



#### FEATURES

- 88 Key Keyboard with ivory finish keys
- "Regulated" weighted hammer action for true piano feel
- One zone
- MIDI program change Button
- MIDI Bank Select Button
- One MIDI Out Jack
- One Sustain Jack
- 9v DC 200mA power input Jack
- On/Off switch

#### CONNECTIONS

1. Connect the power adapter to the power supply input of the SL-990. The SL-990 is supplied with a 9vDC, 200mA, tip positive (+) adapter.
2. Connect a MIDI cable from the MIDI Output of the SL-990 to the MIDI input jack of your MIDI module or Keyboard. NOTE: The SL-990 is capable of providing power through the MIDI connection, if your module is designed to be able to make use this. You may need a special MIDI cable, with all 5 pins connected end to end. Ask your retailer for this cable, if you require it
3. Connect the sustain pedal to the sustain input jack. The SL-990 requires a sustain pedal with a "normally open" circuit, such as the FATAR PS-100 or the VFP-1/10 (piano style) sustain pedals.
4. The SL-990 will function on power-up as a one zone MIDI master controller keyboard transmitting only on channel one. You must enter the program change, bank select and velocity curve (shape) parameters after power-up, please see the preceding sections for instructions on how to accomplish these changes.

number of the curve you want, in the central octave/number entry field. When you release the Shape button, the curve will be changed. If you wish to use negative velocity curves, simply press and hold the Shape button, and first press the "-/H" (Bb) key to indicate that you are choosing a negative (-) **curve**. Then, continue to hold the Shape button and enter the number of the curve you want in the central octave/number entry field. When you release the Shape button, curve will be changed.

### 1. PROGRAM CHANGE

The program change function is used select which patch you want from your MIDI module. You can select the program change number by pressing and holding the Program Change button and entering the number, in the central octave/number entry field which corresponds to the patch you desire. When you release the program change button, the message will be sent. Values run from 1-128.

### 2. BANK SELECT

The Bank Select function allows you to change the patch bank of your MIDI module or keyboard. Due to different manufacturers approaches to this function, the format for entering this parameter depends on the model and manufacturer of your MIDI module or keyboard. Please refer to the MIDI Implementation Chart found in the manual of your MIDI module or keyboard for information on the format which your unit requires.

1. If your module requires a value sent only on control channel 32, you will simply need to press and hold the Bank Change button, and enter the bank number desired in the central octave/number entry field. When you release the bank change button, the message will be sent.

2. If your module requires values to be sent on control channel 32 and control channel 0, you will need to press and hold the Bank Change button, and first enter the value needed for cc; 32 in the central octave/number entry field. Then, while continuing to hold the bank select button, press the key labeled "-/H" (Bb) (indicates that what follows is the "higher byte") and then enter the value needed for cc; 0 in the central octave/number entry field. When you release the bank change button, the messages will be sent. EXAMPLE: (cc; 32 value) then-/H (higher byte) then (cc; 0 value)

### 3. VELOCITY CURVE (SHAPE)

If you wish to adapt your master controller to the dynamic response of your MIDI module or keyboard, or simply wish to adjust the "feel" of your master controller, the SL-990 offers four types of curves. You can choose to use these curves in a positive (normal) or negative (inverted) manner for a total of eight choices in velocity response. Negative curves can be used to produce inverted responses. If you were to play an inverted curve softly, you would get a loud response, and conversely, if you were to play loudly, you would get a soft response. This can be **surprisingly** useful and deserves some experimentation on your part.

**1. Shape N\*1** -This is a linear response and is the norm for most MIDI modules or keyboards. Essentially, what you put in is what you get out.

**2. Shape N\*2** -This shape has a less sensitive response than N\*1. This is useful if you play with a "heavy" touch or if your module or a particular patch is very sensitive to velocity. Think of this as compression, but done through MIDI.

**3. Shape N\*3** -This shape has a more sensitive response than N\*1. This is useful if you play with a "light" touch or if your module or a particular patch is not as sensitive to velocity. Think of this as expansion, but done through MIDI.

**4. Shape N\*4** -This shape has an even more sensitive response than N\*1 or N\*3. This is useful if you play with a "very light" touch or if your module or a particular patch has very little sensitivity to velocity. Think of this as extreme expansion, but done through MIDI.

To change velocity curves, simply press and hold the Shape button, and enter the