COUNTER

User's Manual

DISPLAY BOARD SECTION

1.KEYPAD LAYOUT
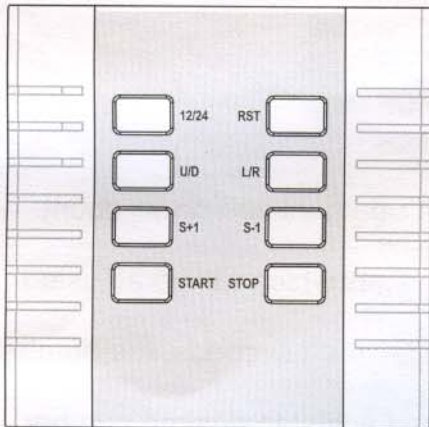
12/24 Key	: Set 12/24 hour format (only for the TIMER)
RST key	: Reset the Counter.
U/D key	: The Counter toggles between upcount and downcount.
L/R key	: Select the left or right two digits to adjust.
S+1 key	: Increase by 1
S-1 key	: Decrease by 1
START key	: Run the Counter.
STOP key	: Stop the Counter.

2.POWER ON SET UP THE DISPLAY BOARD
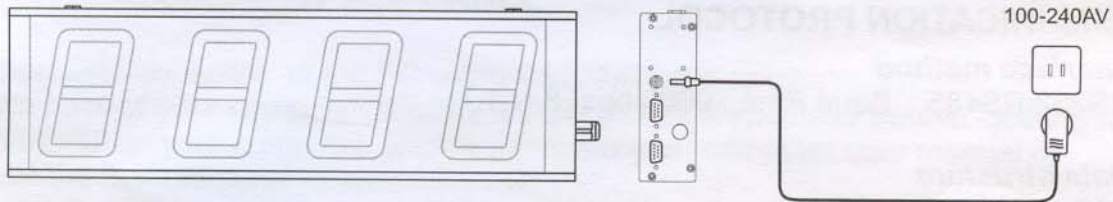
100-240AV

1. Plug the appropriate end of the DC Power Adapter into the power receptacle on the Display Board.
2. Plug the DC Power Adapter into a standard 100~240VAC outlet.
3. Once the Display Board is powered on, it begins to work. First It will cycle through a diagnostic display and then run the last selected function.

3. SELECT THE DISPLAY BOARD FUNCTION

There are function selection switches on the side of the Display Board.
Below is the function list when selection switches are at different status.

The Counter function switch:

MODEL 109	Up-Counter
MODEL 110	Up/Down-Counter

Note: After selecting a new function by selection switches, you need to reboot the Display
Board to let the new function take effect.

4. OPERATION INSTRUCTION

1 *up-counter(model 109)*
1.Press S+1 key will increase by 1.
2.Press Reset key will make the Counter reset and display 0.

2 *up/down-counter(model 110)*
1.Press U/D key will make the Counter alternative between up-count and down-count.
2.Press S+1 will increase by 1 and press S-1 will decrease by 1.
3.To adjust the preset number, press L/R key to select two digits which will be adjusted.
  The selected two digits will flash.
4.Press S+1 or S-1 to set desired number. If press S+1 or S-1 for 3 seconds, the number
  will be adjusted quickly.
5.Press L/R key again to select the other two digits, and then adjust to desired number.
6.Press START to finish presetting the number.

5.COMMUNICATION PROTOCOL

1 *Interface method*
RS232/RS485   Baud Rate : 9600 bps(8,N,1.)

2 *Data structure*
<STX>message…<ETX>
<STX> : are ASCII code '<', 'S', 'T', 'X', & '>',denotes the beginning of data package.
<ETX> : are ASCII code '<', 'E', 'T', 'X', & '>', denotes the end of data package.
The middle messages between '<STX>'and '<ETX>' may vary according to detailed
function or operation.
1)Set Display Board ID
<STX><ID><xx><ETX> <ID>: ASCII code '<', 'I', 'D', &'>'.
xx : the range from 00 to FF, the Hex number in ASCII format.

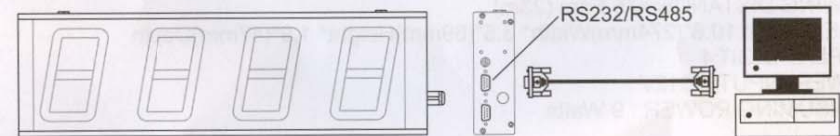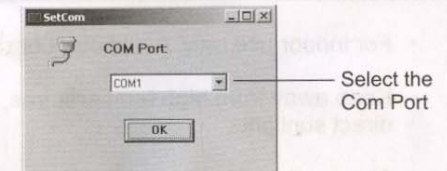| 1) UP-COUNTER(MODEL 109)	2) UP/DOWN-COUNTER(MODEL 110)
<STX><xx><IN><ETX> Increase the Counter by 1. <STX><xx><RE><ETX> Reset the Counter.	<STX><xx><DAyyyy><ETX> Send the preset number. xx: denotes the ID, two ASCII characters. yyyy: the preset number, 4 ASCII characters. <STX><xx><IN><ETX> Increase the Counter by 1. xx: denotes the ID, two ASCII characters. <STX><xx><DE><ETX> Decrease the Counter by 1. xx: denotes the ID, two ASCII characters. <STX><xx><UP><ETX> Begin to count up <STX><xx><DN><ETX> Begin to count down <STX><xx><RE><ETX> Reset the Counter

🖫 SOFTWARE SECTION

1.SOFTWARE SCREEN
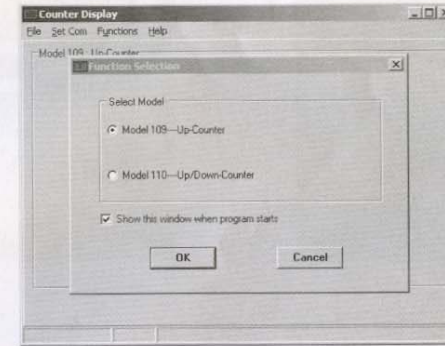
2.SET UP - CONNECTING THE CABLE

1 Connect Display Board to the PC using RS232/RS485 cable.
2.On the back of your computer, identify a COM PORT. If you have trouble locating a
  COM PORT on your computer, please reference your computer user manual or
  contact the manufacturer of your computer.
3.Connect the 9-Pin connector end to the COM PORT you will be using.
  If the 9-pin connector is not connected to the correct COM PORT, computer
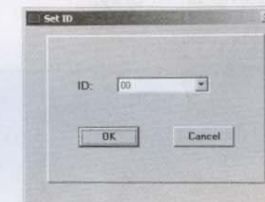 communication will not work.

RS232/RS485

3.CONFIGURE SOFTWARE

1.Select COM port.
2.Click on OK when your settings are
  complete.

Select the
Com Port
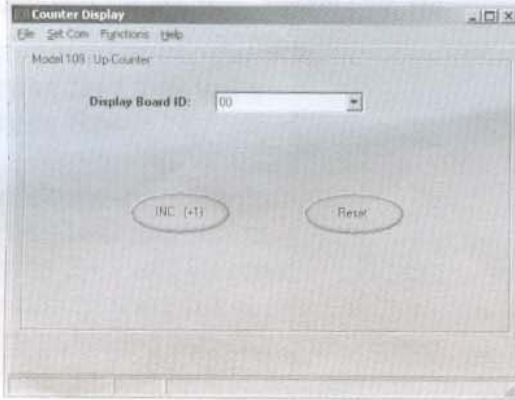

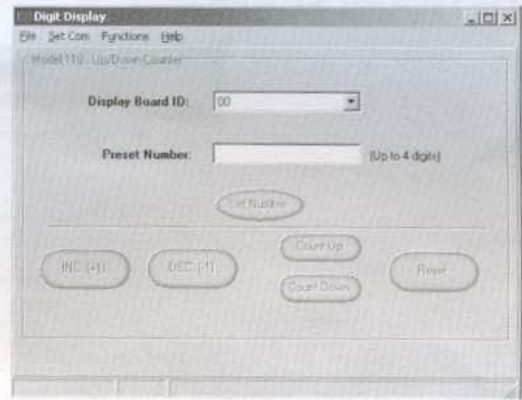### 4.SET DISPLAY BOARD ID

1.Select proper ID number.
2.Click OK button.

5.FUNCTION INTERFACE

1.Up-Counter(Model 109)

2.Up/Down-Counter(Model 110)

SPECIFICATIONS

1 4" COUNTER

VIEWING DISTANCE:<131 Feet (40m)
DIMENSION: 16.7"(424mm)Width* 5.4"(137mm)Height* 1.8"(45mm)Depth
DISPLAY DIGIT:4
POWER INPUT:DC12V
CONSUMING POWER : 9 Watts

2 2.3" COUNTER

VIEWING DISTANCE:<75 Feet (23m)
DIMENSION: 10.8"(274mm)Width* 3.5"(89mm)Height* 1.9"(47mm)Depth
DISPLAY DIGIT:4
POWER INPUT:DC12V
CONSUMING POWER : 9 Watts

Cautions

- For indoor use only. Avoid outdoor storage.

- Keep away from high temperatures, humidity, dew, water and direct sunlight.

- Always disconnect power cord and other cables by holding plug.

- Clean with damp cloth only.