

INTRODUCTION:

Although the OM-CP-PH101 is used in essentially the same manner as the rest of the OM-CP series, a few extra considerations are necessary to achieve the best performance. Determination of pH requires the measurement of two parameters: electrical potential and temperature. Thus, the OM-CP-PH101 has inputs for two external probes: a BNC jack that will accept most standard pH probes, and a 4-position header block that can be easily configured to accept a variety of temperature probes.

GETTING STARTED:

To use the OM-CP-PH101 data recorder, you should follow these steps:

1. Select a pH probe to be used with the recorder. The probe should have a BNC output connection, or an appropriate adapter. To maintain measurement error below 0.1% (about 0.1 pH) you should select a probe with output impedance less than 1000 megaohms at the desired temperature. The Omega PHE-4200 series of probes satisfy this condition above 0 °C (32 °F), and have a BNC output connection.
2. Select a temperature probe to be used with the recorder. This probe must be a 100 ohm platinum RTD, in the standard 2-, 3- or 4-wire configuration. The OM-CP-PH101 is designed to achieve exceptional accuracy with the 4-wire probe, but will still yield measurements much better than required for pH measurement with the 2- or 3- wire probes.
3. Insure that the probe you select can be connected to the OM-CP-PH101 RTD input by selecting a probe with wire leads, or by attaching an adapter that will allow you to connect wire leads to the probe. Omega's PR-10 and PR-11 series of probes have the proper leads for direct connection to the OM-CP-PH101.
4. Connect the probes to the data logger. Refer to the diagram in Figure 1 below.
5. Refer to the description of your pH probe for an applicable calibration procedure.
6. You may now use the OM-CP-PH101 exactly as the rest of the OM-CP series.

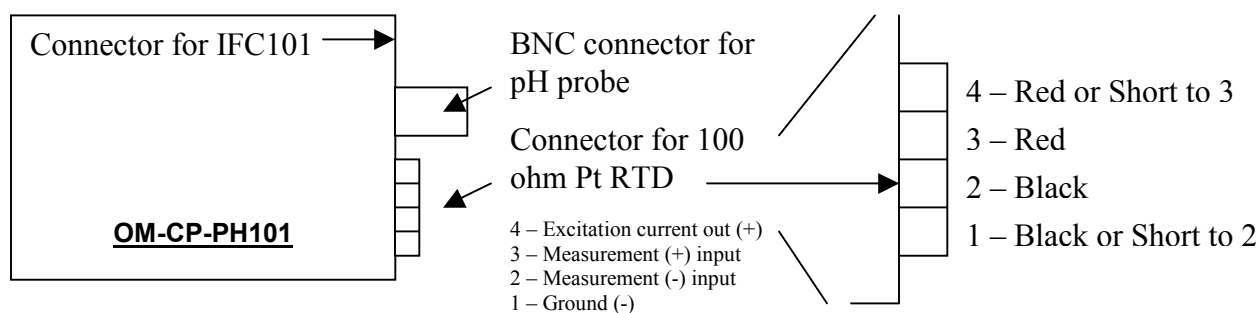


Figure 1