



HENRY ENGINEERING
503 Key Vista Drive
Sierra Madre, CA 91024
(818) 355-3656

DESCRIPTION

LogiConverter is a logic interface unit that facilitates remote control of studio equipment. LogiConverter creates SPDT relay outputs from opto-isolated logic-level inputs. Four channels of control are provided. They can operate independently for 'start-only', or in pairs for 'start-stop' operation. Each channel can be user-programmed to generate momentary or maintained relay closure outputs with several modes of input control.

INSTALLATION

Connection to the four LogiConverter inputs is via the 'D' connector. All inputs are opto-isolated. Input voltages should be between 5 and 24 vdc. For connection to equipment that provides 'open collector' (ground-sink) interface, connect the '+' input to any terminal marked '+ 12V' on the D connector. Connect the '-' input terminal to the open collector, and connect any LogiConverter GND terminal to the emitter. All LogiConverter relay outputs are connected via the 12-terminal barrier strip on the unit.

PROGRAMMING

LogiConverter has 24 possible modes of operation...read carefully!

The four input/output channels can operate independently (start-only) or in pairs (start-stop). If start-stop pairs are selected, channels 1 and 2 are paired, and channels 3 and 4 are paired. The various modes are determined by 8 'dip switches' within the unit, referred to as SW1 through SW8. (See parts layout.) The functions of SW1 through SW8 are detailed below:

- SW1 Selects input mode of Chan. 1
SW2 Selects input mode of Chan. 2
SW3 Selects output mode of Chan. 1
SW4 Selects output mode of Chan. 2
SW5 Selects input mode of Chan. 3
SW6 Selects input mode of Chan. 4
SW7 Selects output mode of Chan. 3
SW8 Selects output mode of Chan. 4

The first four switches (SW1-SW4) affect channels 1 and 2; SW5-SW8 affect channels 3 and 4 identically.

Each channel has an 'input mode' switch associated with it. Chan. 1 has SW1, and Chan. 2 has SW2. Since channels 1 and 2 can operate as a pair, these switches affect both inputs.

For independent (start-only) operation, both SW1 and SW2 must be OFF. An input at Chan. 1 will produce an output at Chan. 1; an input at Chan. 2 will produce an output at Chan. 2. There is no interaction.

There are two modes of paired (start-stop) operation: Non-Latching and Latching. If Non-Latching is selected, an input at Chan. 1 will cause an output at Chan. 1. Removing the input from Chan. 1 will cause an output at Chan. 2. This mode is recommended for maintained input signals only. To select this mode, SW1 should be OFF and SW2 should be ON. The Chan. 2 input is not used with this mode.

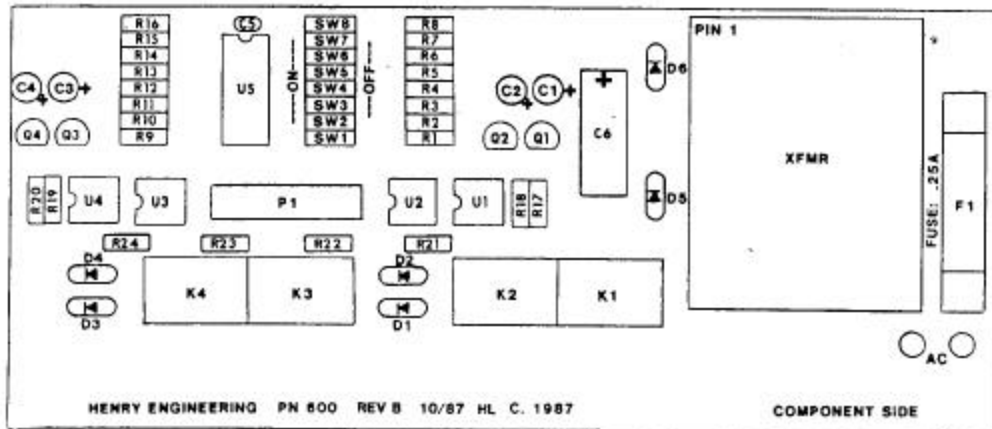
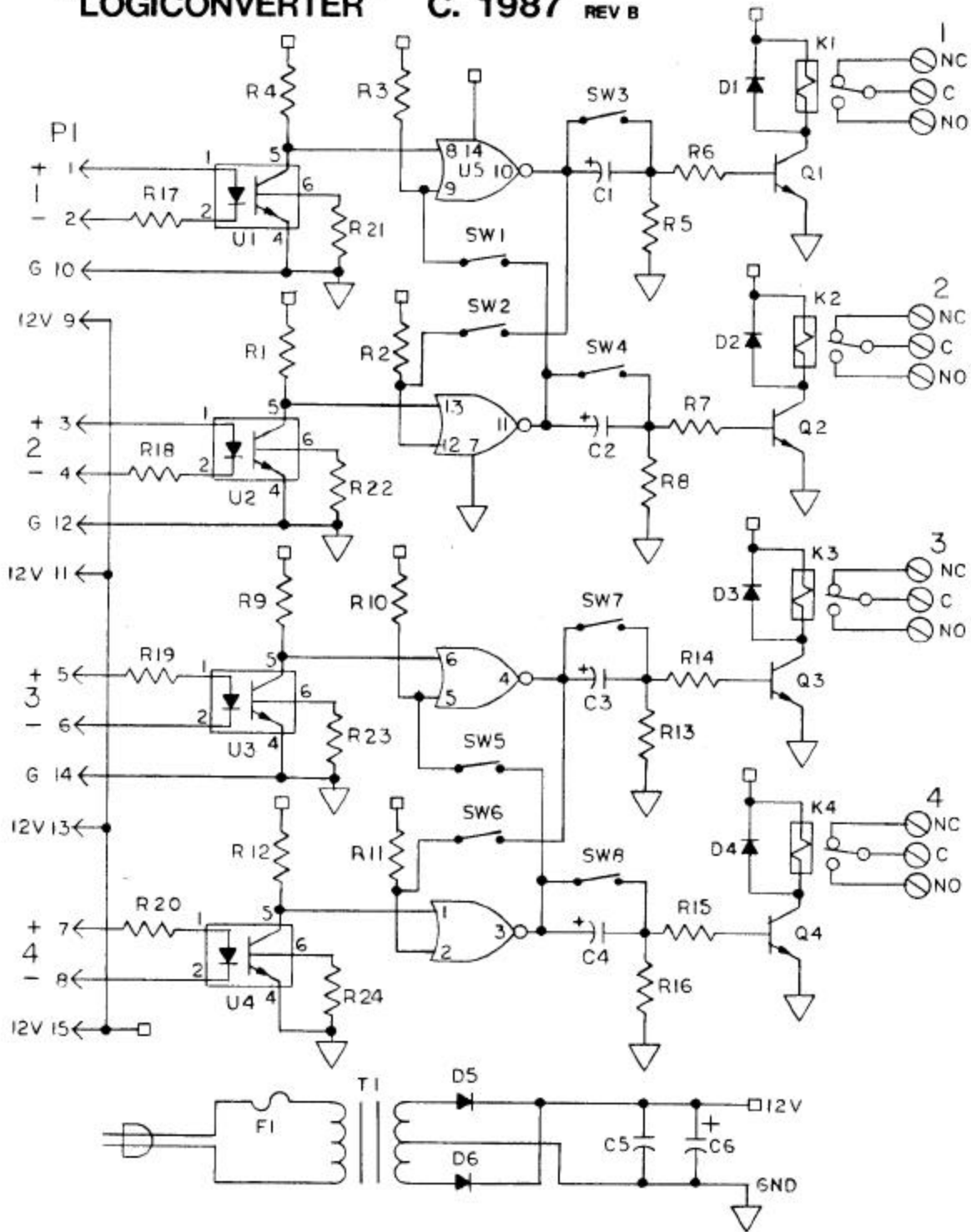
If Latching operation is programmed, an input at Chan. 1 will cause an output at Chan. 1. Additional inputs to Chan. 1 will produce no output; an input at Chan. 2 must be applied to reset the latch, which will also cause an output at Chan. 2. To select this mode, SW1 and SW2 must be ON.

Each channel has an 'output mode' switch: Chan. 1 has SW3 and Chan. 2 has SW4. If SW3 is OFF, the Chan. 1 output relay will produce a momentary closure. If SW3 is ON, the relay closure will be maintained for the duration of the input signal. SW4 affects Chan. 2 in the same way, as does SW7 for Chan. 3 and SW8 for Chan. 4.

"D" CONNECTOR PIN-OUTS FOR ALL INPUTS

Table with 3 columns: PIN, Input, and +12V/GND. Rows include PIN 1-6 and PIN 7-12, and PIN 13-15. Includes note: All inputs: 5-24vdc, 200ms length minimum.

"LOGICONVERTER" C. 1987 REV B



PARTS LIST:

R1-4, 9-12	10K
R5,8,13,16	100K
R6,7,14,15	39K
R17-20	1.5K
R21-24	1MΩ
C1-C4	3.3μf
C5	.1μf
C6	470μf
D1-D6	1N4004
F1	.25amp
K1-K4	12v RELAY
Q1-Q4	2N4401A
U1-U4	4N25
U5	CD4011B