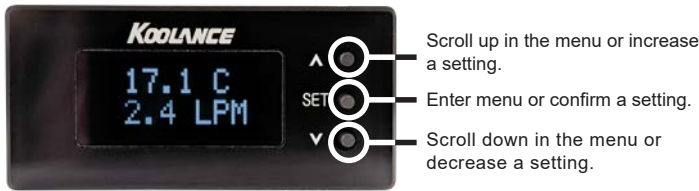
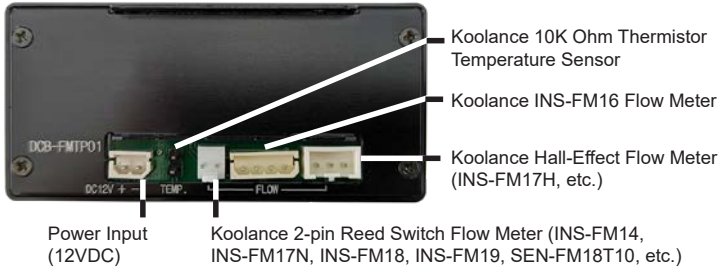
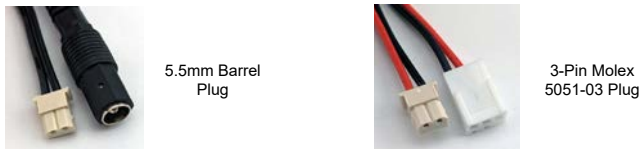


1 DCB-FMTP01 User Manual v 1.0

The DCB-FMTP01 can display the temperature and flow rate values from a Koolance thermistor and flow meter (sold separately). It can also sound an audio alarm based on the flow rate or temperature. Only one temperature sensor and flow meter should be connected to the display at a time. Connect the appropriate device as labeled below:



The display requires 12VDC input power. Two different power harnesses are included: a 5.5mm barrel plug, and a 3-pin Molex 5051-03 connector.



3 General Display Information

- You can exit any menu by holding **SET** for 1 second or waiting 10 seconds.
- To reset all display settings to default, hold **▼ + ▲** for 3 seconds.
- “OPEN” is displayed if no temperature sensor is attached (unless hidden).

Main Menu

To enter the main menu, briefly press **SET**. The selected option will begin flashing. Use **▼** and **▲** to navigate this menu.

- UNIT: Adjust the flow meter and temperature display units
- FLOW SET: Configure the display for the correct flow meter
- ALARM: Adjust the audio alarm settings

When in the top menu, press **SET** to enter one of the above categories. To exit from here, hold **SET**.

UNIT

The temperature and flow rate units can be adjusted (or hidden) in this menu. The selected option will begin flashing. Use **▼** and **▲** to navigate this menu.

- C/LPM: Display Celsius and Liters per Minute
- C/LPH: Display Celsius and Liters per Hour
- F/GPM: Display Fahrenheit and Gallons per Minute
- F/GPH: Display Fahrenheit and Gallons per Hour
- C: Display Celsius (flow rate is hidden)
- F: Display Fahrenheit (flow rate is hidden)
- LPM: Display Liters per Minute (temperature is hidden)
- LPH: Display Liters per Hour (temperature is hidden)
- GPM: Display Gallons per Minute (temperature is hidden)
- GPH: Display Gallons per Hour (temperature is hidden)

To exit from here, hold **SET**.

2 CAUTION: Do not power the device with more than 12V DC power, or reverse the polarity. Doing so may permanently damage the product and is not covered by the warranty.



A bracket is included to optionally mount the display directly to a Koolance flow meter. Due to size constraints, only certain models of Koolance flow meters and tube fittings are compatible with the bracket. These include flow meter models: INS-FM14, INS-FM17H, INS-FM17N, INS-FM18, and SEN-FM18T10.

The bracket supports tube fittings on the flow meter with an outer diameter up to 22.4mm (0.88in). This includes Koolance barb fittings for tubing up to 13mm (1/2in) internal diameter, or Koolance compression fittings for tubing up to 13mm (1/2in) outer diameter.

To mount the display to a Koolance flow meter, thread the flow meter's wire through the lower bracket opening. Then hook the lower bracket tab into the display, and secure it using the upper screws.



Hook the lower bracket tab into the display



Secure with two screws on top

4 FLOW SET

The flow meter multiplication factor is configured in this menu. This is the value which is multiplied by the flow meter's pulses (in Hertz) to derive the flow rate in Liters per Minute.

FACTOR
0.310: Flow meter multiplier to determine flow rate (0.000-9.999)

The first digit will flash. Press **▼** or **▲** to adjust the value (hold to change quickly), then press **SET** to progress to the next digit. To exit from here, hold **SET**.

NOTE: To display an accurate flow rate, be sure to use the correct value. Values for Koolance flow meter models are shown below:

Model	6mm ID Tubing	10-13mm ID Tubing
INS-FM14	0.100	0.095
INS-FM16	0.200	0.230
INS-FM17H	0.320	0.310
INS-FM17N	0.280	0.310
INS-FM18	0.280	0.310
INS-FM19	0.280	0.310
SEN-FM18T10	0.280	0.310

ALARM

The display can sound an audio alarm if the temperature or flow rate reach a set value. The value of the triggered sensor(s) will also flash in the display.

- C: (Units differ) Temperature Alarm Setting, “-----” to disable; Range: 0-90°C, 32-194°F
- LPM: (Units differ) Flow Rate Alarm Setting, “-----” to disable; Range: 0.1-99.9LPM, 1-5994LPH, 0.1-26.4GPM, 1-1584GPH

The first value will flash. Press **▼** or **▲** to adjust the value (hold to change quickly), then press **SET** to progress to the next value. To exit from here, hold **SET**.