

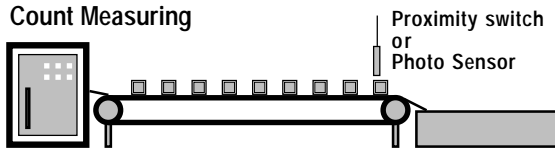
SPECIFICATIONS:

- Digital Display : Total(6-digit, 0.3" high red LED); Batch(6-digit, 0.3" high green LED).
- Input Power : AC 110V/220V (+/-10%) 50/60 Hz.
- Sensor Power : DC 12V, 40mA.
- Frequency Response : 10,000 Pulse / Sec.
- Total Count Range : -99999 ~ 999999.
- Batch Count Range : -99999 ~ 999999.
- Total Setting Range : 0 ~ 999999.
- Batch Setting Range : 0 ~ 999999.
- Counting Mode : Add / Sub; Count / Direction Control;
(CP1;CP2) Add / Add; Quadrature(x4).
- Count Input Set-Up : NPN(Pullhigh resistor); PNP(Pull low resistor) Selectable.
Logic(10KHz); Contact(100Hz) Selectable.
CMOS(12V); TTL(5V) level Selectable.
- Input Pulse Divider : Programmable 0~9999.
- Input Scale Factor : 0.00001 ~ 10.00000.
- Operation Function: 4 Modes setting by DIP switch.
- Control Output : 1 Relay(Form C); 1 Solid-state for Total-Output.
1 Relay(Form C); 1 Solid-state for Batch-Output.
- MemoryRetention : No power EEprom for 10 years.
- Operating Temperature : 0~50 °C.
- Storage Temperature : -10~60 °C.



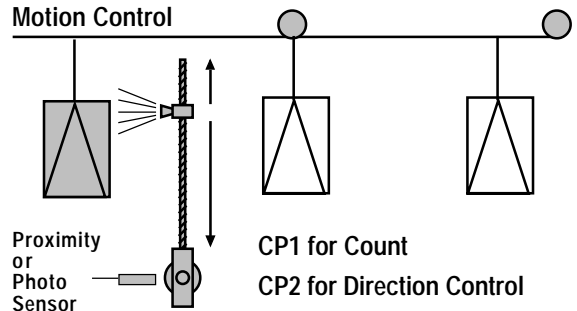
Typical Application:

Count Measuring



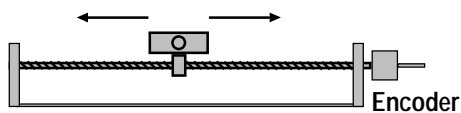
CP1 for Count up
CP2 for Count down
Scale Factor = 1

Motion Control



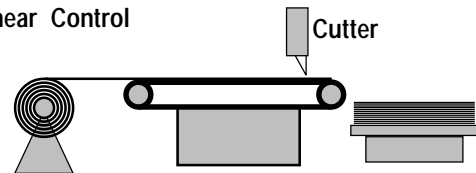
Proximity or Photo Sensor
CP1 for Count
CP2 for Direction Control

Position Control



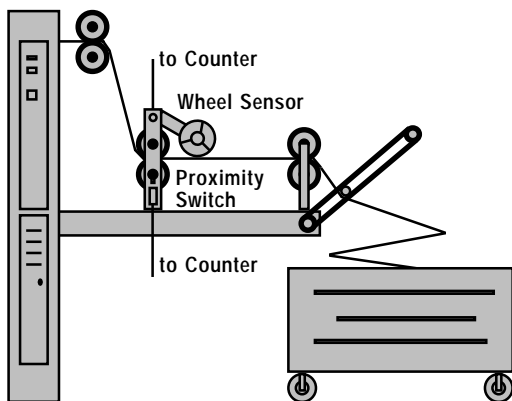
CP1; CP2 for Count up/down (Quadrature) x4
Scale Factor = 0.001~10.000
if S.F = 0.25 then A,B phase 1 cycle = 1

Shear Control



CP1; CP2 for Count up/down (Quadrature) x4
or CP1 Count up

Length Control



Lost Cost Length-Control :

Use Proximity-Switch or Photo-Sensor to substitute Wheel Sensor.

The Counter's Scale-Factor function let each pulse input response real length.

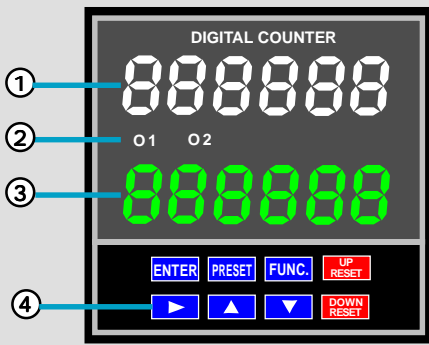
Ex: The roller 1 Revolution for 325.34mm.

The S.F. set on 0.325 then the unit will be 1-Meter

Display will show : 32 for 100 revolution.

Display will show : 325 for 1000 revolution.

Display will show : 3253 for 10000 revolution.



Panel Description:

- ① Red Display:
Show present value & functions.
- ② Output LED(O1/O2):
Show Output active indicator.
- ③ Green Display:
Show set value & function's value.
- ④ Key-Button:
Run setting functions.
Reset batch & total count value.

Key-Function description:

ENTER	After completing preset function press this key to save new setting value. If not press this key will be auto-save on no key-press in 10 seconds.
PRESET	Direct press this key for Preset-1 / Preset-2 setting functions. In other function press this key for change functions setting .
FUNC.	press this key with ▲ key for setting functions d-t / S-F / S-d .
▶	press this key to shift right flash digit .
▲	press this key to increase flash digit (add 1).
▼	press this key to decrease flash digit (subtract. 1).
UP RESET	press this key to reset total count value .
DOWN RESET	press this key to reset batch count value .

Example: P-b=1000; P-t=2000. Now we want change P-t SV value to 2500.

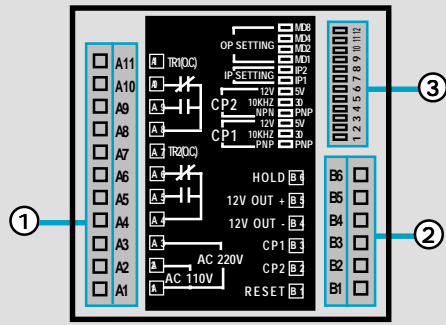
1th-Press **PRESET** show: P-b 2nd-Press **PRESET** show: 002000 Then press **▶** key 4-times to shift digits 002000
 001000 P-t P-t
 Then press **▲** key 5-times to increase flashing digit setting value. 002500
 Then press **ENTER** key to save new value. P-t

Example: d-t =1.00; S-F = 1.0. S-d = 1. Now we want change S-d to 4

Press **FUNC.** + **▶** for setting Delay-Time / Scale Factor / Divider Setting 3 Functions.
 show: d-t then press **PRESET** show S-f then press **PRESET** again show S-d
 0 100 100000 0000
 set delay-time set pre-scale set divider
 0.01-99.99 seconds 0.00001-10.0 1-9999
 Then press **▼** key 4-times to decrease flashing digit setting value to 4. S-d
 Then press **ENTER** key to save new value. 0004

Example: d-t =1.00; S-F = 1.0. S-d = 1. Now we want change S-F to 0.5

Press **FUNC.** + **▶** for setting Delay-Time / Scale Factor / Divider Setting 3 Functions.
 show: d-t then press **PRESET** show S-f then press **▶** show S-f then press **▼** show S-f
 0 100 100000 100000 000000
 set delay-time set pre-scale
 0.01-99.99 seconds 0.001-9.999
 then press **▶** show S-f then press **▼** (or **▲**) 5-times show S-f
 000000 050000
 Then press **ENTER** key to save new value.



Connections:

- ① 11-Pin Terminal Block:
Use AC Power & Batch / TotalOutput Pin.
- ② 6-Pin Terminal Block:
Use 12V Output & Signal Input Pin.
- ③ 12-Pin DIP SW.:
Operation Function setting.

11-Pin Terminal Block Connections:

1. Input Power AC110V Connect to PIN-A1,A2.
2. Input Power AC220V Connect to PIN-A1,A3.
3. Batch-Relay Output PIN-A4(COMM);A5(NO);A6(NC).
4. Batch-Solid-State Output, PIN-A7 (NPN Open-Collect).
5. Total-Relay Output PIN-A8(COMM);A9(NO);A10(NC).
6. Total-Solid-State Output, PIN-A11 (NPN Open-Collect).

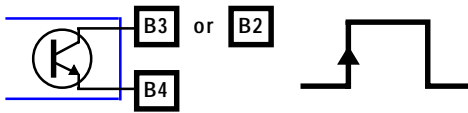
6-Pin Terminal Block Connections:

1. PIN-B1 remote reset (Active with B4).
2. PIN-B2 Count Input CP2.
3. PIN-B3 Count Input CP1.
4. PIN-B4 DC0V (40mA Supply for SENSOR).
5. PIN-B5 DC12V(40mA Supply for SENSOR).
6. PIN-B6 to Count Inhibit (Active with B4).

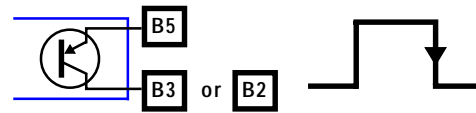
12-Pin DIP SW.Preset:

- PIN-1~6 Input CP1,CP2 setting;
- PIN-7~8 Count Mode setting;
- PIN-9~10 Operation Mode setting.
- PIN-11~12 Decimal Point setting.

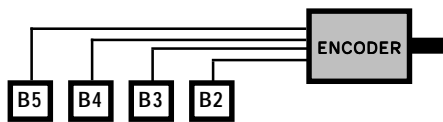
Pin-1(CP1);4(CP2)-OFF, NPN INPUT.



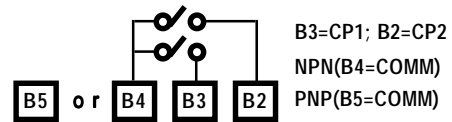
Pin-1(CP1);4(CP2)-ON, PNP INPUT.



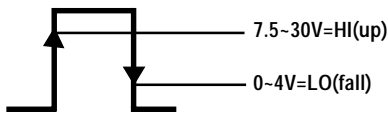
Pin-2(CP1);5(CP2)-OFF, LOGIC INPUT.



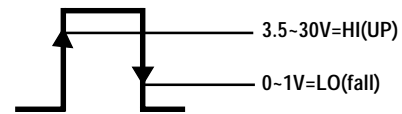
Pin-2(CP1);5(CP2)-ON, CONTACT INPUT.



Pin-3(CP1);6(CP2)-OFF, 12-LEVEL INPUT.

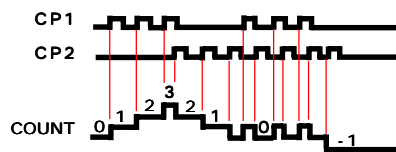


Pin-3(CP1);6(CP2)-ON, 5V-LEVEL INPUT.

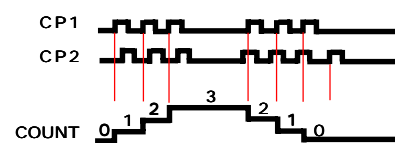


12-Pin DIP SW. Pin-7,8 Counting Mode:

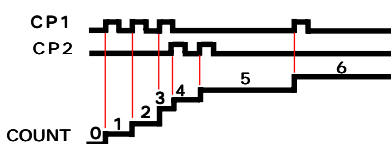
7-OFF;8-OFF, CP1 Add; CP2 Sub.



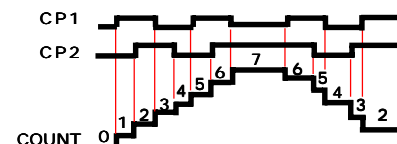
7-ON;8-OFF,CP1 count; CP2 Direction **Control**.



7-OFF;8-ON, CP1 Add; CP2 Add.

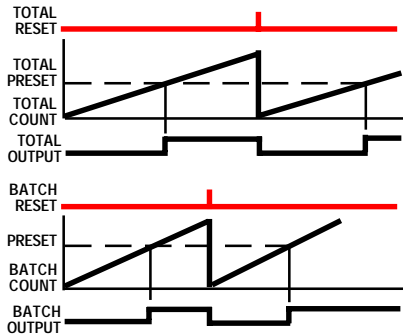


7-ON;8-ON, CP1; CP2 Quadrature x4.

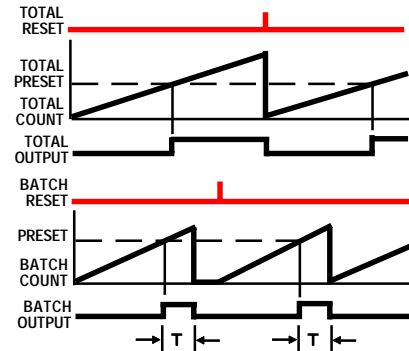


12-Pin DIP SW. Pin-9,10. for 4-Modes Operation Setting:

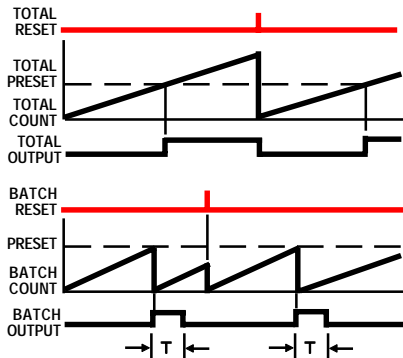
(MODE-0) 9-OFF;10-OFF.
 Latch output at preset value.
 Manual reset output & reset counting zero.



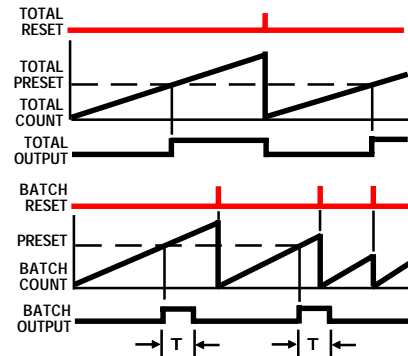
(MODE-1) 9-ON;10-OFF.
 Latch output at preset value.
 Automatic reset to zero and output after delay timer up.



(MODE-2) 9-OFF;10-ON.
 Latch output at preset value (with reset counting to zero).
 Automatic reset output after delay timer up.



(MODE-3) 9-ON;10-ON;11-OFF.
 Output automatic Reset After Delay-Timer up.
 counting not reset to zero.



12-Pin DIP SW. Pin-11,12. for Decimal Point Setting:

11-OFF; 12-OFF



11-ON; 12-OFF



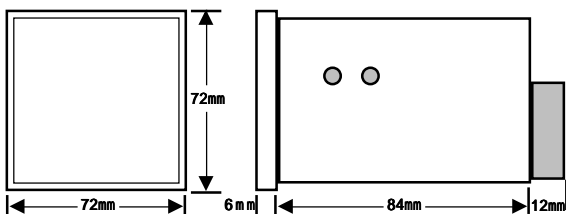
11-OFF; 12-ON



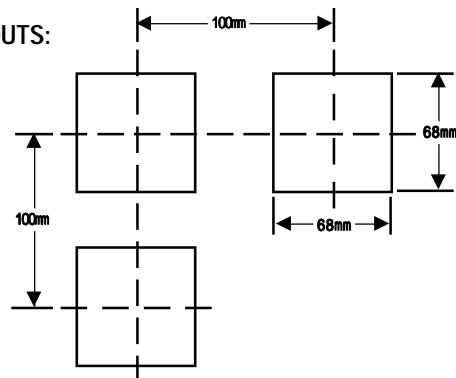
11-ON; 12-ON



DIAMENSIONS:



PANELCUT OUTS:

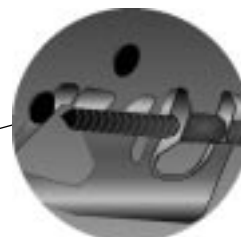


Panel Mounting:

Step 1



Step 2



Step 3

