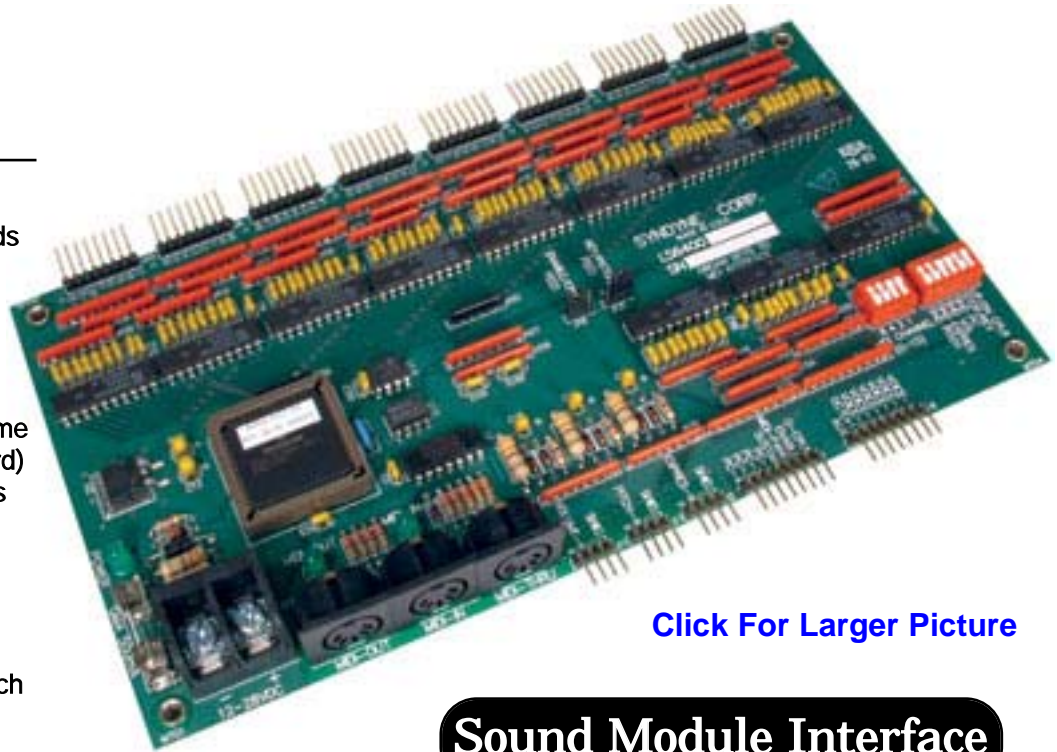


LS6400 Pipe Organ To MIDI

FEATURES:

- Easy to install in an existing organ
- Allows playing general MIDI sounds from any standard MIDI sound module
- Change from one MIDI sound to another by using organ keys
- Play different MIDI sounds from different keyboards at the same time (requires one LS6400 per keyboard)
- Assignable to all 16 MIDI channels
- Built-in MIDI Merge
- MIDI-In, MIDI-Out, and MIDI Thru
- 6 Settable Reversible Pistons
- +1, -1, and -2 Octave Transposing
- MIDI Sustain
- MIDI Volume, Expression, and Pitch Inputs



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Sound Module Interface

SPECIFICATIONS:

SYSTEM DESIGN INTENT:

The LS6400 is a simple, low cost device for adding general MIDI voices from a MIDI sound module to an existing organ. While designed specifically for pipe organs, it can also be used with other electronic instruments. The inputs on an LS6400 Interface are connected to key contacts on a manual or pedal board. These inputs can be directly wired to the keyboard or pedal board contacts or wired at the console junction board. The LS6400 inputs are well buffered so they can be wired to the existing contacts along with other organ electronics. No separate contacts are needed. The LS6400 will accept either positive or negative input signals and will operate directly from the organ rectifier (12 to 28 volts DC).

When MIDI is desired for more than one division, an LS6400 should be connected to each division where MIDI is required. For instruments

with more than one LS6400, "chain" LS6400 interface modules by connecting the output from one module into the input of the next. The last LS6400 module in the chain would then have its output connected to the sound module (synthesizer).

Changing MIDI sounds from the organ is accomplished by holding a "PC" piston, then pressing the appropriate note on the keyboard. Each note on the keyboard has been assigned to a particular General MIDI sound (i.e., piano, strings, harp etc.) on your MIDI sound module. There are several assignment options so you can set any of the 128 General MIDI sounds from either manual or pedal keys.

DIMENSIONAL:

Length: 9"

Width: 5-3/4" including connectors

Height: 1-1/4"

MECHANICAL:

Mounting: Four built-in standoffs for screw mounting.

Connections: All wires are connected via removable connectors on the board for easy installation.

ELECTRICAL:

Power Supply: Operates on standard organ rectifier power. On-board power supply is provided to operate electronics.

Programming: Provided with all functions included. No programming is necessary. All options are selected by DIP switches.

INPUTS:

Enable Input: Allows operation from either a stop or a reversible piston.

Select Input: Four inputs are provided to select different sets of sounds by pressing the appropriate

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key.

Pitch Input: Allows tuning a sound module to the pitch of the organ.

Expression Input: Provides expression for the MIDI sound module. Can be controlled by an organ expression pedal potentiometer.

Volume Input: Input to control volume of MIDI sounds.

Octave Coupler Input: Provides an octave coupler for MIDI sounds.

MIDI In Connector: Accepts MIDI information from other LS6400 boards and MIDI devices. That MIDI data will be merged with note information from the inputs on board and passed out of the MIDI Out Connector.

MIDI Out Connector: All MIDI data coming in the MIDI In Connector is merged with MIDI data collected from the inputs and sent out this connector.

MIDI Thru Connector: Passes through all "MIDI In" Messages

DIP SWITCHES:

MIDI Channel: Allows selection of MIDI channels 1-16.

UP/DN Coupler: Selects whether coupler shifts keying up or down on octave.

Stop/Rev: Selects whether the enable input reacts to a stop input (continuous) or a reversible input (momentary).

Send PC: A program change number is assigned to each note

input so MIDI sounds can be changed by using keys on the organ keyboard in the set mode. Those numbers will be sent out or not sent out the MIDI Out Connector when a note is depressed, depending on the position of this switch.

Send Volume: This switch determines whether any MIDI volume changes go out the MIDI Out Connector.

Send Expression: This switch determines whether any MIDI expression changes go out the MIDI Out Connector.

Send Pitch: This switch determines whether any MIDI Pitch changes go out the MIDI Out Connector.

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