General Description

The I/O Switch Module is used in the Redundant Processor Unit (RPU) to interface to and select one of two parallel I/O chains as the Master I/O chain.

Both I/O chains connect to the I/O Switch Module through two 37-pin D connectors located at the top and bottom positions on the front of the module.

The module transfers the selected I/O chain bus to the RPU backplane bus for use by the CPU Switch Module.

Two I/O Switch Modules can be used in an RPU; one for the Main I/O chain, and an optional module for the Auxiliary I/O chain,

A jumper is provided on the module to allow operation with a second I/O chain. Four LED indicators are provided to show CPU and I/O chain status. The features and benefits of the I/O Switch module are summarized in Table 1, while Table 2 provides module specifications.

Table 1. Features and Benefits

FEATURES	BENEFITS
Two parallel bus connectors	Provides RPU link for one or two I/O chains
Solid state bus switch	Provides bumpless transfer of I/O chain control
Status display	Shows CPU and I/O chain status

Table 2. Specifications

Dimensions:	Circuit Boar& 8.15 x 11.0 x 1.10 (inches) 208 x 280 x 28 (mm) Faceplate: 12.46 x 1.175 (inches) 317 x 30 **(mm)**
Power Requirements:	5 V dc, 2.0 A (Supplied by RPU power supply)
Storage Temperature:	-40° to +70° c
Operating Temperature:	0° to 60" C (Outside of rack)
Humidity:	5% - 95% (non-condensing)

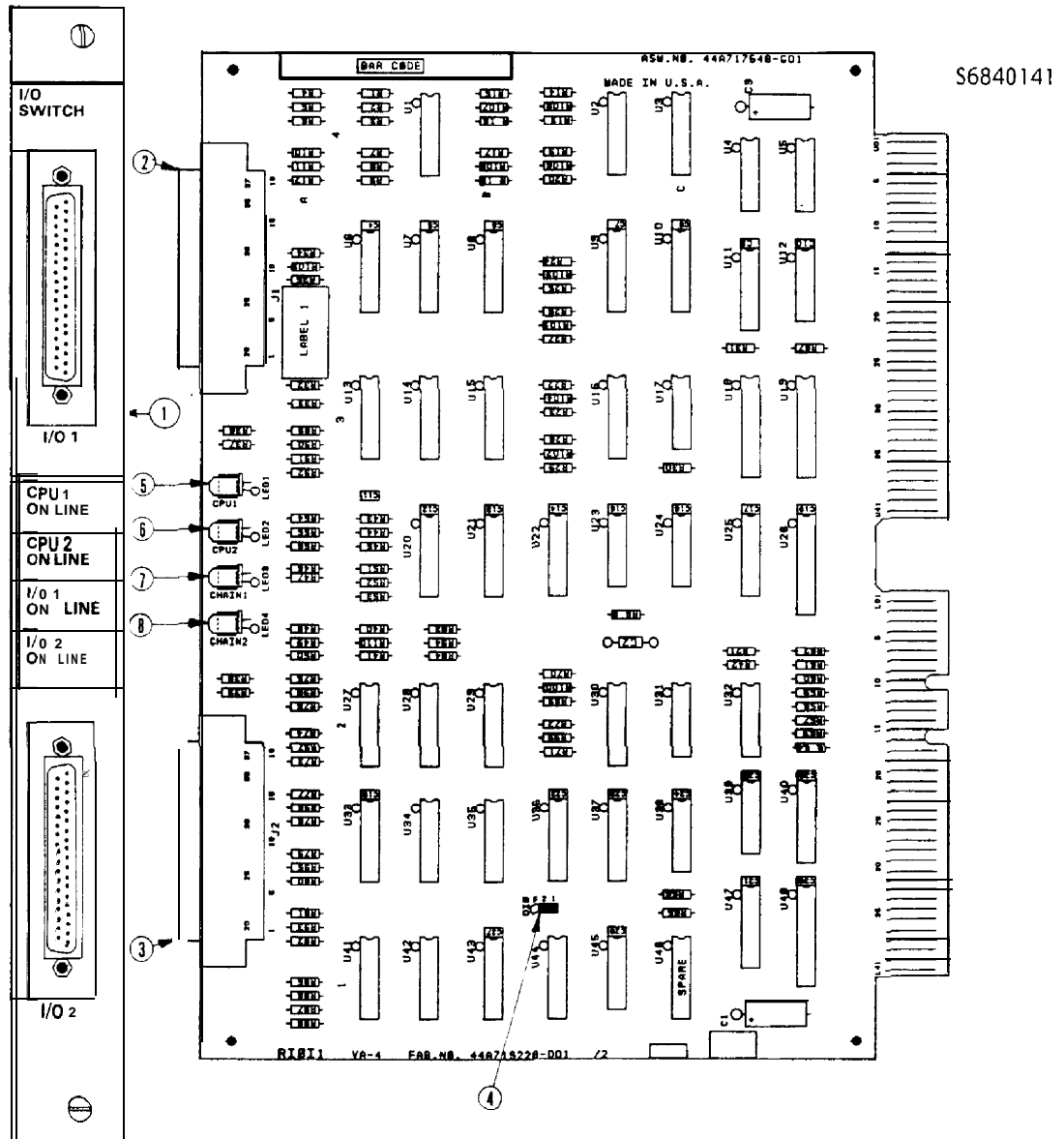**Figure 1. User Items**

1. Faceplate.

2. I/O Chain No. 1 Connector.

3. I/O Chain No. 2 Connector.

4. Jumper (labeled DIO)

   Single I/O chain 3 2 1

   Dual I/O chains 3 2 1

5. CPU1 On-Line

   When on, indicates that CPU1 is available as the Master **CPU.**

6. CPU2 On-Line

   When on, indicates that CPU2 is available as the Master CPU.

7. I/O 1 On-Line

   When on, indicates that **I/O** chain No. 1 is available.

8. I/O 2 On-Line

   When on, indicates that I/O chain No. 2 is available.

Installation

Set the DIO jumper to the required position (See Figure 1). The I/O Switch Module must **be** installed in either the second or seventh slots (from the left) of the RPU, depending on whether it is to be used in the Auxiliary or Main I/O chain, respectively. Use the insertion/extraction **tool** provided with the RPU to ensure proper module seating. Guide the faceplate over the connectors; then secure the faceplate to the rack **by** tightening the thumbscrews at the top and bottom.

Connect a multi-pair cable from the I/O chain 1 port (37-pin D connector) on the RPU to the I/O Receiver card top 37-pin D connector which begins I/O chain No. 1.

If a second I/O chain is used, connect a multi-pair cable from the I/O chain No. 2 port (37-pin D connector) **on** the RPU to the I/O Receiver card top 37-pin D connector which begins I/O chain No. 2.

Repeat the previous two operations if the optional Auxiliary I/O chain(s) is used.

All **connectors** should be secured using the furnished screws.

CAUTION

While removing or installing the I/O Switch Module, power should be removed from the RPU. Removing either RIOI board from the RPU will cause an I/O Chain reset. The process controlled by the CPU will stop.

For best results, cables from the I/O Switch Module to either I/O chain should be routed separately from power, contactor or motor circuits containing high current or high frequency noise components. These cables should not exceed fifty feet in length, including cable when connecting to other I/O Receiver cards in the daisy chain.

Table 3. Ordering Information

Equipment	Catalog Number
Circuit Board and Faceplate	IC600RB750
Faceplate only	IC600FP750
I/O Chain Cable 2 feet **(Ohm)**	IC600WD002
I/O Chain Cable 5 feet (1.5m)	IC6OOWDOO5
I/O Chain Cable 10 feet (7.5m)	IC600WD010
I/O Chain Cable 25 feet (18.75m)	IC6OOWDO25
I/O Chain Cable 50 feet **(37.5m)**	IC6OOWD050

The UL symbol **on** the nameplate means the product is listed by Underwriters Laboratories Inc. (UL Standard No. 508, Industrial Control Equipment, subsection Electronic Power Conversion Equipment.)

For further information, contact your local GE Fanuc sales representative.