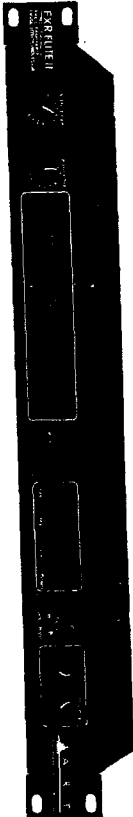


FXR ELITE II



Stereo / Dual Mono Programmable Effects Processor

USER'S GUIDE

FXR Elite II User's Guide

CONTENTS

Introduction	3
Features	3
Quick Start Instructions	4
Setup with a mixer	4
Setup with an amp	4
Installation	5
Powering the FXR Elite II	5
Inputs & Outputs	6
Line In L & R	6
Line Out L & R	6
True stereo operation	7
External switch input	7
MIDI In & MIDI Out	8
Front panel controls & indicators	8
Main encoder	8
A Encoder	8
B Encoder	9
LED parameter indicators	9
Numeric display	9
MIDI button	10
Mix button	10
Store	10
Bypass	10
Factory Reset - Restoring Settings	11
Clip & Left channel/Right channel signal LEDs	11
Input level control	11
Output level control	12
Modes of Operation	12
Preset mode	12
MIDI/Utility mode	13
Editing MIDI & Utilities	13
Activating Global Dry Kill	15
MIDI Controllers & numbers	15
MIDI Implementation	17
MIDI Channel	17
Real time control	17
Dry Kill	18
Bypass	18
MIDI Program Table (MPT)	18

Editing the MPT	19
Event monitor	20
MIDI downloading	20
Other MIDI notes	21
Setup Instructions	22
Mixer reverb send/return patching	22
Mixer input channel send/return loop	22
Amp send/return (effects loop)	23
Preamp/amp/FXR Elite II combination	23
Plugging an instrument into an FXR Elite II and an amp	23
Bypassing the FXR Elite II with a footswitch	23
FXR Elite II preset list	24
Changing parameters within presets	32
Battery backup	33
Specifications	34
Warranty & Service Information	35
Customer Service Information	36

Fill in the following information for your reference:

DATE OF PURCHASE _____
PURCHASED FROM _____
SERIAL NUMBER 434 - _____

WE'RE ON-LINE!

For Product information, questions, applications, tips, answers and general discussion with A R T employees look for A R T on the Internet..

Look for the A R T folder on America Online in Craig Anderson's Stage Studio and Sound (keyword "SSS") under the Manufacturer Supported Forums. Email us at artroch@aol.com

Look for the A R T supported area in the MIDI Forum B area on CompuServe (Go MIDI). CompuServe address: 76702,3700. Email us at artroch@cis.compuserve.com

Check out our Web Page at: <http://www.artroch.com>

434-5004-101



Introduction

Thank you for purchasing an FXR Elite II — 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 Elite II 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 - Dual Processing
- Two processors in one!
- Up to four studio effects combinations per preset
- Stereo inputs and outputs
- Easy editing — 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
- MIDI Control
- Designed and manufactured in the United States of America

The FXR Elite II provides you with 255 of the finest single and multiple effects combinations designed for use in the studio or on the stage. With the power to process 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. A R T designed a combination of powerful processing and ease of use into the FXR Elite II. We strongly suggest that you read and refer to this manual while getting used to your new processor.



Quick Start Instructions

You're probably in a hurry to get your FXR Elite II up and running, and don't want to read the manual (at least, not right now) - we understand. However, here are the basics. 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 Elite II. Refer to this section if you have any difficulty. And later, when you want to get into more of the details of your FXR Elite II, check out the rest of the manual.

Quick Setup

Turn the Input and Output knobs to their full counterclockwise positions. Insert the supplied AC adapter's plug into the input labeled PWR on the FXR Elite II's back panel.

With a mixer: Connect two cords with 1/4" plugs between your mixer's reverb sends and the FXR Elite II's Line Inputs. Connect two more cords between the FXR Elite II's Line Outputs and your mixer's returns.

Straight into an amp: If you're patching the FXR Elite II into a guitar (or other instrument) amplifier, use one cord between the instrument and the FXR Elite II'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 Elite II'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 Elite II's right Line In.

In an amp's effects loop: If you're patching the FXR Elite II 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 Elite II'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 Elite II's right Line Output to the amp's other effects return jack.) Set the FXR Elite II's mix control to its midpoint (so the numeric display shows the number 50).

Note: If you need further help doing your initial hook-up, refer to the information on pages 22 through 23.

Plug the FXR Elite II's AC adapter into the wall socket (the FXR Elite II 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 Elite II. Turn the FXR Elite II's Input knob clockwise until the FXR Elite II's Signal LED's glow. If the Clip LED glows constantly, turn down its Input level—the Clip LED should only glow when a very loud instantaneous signal reaches the FXR Elite II.

Now turn up the FXR Elite II's Output level, and raise the return level on your mixer or amp. You should be hearing the FXR Elite II'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 large encoder knob (immediately to the right of the numeric display). For a list of the presets, arranged according to bank and number, see pages 25 through 32.

Hammer your keyboard. Wait 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.

Installation

The FXR Elite II 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-space 19" rack-mount enclosure, the FXR Elite II 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 Elite II on top of power amps, tube equipment, or other sources of heat.

Powering The FXR Elite II

The FXR Elite II is powered by an external AC adapter. Always make sure that its output jack is securely plugged into the rear of the FXR Elite II, and that the adapter is held firmly in an electrical outlet. Never operate the FXR Elite II 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 Elite II 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.

Inputs & Outputs

Despite the FXR Elite II'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 and 5-pin DIN MIDI connectors make patching simple. Note: For best audio quality, always use high-quality cables.

Because the FXR Elite II is designed for line-level or instrument operation, we don't recommend plugging microphones directly into it. Instead, either use a preamp (like A R T's Tube MP, Dual MP or Pro MPA), 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 Elite II, 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 are processed separately. If both outputs are used and the FXR Elite II receives a mono input signal, a stereo image is produced. If you're only supplying the FXR Elite II with a mono input, use the FXR Elite II'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

6



APPLIED RESEARCH AND TECHNOLOGY

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 Elite II's left Line In. (2) Connect a cord between the FXR Elite II'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 Elite II'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 Elite II'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 Elite II. 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.

True Stereo Operation

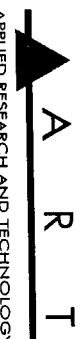
The FXR Elite II is designed to operate in true stereo. That is, each channel functions separately from the other, offering a wider variety of effects. Notice in the preset list on pages 25 - 32 that many presets have one grouping of effects for the left channel and one for the right. These separate combinations can be a powerful tool for mixing multiple instruments. 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.

External Switch Input

The Ext. Switch Input jack is designed to let you select whether the FXR Elite II's effects are in the circuit or out. A footswitch and any 2-conductor cable with 1/4" phone plugs may be used with this jack. The unit can be configured to accept three different types of footswitch: push/push (toggle), momentary normally closed, and momentary normally open. To access this option, push the MIDI button and then turn the large encoder knob until you see a lowercase letter "j" in the numeric display. Note: The first segment of the display will blink rapidly. Turn the A Encoder knob to select from the three modes of operation:

- to push/push (toggle)
- nC momentary, normally closed

7



APPLIED RESEARCH AND TECHNOLOGY

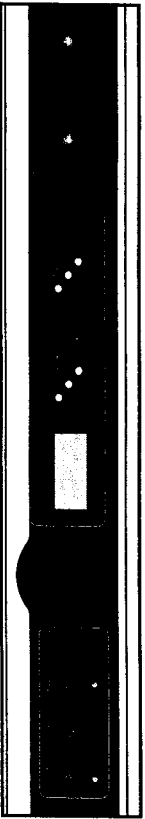
no momentary, normally open
After you've made your selection, push the Save button to store your change. Then press the MIDI button again; the display stops blinking and reverts to showing the preset number you selected previously.

A MIDI controller such as an A R T X-15 can control the Bypass status via MIDI. See page 18 for more information.

MIDI In & Out

The jack labeled MIDI In receives the MIDI signal containing MIDI Program Change and real time control messages. It enables you to "talk" to the FXR Elite II from an external source such as an A R T X-12, X-15 Ultrafoot, a computer equipped with MIDI ports and associated software, or a sequencer. The MIDI Out jack transmits MIDI information from the FXR Elite II to other MIDI-controllable gear such as sequencers, synthesizers, etc. See pages 13 - 22 for further information on the FXR Elite II's MIDI capabilities.

CONTROLS & OPERATION



FRONT-PANEL CONTROLS & INDICATORS

Encoder (main encoder)

The main encoder in the center of the front panel is primarily used for selecting presets. Turn this knob to select from presets ranging from 1 to 255. When the Mix button is pressed (illuminating the LED above the button), this encoder knob adjusts the Mix amount. When the Mix LED is lit, its numeric value is shown on the display - from dry (00) to wet (100). Pressing the Mix button again (turning off the LED) reverts back to showing the preset number. When the MIDI button is pressed (indicated by the flashing of the first segment of the display), the large encoder scrolls through the available MIDI and Utility functions.

A Parameter Encoder

This knob controls one of a preset's adjustable parameters, indicated by the lit LED farthest to the left in the parameter section of the display. Whenever

you turn the knob, the numeric display changes from showing the current preset number to showing a blinking equals sign (=) and a two-digit number that corresponds to the parameter's level (the parameter LED will flash as well). Any changes you make with the A Encoder may be saved in a preset by pressing the Store button. Note: About two seconds after you quit turning the knob, the display returns to showing the preset number.

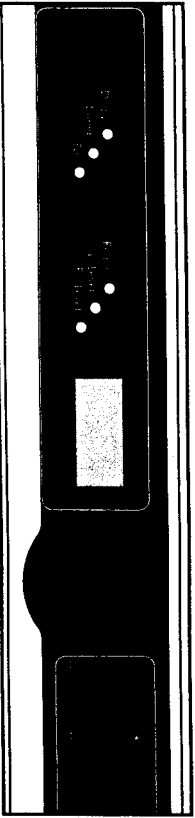
B Parameter Encoder

This knob controls one of a preset's adjustable parameters, indicated by the lit LED farthest to the right in the parameter section of the display. Whenever you turn the knob, the numeric display changes from showing the current preset number to showing a blinking equals sign (=) and a two-digit number that corresponds to the parameter's level (the parameter LED will flash as well). Any changes you make with the B Encoder may be saved in a preset by pressing the Store button. Note: About two seconds after you quit turning the knob, the display returns to showing the preset number.

Note: The A and B Encoder's parameters may also be controlled via MIDI. See page 17 for further details.

LED Parameter Indicators

The parameter section of the display in the middle of the panel tells you which parameters can be changed via the A Encoder and B Encoder. The LED glowing farthest to the left corresponds to the A Encoder, and the LED



glowing farthest to the right corresponds to the B Encoder. When only one LED glows, it corresponds to the A Encoder, and the B Encoder has no effect.

Numeric Display

In Preset Mode, this display shows a 1-, 2-, or 3-digit number that corresponds to the preset currently in use. When you're editing parameters, editing Mix, or are in the MIDI/Utility mode, the display tells you what values or parameters you are modifying.

MIDI Button

The MIDI button switches the FXR Elite II into MIDI/Utility mode. In this mode, the large encoder scrolls through the available parameters while the A and B encoders are used to change the values of those parameters. See pages 13 - 21 for more information on the Elite II's MIDI capabilities.

MIX Button

Pressing the Mix button allows you to adjust the mix setting of the selected preset. When pressed, the LED above the Mix button will illuminate and the display shows the current mix setting. The range is from 0 (all dry signal) to 99 (all effect). Turning the large encoder changes the setting. Press store to save your changes.

If you employ the FXR Elite II 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 Elite II 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 Elite II 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 Elite II's output. (Consult the amp's manual to determine the correct setting.)

Store

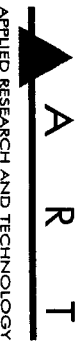
Anytime you make a parameter change or alter the Mix settings, you can save these changes in a preset by simply pressing the Store button. The change is saved instantly.

Bypass

Activating the bypass eliminates all "wet" (processed) signal from the outputs, leaving only the dry signal. The LED above the Bypass switch blinks continuously whenever the bypass mode is engaged. Pressing Bypass again returns the preset to active status.

Another way to bypass the unit is to employ the Bypass jack on the rear panel. For further information, refer to the External Switch Input section on page 7.

10

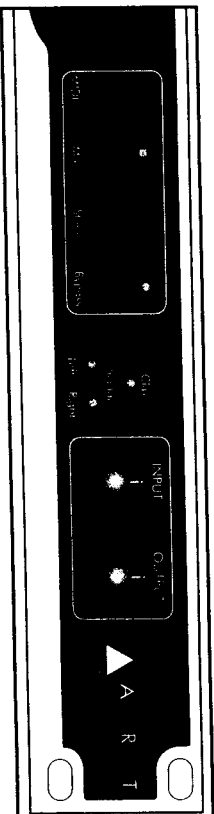


APPLIED RESEARCH AND TECHNOLOGY

The bypass may also be accessed through MIDI. Refer to page 18 for further information.

Factory Reset - Restoring Settings

If you want to restore all presets to their factory settings, depress the Mix, Store and Bypass buttons simultaneously. Remember: Only do this if you want to restore all of the settings (including MIDI parameters) to their factory values.



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 Elite II'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 setting is global, meaning that it affects the FXR Elite II's input level, regardless of what program is engaged. Its setting can't be stored within programs.

11



APPLIED RESEARCH AND TECHNOLOGY

Output

The Output control governs the amount of signal leaving the FXR Elite II. 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. Use your ears as a guide, too.

The Output knob setting is global, meaning that it affects the FXR Elite II's output level, regardless of what program is engaged. Like the Input control, its setting can't be stored within programs.

MODES OF OPERATION

Preset Mode

After power-up, the unit enters Preset mode. Preset mode is identified by a non-flashing numeric display and one or two non-flashing LEDs lit in the parameter section of the display (to the left of the numeric display). The numeric display shows the current preset number. In Preset mode, you can recall and modify the 255 available presets. As many as three parameters can be modified in each preset: mix level, A parameter, and B parameter.

In preset mode, The main encoder recalls presets. The A and B encoders allow you to adjust two parameters. All three encoders rotate in either direction, changing the preset or parameter they control. Parameter values range from 00 to 99. Note that the knobs don't spin freely; instead there are click points (or "ticks") throughout their rotation.

On the first tick of an encoder, the parameter value is displayed. Subsequent ticks of that encoder cause the value to change: the value is displayed on the numeric display with a flashing equals sign (=) in front. Changing the value of a parameter does not make permanent changes to the parameter; that is the function of the Store button.

You can tell which parameters the A and B encoders control by LEDs lit in the parameter section on the display. Except for presets 121 to 124, which have only one changeable parameter each, every preset's editable parameters are indicated by two LEDs. The farthest left glowing LED corresponds to the A parameter. The farthest right LED corresponds to the B parameter. If only one LED is lit, the B encoder serves no function.

As the A and B encoders are turned, the corresponding LED in the display area flashes in time with the equal sign in the numeric display.

12



After approximately two seconds without changes made by the encoder, the display reverts to showing the current preset number.

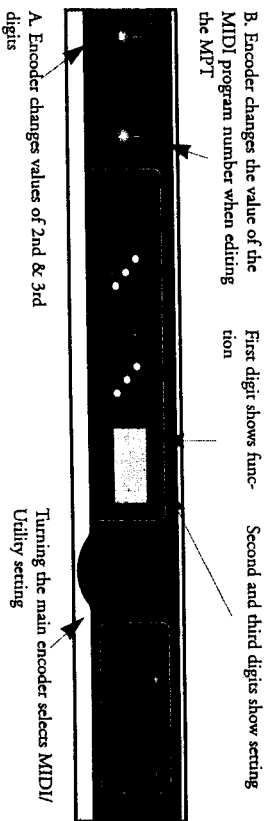
MIDI/Utility Mode

MIDI/Utility mode is entered and exited by pressing the MIDI button. It provides access to MIDI control, as well as a way to set the Bypass jack's mode. You can tell that you've entered Utility mode when the letter "c" flashes in the first digit of the numeric display, followed by a number between 1 and 16.

Any changes made in MIDI/Utility mode can be saved. Simply hit Store after making the desired changes. Then push the MIDI/Utility button to exit back to preset mode.

Editing MIDI & Utilities

The following list shows which parameters are controlled in this mode, as well as the letter that glows in the numeric display to signify it, the range of options that are offered, and a description of what these options do.



Parameter	Letter	Range	Default	Description
System Channel	c	0F, 1-16	1	MIDI channel the FXR responds to
Omni Mode	o	0F, on	on	MIDI Omni mode
Left Controller	L	0F, 01-1F, 21-71	04	Controller number for A parameter
Right Controller	r	0F, 01-1F, 21-71	0b	Controller number for B parameter



13

Parameter	Letter	Range	Default	Description
Mix Controller	i	0F, 01-1F, 21-71	0F	Controller number for Mix Level parameter
Dry Kill	d	0F, 01-1F, 21-71	0F	Controller number for Dry Kill parameter
Bypass Controller	b	0F, 01-1F, 21-71	54	Controller number for Bypass parameter
MIDI Prog. Table	P	n/a	n/a	Translation table for MIDI program changes
Event Monitor	E	0F, on	on	Show changes to A and B parameters when received via MIDI
MIDI Full Dump	F	no, yE	no	Performs a full data dump over MIDI of all current settings and stored presets
Bypass Jack Mode	J	to, nC, no	to	Allows for either push/push (toggle) or normally closed or normally open momentary switches
Global Dry	g	no, yE	no	An "on" setting sets all presets to 100% wet mix.

When you select "yE" and then press Store, the FXR Elite II performs a MIDI data dump to MIDI storage devices such as sequencers, computers, etc.

For System Channel, "oF" means off (all MIDI ignored, except for System Exclusive messages).

The Left Controller and Right Controller options edit the MIDI Controller number.

Activating Global Dry Kill

You can program the FXR Elite II to store a "global" Dry Kill setting for all of the presets at one time. This is especially useful when the FXR Elite II is patched into a mixer's reverb send/return loop, or whenever you don't want a dry signal passing through the FXR Elite II. Press the MIDI button, turn the Mix knob until you see a "g" in the LED window, and then turn the A Parameter Encoder until you see "yE" in the window. Hit the Save button and then the MIDI/Utility button to exit. All presets are now configured so that Dry Kill is activated when you call them up. For more on Global Dry Kill mode, see page 21.

MIDI Controllers & Numbers

Here's a list of MIDI Controllers and their numbers, which will help you avoid conflicts if you control the FXR Elite II and other MIDI gear in the same setup. The FXR Elite II displays controller numbers in hexadecimal. Don't panic! The following table lists hexadecimal numbers, their equivalent decimal numbers, and the common uses for these controller numbers in MIDI. The FXR Elite II's default controller parameters are intended to work with the A R T X-15's default values. No changes to either unit should be necessary. Connect a MIDI cable from the X-15's MIDI Out to the FXR Elite II's MIDI In, and you're ready to go.

Hexadecimal	Decimal	Controller Description
00	0	Reserved
01	1	Mod Wheel
02	2	Breath Controller
03	3	Undefined
04	4	Foot Controller
05	5	Portamento Time
06	6	Data Entry (MSB)
07	7	Main Volume
08	8	Balance
09	9	Undefined
0A	10	Pan
0B	11	Expression Controller
0C-0F	12-15	Undefined

Hexadecimal	Decimal	Controller Description
10-13	16-19	General Purpose Numbers 1-4
14-1F	20-31	Undefined
20	32	Reserved
21-3F	33-63	LSB For Values 0-31
40	64	Damper Pedal (Sustain)
41	65	Portamento
42	66	Sostenuto
43	67	Soft Pedal
44	68	Undefined
45	69	Hold 2
46-4F	70-79	Undefined
50-53	80-83	General Purpose Numbers 5-8
54-5A	84-90	Undefined
5B	91	External Effects Depth
5C	92	Tremolo Depth
5D	93	Chorus Depth
5E	94	Celeste (Derune) Depth
5F	95	Phaser Depth
60	96	Data Increment
61	97	Data Decrement
62	98	Non-Registered Parameter Number
LSB	99	Non-Registered Parameter Number MSB
64	100	Registered Parameter Number LSB
65	101	Registered Parameter Number MSB
66-78	102-120	Undefined
- - -	121-127	Reserved For Channel Mode Messages

MIDI IMPLEMENTATION IN THE FXR ELITE II

The FXR Elite II offers extensive MIDI features not found in any other processor in it's price range. These include: MIDI mapping, MIDI control of Bypass and Dry Kill, Real Time control of Effect Parameters and Mix, and an MIDI event monitor. This text will explain how to get to these MIDI controls and how to utilize them.

The MIDI/Utility functions are accessed by pressing the MIDI button. Turning the main encoder scrolls through the different functions. These functions are indicated by an upper or lower case letter (see pages xx-xx for a complete list). Once you have selected a function, it's MIDI controller number can be changed by turning the A Encoder. Store must be pressed to save any changes made to functions in the MIDI/Utility section.

Midi Channel

When you press the MIDI button, the first thing you will see is a flashing "C" and the number 1. The letter C refers to MIDI Channel. The number refers to the channel number the Elite II is set to receive MIDI messages on. The factory default (already set at the factory) is channel #1. The options are channels 1-16 or of (Off). If you are having trouble getting your Elite to respond to MIDI commands, be sure that your MIDI channel is set properly. (It should be set to the same channel that your controller is set to). If you wish to have your Elite respond to messages on all MIDI channels, the Omni mode should be set to on (also a factory default). The parameter, indicated by a flashing "o", (omni) has choices of on or off.

Real Time Control Of The A Encoder

The effect parameter that is edited with the A Parameter Encoder may also be controlled via MIDI. This effect parameter is represented by a flashing "L" (L channel) in the MIDI/ Utility section. The number following the "L" is the MIDI controller number that the parameter is set to respond to. This controller number may be changed to accommodate almost any MIDI continuous controller by turning the A Encoder.

Real Time Control Of The B Encoder

The effect parameter edited with the B Encoder may also be controlled via MIDI. This effect parameter is represented by a flashing "r" (r channel) in the MIDI/ Utility section. The number following the "r" is the MIDI controller number the parameter is set to respond to. This controller number

may be changed to accommodate any MIDI continuous controller by turning the A Encoder.

Real Time Control Of The Effects Mix

Like the effects parameters, the Mix control may be controlled via a MIDI continuous controller. The Mix parameter is represented by a flashing "1" in the MIDI/ Utility section. This parameter is set to "oF" (off) from the factory. The value may be changed to accommodate nearly any MIDI continuous controller by turning the A Encoder.

Dry Kill

A global Dry Kill function may be turned on and off via MIDI. When the Dry Kill is set to "on", all the dry signal is muted at the outputs of the FXR Elite II's output - regardless of the Mix setting. The parameter in the MIDI/ Utility section, indicated by a flashing "d" (dry kill), may be programmed to respond to MIDI controller messages. The parameter is set to (off) at the factory. If using the Elite II with an X-15, the Dry Kill can be assigned to one of the effects pads.

Bypass

The Bypass function may be turned on and off via MIDI. The parameter in the MIDI/ Utility section, indicated by a flashing "b" (bypass), is set at the factory to MIDI controller number 84. (This number will say 54 on the display as this is the hexadecimal equivalent. See page 16 for explanation.) When using the Elite II with an X-15, the value does not have to be changed. However, this value is adjustable for use with any other MIDI controllers.

Bypass Jack

The Elite II can be bypassed via the 1/4" Remote Jack on the rear panel. This jack is programmable to accept a variety of remote footswitches. The function is represented by a flashing "r" (remote Jack) under the MIDI/ Utility section. The default is "o" which stands for a toggle (push on/push off) switch. Other options are: "nC" which stands for a momentary (normally closed/ momentarily open) switch, and "no" which stands for a momentary (normally open/ momentarily closed) switch.

MIDI Program Table (MPT)

The MIDI Program Table is an internal table that allows you to "map" the presets in the Elite II. All the presets may be called up in a personalized order with MIDI program change messages. (ex. Preset 100 can be called up

when you press pad 1 on the X-15). Unlike other MIDI controllers, the A R T X-12 and X-15 can access all 255 presets in the FXR Elite II! The factory default is a one-to-one mapping of Program Change request number to preset number, but this may be changed by the user.

A flashing "P" (Program table) followed by "-." represents the Program Table. Turning the A Encoder scrolls through MIDI Program numbers. This is recognizable by a flashing decimal point to the left of the last digit in the display. (example: __.0) The MIDI Program number is the number sent from a MIDI controller to recall a preset. The X-15 sends MIDI Program Messages that range in number from 0 to 254. When Pad #1 is pressed, it sends MIDI Program Change Message #0 (* Note the number equals the pad # minus 1). Turning the A Encoder scrolls through the range of MIDI Program numbers from 0 to 254. (NOTE: Some MIDI controllers start with MIDI Program Change message #1. Check the manufacturers manual for how their tables are set.)

Turning the B Encoder scrolls through the Preset numbers. This is recognizable by a flashing decimal point at the far right of the display. (example: __.1.) The Preset number is the number of the Preset in the Elite II. Turning the B Encoder scrolls through all the preset numbers in the Elite II.

Editing the MPT

To program the MPT, simply decide which Preset you want to recall when you hit a specific pad on the X-15 or other controller. Call up that MIDI Program number in the Elite II, turn the B Encoder until the Preset number that you wish to call up appears in the display. Press SAVE after all changes made to the MPT to store changes. To repeat the process, simply turn the A Encoder to select another MIDI program number.

Programming example:

We will program the Elite II to call up presets 10, 100, and then 255 when pads #1, #2 and #3 are pressed on the X-15.

- Press the MIDI button. This places you in MIDI/ Utility mode.
- Turn the main encoder to the right until you see "P__" in the display. (this represents the MIDI Program Table).
- Turn the A Encoder to select the MIDI program number.
- Turn the A Parameter encoder until the display reads __.0 (this represents the number sent by the X-15 when the #1 Pad is pressed).
- Turn the B Parameter encoder until the display reads _10. (this

represents Elite II preset number 10).

- Press Store (this saves the change to the MPT).
- Turn the A Parameter encoder to the right until the display reads: ___1 (this represents the number sent by the X-15 when Pad #2 is pressed).
- Turn the B Parameter encoder to the right until the display reads: 100. (this represents Elite II Preset number 100).
- Press Store.
- Turn the A Parameter encoder to the right until the display reads: ___2 (this represents the number sent by the X-15 when Pad #3 is pressed).
- Turn the B Parameter encoder to the right until the display reads: 255. (this represents Elite II Preset number 255).
- Press Store.
- Press the MIDI button to exit the MIDI/ Utility section.

Now when you press Pad 1, preset 10 is recalled. When you press Pad 2, preset 100 is recalled. When you press Pad 3, preset 255 is recalled. Repeat the above procedure to enter more presets or your own order.

Event Monitor

The Elite II allows you to "see" what is happening when it receives MIDI Continuous Control Messages. This function may be turned off and on in the MIDI/ Utility section. The function is represented by a flashing "E" (Event monitor). It's default is on.

MIDI Downloading

The Elite II is capable of taking a "snapshot" of all its internal settings and sending them to a MIDI storage device or another Elite II. This function can be set to YE (yes) or no and is represented by a flashing "F" (Full MIDI Dump). It's default is no.

If set to yes, the Elite will do a data dump when the Store button is pressed. It is recommended to keep this function set to "no" unless you wish to do a data dump.

Note: The FXR Elite II is always ready to accept information transferred to it from its MIDI In. The Elite II will not show any indication after receiving information.

Channel Mode Messages

The FXR Elite II responds to the Omni On and Omni Off Channel Mode messages. These must match the FXR Elite II's MIDI channel to be recognized.

System Exclusive (SysEx) Messages

The following chart shows the SysEx messages in the FXR Elite II:

Byte	Value (in hex)	Description
1	10	Start of SysEx message
2	1a	ART manufacturer's ID
Byte	Value (in hex)	Description
3	0x	MIDI channel
4	17	FXR Elite II product ID
5	??	Function ID
...	??	Data
(last)	F7	End of SysEx message

The function ID is taken from one of the following:

Unit Handshake	
Inbound	41
Outbound	01

This function ID may be used to see if an FXR Elite II is present on a channel of a MIDI network. There are no data bytes associated with this message.

Parameter Exchange	
Inbound	4b (request)
Inbound	0b (receive)
Outbound	0b (send)

This function ID is used to send or receive the operating state of the FXR Elite II. It includes both the options editable in MIDI/Utility mode and the settings of each of the 255 presets.

There are no data bytes in the inbound request for a Parameter Exchange request.

Unit Status	
Inbound	4d
Outbound	0d

This function ID can be used to check the FXR Elite II's operating status. There are no data bytes in the inbound message, and two data bytes in the outbound message. The value of the Unit Status is in the second byte, which is the version number of the software.

Other MIDI Notes

- The FXR Elite II does not act as a MIDI merger.
- The FXR Elite II ignores inbound Active Sensing messages.
- The FXR Elite II does not generate Active Sensing messages.
- The System Reset message is ignored.

HOOK UP INSTRUCTIONS

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

To connect the FXR Elite II into the reverb send/return loop of a mixer, follow the procedure below: If the mixer has only one input and one output (mono), connect them to the FXR Elite II'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 Elite II's Right Line Out and the mixer's second return jack.

PATCHING THE FXR ELITE II INTO ONE MIXER INPUT CHANNEL'S 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 ELITE II IN AN AMP'S EFFECTS LOOP

Patch the FXR Elite II into the effects loop of an instrument amplifier as described here (for mono setups, use the FXR Elite II'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 Elite II's right Line Out and the amp's second return jack.

USING THE FXR ELITE II IN STEREO WITH A PRE-AMP & TWO AMPS

Patch the line output from a preamp such as an ART SGX 2000 into the FXR Elite II's Left Line In (if the preamp has stereo outputs, patch the second into the FXR Elite II's Right Line In). Connect the FXR Elite II's Line Outpins 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 Elite II's output level and the amps' gain controls accordingly.

PLUGGING DIRECTLY INTO AN FXR ELITE II & AMP

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

BYPASSING THE FXR ELITE II WITH A FOOTSWITCH OR AN X-15

A standard footswitch can be used to activate the FXR Elite II's bypass function. In addition, the X-15 Ultrafoot's Bypass output can be connected to the FXR Elite II's Bypass input. If you are using MIDI control, the FXR Elite II and the X-15 are factory-configured with default settings that allow bypassing.

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 s 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)

17	D	Bright 3.5 s Large Hall
18	D	Warm 3.5 s Large Hall
19	D	Bright 5.0 s Large Hall
20	D	Warm 5.0 s Large Hall
21	D	Warm 10.0 s Large Hall
22	D	Bright 10.0 s Large Hall
23	D	Bright 1.2 s Chamber
24	D	Warm 0.8 s Chamber
25	D	Bright 1.5 s Chamber
26	D	Bright 2.5 s Chamber
27	D	Bright 0.5 s Soft Attack Plate
28	D	Bright 0.5 s Hard Attack Plate
29	D	Warm 0.8 s Hard Attack Plate
30	D	Warm 1.5 s Soft Attack Plate
31	D	Warm 2.5 s Soft Attack Plate
32	D	Warm 2.5 s Hard Attack Plate

Gates and Reverse Reverbs (Bank 3)

33		50 ms Flat Dark
34		50 ms Flat Bright

35 50 ms Sloped Bright
 36 50 ms Reverse Bright
 37 100 ms Flat Bright
 38 100ms Sloped Dark
 39 100 ms Sloped Bright
 40 100 ms Reverse Medium
 41 150 ms Flat Bright
 42 150 ms Sloped Dark
 43 150 ms Sloped Bright
 44 150 ms Reverse Medium
 45 200 ms Flat Bright
 46 200 ms Sloped Dark
 47 200 ms Sloped Bright
 48 200 ms Reverse Medium

Delays (Bank 4)

49 D Left 50 ms/Right 100 ms 50% regen
 50 D Left 75 ms/Right 150 ms 50% regen
 51 D Left 120 ms/Right 190 ms 50% regen
 52 D Left 180 ms/Right 320 ms 50% regen
 53 50 ms 3 tap Sloped multitap L/R/L
 54 75 ms 3 tap Flat L/R/L
 55 100 ms 3 tap Sloped L/R/L
 56 125 ms 3 tap Sloped L/R/L
 57 D Left 25 ms/Right 35 ms Slap
 58 D Left 35 ms/Right 50 ms Slap
 59 D Left 65 ms/Right 80 ms Slap
 60 D Left 100 ms/Right 120 ms Slap
 61 80 ms ping pong delay L/R/L 60% regen
 62 120 ms ping pong delay L/R/L 60% regen
 63 160 ms ping pong delay L/R/L 60% regen
 64 175 ms ping pong delay L/R/L 60% regen

Reverb/Delays (Bank 5)

65 0.5 s Room Bright w/100ms Slap DDL
 66 0.8 s Room Bright w/125 ms Slap DDL
 67 1.2 s Room Bright w/175 ms 33% regen DDL
 68 1.5 s Room Bright w/200 ms 50% regen DDL
 69 2.0 s Hall Warm w/50 ms double DDL
 70 2.5 s Hall Bright w/100 ms double DDL
 71 3.5 s Hall Warm w/175 ms 33% regen DDL

72 5.0 s Hall Bright w/200 ms 50% regen DDL
 73 1.5 s Chamber Bright w/100 ms Slap DDL
 74 2.0 s Chamber Warm w/150 ms Slap DDL
 75 2.5 s Chamber Warm w/175 ms 33% regen DDL
 76 5.0 s Chamber Warm w/225 ms 50% regen DDL
 77 0.5 s Plate Bright w/75 ms double DDL
 78 1.0 s Plate Bright w/125 ms double DDL
 79 2.5 s Plate Bright w/75 ms double DDL
 80 3.5 s Plate Bright w/125 ms double DDL

Delays/Flanger and Chorus (Bank 6)

81 D Slow wide flange 33% regen
 82 D Medium flange 33% regen
 83 D Tremolo flange 25% regen
 84 D Slow wide chorus
 85 D Medium wide chorus
 86 D Tremolo chorus
 87 D Slow side flange w/150ms 20% regen DDL
 88 D Medium flange w/125 ms 40% regen DDL
 89 D Tremolo flange w/100 ms 20% regen DDL
 90 D Slow side flange w/200 ms 33% regen DDL
 91 D Medium wide flange w/75 ms Slap DDL
 92 D Slow wide chorus w/50 ms 33% regen DDL
 93 D Medium wide chorus w/75 ms 30% regen DDL
 94 D Medium wide chorus w/125 ms 25% regen DDL
 95 D Tremolo chorus w/70 ms Slap DDL
 96 D Tremolo chorus w/200 ms 33% regen DDL

Reverbs/Flanger or Chorus (Bank 7)

97 Slow wide flange w/0.8 s Medium Bright Chamber reverb
 98 Med. slow wide flange w/0.8 s Med. Bright Plate reverb
 99 Medium wide flange w/0.8 s Medium Bright Plate reverb
 100 Tremolo flange w/0.8 s Medium Bright Room reverb
 101 Slow side chorus w/0.8 s Medium Bright Room reverb
 102 Medium slow wide chorus w/1.0 s Medium Bright Hall reverb
 103 Medium wide chorus w/1.5 s Medium Bright Hall reverb
 104 Tremolo chorus w/0.8 s Medium Bright Plate reverb
 105 Slow wide flange w/2.0 s Medium Warm Room reverb
 106 Medium slow wide flange w/1.5 s Medium Warm Room reverb
 107 Medium wide flange w/1.0 s Medium Warm Room reverb
 108 Tremolo flange w/0.5 s Small Warm Room reverb

109 Slow wide chorus w/1.5 s Medium Warm Room reverb
 110 Medium slow wide chorus w/2.0 s Medium Warm Hall reverb
 111 Medium wide chorus w/2.0 s Medium Bright Hall reverb
 112 Tremolo chorus w/1.0 s Medium Warm Room reverb

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

113 0.8 s Bright Room reverb + Left 175 ms/Right 200 ms 40% regen
 DDL + medium wide chorus
 114 1.5 s Warm Room reverb + Left 45 ms/Right 55 ms Slap DDL +
 medium wide chorus
 115 2.5 s Warm Room reverb + Left 80 ms/Right 120 ms 30% regen
 DDL + slow wide chorus
 116 3.0 s Sizzle Plate reverb + Left 45 ms/Right 55 ms Slap DDL +
 Tremolo chorus
 117 0.5 s Bright Plate reverb + Left 200 ms/Right 175 ms 40% regen
 DDL + medium wide flange
 118 1.5 s Warm Room reverb + Left 45 ms/Right 55 ms Slap DDL +
 medium wide flange
 119 2.5 s Warm Room reverb + Left 80 ms/Right 120 ms 30% regen
 DDL + slow wide flange
 120 3.0 s Sizzle Plate reverb + Left 45 ms/Right 55 ms Slap DDL +
 Tremolo flange
 121 D Slow panner
 122 D Medium panner
 123 D Fast Panner
 124 1.5 s Bright Hall reverb w/Slow panner
 125 1.5 s Bright Hall reverb w/Medium panner
 126 1.5 s Bright Hall reverb w/Fast panner
 127 2.5 s Bright Hall reverb + 200ms DDL + medium panner

Reverb + Reverb (Bank 9)

128 D 0.5 s Dark Plate 0.5 s Bright Plate
 129 D 0.5 s Dark Room 0.8 s Bright Room
 130 D 0.5 s Dark Chamber 1.2 s Bright Chamber
 131 D 0.5 s Dark Plate 1.8 s Bright Plate
 132 D 0.8 s Dark Room 0.5 s Bright Room
 133 D 0.5 s Dark Chamber 0.8 s Bright Chamber
 134 D 0.5 s Dark Plate 1.2 s Bright Plate
 135 D 0.5 s Dark Room 1.8 s Bright Room
 136 D 1.2 s Dark Chamber 0.8 s Bright Chamber
 137 D 0.8 s Dark Plate 0.8 s Bright Plate

138 D 0.8 s Dark Room 1.8 s Bright Room
 139 D 0.8 s Dark Chamber 2.5 s Bright Chamber
 140 D 1.2 s Dark Plate 0.8 s Bright Plate
 141 D 1.2 s Dark Room 1.2 s Bright Room
 142 D 1.2 s Dark Chamber 1.8 s Bright Chamber
 143 D 1.2 s Dark Hall 2.5 s Bright Hall

Reverb + Reverb (Bank 10)

144 D 1.8 s Dark Plate 0.8 s Bright Plate
 145 D 1.8 s Dark Room 1.2 s Bright Room
 146 D 1.8 s Dark Chamber 1.8 s Bright Chamber
 147 D 1.8 s Dark Hall 2.5 s Bright Hall
 148 D 2.5 s Dark Plate 0.5 s Bright Plate
 149 D 2.5 s Dark Room 1.2 s Bright Room
 150 D 2.5 s Dark Chamber 1.8 s Bright Chamber
 151 D 2.5 s Dark Hall 3.5 s Bright Hall
 152 D 3.5 s Dark Plate 0.8 s Bright Plate
 153 D 3.5 s Dark Room 1.2 s Bright Room
 154 D 3.5 s Dark Chamber 1.8 s Bright Chamber
 155 D 3.5 s Dark Hall 2.5 s Bright Hall
 156 D 5 s Dark Room 1.8 s Bright Room
 157 D 5 s Dark Plate 3.5 s Bright Hall
 158 D 10 s Dark Hall 1.8 s Bright Chamber
 159 D 10 s Warm Hall 3.5 s Bright Hall

Delay + Delay (Bank 11)

160 D 1 tap 25 ms Slap 1 tap 225 ms 50% regen
 161 D 1 tap 55 ms Slap 1 tap 265 ms 50% regen
 162 D 1 tap 65 ms Slap 1 tap 235 ms 50% regen
 163 D 1 tap 100 ms Slap 1 tap 325 ms 50% regen
 164 D 1 tap 25 ms 50% regen 1 tap 50 ms 40% regen
 165 D 1 tap 45 ms 50% regen 1 tap 90 ms 35% regen
 166 D 1 tap 75 ms 50% regen 1 tap 150 ms 35% regen
 167 D 1 tap 100 ms 50% regen 1 tap 200 ms 35% regen
 168 D 1 tap 125 ms 50% regen 1 tap 250 ms 35% regen
 169 D 1 tap 165 ms 50% regen 1 tap 330 ms 35% regen
 170 D 1 tap 250 ms 50% regen 1 tap 125 ms 50% regen
 171 D 1 tap 350 ms 50% regen 1 tap 150 ms 50% regen
 172 D 1 tap 450 ms 50% regen 1 tap 50 ms 50% regen
 173 D 3 tap 175 ms Flat 0% reg. 3 tap 325 ms Flat 0% regen
 174 D 3 tap 125 ms Flat 0% reg. 3 tap 200 ms Flat 0% regen
 175 D 3 tap 80 ms Flat 0% reg. 3 tap 120 ms Flat 0% regen

Delays + Gated Reverb (Bank 12)

176	D	1 tap 200 ms 33% regen	DDL	50ms Bright gate
177	D	1 tap 190 ms 33% regen	DDL	50ms Dark gate
178	D	1 tap 180 ms 33% regen	DDL	100ms Bright gate
179	D	1 tap 150 ms 33% regen	DDL	100ms Dark gate
180	D	1 tap 200 ms 33% regen	DDL	150ms Bright gate
181	D	1 tap 190 ms 33% regen	DDL	150ms Dark gate
182	D	1 tap 180 ms 33% regen	DDL	200ms Bright gate
183	D	1 tap 150 ms 33% regen	DDL	200ms Dark gate
184	D	1 tap 35 ms 0% regen	DDL	50ms Bright gate
185	D	1 tap 90 ms 40% regen	DDL	50ms Dark gate
186	D	1 tap 65 ms 0% regen	DDL	100ms Bright gate
187	D	1 tap 120 ms 40% regen	DDL	100ms Dark gate
188	D	1 tap 75 ms 0% regen	DDL	150ms Bright gate
189	D	1 tap 150 ms 40% regen	DDL	150ms Dark gate
190	D	1 tap 100 ms 0% regen	DDL	200ms Bright gate
191	D	1 tap 200 ms 40% regen	DDL	200ms Dark gate

Flanger/Chorus + Gated Reverb (Bank 13)

192	D	Medium Slow wide chorus	50ms Bright gate	
193	D	Medium Fast wide chorus	50ms Dark gate	
194	D	Medium Slow wide flange	50ms Bright gate	
195	D	Medium Fast wide flange	50ms Dark gate	
196	D	Slow wide chorus	100ms Bright gate	
197	D	Tremolo chorus	100ms Dark gate	
198	D	Slow wide flange	100ms Bright gate	
199	D	Fast flange	100ms Dark gate	
200	D	Medium Slow wide chorus	150ms Bright gate	
201	D	Medium Slow wide chorus	150ms Dark gate	
202	D	Medium Slow wide flange	150ms Bright gate	
203	D	Medium Slow wide flange	150ms Dark gate	
204	D	Medium Slow wide chorus	200ms Bright gate	
205	D	Tremolo chorus	200ms Dark gate	
206	D	Medium Slow wide chorus	200ms Bright gate	
207	D	Fast Flange	200ms Dark gate	

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

208	D	Slow wide flange 50% regen	Slow wide flange 50% regen	
209	D	Slow wide flange 75% regen	Slow wide flange 75% regen	

210	D	Med. wide flange 50% regen	Med. wide flange 50% regen	
211	D	Med. wide flange 75% regen	Med. wide flange 75% regen	
212	D	Tremolo flange 33% regen	Tremolo flange 33% regen	
213	D	Tremolo flange 50% regen	Tremolo flange 50% regen	
214	D	Slow wide chorus	Slow wide chorus	
215	D	Medium slow chorus	Medium slow chorus	
216	D	Medium wide chorus	Medium wide chorus	
217	D	Medium fast chorus	Medium fast chorus	
218	D	Fast chorus	Fast chorus	
219	D	Tremolo chorus	Tremolo chorus	
220	D	Very Slow panner	Very Slow panner	
221	D	Medium Slow panner	Medium Slow panner	
222	D	Medium Fast panner	Medium Fast panner	
223	D	Ultra Fast panner	Ultra Fast panner	

Reverb/Delay + Flanger/Chorus (Bank 15)

224	D	0.5s Room Bright w/100 ms Slap	DDL	Med. wide chorus
225	D	0.8s Room Bright w/125 ms Slap	DDL	Med. wide flange
226	D	1.2s Room w/175 ms 33% regen	DDL	Med. wide chorus
227	D	1.5s Room w/200 ms 50% regen	DDL	Med. wide flange
228	D	2.0s Hall Warm w/50 ms double	DDL	Slow wide chorus
229	D	2.0s Hall Bright w/100 ms double	DDL	Slow wide flange
230	D	2.5s Hall Warm w/175 ms 33% regen	DDL	Tremolo chorus
231	D	3.5s Hall Bright w/200 ms 50% regen	DDL	Tremolo flange
232	D	1.5s Chamber Bright w/100 ms Slap	DDL	Tremolo chorus
233	D	2.0s Chamber Warm w/150 ms Slap	DDL	Tremolo flange
234	D	2.5s Chamber w/175 ms 33% regen	DDL	Slow wide chorus
235	D	5.0s Chamber w/225 ms 50% regen	DDL	Slow wide flange
236	D	0.5s Plate Bright w/75 ms double	DDL	Med. wide chorus
237	D	1.0s Plate Bright w/125 ms double	DDL	Med. wide flange
238	D	2.5s Plate Bright w/75 ms double	DDL	Tremolo chorus
239	D	3.5s Plate Bright w/125 ms double	DDL	Tremolo flange

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

240	D	1.8s Warm Room	Slow wide flange 33% regen	
241	D	1.2s Bright Room	Medium flange 33% regen	
242	D	1.8s Warm Room	Tremolo flange 25% regen	
243	D	1.8s Bright Plate	Slow wide chorus	
244	D	1.8s Warm Chamber	Medium wide chorus	
245	D	2.5s Bright Hall	Tremolo chorus	
246	D	2.5s Bright Plate	Slow flange w/150ms 20% regen	DDL

247 D	1.8s Warm Hall	Med. flange w/125 ms 40% regen DDL
248 D	1.8s Bright Plate	Trem flange w/100 ms 20% regen DDL
249 D	1.2s Warm Room	Slow flange w/200 ms 33% regen DDL
250 D	1.2s Bright Plate	Med. flange w/75 ms Slap DDL
251 D	2.5s Warm Chamber	Chorus w/50 ms 33% regen DDL
252 D	1.8s Bright Hall	Med. chorus w/75 ms 30% regen DDL
253 D	1.2s Warm Room	Med. chorus w/125 ms 25% regen DDL
254 D	1.2s Bright Plate	Tremolo chorus w/70 ms Slap DDL
255 D	2.5s Bright Plate	Slow wide chorus w/125 ms Slap DDL

Changing Parameters Within Presets

The FXR Elite II allows you to control parameters within each preset, either by adjusting the A Param Encoder, or B Param Encoder knobs, or via MIDI. (For more on MIDI control for the FXR Elite II, see pages 20 through 27.)

The chart below indicates which parameters can be altered within each preset. Exceptions and further explanation are included after the chart.

Bank	Preset	A Param Enc.	B Param Enc.
1	1-16	Reverb Level	Reverb Contour
2	17-32	Reverb Level	Reverb Contour
3	33-48	Reverb Level	Reverb Contour
4	49-64	Delay Time	Delay Regen
5	65-80	Delay Time	Delay Regen
6	81-83	Sweep	Regen
6	84-86	Sweep	No function
6	87-91	Flanger Regen	Delay Regen
6	92-96	Chorus Sweep	Delay Regen
7	97-112	Flanger Sweep	Reverb Contour
8	113-120	Delay Time	Delay Regen
8	121-124	Pan Sweep	No function
8	125-128	Reverb Contour	Pan Sweep
9	129-144	Left Level	Right Level
10	145-160	Left Level	Right Level
11	161-176	Left Level	Right Level
12	177-192	Delay Regen	Reverb Level
13	193-208	Sweep	Level
14	209-214	Sweep	Regen
14	215-224	Sweep	No function
15	225-240	Delay Regen	Sweep
16	241-243	Reverb Level	Flanger Regen
16	244-246	Reverb Level	Chorus Sweep

Bank	Preset	A Param Enc.	B Param Enc.
16	247-251	Flanger Regen	Delay Regen
16	252-255	Chorus Sweep	Delay Regen

Notes On Editable Parameters

Presets 1-48. Reverb Contour sets the cutoff frequency of a lowpass filter, which lets you adjust the way in which the reverb's high frequencies die away as the reverb decays. Reverb Contour is indicated on the front panel by "EQ."

Presets 193-208. None of the gate parameters are controllable. Only the parameters shown in the table are adjustable.

Presets 247-255. Reverb parameters are not controllable in these presets.

All presets with adjustable Sweep parameter. For flanger and chorus, the Sweep control reduces width and increases speed as you turn the parameter encoder clockwise. For the panner, turning the parameter encoder clockwise increases the speed.

Battery Backup

When the FXR Elite II's power is turned off, the edited programs are retained via battery-powered backup memory. This, as well as the last preset used and the MIDI Channel, will be active the next time the unit is powered up. The battery should be able to keep all memory information retained for four years. When the FXR Elite II is turned on, a battery check is made. If the battery needs replacement, the display will flash "bAt" until a button is pressed. The unit will operate normally, but a new battery should be installed. If the battery needs replacement, contact our Customer Service department.

ART FXR Elite II Specifications

Dimensions	1.75" H x 19" W x 4.25" D, all-steel case
Weight	4 lbs., 10.7 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
MIDI receive channel	1-16, OMNI (all), Off
MIDI Programs	May be assigned to any preset number

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.

Applied Research and Technology, Inc.

215 Tremont Street
Rochester, NY 14608

(716) 436-2720
(716) 436-3942 (FAX)

OUR NEW AREA CODE IS 585

WARRANTY & SERVICE INFORMATION

LIMITED WARRANTY

Warranty service for this unit will be provided by Applied Research & Technology, Inc. in accordance with the following warrant statement.

Applied Research and Technology, Inc. (A R T) 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 three years 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.

EXCLUSIONS: This warranty does not apply in the event of misuse or abuse of the product or as a result of unauthorized alterations or repairs. This warranty is void if the serial number is altered, defaced, or removed.

A R T reserves the right to make changes in design or make additions to or improvements upon this product without any obligation to install the same on products previously manufactured.

A R T shall not be liable for any consequential damages, including without limitation damages resulting from loss of use. Some states do not allow limitation of incidental or consequential damages, so the above limitation or exclusion may not apply to you. This warranty gives you specific rights and you may also have other rights which vary from state to state.

For units purchased outside the United States, service will be provided by an authorized distributor of Applied Research and Technology, Inc.

Service

The following information is provided in the unlikely event that your unit requires service.

- 1) Be sure that the unit is the cause of the problem. Check to make sure the unit has power supplied, all cables are connected correctly, and the cables themselves are in working condition.
- 2) If you find the unit to be at fault, write down a description of the problem, including how and when the problem occurs.

3) Call the factory for a Return Authorization (RA) number.

4) Pack the unit in its original carton or a reasonable substitute. The packing box is not recommended for a shipping carton. Put the packaged unit in another box for shipping. Print the RA number clearly under the address.

5) Include with your unit: a return shipping address (we cannot ship to a P.O. Box), a copy of your purchase receipt, a daytime phone number, and a description of the problem.

6) Ship the unit to:

APPLIED RESEARCH AND TECHNOLOGY, INC.
215 TREMONT STREET
ROCHESTER, NY 14608
ATTN: REPAIR DEPARTMENT
RA # _____
OUR NEW AREA CODE IS 585

7) Contact our customer service department at (716) 436-2720 for your Return Authorization number or questions regarding repairs. Customer Service hours are 9:00 AM to 4:00 PM Eastern Time, Monday through Friday.

Customer Service

You may contact A R T's Customer Service Department between the hours of 9:00 AM and 4:00 PM Eastern Time Monday through Friday. The Customer Service Department will answer technical questions about ART products and provide information concerning service.

Additional Information

If you are planning to purchase additional equipment for your audio needs, please consider the following A R T Products.

Recording/ Live Sound

MR-1, Personal Reverb Processor
Tube MP, Personal Microphone Preamp/limiter
MDM-8L, Eight channel compressor/limiter
Pro Gate, Eight channel programmable Noise Gate
SC-2, two channel compressor/limiter/gate
MDC-2001, Stereo dynamics processor
FXR, Two channel Digital multi-effects processors
Effects Network, Digital Dedicated and multi-effects processor
Multiverb Alpha, Digital multi-effects processor
HD-15, Two channel 15 band EQ
HD-31, 31 band EQ
Pro MP, Professional two channel microphone preamp

Instrument applications

XTREME, Personal guitar processor with digital effects
DST-4, Programmable guitar preamp with digital effects
Power Plant, Studio guitar preamp
DST 8080, 80 watt/ channel powered guitar preamp with effects
The Acoustic, Personal acoustic guitar processor with digital effects
SGX-2000, Analog and digital preamp/ processor for guitar
SGX-Nightbass, Analog and digital preamp/ processor for guitar
ECC, Guitar floor processor
BCC, Bass floor processor

MIDI

X-15, MIDI foot controller with two expression pedals
X-12, MIDI foot controller with optional Power Pedal controller

For a full line catalog, write, call in, or email us to request one.
For up to date information on new products send in your User Registration card NOW!