

A2  
Humidity Temperature  
Indicator

**SUPPLEMENTAL INSTRUCTIONS**

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## 1 Battery Operation

The A2 indicator is factory preset for battery operation. If you have previously set the indicator for operation with a rechargeable battery, you must return the internal jumper to its original position before inserting a regular battery (see Operation with a Rechargeable Battery).

Insert a 9V Alkaline battery or a 9V rechargeable battery in the battery compartment located at the rear of the indicator.

You may also use an AC adapter providing 9V DC (200 mA). The plug of the adapter must have the DC (+) at the tip. Connect the plug of the AC adapter to the jack located on the left hand side of the indicator.

## 2 Operation with a Rechargeable Battery

Remove any non rechargeable battery from the battery compartment. Remove the screw located in the battery compartment to open the instrument housing. Set the jumper located at the bottom left of the PCB to the ACCU position (two top pins). Reassemble the instrument housing and secure it with the screw. You can now insert a 9V rechargeable battery. If an AC adapter is connected to the indicator, this will charge the battery with a constant current.

**IMPORTANT:** using a rechargeable battery with the jumper set to the wrong position can damage the indicator.

## 3 Humidity and Temperature Probe

The A2 indicator can operate with any humidity and temperature probe of the ROTRONIC HYGROMER series. Connect the probe to the BINDER connector located at the top right hand side of the indicator.

The pin configuration of this connector is as follows (place indicator so that the small notch of the connector is at the top - pin numbering is clockwise):

Pin 1; Temperature (+) - first pin to the right of the notch.

Pin 2: DC (+) to power the probe

Pin 3: Ground (common)

Pin 4: not used

Pin 5: Humidity (+)

The indicator may also be used to display the output signal of a humidity and temperature transmitter. This permits measurement over a wider range of temperatures. The humidity output signal from the transmitter must be 0-1V = 0-100 %RH. The temperature output signal must be 0V = 0°C. The minimum temperature signal accepted by the A2 indicator is -1.999 V = -199.9°C. The maximum is +1.999V=+199.9°C.

Note: regardless of whether the temperature display is in °C or in °F, the temperature input signal must be in °C as specified above.

#### 4 Push Buttons

- Blue Push Button: use this push button to turn the indicator on and off.
- Red Push Button: keep this push button pressed down to freeze the display.

#### 5 Temperature Display

The A2 is factory set for temperature indication either in °C or in °F.

#### 6 Auto Power Off

The indicator switches off automatically if no push button is pressed for 2 minutes.

#### 7 Low Battery Indication

The display automatically indicates LOW BAT when the battery voltage is too low for proper operation.

## 8 Analog Outputs

The 6-pin DIN connector located at the top left hand side of the indicator provides analog outputs for both humidity and temperature. Pin configuration is as follows (position the indicator so that the notch of the connector is at the bottom - pin numbering is clockwise):

Pin 1 : Humidity (+) - first pin to the left of the notch

Pins 2-4: not used

Pin 5 : Temperature (+)

Pin 6 : Ground (common) - center pin

Note: The signals available at the output connector are exactly the same as the input signals from the probe or transmitter. The temperature output signal is in °C, regardless of whether the temperature display is in °C or in °F.

## 9 Indicator Calibration

The two potentiometers located on the left hand side of the indicator permit calibration of the display of the indicator. This requires providing an accurate 1 V input signal both for humidity and temperature.

Note: for calibrating the probe, follow the instructions specific of the probe being used.

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**Specifications**

Operation	9 V Alkaline Battery 9 V AC Adapter (200 mA) DC(+) Tip 9 V Rechargeable Battery 110 mAh
Max. Current Consumption	2 mA
Temperature Operating Range	-10...60°C (14...140°F)
Humidity Measuring Range	0...100 %RH
Temperature Measuring Range	-199.9...199.9 °C or °F
Humidity Input Signal	0...1V=0...100 %RH
Temperature Input Signal *	-1.999V...1.999V=-199.9°C...199.9°C
Display	Dual LC Display
Resolution	0.1 %RH, 0.1°C or 0.1°F
Analog Outputs	Identical to Input Signals
Battery Test	Automatic Indication "LOW BAT"
Automatic Power Off	After 2 Minutes
HOLD Function	Push Button Operated
Housing Material	ABS
Housing Dimensions	230 x 80 x 30 mm
Weight	Appr. 290 g (0.64 lb.)