

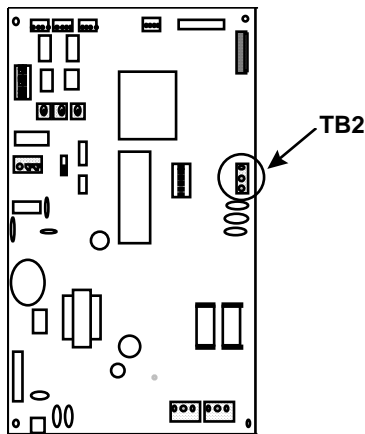
Getting Started with DR4300

Overview

The DR4300 recorder is a one-or two-pen microprocessor-based circular chart recorder providing reliable, convenient pen-drawn analog traces on preprinted 10-inch charts. Chart speed and range are configurable. In addition to generating pen-drawn chart traces, the DR4311 and DR4312 models include a display and keypad. This option lets you display the real-time value of the process variable for each pen channel, as well as other values.

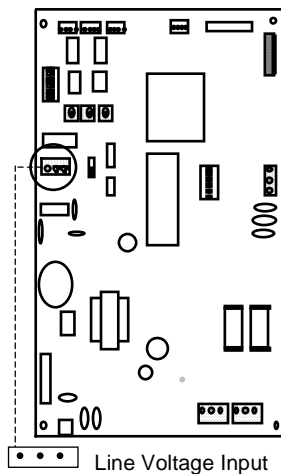
Each pen channel has its own printed circuit assembly, allowing the channels to operate independently.

Connecting the Analog Inputs



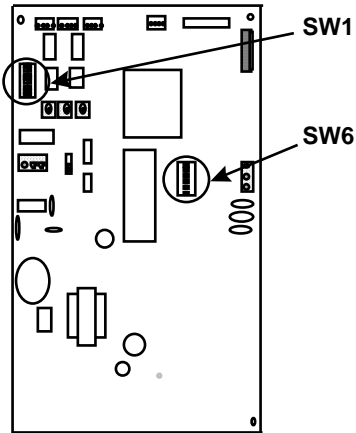
- Open the recorder door. Loosen the captive screw in the chart plate and swing the plate out.
- Locate terminal block **TB2** on the right edge of the printed circuit assembly for pen 1 (right side of the recorder).
- Insert the wires under the appropriate screws for the applicable input type. Refer to *Figure 2-9* in the Product Manual for specific input actuation wiring.
- Tighten the screws to secure the wires.
- If the recorder has two pens, repeat these steps for the second channel to **TB2** on the pen 2 printed circuit assembly located on the left side of the recorder.

Connecting Instrument Power



- Separate recorder models are available for use with 100 Vac to 240 Vac or 20 Vdc to 27 Vdc power. (Refer to model number information in *Section 1 – Overview* of the Product Manual.)
- Locate the power terminal block for your recorder model. Refer to *Figure 2-7* (Models without CE Mark) or *2-8* (Models with CE Mark) in the Product Manual for your specific model type.
 - Run power wires separately through conduit holes as indicated in *Figure 2-5* or *2-6* in the Product Manual.
 - Strip 1/4-inch maximum of insulation from the end of each wire and form end to fit under a screw connection.
 - **Install the power wires into the correct screw terminals, as shown in *Figure 2-7* or *2-8* in the Product Manual, to avoid damaging the recorder.**
 - Refer to *document 51-52-05-01* for additional information concerning noise interference prevention.

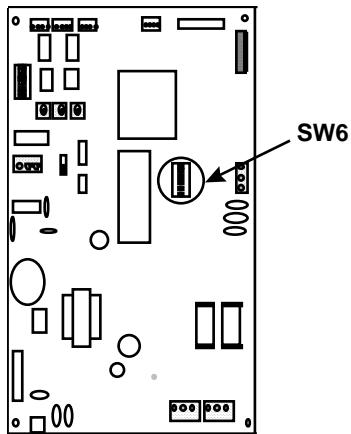
Instrument Configuration



For recorder models WITHOUT display and keypad

Configuration switches **SW1** and input switches **SW6** are provided on each pen channel's printed circuit assembly.

- Go to *Table 3-2* in the Product Manual and find the desired combination of recorder selections and input type for the pen 1 channel.
- Set the switches in **SW1** and **SW6**, as indicated in *Table 3-2* of the Product Manual, for pen 1 on the printed circuit assembly on the right side of the recorder. (Pen 1 is purple.)
- Repeat for pen 2 on its printed circuit assembly, located on the left side of the recorder (if available).



For recorder models WITH display and keypad

Input switches **SW6** are provided on each pen channel's printed circuit assembly.

- Go to *Table 4-3* in the Product Manual and find the desired input type for the pen 1 channel.
- Set the switches in **SW6**, as indicated in *Table 4-3* of the Product Manual, for pen 1 on the printed circuit assembly on the right side of the recorder. (Pen 1 is purple.)
- Repeat for pen 2 on its printed circuit assembly, located on the left side of the recorder (if available).
- Go to *Table 4-4* in the Product Manual for the configuration procedure. Refer to *Figure 4-2* in the Product Manual for a sequenced prompt hierarchy and to *Tables 4-5 through 4-18* for configuration parameter definitions.

Upper Display - four characters

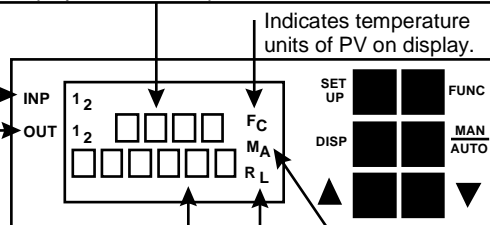
- Normal operation - Displays process variable (PV) for the selected input channel.
- Configuration mode - Displays selection or parameter value.

Data displayed is for input

Channel 1 or 2

Output relay 1 or 2

is ON, when lit.



Indicates temperature units of PV on display.

SET UP

FUNC

DISP

MAN/AUTO

FC

MA

RL

▲

▼

Lower Display - six characters

- Normal operation - Displays selectable operating parameter label and value. With totalization, shows totalizer value.
- Configuration mode - Displays Set Up group and function parameters.

Indicates controller mode:

- M = Manual
- A = Automatic

When either of the remote switch is set for SP2, or when NumSPs = TWO

L = Setpoint 1 (SP) active

R = Setpoint 2 (S2) active

Otherwise, neither indicator is used.

Ready to Start Up

Refer to *Table 3-5* or *4-22* in the Product Manual for procedure to set the chart time line.

Turn on the power to the instrument and it will start recording your input. For information on connecting the other input and output options, refer to *Section 2* in the Product Manual.

Technical Assistance

If you encounter a problem with your DR4300 recorder, you can receive technical assistance by dialing 1-800-423-9883 (USA and Canada). An engineer will discuss the problem with you. Please have your complete model number, serial number, and software version available.