

Welcome to the world of the Fatar Studio Series Keyboard Controllers. Congratulations on purchasing the ST-490 Plus, one of the finest master keyboard controllers in the world today. The Studio-490 Plus is the perfect choice for a musician looking for a simple yet versatile keyboard controller to produce quality results for the live or studio environment.

▶ **TECHNICAL CHARACTERISTICS:**

- * 49 keys
- * One zone
- * Velocity Sensitive
- * Two Parallel MIDI Outputs
- * Sustain Input Jack
- * Volume Input Jack
- * Program change, MIDI Channel, Transpose.
- * External Adapter 9V DC 500mA included

▶ **CONNECTIONS:**

1) Connect the AC adapter cable to the power input jack, in the back of the controller, located next to the power switch. See Figure #1.

Make sure that the AC adapter corresponds to the correct voltage output. The Studio 490 Plus will accept an adapter that has a rating of 9V DC with a positive polarity tip and has a minimum current of 200 ma.



Figure #1.

2) Connect MIDI cable from the ST-490 Plus's MIDI outputs, (each output can handle up to four synthesizers, modules, or effect devices) to the MIDI input on your sound sources. Set your sound sources to the desired MIDI channels by the ST-610 Plus. Each channel would normally be assigned to a different sound or effect. Since the ST-490 Plus has only one zone, you can only program one of the 6 channels at a time. Make sure that your sound source is properly assigned to the channel you are sending on.

To select a base channel hold the [CHANNEL] switch and enter the channel number (1 through 16) by depressing the appropriate black numbered key (0-9). The function switch must be released after the black number keys. At this point the ST-490 Plus is sending on that channel.

Program change:

A program change command allows you to change the sound on your sound source from the ST-490 Plus. The program change will be sent on whichever MIDI channel the ST-490 Plus

is currently set. Program changes are numbered 1 through 128. You may notice, depending on the sound source, that a program change of 1 will show up on your sound source as 0. This is not a problem, since MIDI is not completely standard between manufacturers. Thank the heavens that there are only a few anomalies like this between the manufacturers.

To issue a program change, hold the [PROGRAM] switch and enter the desired number on the numbered black keys with the appropriate program number or use the [INC]/ [DEC] (increment/ decrement) keys. If a number greater than 128 is entered, it will wrap around to the beginning.

Bank change:

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Some sound sources today, especially found on computer sound cards, have a feature called bank select. The MIDI specification calls for bank numbers 1 through 16384. Once you have selected your bank you are able to select a program change (1 through 128).

To select a bank of programs, hold the [PROGRAM] switch, press [BANK] key, and enter the appropriate bank number using the 0 through 9 keys. The bank command will be transmitted when the [PROGRAM] switch is released.

The [INC]/ [DEC] keys may be used instead of entering the bank number.

This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to Part 15 of the FCC rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment on and off, **the** user is encouraged to try to correct the interference by one or more of the following measures:

- **Reorient or relocate the receiving antennas.**
- **Increase the separation between the equipment and the receiver.**
- **Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.**
- **Consult the dealer or an experienced radio/TV technician for help.**

NOTE: Use of shielded power and interface cables with this equipment is **required in order** to ensure compliance with FCC specifications.

CAUTION: Changes or modifications to this equipment not expressly approved by the manufacturer responsible for compliance could void the user's authority to operate **the** equipment.

It is recommended that only FCC class B certified devices be used with this equipment. Operation of Class A equipment in a residential area is likely to cause harmful interference in which case the user will be required to correct the interference at his or her own expense.