PRESET UP/DOWN COUNTER

CE

General Specifications:

- 2x4 Digit display, single PRESET, single OUT, up/down counter
- Counts switch, proximity switch & incremental encoder input
- Password protection
- Selectable input frequency
- Calibration constant; 0.001.....9.999
- Selectable decimal point; 1. ..... 3. Digit
- 7 input / 9 output function options
- Adss "OFFSET" to Count Value
- OUT; latch or 0.1.....999.9 seconds pulse
- Loads count value & OUT satus at the lastest power failure after the first power on
- RESET via front panel
- Displays Preset ½ values
- EEPROM memory to store settings

Technical Specifications:

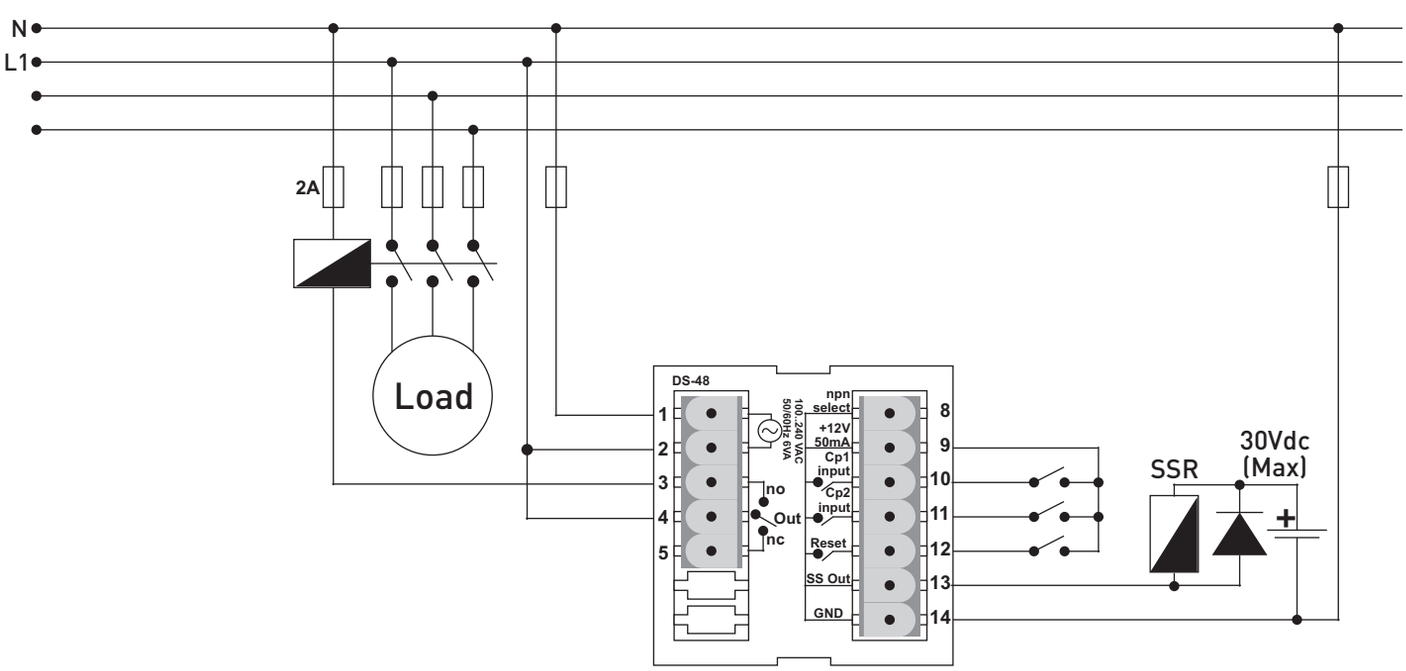
- **Panel Hole Sizes** : 44x44mm
- **Display** : 2x4 Digit 7 Segment display
- **Count Input** : 2 x (Max: 7500 Hz, 5-30V)
- **NPN Selection** : Connect "npn select" to "+12V" to select NPN sensor for Cp1 and Cp2. Reset input is always PNP. For totem pole or PNP type sensor "npn select" left unconnected.
- **Sensor Types** : PNP/NPN proximity switch - NPN/PNP/Totem-pole output encoder
- **Input Frequency** : 20, 50, 2500, 7500 Hz selectable.
- **Reset Input** : 10ms (min) , Positive input (PNP only) (5.....30V)
- **Output** : Out; Relay (O-NO-NC), 250VAC, 2A, Rezistif Yük Open Collector (NPN), 30V, 100mA max.
- **Sensor Supply** : 12VDC, 50mA(max.), unregulated
- **Supply Voltage** : 100...240VAC, 50-60Hz
- **Power Consump.** : < 8VA
- **Operating Temp.** : -20 °C....55 °C
- **Operating Altitude** : < 2000m

MADE IN TURKEY

⚠ Warning:

- Use shielded and twisted signal cables and connect shield to ground. Keep all signal cables away from circuit breakers, inductive loads, device/cables emitting electrical noise and power cables.
- Take precautions agains environmental conditions like humidity, vibration, pollution and high/low temperature during installation.
- Use fuse (F250mA 250VAC) on mains/supply input of the device. Use appropriate cables for supply connections. Apply safety regulations during installation.
- Prefer to use (Inpt = Phs1) option for encoders, select (Freq = 20) to count mechanical switch ON-OFF pulses, select the minimum input frequency option that suits your application.
- For Inpt = 1u2u, 1u2d, Phs2; input signal frequency shall be at most ½ of the selected input frequency option if both inputs are used. And for Inpt = Phs4; input signal frequency shall be at most 1/4 of the selected input frequency option if both inputs are used.

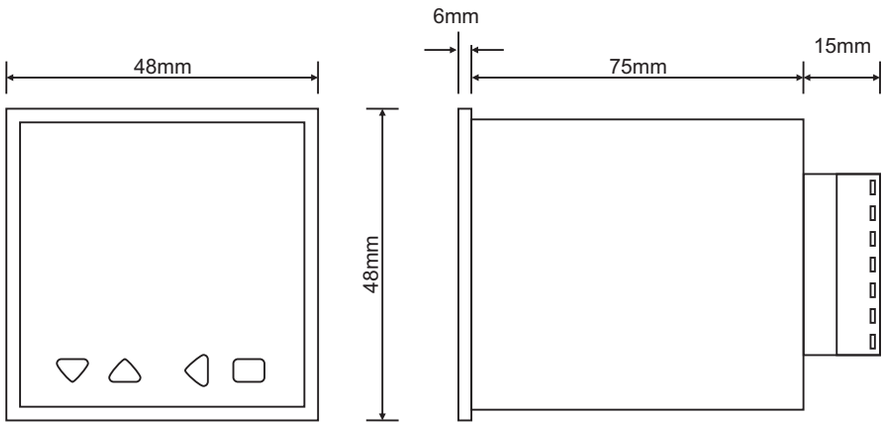
Connection



Notes:

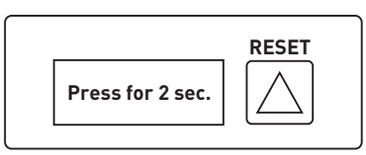
- Connect SS Out return pin directly to GND.
- Use free-wheeling diode to protect SS Out.
- To select PNP option; connect “npn select” to “+12V”.

Dimensions

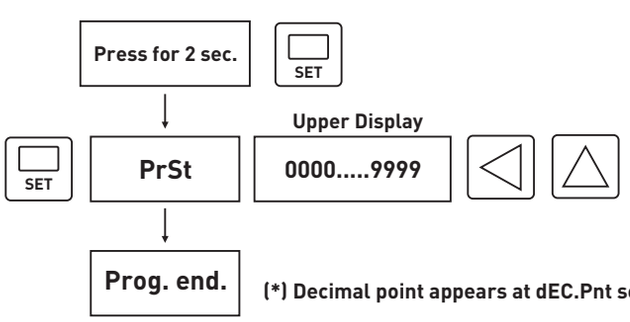


Programming Steps:

Front Panel RESET:

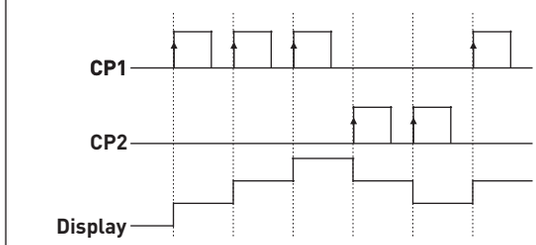
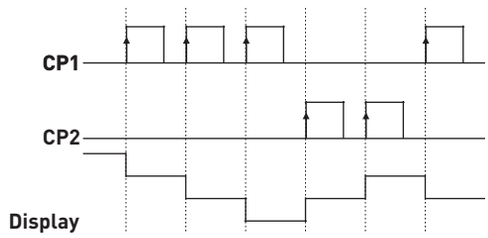
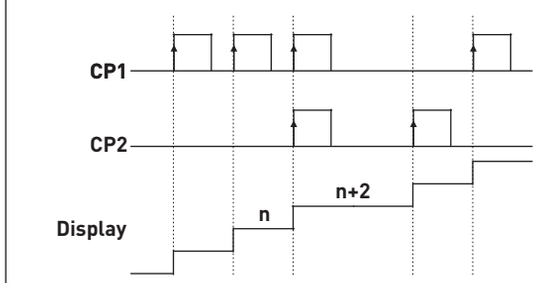
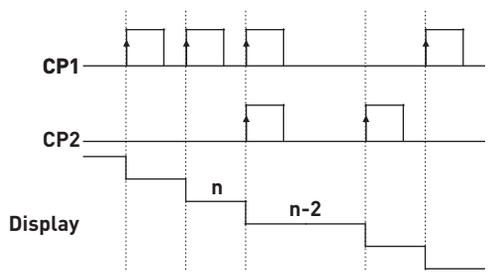
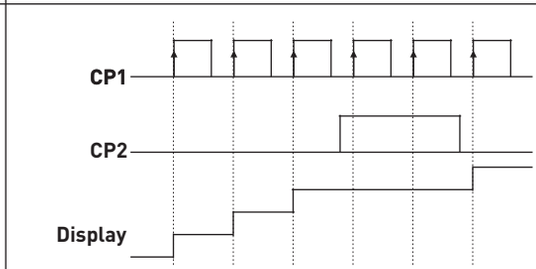
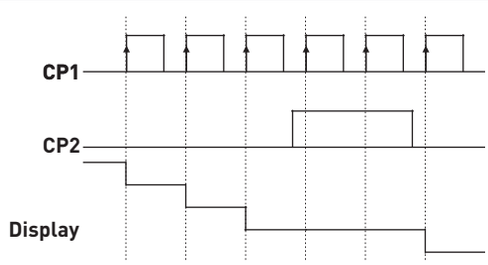
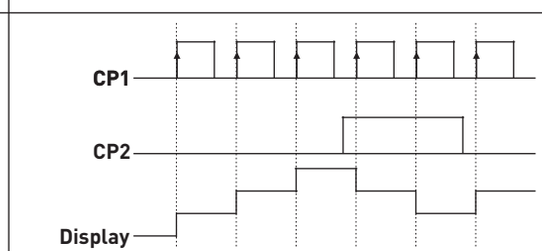
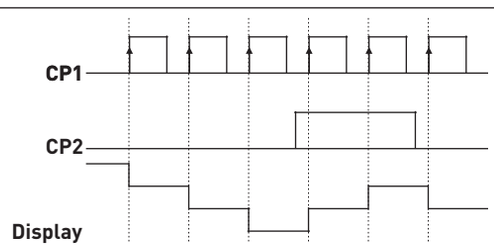
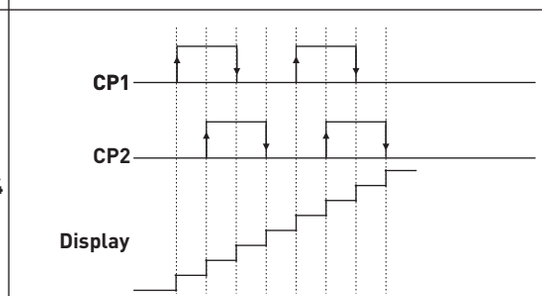
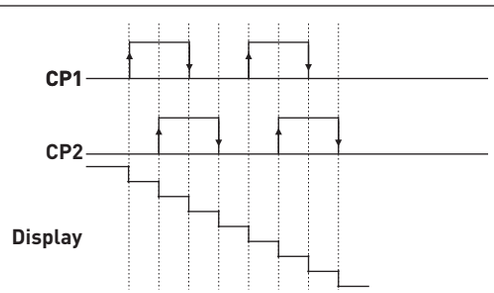
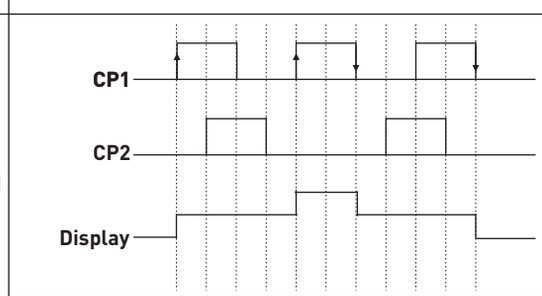
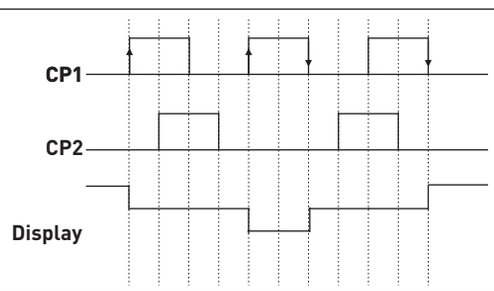
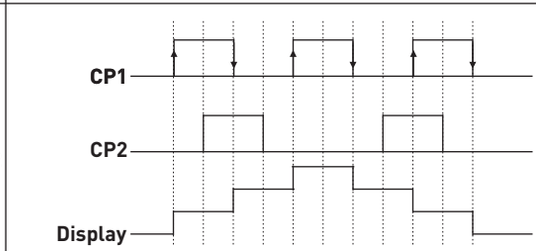
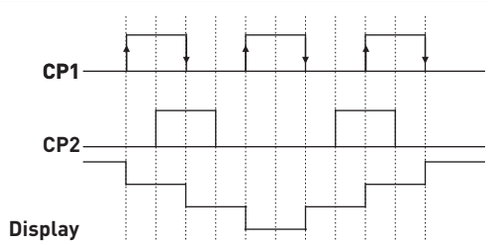


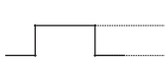
Programming Preset Value:



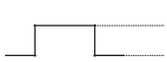
(*) Decimal point appears at dEC.Pnt selection.

Input Types

	Cr.dr = drct	Cr.dr = oppo
Inp = 1u 2n		
Inp = 1u 2u		
Inp = 1u 2G		
Inp = 1u 2d		
Inp = Phs4		
Inp = Phs1		
Inp = Phs2		

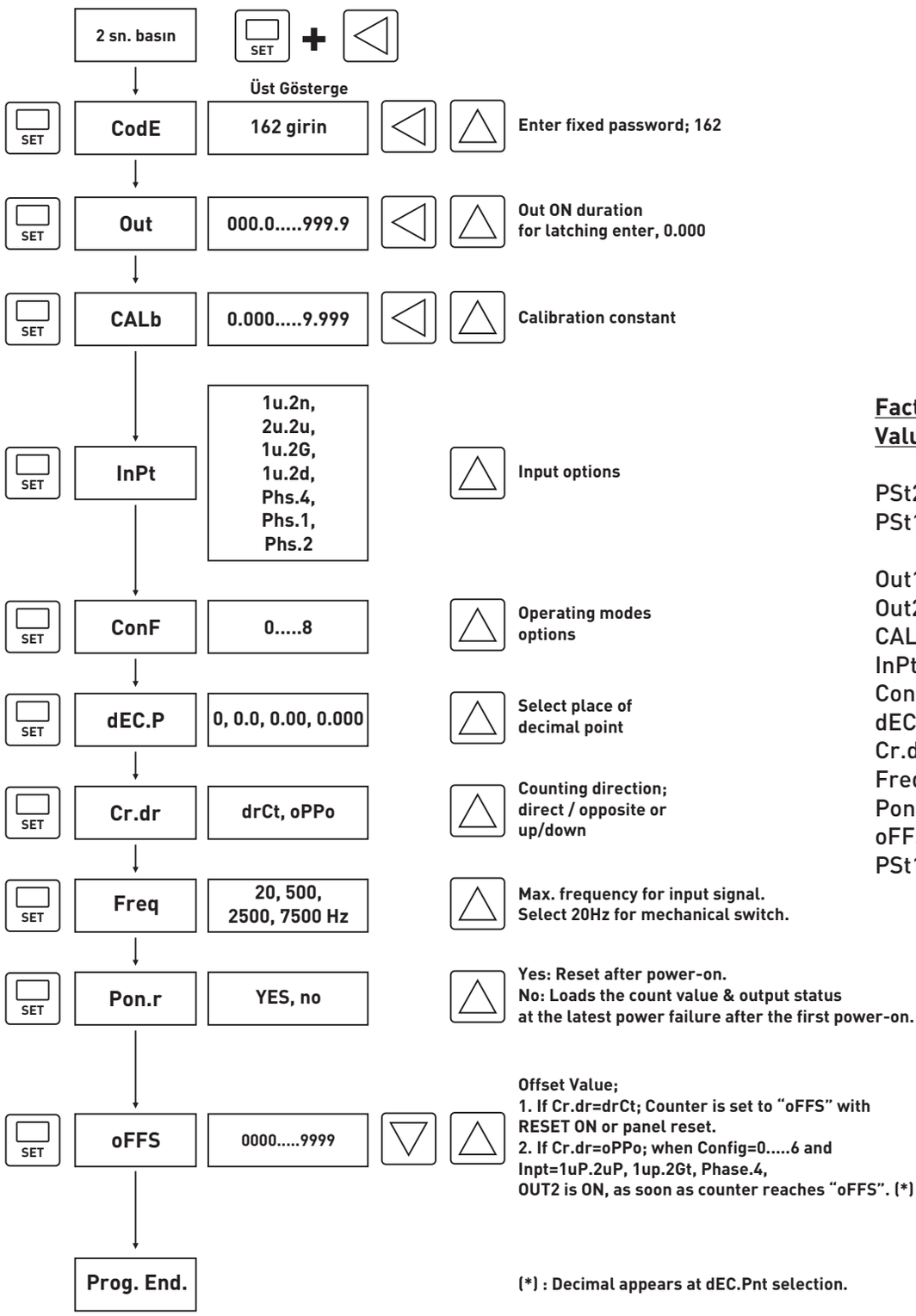


PNP / Totem Pole ON
PNP / Totem Pole OFF



NPN OFF
NPN ON

Programming Parameters:



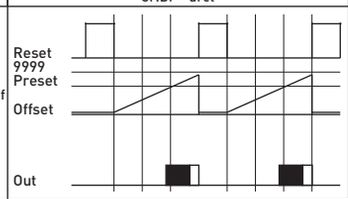
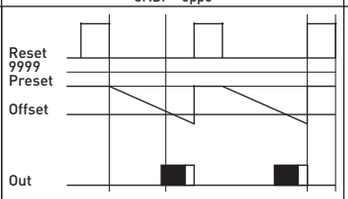
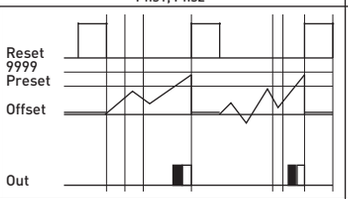
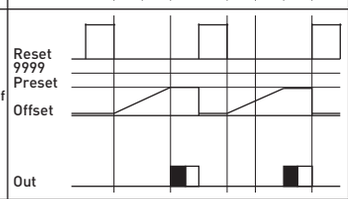
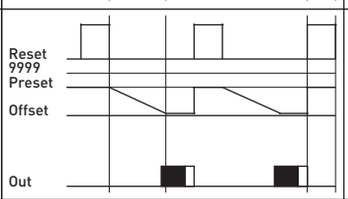
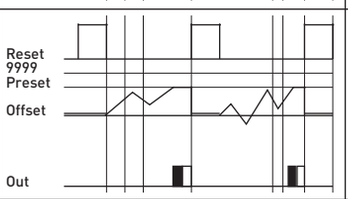
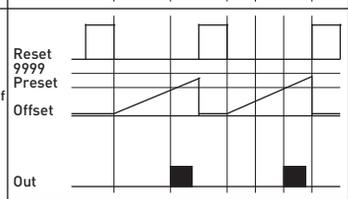
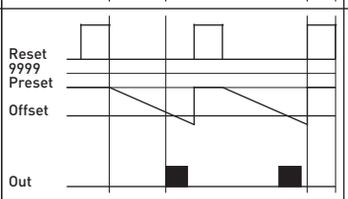
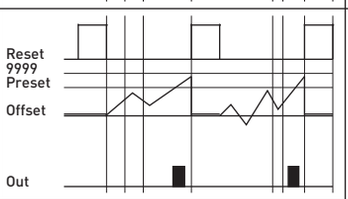
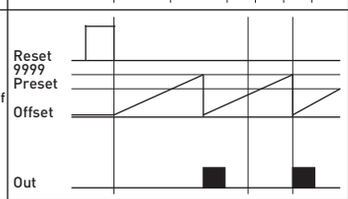
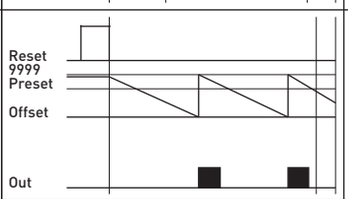
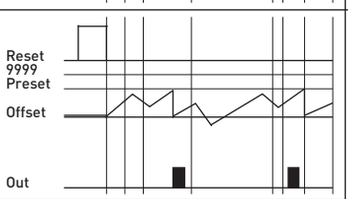
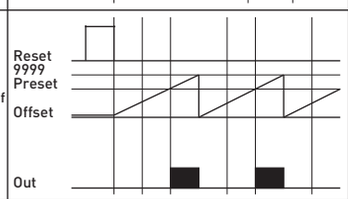
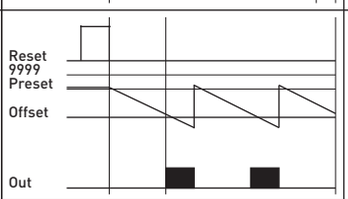
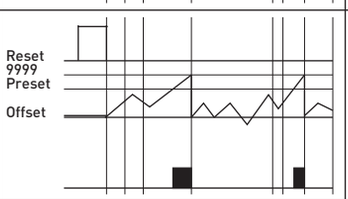
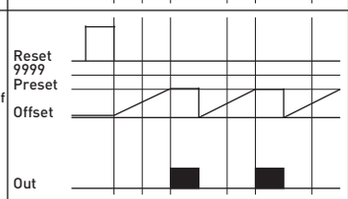
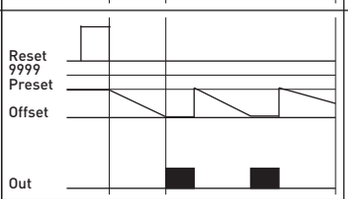
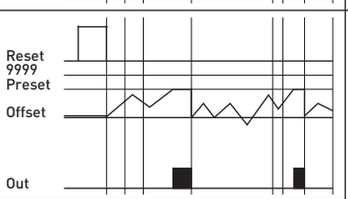
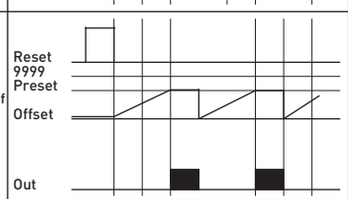
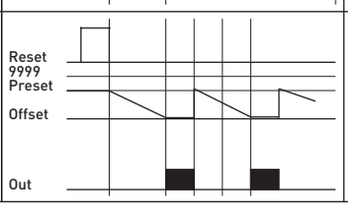
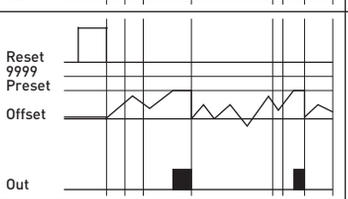
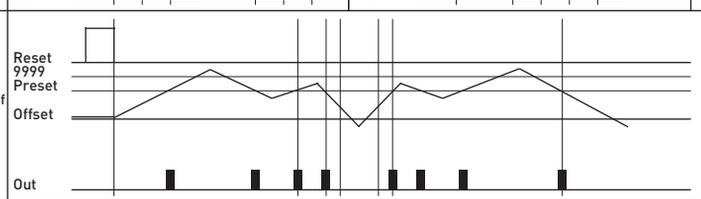
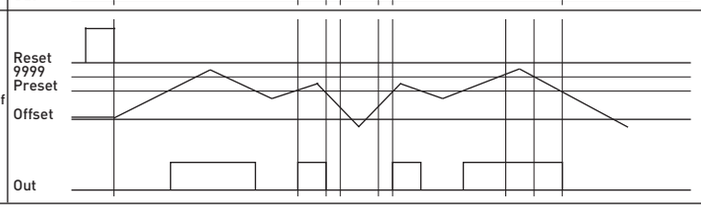
Factory SET Values:

PSt2: 0100
PSt1: 0050

Out1: 001.0 sec.
Out2: 001.0 sec.
CALb: 1.000
InPt: 1u.2n
ConF: 0
dEC.P: 0
Cr.dr: drCt
Freq: 20
Pon.r: YES
oFFS: 0000
PSt1: AbSt

Note: If no entry is done for 20 sec. during programming, current enteries are accepted and saved to EEPROM memory.

Operating Modes

	Inpt = 1u2u, 1u2G, Phs4 Cr.Dr = drct	Inpt = 1u2u, 1u2G, Phs4 Cr.Dr = oppo	Inpt = 1u2n, 1u2d, Phs1, Phs2	Comment
Conf 0				Counting continues up/down until RESET ON after, Preset is reached.
Conf 1				Counting stops until RESET ON after Preset is reached.
Conf 2				Counting continues up/down until RESET ON after Preset is reached.
Conf 3				Counter is reset after Preset is reached.
Conf 4				Counting continues up/down after Preset is reached. Counter is reset with OUT pulse OFF.
Conf 5				Counting stops after Preset is reached. Counter is reset OUT pulse OFF.
Conf 6				Counter is reset after Preset is reached but display freezes until the end of OUT pulse.
Conf 7				OUT is ON when counter is equal to Preset else OFF. Use SS Out if ON duration is too small for relay ON time.
Conf 8				OUT is ON when counter is greater or equal to Preset else OFF. Use NC pin of OUT if less then is required.

■ Pulse □ Latched Output