1. LCD
Displays readings, units, symbols, and decimal points
2. POWER
Powers the unit on/off
3. UNIT
Selects the temperature units °C / °F
4. PRINT
Prints current measurement (print format shown below):
   LINE 1: 10:51:12 11:02
   LINE 2: T1 K-0023.0 °C
5. 9V-ADAPTOR SOCKET
6. FEED PAPER (Fig.2):
   a. Advances the thermo-paper one line.
   b. Cancels printing.
7. TIME:
   a. Calendar year
   b. Month - Day
   c. Hour - Minutes
   d. Minute - Seconds
OVER RANGE
a. Bl or -EL appears
8. DP
Low battery indicator
9. High / Low Alarm output connector
   a. Pin 1: GND (external supply low voltage)
   b. Pin 2: VCC (external supply high voltage)
   c. Pin 3: SYNC (external trigger signal)
   d. Pin 4: High Alarm
   e. Pin 5: Low Alarm
   f. Pin 6: SELECT (microcomputer)
   g. Pin 7: ENC (microcomputer)
   h. Pin 8: WHT (microcomputer)
   i. Pin 9: PUR (microcomputer)
   j. Pin 10: Power-on reset
   l. Pin 12: Tm (temperature sensor)

NOTE: voltage VCC to GND is 16V Maximum, 5V Minimum.
GND SYNC VCC

Example:
High Alarm = 130.5°C
Low Alarm = -50.5°C
If reading R = 130.5°C
Result: High Alarm output reading 5V
Low Alarm output reading 0V
If reading R = 50.5°C
Result: Low Alarm output reading 5V
High Alarm output reading 0V
Example:
Hi alarm = 25.5°C
Lo alarm = 25.5°C
If reading R = 25.5°C
Result: Hi Alarm output reading 0V
Lo Alarm output reading 0V
Example:
High Alarm = 25.5°C
Low Alarm = 25.5°C
If reading R = 25.5°C
Result: Hi Alarm output reading 0V
Lo Alarm output reading 0V

10. Tm / ENC / Tm1 / ENC1:
Press to select the display method, T1, T2, T3, T4.
11. MENU:
Press to enter or exit the setup mode. (Hold down the key to scroll quickly.)
12. UP:
Press to increase the value of a parameter.
13. RIGHT:
Press to move to a desired parameter.
14. DOWN:
Press to decrease a parameter’s value.
15. LEFT:
Press to move to a desired parameter.

Parameters (in sequence):
K/EUT (thermocouple types)
0001: Internal printing enable (01) and disable (00)
°C °F (Temperature units)
High/Low Alarm (high and low alarm limits)
Ex: E Type (1333.0°C - 2000°F)
J Type (765.5°C - 1300°F)
INTV (printing interval range: 0s/0s/0s to 23h59m:59s)
Interval printing start time range: 00.00m to 23.59h
Calendar year range (range up to 2099)
Calendar month-day (ranges from 01-01 to 12-31)
Calendar minute-second (ranges from 00:00s to 59:59m)
17. Temperature probe sockets.
18. Battery compartment and cover

Press the button to power the meter. If “Hi” appears, check that the probe is connected properly and that it is operational.
To enter the programming mode, press the button, exit, press it again. Use the left and right arrow buttons ( or ) to select a parameter for editing; use the up and down buttons ( or ) to increase or decrease the value of a parameter. When modifying a parameter, the parameter’s symbol will blink.

The available parameters in sequence:
1. INTERVAL PRINTING STATUS (00 = ENABLE, 01 = DISABLE): See LCD display example below
2. TYPE OF THERMOCOUPLE (K/EUT):
3. ALARM UNIT (°C / °F):
4. FIRST THREE DIGITS IN HI ALARM (000 ~ 999):
5. LAST TWO DIGITS IN HI ALARM (00 ~ 99):
6. FIRST THREE DIGITS IN LO ALARM (000 ~ 999):
7. LAST TWO DIGITS IN LO ALARM (00 ~ 99):
8. HOUR OF INTERVAL PRINTING (00 ~ 23):
9. MINUTE OF INTERVAL PRINTING (00 ~ 59):
10. SECOND OF INTERVAL PRINTING (00 ~ 59):
11. HOUR OF START INTERVAL PRINTING TIME (00 ~ 23):
12. MINUTE OF START INTERVAL PRINTING TIME (00 ~ 59):

NOTE: Print time START must be before print time STOP.
13. **HOUR OF STOP INTERVAL PRINTING TIME (00 ~ 23):**

   ![Image](2359⁰C)

   ![Image](2359⁰C)

14. **MINUTE OF STOP INTERVAL PRINTING TIME (00 ~ 59):**

   ![Image](1999⁰C)

15. **FIRST TWO DIGITS OF CALENDAR YEAR (19 ~ 29):**

   ![Image](1999⁰C)

16. **LAST TWO DIGITS OF CALENDAR YEAR (00 ~ 99):**

   ![Image](1999⁰C)

17. **MONTH DIGITS OF CALENDAR MONTH-DAY (01 ~ 12):**

   ![Image](1102⁰C)

18. **DAY DIGITS OF CALENDAR MONTH-DAY (01 ~ 31):**

   ![Image](1102⁰C)

19. **HOUR DIGITS OF CALENDAR HOUR-MINUTE (00 ~ 23):**

   ![Image](1807⁰C)

20. **MINUTE DIGITS OF CALENDAR HOUR-MINUTE (00 ~ 59):**

   ![Image](1807⁰C)

21. **SECOND DIGITS OF CALENDAR MINUTE-SECOND (00 ~ 59):**

   ![Image](1807⁰C)

   If interval printing is enabled in the programming mode, the printer will print as in the examples below:

   | 11:54:00 | 11:02 |
   | 11:50 | 11:00 |

   First two lines:
   Line 1: hour:minute:second  month-day  start printing time
   Line 2: interval printing time  hour:minute:second

   Following two lines:
   Line 1: hour:minute:second  month-day  (interval printing time)
   Line 2: measurement channel, thermocouple type, reading, and unit.

   Last two lines:
   Line 1: hour:minute:second  month-day  (stop printing time)
   Line 2: interval printing time  hour:minute:second

   **NOTE:** If the print button is pressed during this period the last two lines will not be printed.

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1. **PRINTING THERMOMETER INSTRUCTIONS**

   If the print button is held for 2 seconds, the printer will print as follows:

   | 17 | 50 | 15:02 |
   | 17 | 50 | 15:02 |
   | 17 | 50 | 15:02 |
   | 17 | 50 | 15:02 |
   | 17 | 50 | 15:02 |
   | 17 | 50 | 15:02 |
   | 17 | 50 | 15:02 |
   | 17 | 50 | 15:02 |

   1. When battery power falls low, thewill appear on the LCD. Replace the six 1.5V 'AAA' batteries.
   2. After the temperature probe(s) have been disconnected and the meter power turned off, remove the rear battery cover.
   3. Remove batteries from the holder and replace with six 1.5V 'AAA' alkaline batteries.
   4. Secure the battery cover.

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To stop printing, press the Print or the Feed button.

1. **SETUP INTERVAL PRINT (with 24 hour maximum interval limit):**

   - Enter the Menu mode by pressing the MENU button.
   - Enable interval printing using the / buttons (01 is enable).
   - Use the / buttons to scroll through the available editing parameters
   - Setup Interval Start/Stop print time by pressing / buttons
   - Press the MENU button to return to normal operating mode. The INTV symbol will be shown on LCD indicating that interval printing is active.

2. **SETUP INTERVAL PRINT (without 24 hour limit):**

   - Enter the Menu mode by pressing the MENU button.
   - Disable Interval Printing using the / buttons (00 is disable).
   - Set Interval Print Time using the / buttons
   - Press MENU again to return to normal operation.
   - Press and hold the PRINT button for about 3 seconds, the INTV symbol will be shown on LCD indicating that interval printing is active.

3. During the Interval Print period, no buttons can be used except the PRINT and FEED button. When the PRINT button is pressed, one more line will be printed before the interval printing session is aborted. Pressing the FEED button aborts interval printing immediately.