TAC7-6116 is a Multi-Function Digital Counter. 6-digit preset with 6 digit totalizer. 16 operation modes for synchronous counting or accumulative total. Prescale in dividable for 1 to 9999 and multiplier from 0.00001 to 10.0 and decimal point setting. 4 Counting modes for different applications, Input hardware setting for different sensors.

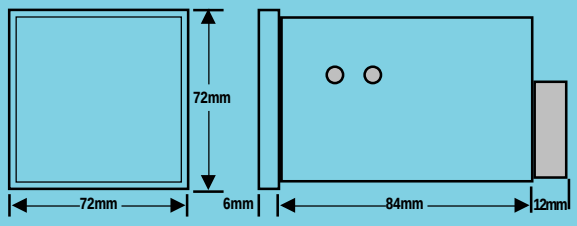
Applications :

Counting Control with Totalizer
Length control with Total Length
Length control with Quantity
Flow control with Tubs counting

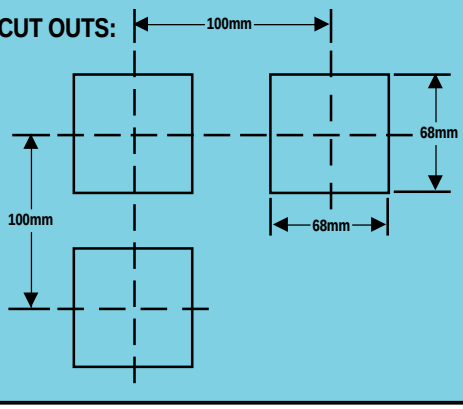
Specifications :

Upper Display :	-99999~9999990.3¨(7.62mm) red LED.
Lower Display :	-99999~9999990.3¨(7.62mm) green LED.
Preset Value :	0~999999 (0 = non-control) .
Counting Speed :	10,000 cps (Logic Input) 30 cps (Contact Input).
Input Signal :	NPN / PNP (or Open collector).
Signal Level :	CMOS (HI 7.5~30V / LO 0~4V); TTL (HI 4~30V / LO 0~1V)
Counting Mode :	4 modes.
Operating mode :	16 modes
Output Component :	Relay Output (1C), 250VAC/3A (Resistance); Transistor Output (30V/60mA Max.).
Operation Tempture :	0~50°C.
Operation Humidity :	45~85%RH.
Storage Environment :	-20~60°C; 35~90%RH.
Degree of Protection :	IP65.
Input Power :	AC110V; AC220V.
Output Power :	DC 12V/30mA Output for sensor.

DIAMENSIONS:

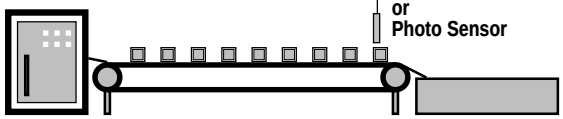


PANELCUT OUTS:



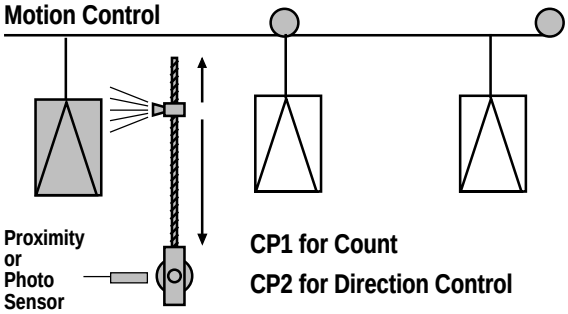
Typical Application:

Count Measuring



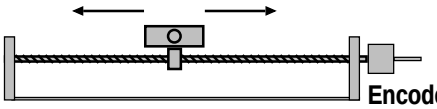
CP1 for Count up
CP2 for Count down
Scale Factor = 1

Motion Control



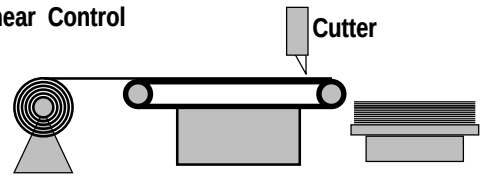
CP1 for Count
CP2 for Direction Control

Position Control



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

Shear Control

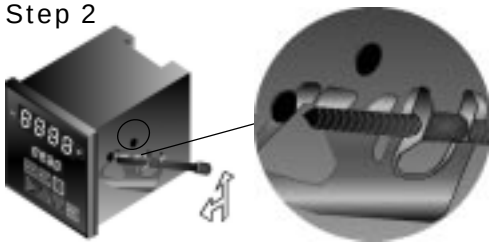


CP1; CP2 for Count up/down (Quadrature) x4
or CP1 Count up

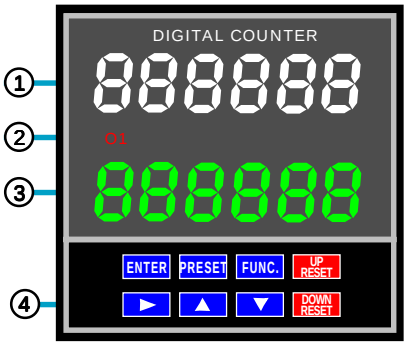
Panel Mounting:

Step 1

Step 2



Step 3



Panel Description:

① Red Display: Present Value & Functions.
② Output LED(O1;O2): Output Active Indicator.
③ Green Display: Set Value & Fuction¡¦s Value.
④ Key-Button: Run Setting Functions.

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 with ► key for setting functions d-P / P-c / r-t .**
►	**press this key for shift right flash digit .**
▲	**press this key for increase flash digit (add 1).**
▼	**press this key for decrease flash digit (sub. 1).**
RESET	**press this key(r-t=0~9) for reset count value or restore P-c value to display (count value).**

Preset program procedure description :

Press button PRESET to active Preset-Batch function.

Preset-Batch (0 ~ 999999)

then press button ► to sfift right the flah digit; press button ▲ to increse 1 in flah digit; press button ▼ to decrese 1 in flah digit.

flash digit 2 shift to 3

3 change to 4

3 change to 2

press button ENTER to exit this function and save new setting .

Press button FUNC. + ► to active d-t, then press PRESET change to S-F, next press PRESET change to S-d, loop.

d-t = 0.01 ~ 99.99 sec.

S-F = 0.00001 ~ 10.0

S-d = 1 ~ 9999.

then press button ► to sfift right the flah digit; press button ▲ to increse 1 in flah digit; press button ▼ to decrese 1 in flah digit.

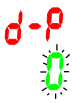
flash digit 0 shift to 1

From 1 change to 2

From 1 change to 0

press button ENTER to exit this function and save new setting .

Press button FUNC. + ▲ to active d-P.



d-P = 0 ~ 5.

if press button ► will be no change; press button ▲ to increse 1 in flah digit; press button ▼ to decrese 1 in flah digit.

no change

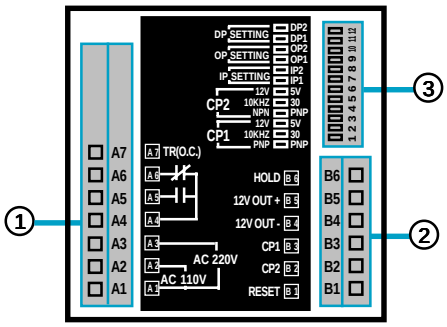
flash digit 0 increse to 1

flash digit 0 decrese to 9

press button ENTER to exit this function and save new setting .

Function description :

P-b 234560	Preset-1 : **P-b for Set point compare with counting value, setting rage from 0 ~ 999999.** **Press** PRESET **button to active this function.** **When counting active this point the OUTPUT (On or OFF) will active**
d-t 02.00	Delay Time : **d-t for Output auto-reset time delay, setting rage from 0.01 ~ 99.99 seconds.** **Press** FUNC. **+** ► **button 2nd times to active this function, loop active.** **None use time delay 1 Operate Mode (Mode 7,8,15).**
S-F 2.00000	Scale Factor : **S-F for Count Input pulse scale, setting rage from 0.00001 ~ 10.0 (0.00000 = 10.0).** **Press** FUNC. **+** ► **button 3rd times to active this function, loop active.** **This scale for count input CP1 & CP2; count up and count down.**
S-d 0001	Scale Divider : **S-F for Count Input pulse scale, setting rage from 0.00001 ~ 10.0 (0.00000 = 10.0).** **Press** FUNC. **+** ► **button 4th times to active this function, loop active.** **This scale for count input CP1 & CP2; count up and count down.**
d-P 0	Decimal-Point : **S-F for Count Input pulse scale, setting rage from 0.00001 ~ 10.0 (0.00000 = 10.0).** **Press** FUNC. **+** ▲ **button 1st times to active this function, loop active.** 0 **d-P=0** 0.0 **d-P=1** 0.00 **d-P=2** 0.000 **d-P=3** 0.0000 **d-P=4** 0.00000 **d-P=5**



Front Panel Descriptions:

① 7-Pin Terminal Block:

Power Input AC110V connect to PIN-A1,A2; AC220V connect to PIN-A1,A3.

Relay Out PIN-A4(COMM); A5(NO); A6(NC).; Transistor Output PIN-A7(NPN O.C.).

② 6-Pin Terminal Block:

PIN-B3 for Count-Input 1 (CP1); PIN-B2 for Count-Input 2 (CP2).

PIN-B1 for Remote Reset; PIN-B6 for Count Inhibit Control (Short with PIN-4 Active).

③ **DC Power Output PIN-B4 is DC 0V; PIN-B5 is DC12V(40mA for SENSOR).**

12-Pin DIP SW.:

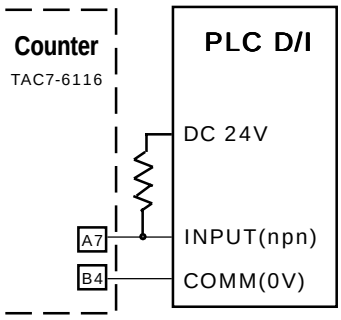
PIN-1~3 for Setting CP1; PIN-4~6 for Setting CP2.

PIN-7,8 for Count Mode Setting (4-Modes)

PIN-9~12 for Output Operation Mode Setting (16-Modes)

Transistor Output PIN-A7(NPN) for OutPut Expanding Connectiona :

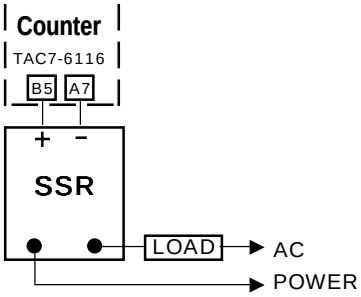
1. to PLC :



Counter Output OFF, PLC Input = DC 24V.

Counter Output ON, PLC Input = DC 0V.

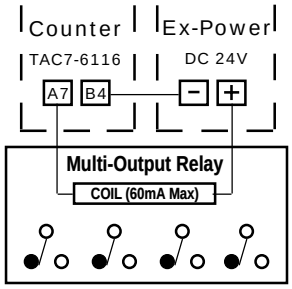
2. to SSR :



Counter Output OFF, SSR OFF.

Counter Output ON, SSR ON.

3. **Multi-Output Relay Connections:**

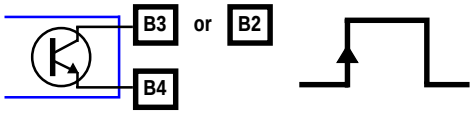


External power 5~30VDC.

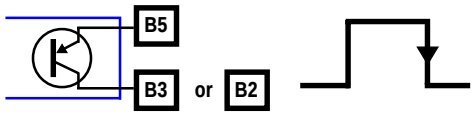
Output ON Relay ON; Output OFF Relay OFF.

12-Pin DIP SW. Pin-1~3(CP1); Pin-4~6(CP2) Input Operating Selections :

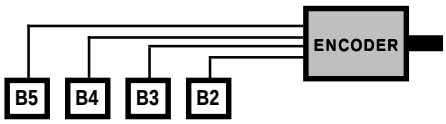
PIN-1 OFF(CP1); PIN-4 OFF(CP2), NPN INPUT.



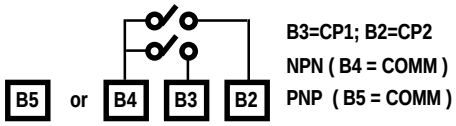
PIN-1 ON(CP1); PIN-4 ON(CP2), PNP INPUT.



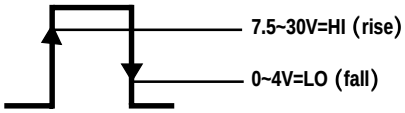
PIN-2OFF(CP1); PIN-5OFF(CP2), LOGIC INPUT.



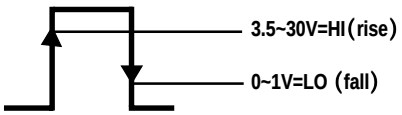
PIN-2 ON(CP1); PIN-5 ON(CP2), CONTACT INPUT.



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

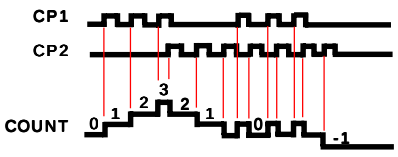


PIN-3 ON(CP1); PIN-6 ON(CP2), 5V-LEVEL INPUT.

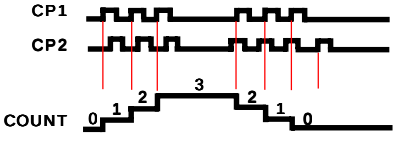


12-Pin DIP SW. Pin-7,8 for Count Mode Seections :

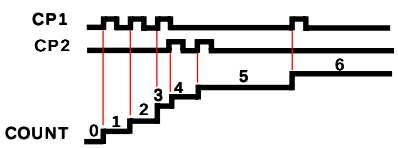
PIN-7 OFF; PIN-8 OFF, CP1 Count UP; CP2´Count Down.



PIN-7 ON; PIN-8 OFF, CP1 Counting; CP2 Count Direction Control



PIN-7 OFF; CP1 Count UP; CP2´Count Up too.



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