0.5 s Bright Plate
6	D	2.5 s Dark Room	1.2 s Bright Room
7	D	2.5 s Dark Chamber	1.8 s Bright Chamber
8	D	2.5 s Dark Hall	3.5 s Bright Hall
9	D	3.5 s Dark Plate	0.8 s Bright Plate
10	D	3.5 s Dark Room	1.2 s Bright Room
11	D	3.5 s Dark Chamber	1.8 s Bright Chamber
12	D	3.5 s Dark Hall	2.5 s Bright Hall
13	D	5 s Dark Room	1.8 s Bright Room
14	D	5 s Dark Plate	3.5 s Bright Hall
15	D	10 s Dark Hall	1.8 s Bright Chamber
16	D	10 s Warm Hall	3.5 s Bright Hall

Delay + Delay (Bank 11)

1	D	2 tap 25 ms/65 ms Slap	2 tap 185 ms/225 ms 50% regen
2	D	2 tap 55 ms/70 ms Slap	2 tap 200 ms/265 ms 50% regen
3	D	2 tap 65 ms/85 ms Slap	2 tap 185 ms/235 ms 50% regen
4	D	2 tap 100 ms/120 ms Slap	2 tap 280 ms/325 ms 50% regen
5	D	1 tap 25 ms 50% regen	1 tap 50 ms 40% regen
6	D	1 tap 45 ms 50% regen	1 tap 90 ms 35% regen
7	D	1 tap 75 ms 50% regen	1 tap 150 ms 35% regen
8	D	1 tap 100 ms 50% regen	1 tap 200 ms 35% regen
9	D	1 tap 125 ms 50% regen	1 tap 250 ms 35% regen
10	D	1 tap 165 ms 50% regen	1 tap 330 ms 35% regen
11	D	1 tap 250 ms 50% regen	1 tap 125 ms 50% regen
12	D	1 tap 350 ms 50% regen	1 tap 150 ms 50% regen
13	D	1 tap 450 ms 50% regen	1 tap 50 ms 50% regen
14	D	3 tap 175 ms Flat 0% regen	3 tap 325 ms Flat 0% regen
15	D	3 tap 125 ms Flat 0% regen	3 tap 200 ms Flat 0% regen
16	D	3 tap 80 ms Flat 0% regen	3 tap 120 ms Flat 0% regen

Delays + Gated Reverb (Bank 12)

1	D	2 tap 185 ms/200 ms 33% regen DDL	50ms Bright gate
2	D	2 tap 165 ms/190 ms 33% regen DDL	50ms Dark gate
3	D	2 tap 150 ms/180 ms 33% regen DDL	100ms Bright gate
4	D	2 tap 125 ms/150 ms 33% regen DDL	100ms Dark gate
5	D	2 tap 185 ms/200 ms 33% regen DDL	150ms Bright gate
6	D	2 tap 165 ms/190 ms 33% regen DDL	150ms Dark gate
7	D	2 tap 150 ms/180 ms 33% regen DDL	200ms Bright gate
8	D	2 tap 125 ms/150 ms 33% regen DDL	200ms Dark gate
9	D	2 tap 25 ms/35 ms 0% regen DDL	50ms Bright gate
10	D	2 tap 45 ms/90 ms 40% regen DDL	50ms Dark gate
11	D	2 tap 45 ms/65 ms 0% regen DDL	100ms Bright gate
12	D	2 tap 60 ms/120 ms 40% regen DDL	100ms Dark gate
13	D	2 tap 65 ms/75 ms 0% regen DDL	150ms Bright gate
14	D	2 tap 75 ms/150 ms 40% regen DDL	150ms Dark gate
15	D	2 tap 85 ms/100 ms 0% regen DDL	200ms Bright gate
16	D	2 tap 100 ms/200 ms 40% regen DDL	200ms Dark gate

FXR

Flanger/Chorus + Gated Reverb (Bank 13)

1	D	Medium Slow wide chorus	50ms Bright gate
2	D	Medium Fast wide chorus	50ms Dark gate
3	D	Medium Slow wide flange	50ms Bright gate
4	D	Medium Fast wide flange	50ms Dark gate
5	D	Slow wide chorus	100ms Bright gate
6	D	Tremolo chorus	100ms Dark gate
7	D	Slow wide flange	100ms Bright gate
8	D	Fast flange	100ms Dark gate
9	D	Medium Slow wide chorus	150ms Bright gate
10	D	Medium Slow wide flange	150ms Dark gate
11	D	Medium Slow wide flange	150ms Bright gate
12	D	Medium Slow wide flange.	150ms Dark gate
13	D	Medium Slow wide chorus	200ms Bright gate
14	D	Tremolo chorus	200ms Dark gate
15	D	Medium Slow wide chorus	200ms Bright gate
16	D	Fast Flange	200ms Dark gate

Flanger/Chorus/Panner + Flanger/Chorus/Panner (Bank 14)

1	D	Slow wide flange 50% regen	Slow wide flange 50% regen
2	D	Slow wide flange 75% regen	Slow wide flange 75% regen
3	D	Medium wide flange 50% regen	Medium wide flange 50% regen
4	D	Medium wide flange 75% regen	Medium wide flange 75% regen
5	D	Tremolo flange 33% regen	Tremolo flange 33% regen
6	D	Tremolo flange 50% regen	Tremolo flange 50% regen
7	D	Slow wide 20ms chorus	Slow wide 20ms chorus
8	D	Slow wide 10ms chorus	Slow wide 10ms chorus
9	D	Medium wide 20ms chorus	Medium wide 20ms chorus
10	D	Medium wide 10ms chorus	Medium wide 10ms chorus
11	D	Tremolo 20ms chorus	Tremolo 20ms chorus
12	D	Tremolo 10ms chorus	Tremolo 10ms chorus
13	D	Very Slow panner	Very Slow panner
14	D	Medium Slow panner	Medium Slow panner
15	D	Medium Fast panner	Medium Fast panner
16	D	Ultra Fast panner	Ultra Fast panner

Reverb/Delay + Flanger/Chorus (Bank 15)

1	D	0.5 s Room Bright w/100ms Slap DDL	Medium wide chorus
2	D	0.8 s Room Bright w/125 ms Slap DDL	Medium wide flange
3	D	1.2 s Room Bright w/175 ms 33% regen DDL	Medium wide chorus
4	D	1.5 s Room Bright w/200 ms 50% regen DDL	Medium wide flange
5	D	2.0 s Hall Warm w/50 ms double DDL	Slow wide chorus
6	D	2.0 s Hall Bright w/100 ms double DDL	Slow wide flange
7	D	2.5 s Hall Warm w/175 ms 33% regen DDL	Tremolo chorus
8	D	3.5 s Hall Bright w/200 ms 50% regen DDL	Tremolo flange
9	D	1.5 s Chamber Bright w/100 ms Slap DDL	Tremolo chorus
10	D	2.0 s Chamber Warm w/150 ms Slap DDL	Tremolo flange
11	D	2.5 s Chamber Warm w/175 ms 33% regen DDL	Slow wide chorus
12	D	5.0 s Chamber Warm w/225 ms 50% regen DDL	Slow wide flange
13	D	0.5 s Plate Bright w/75 ms double DDL	Medium wide chorus
14	D	1.0 s Plate Bright w/125 ms double DDL	Medium wide flange
15	D	2.5 s Plate Bright w/75 ms double DDL	Tremolo chorus
16	D	3.5 s Plate Bright w/125 ms double DDL	Tremolo flange

Reverb + Delay/Flanger/Chorus/Special Effects (Bank 16)

1	D	1.8 s Warm Room	Slow wide flange 33% regen
2	D	1.2 s Bright Room	Medium flange 33% regen
3	D	1.8 s Warm Room	Tremolo flange 25% regen
4	D	1.8 s Bright Plate	Slow wide chorus
5	D	1.8 s Warm Chamber	Medium wide chorus
6	D	2.5 s Bright Hall	Tremolo chorus
7	D	2.5 s Bright Plate	Slow wide flange w/150ms 20% regen DDL
8	D	1.8 s Warm Hall	Medium flange w/125 ms 40% regen DDL
9	D	1.8 s Bright Plate	Tremolo flange w/100 ms 20% regen DDL
10	D	1.2 s Warm Room	Slow wide flange w/200 ms 33% regen DDL
11	D	1.2 s Bright Plate	Medium wide flange w/75 ms Slap DDL
12	D	2.5 s Warm Chamber	chorus w/50 ms 33% regen DDL
13	D	1.8 s Bright Hall	Medium wide chorus w/75 ms 30% regen DDL
14	D	1.2 s Warm Room	Medium wide chorus w/125 ms 25% regen DDL
15	D	1.2 s Bright Plate	Tremolo chorus w/70 ms Slap DDL
16	D	2.5 s Bright Plate	Slow wide chorus w/125 ms Slap DDL

ART FXR Specifications

Dimensions		1.75" H x 19" W x 4.25" D, all-steel case
Weight		4 lbs., 7.6 oz
Connections		Stereo In/Out 1/4" phone
Presets		255
Input impedance		500k ohms
Output impedance		1k ohm
Maximum input level		>+14dBv
Maximum output level		>+14dBv
Dynamic range	dry	>100dB (A-weighted)
	wet	>80dB (A-weighted)
Total harmonic distortion (THD)	dry	<.015% @ 1kHz
	wet	<.04% @ 1kHz
Channel separation		>65dB

ART retains a policy of constant product improvement. Therefore, specifications are subject to change without notice.

Designed and manufactured in the United States of America.

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FXR

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LIMITED WARRANTY

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Applied Research & Technology, Inc. (ART) warrants to the original purchaser that this product and the components thereof will be free from defects in workmanship and materials for a period of one year from the date of purchase. Applied Research & Technology, Inc. will, without charge, repair or replace, at its option, defective product or component parts upon prepaid delivery to the factory service department or authorized service center, accompanied by proof of purchase date in the form of a valid sales receipt.

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