

DP80-Scan Instruction Manual

SCANNING OPTION

The scanning option gives the capability to scan multiple inputs by working with the multi-input cards in your indicator. This new option requires no programming; thus, no special menu prompts are given with this option installed.

As required for your application, configure, install, and wire the scanning option as described in the instructions which start on the next page.

To begin input scanning, press a multi-input STEP key for two seconds (the multi-input card must be one of those connected to the scanning option). The display readout will then sequentially show the value of multi-input card channels at a default rate of 3.4 seconds a channel. The display rate can be made slower (6.8 sec) or faster (1.7 sec) — refer to the configuration instructions to change the rate of display. Press a multi-input STEP key again to end scanning and to go back to manual selection of inputs.

It is recommended that the scanning option *not* be used with a communications option such as serial output, BCD output, etc. since measurement data cannot be identified as discrete channels.

Use alarms carefully when using the scanning option. If alarms are used, all scanned channels must have the same range of input (more or less) since they must all share the same alarm limit value(s). Also, since scanning is performed asynchronously with the A/D conversion, you must use an alarm delay with a value of at least three (3) to avoid spurious alarm tripping as the indicator's input settles down the true channel value.

Scanning Option Card Configuration

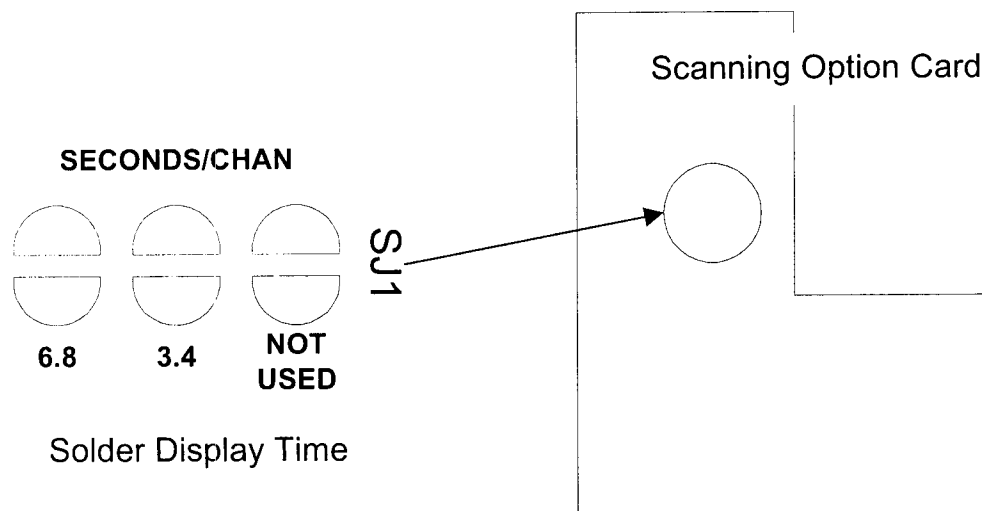
The Scanning Option Card is configurable for:

- Channel display time
- Input type, 2-wire inputs or 3-/4-wire inputs
- Number of multi-input cards to scan

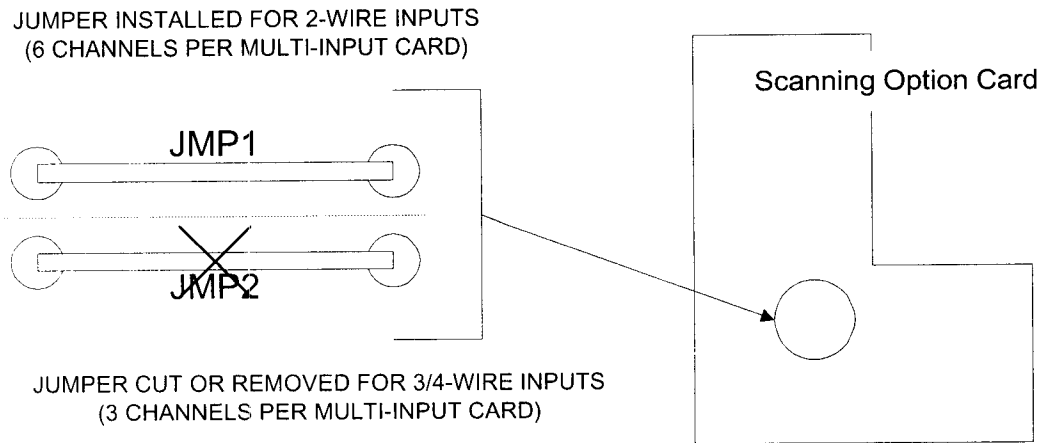
Configuring for Channel Display Time and Input Type

Remove the scanning option card from the indicator housing to configure the channel display time or input type.

Three pair of solder pads on the scanning option card are used to set the channel display time. These pads are shown in the drawing below. As shipped from the factory, solder joins the middle pair of pads to give 3.4 seconds/channel display time. To change the display time, wick or suction off the existing solder from the pads with a soldering iron. Join a new pad pair with solder as required for the desired channel display time.

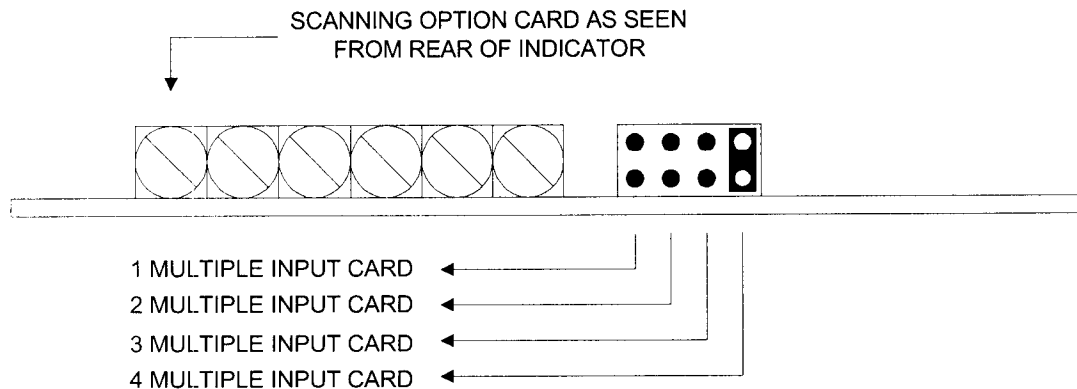


A jumper (JMP1) on the scanning option card configures the option to scan 2-wire inputs (thermocouple or linear inputs) or 3-/4-wire inputs (RTDs or thermistors). The location of this jumper is shown in the drawing below. Configure your scanning option card as necessary for the type multi-input card(s) installed in your indicator.



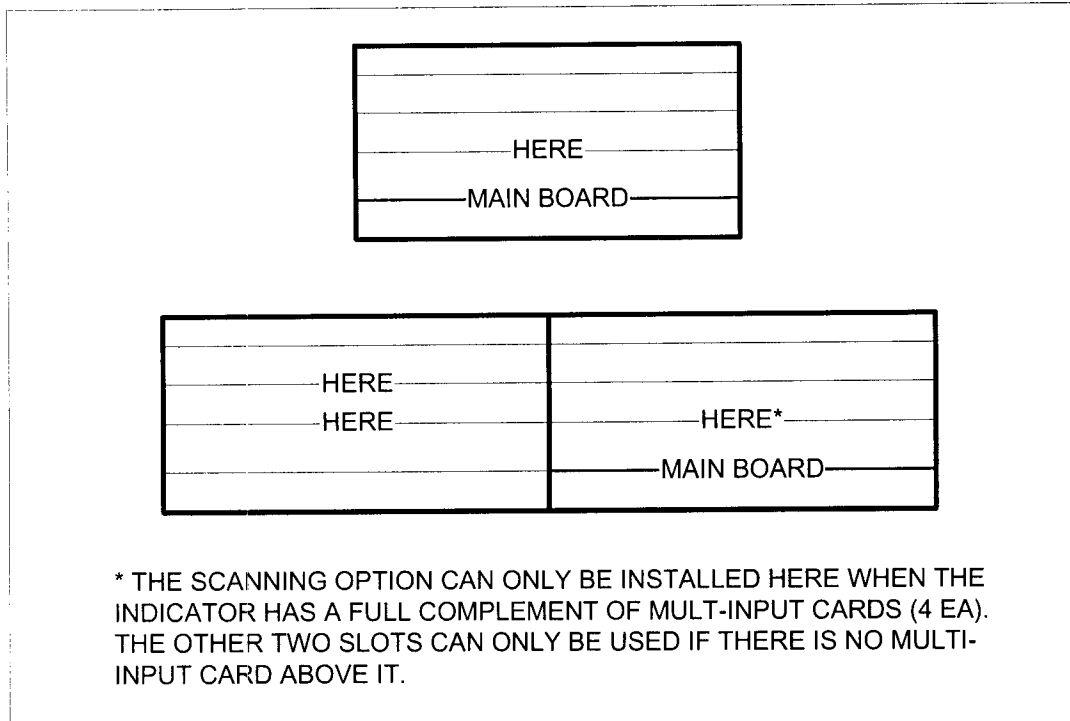
Configuring the Number of Multi-Input Cards To Scan

The scanning option scans inputs from 1 to 4 multi-input cards. Set the number of cards to scan by placing a jumper jack over a pair of pins. With the rear panel removed, the jumper jack and pins are accessible from the rear of the instrument. See the drawing below for details on jumper jack installation.



Scanning Option Installation

The drawing below shows the possible indicator slots in which the scanning option card may be installed. Your indicator can use only one (1) scanning option card.



Installing the Scanning Option

To install the scanning option, follow these steps:

CAUTION

To ensure proper operation of your indicator, always remove power before removing or installing any card.

STEP 1. Remove the rear panel.

STEP 2. Plug the card into the indicator with components facing up. See the drawing above for possible slot locations. Keep in mind that a particular combination of option cards may limit the number of slots in which a given option can be installed.

STEP 3. Wire the scanning option card. The discussion on wiring follows these installation steps.

STEP 4. After wiring, reinstall the rear panel. This completes installation of this option. Removal of the option card is the reverse of installation.

Wiring the Scanning Option Card

Connect the scanning option card to the indicator's multiple input card(s) as illustrated below. Use insulated hook-up wire for the connections.

