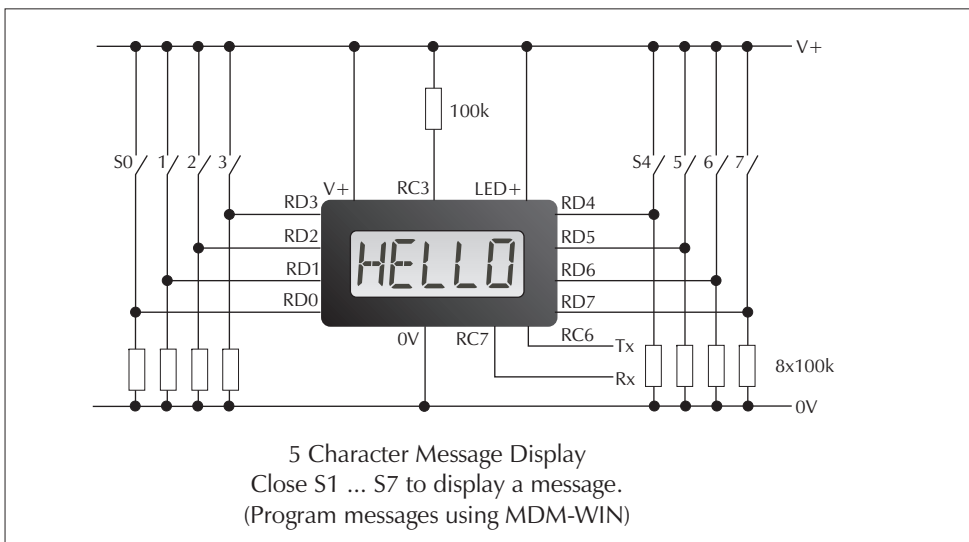


5 Character Message Display Application

A 5 character message display system. If the message is longer than 5 characters, the message scrolls from right to left on the display, up to a maximum of 25 characters per message. A message is called up by connecting one of the RD port pins to V+. Simultaneous connection of two or more RD port pins to V+ causes the display to alternate between all affected messages. If no RB ports are connected to V+ then the display will be blank. Messages are programmed via MDM-WIN software.



Pin Functions

V+	17	Positive power supply connection.
LED+	15	LED backlighting connection.
0V	19	Negative power supply connection.
RD0	28	Connect to V+ via 100k resistor to select message 0
RD1	30	Connect to V+ via 100k resistor to select message 1
RD2	32	Connect to V+ via 100k resistor to select message 2
RD3	34	Connect to V+ via 100k resistor to select message 3
RD4	33	Connect to V+ via 100k resistor to select message 4
RD5	31	Connect to V+ via 100k resistor to select message 5
RD6	29	Connect to V+ via 100k resistor to select message 6
RD7	27	Connect to V+ via 100k resistor to select message 7
RC3	20	Connect to V+ via 100k resistor to select message display application.
RC6	7	Tx connection for communications with other devices.
RC7	5	Rx connection for communications with other devices.

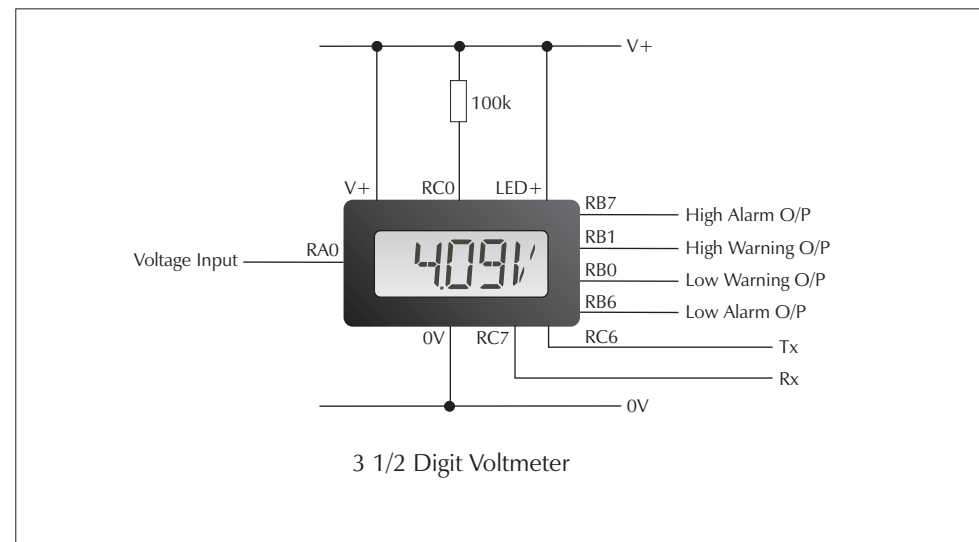
Note: Connect Pin 8 to 0V when not using RS232 with the Windows control software.

MDM-1

Multi-function Display Module (Applications)

3 1/2 Digit Voltmeter Application

A 3 1/2 digit voltmeter with a range of 1024 counts and an input voltage range of 0 to <5Vd.c. The reading is displayed on the four left hand digits. Via MPLAB, the user can display an annunciator on the right-hand digit, enable/disable leading zero blanking, and select decimal points. This application allows the use of warning and alarm messages as well as associated digital outputs which can be used for control purposes.



Pin Functions

V+	17	Positive power supply connection.
LED+	15	LED backlighting connection.
0V	19	Negative power supply connection.
RA0	4	Measurement input (0 to 5V d.c. measurement range).
RB0	16	Low Warning output.
RB1	14	High Warning output.
RB6	3	Low Alarm output.
RB7	1	High Alarm output.
RC0	13	Connect to V+ via 100k resistor to select voltmeter application.
RC6	24	Tx connection for communications with other devices.
RC7	26	Rx connection for communications with other devices.

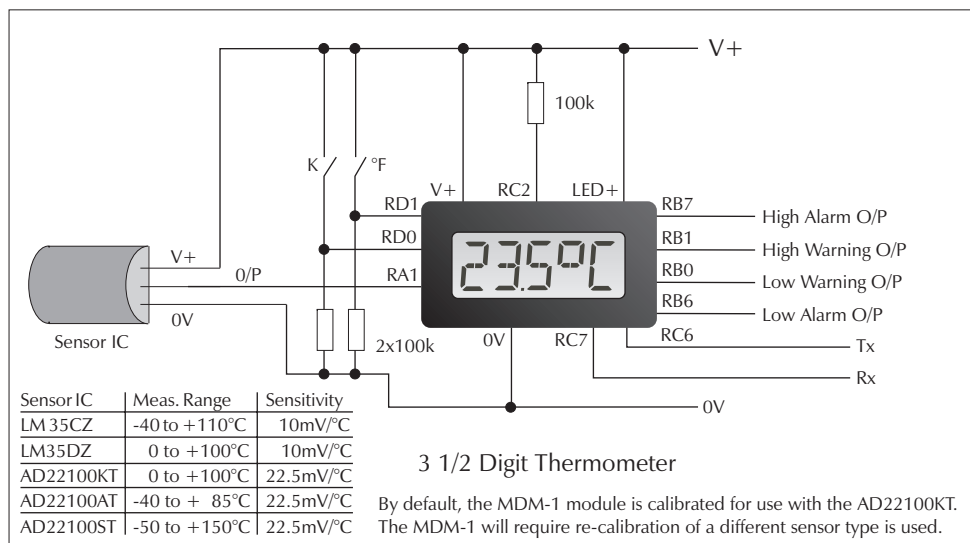
DO NOT APPLY SIGNALS TO THE MODULE'S INPUT PINS BEFORE POWERING UP THE MODULE.

Note: Connect Pin 8 to 0V when not using RS232 with the Windows control software.

3 1/2 Digit Thermometer Application

A 3 1/2 digit temperature meter with a range of 1024 counts and an input voltage range of 0 to <5Vd.c. The reading is displayed on the four left hand digits. Via MPLAB, the user can display an annunciator on the right-hand digit and select decimal points. The meter is intended to be used with easily available, low-cost, voltage-output temperature sensors (see table below).

This application allows the use of warning and alarm messages as well as associated digital outputs which can be used for control purposes.



Pin Functions

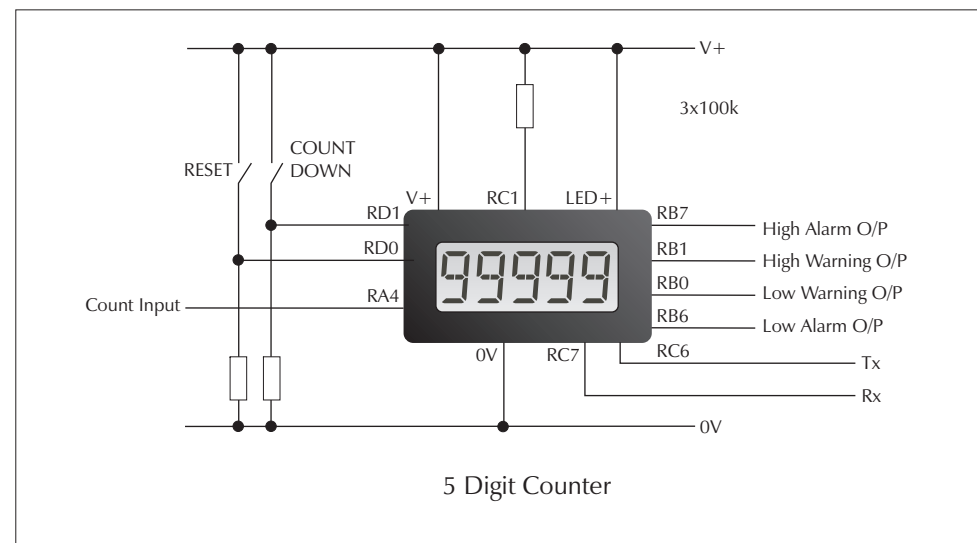
V+	17	Positive power supply connection.
LED+	15	LED backlighting connection.
0V	19	Negative power supply connection.
RA1	6	Measurement input from linear mv/°C temperature sensor.
RD0	28	Connect to V+ via 100k resistor to select Kelvin range.
RD1	30	Connect to V+ via 100k resistor to select Fahrenheit range.
RB0	16	Low Warning output.
RB1	14	High Warning output.
RB6	3	Low Alarm output.
RB7	1	High Alarm output.
RC2	26	Connect to V+ via 100k resistor to select thermometer application.
RC6	7	Tx connection for communications with other devices.
RC7	5	Rx connection for communications with other devices.

Note: Connect Pin 8 to 0V when not using RS232 with the Windows control software.

5 Digit Counter Application

A 5 digit up/down counter with reset input. Counting up, at 99999, the reading rolls over to zero and continues counting. Any high alarm condition is then reset. Counting down, at 0, the reading rolls over to 99999 and continues counting. Any low alarm condition is then reset.

This application allows the use of warning and alarm messages as well as associated digital outputs which can be used for control purposes.



Pin Functions

V+	17	Positive power supply connection.
LED+	15	LED backlighting connection.
0V	19	Negative power supply connection.
RA4	11	Count input.
RD0	28	Connect to V+ via 100k resistor to reset the counter to zero.
RD1	30	Connect to V+ via 100k resistor to count down, else counts up.
RB0	16	Low Warning output.
RB1	14	High Warning output.
RB6	3	Low Alarm output.
RB7	1	High Alarm output.
RC1	24	Connect to V+ via 100k resistor to select counter application.
RC6	7	Tx connection for communications with other devices.
RC7	5	Rx connection for communications with other devices.

Note: Connect Pin 8 to 0V when not using RS232 with the Windows control software.