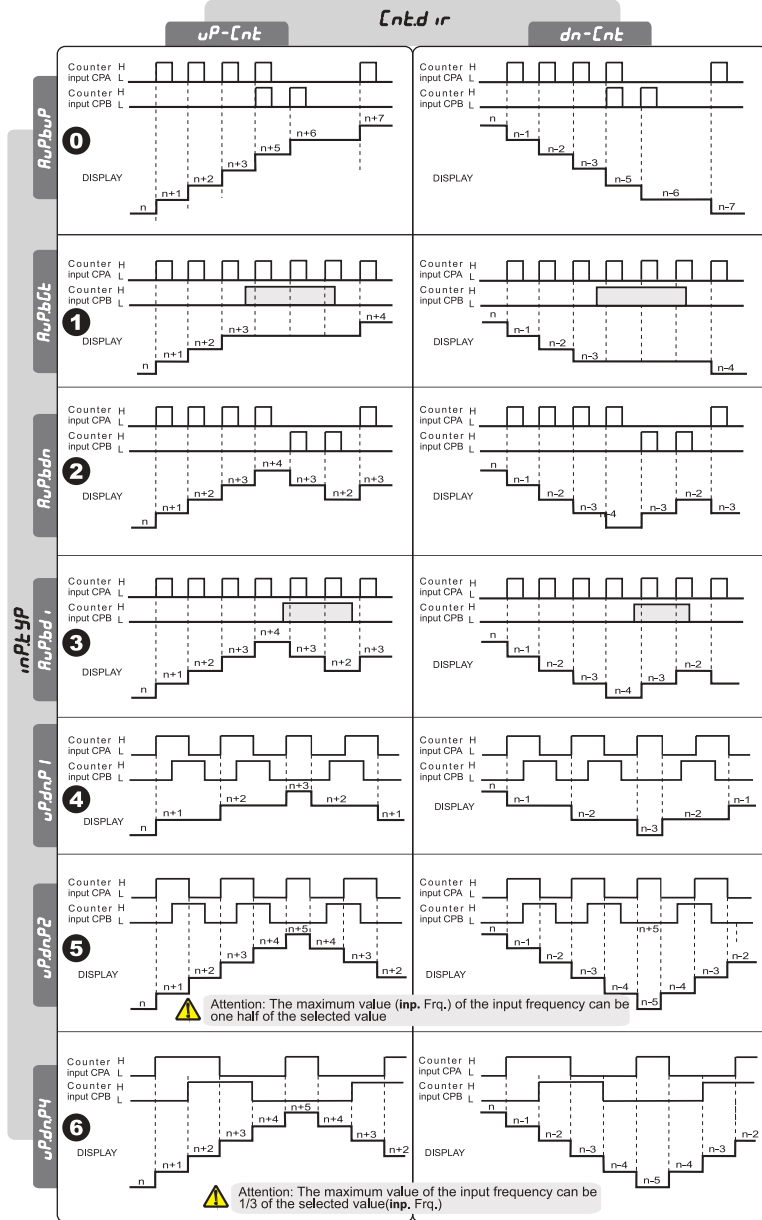


TABLE.3

COUNTER INPUT TYPE TABLE



NOTE: 1

## INPUT TYPE

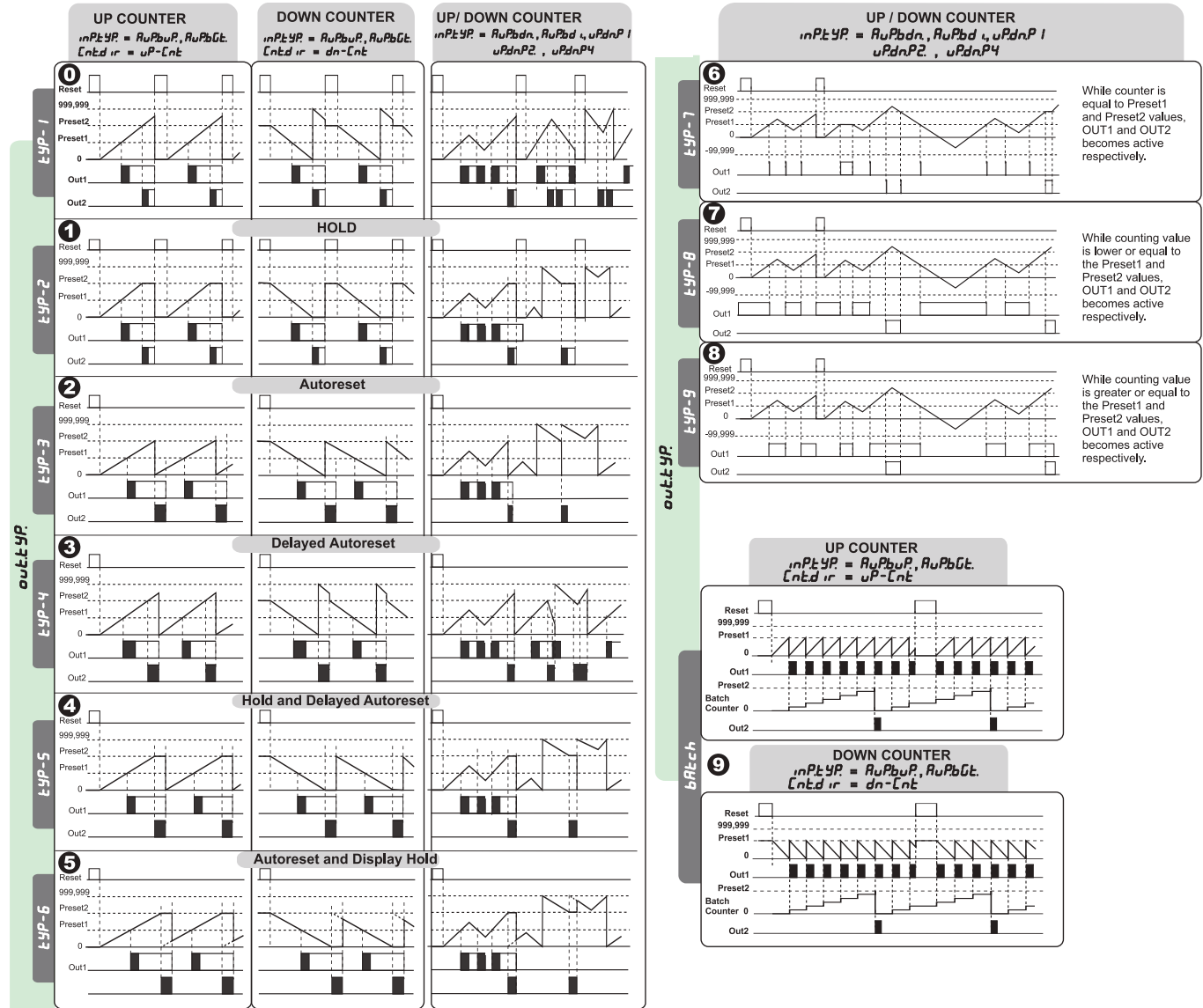
| Input Symbol | NPN input (Voltage input no) | PNP input (Voltage input) |
|--------------|------------------------------|---------------------------|
| H            | input short circuit          | 4,5V - 30V DC             |
| L            | input open circuited         | 0V - 2V DC                |



Input frequency must not exceed the specified value. If input frequency exceed the specified value, the device does not make accurate count.

TABLE.4

COUNTER OUT TYPE TABLE



While *batch* counter mode is selected, decimal point is invisible.

Because, *PrsEt2* and *batch* values are integer.

■ If *ou1t in* and *ou2t in* is adjusted between 0.01 and 999.9 sec, pulse output is obtained

□ If *ou1t in* and *ou2t in* is adjusted between 0.0 and 999.9 sec, continuous output is obtained.

## REV/SPEED MEASURING MODE PROGRAMMING DIAGRAM

⚠ If  $dE\tilde{n}odE$  parameter is selected as  $tRcho$ , following parameters will be activated.

If key is pressed while holding key, "Programming Mode" is entered.

Accessing to "Running Mode" from "Programming Mode" :

if no key is pressed within 20 seconds, during "Programming Mode", data is stored automatically and "Running Mode" is entered. Alternatively, the same function occurs first pressing key and "Programming Mode" is entered. Then keys are pressing together, data is recorded and "Running Mode" is entered.

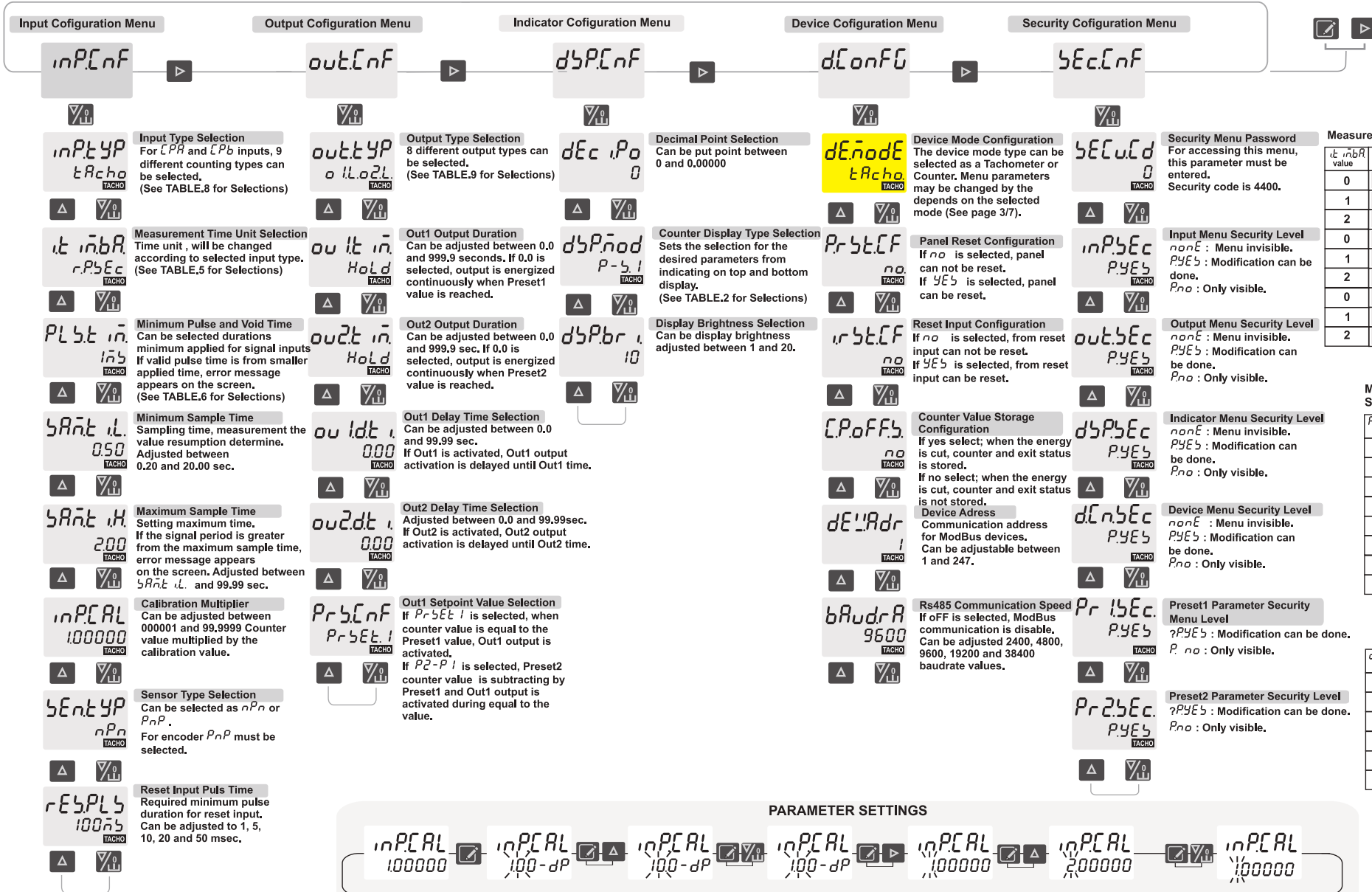


TABLE.5

| $tRcho$ value | Parameter message | Explanation      | $nPn$    |
|---------------|-------------------|------------------|----------|
| 0             | $rP5Ec$           | Puls in 1 second | $tRcho$  |
| 1             | $rPn$             | Puls in 1 minute | $tRcho$  |
| 2             | $rPhour$          | Puls in 1 hour   | $tRcho$  |
| 0             | $nP5Ec$           | meter / second   | $nP5Ec$  |
| 1             | $nPn$             | meter / minute   | $nPn$    |
| 2             | $nPhour$          | metre / hour     | $nPhour$ |
| 0             | $n1c5Ec$          | microseconds     | $n1c5Ec$ |
| 1             | $n1s5Ec$          | milliseconds     | $n1s5Ec$ |
| 2             | $100ns$           | 100 milliseconds | $100ns$  |

TABLE.6

Minimum Pulse Void Time Selection Table

| $PL5t$ value | Parameter message | Explanation |
|--------------|-------------------|-------------|
| 0            | $40ns$            | 40 msec     |
| 1            | $20ns$            | 20 msec     |
| 2            | $10ns$            | 10 msec     |
| 3            | $1ns$             | 1 msec      |
| 4            | $0.5ns$           | 0.5 msec    |
| 5            | $0.1ns$           | 0.1 msec    |
| 6            | $0.05ns$          | 0.05 msec   |
| 7            | $0.02ns$          | 0.01 msec   |

TABLE.7

Parameter Selection Table to Display

| $d5Pnod$ value | Parameter message | UPPER Display | LOWER Display |
|----------------|-------------------|---------------|---------------|
| 0              | $P-5.1$           | Measuring     | SET1          |
| 1              | $P-5.2$           | Measuring     | SET2          |
| 2              | $P-R5.1$          | Measuring     | On SET1       |
| 3              | $P-tP$            | Measuring     | Total Rev     |
| 4              |                   |               |               |
| 5              |                   |               |               |

### PARAMETER SETTINGS

The selected parameter of the digit will flash when the key is pressed. Value can be changed by using navigation keys. The next digit can be selected with the key and the same method can be applied as the previous step. If the decimal point of the selected parameter can also be adjusted, the message  $-dP$  appears on the display during the digit selection. While this message is displayed, the decimal point is brought to the desired place with the keys. If the key (Up) is pressed continuously for 0.6 seconds, the value to be increasing rapidly. The same method applies to the decrement (Down) key.

**TABLE.8** PULSE MEASUREMENT INPUT TYPE TABLE

**0 Pulse Measurement Method (rps: pulse/second, rpm: pulse/minute, rph : pulse/hour)**

CPA input: H, L, second

CPB(HOLD)input: H, L, second

Process value: Previous value, (Calibration/T1x60) rpm, (Calibration/T2x60) rpm, (Calibration/T3x60) rpm

Attention: Pulse and void times input signal appropriate must be selected.

**1 Phase Difference Input Pulse Measurement Method (rps: pulse/second, rpm: pulse/minute, rph : pulse/hour) Direction Indicator**

CPA Input: H, L, second

CPB Input: H, L, second

Process value: Previous value, (Calibration/T1x60) rpm, (Calibration/T2x60) rpm, (Calibration/T3x60) rpm, (Calibration/T4x60) rpm

Attention: Pulse and void times input signal appropriate must be selected.

**2 CPA With CPB Inputs Puls Rate Finding Method**

CPA input: H, L, second

CPB input: H, L, second

Process value: Previous value, (1/Ta) / (1/Tb)

**3 Speed Measurement Method ( m/s : meter / second, m/m : meter / minute, m/h : meter / hour) Can Be Selected**

CPA input: H, L, second

CPB input: H, L, second

Process value: Previous value, (Calibration value / T1)m/s, (Calibration value / T2)m/s, (Calibration value / T3)m/s

Attention: Pulse and void times input signal appropriate must be selected.

**4 Period Measurement Method**

CPA input: H, L, second

CPB(HOLD)input: H, L, second

Process value: Previous value, (T1+T2+ ..... +Tn)/n

Attention: Pulse and void times input signal appropriate must be selected.

**5 Time Difference Measurement Method**

CPA input: H, L, second

CPB input: H, L, second

Process value: Önceki değer, T1, T2, T3

Attention: Pulse and void times input signal appropriate must be selected.

**6 Puls Width Measurement Value**

CPA input: H, L, second

CPB(HOLD)input: H, L, second

Process Value: Previous value, T1, T2, T4

Attention: Pulse and void times input signal appropriate must be selected.

**7 Pulse Census Method**

CPA input: H, L, second

CPB input: H, L, second

RESET IN input: H, L, second

Process value: Previous value, counting value: 9, sayma değeri: 10, SIFIR

Attention: Pulse and void times input signal appropriate must be selected. ( Counting values Calibration = for 1 )

**8 Pulse Census Method**

CPA input: H, L, second

CPB input: H, L, second

RESET IN input: H, L, second

Process value: Previous value, counting value: 9, counting value: 13, ZERO

Attention: Pulse and void times input signal appropriate must be selected. ( Counting values Calibration = for 1 )

**9 CHA with CHB Inputs Pulse Difference Finding Method**

CPA input: H, L, second

CPB input: H, L, second

Process value: Previous value, ((1/Ta) - (1/Tb))x60 rpm, ((1/Ta) - (1/Tb))x60 rpm, ((1/Ta) - (1/Tb))x60 rpm

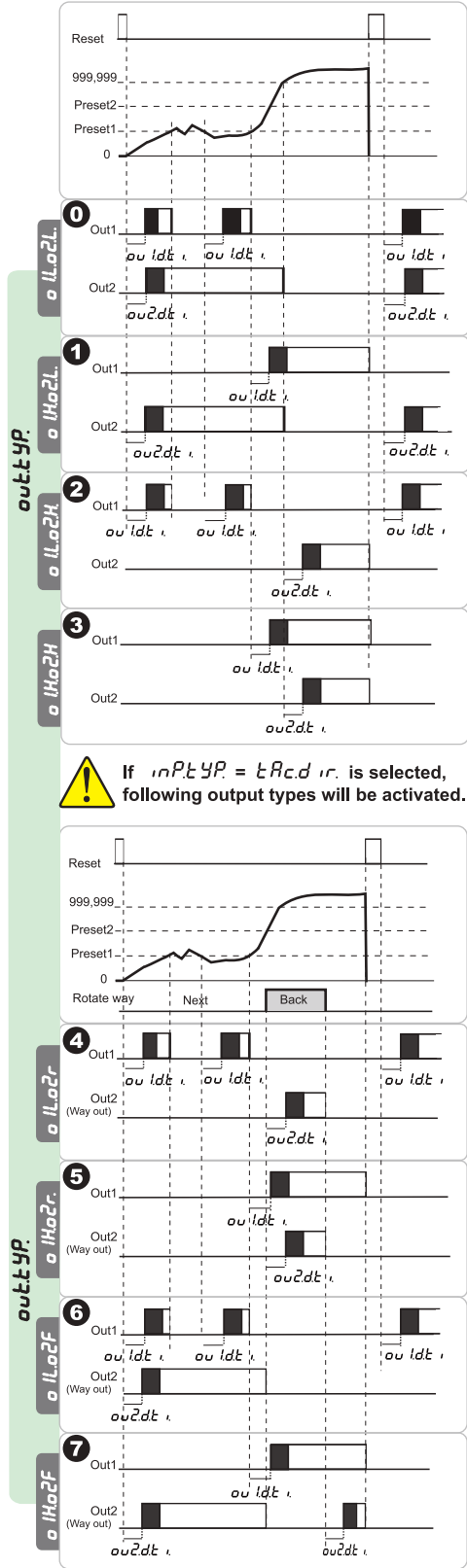
**ATTENTION !** If this method selected, measured pulse from CPA input must be greater or equal from CPB inputs pulse  
If CPA small CPB;  $\text{rps} \leq \text{rph}$  this error message is visible.

**NOTE: 1**

## INPUT TYPE

| Input Symbol | NPN input (Voltage input not) | PNP input (Voltage input) |
|--------------|-------------------------------|---------------------------|
| H            | Input shourtchange            | 4,5V - 30V DC             |
| L            | Input open circuit            | 0V - 2V DC                |

**TABLE.9** PULSE MEASURED OUTPUTS TYPE TABLE



If  $0.01 \leq \tau$  and  $0.01 \leq \tau$  is adjusted between 0.01 and 999.9 sec. pulse output is obtained.

☐ If  $ou$  is  $\bar{n}$  and  $ou\bar{c}$  is  $\bar{n}$  is adjusted between 0.0 sec. (Hold)  
continuous output is obtained.

*ou1dt* , and *ou2dt* , is adjusted between 0.0 and 999.9 sec.  
Output delayed of until adjusted time . When set 0 output is instantly taken