

# CHAPTER 3

# TIMER

	- NT
In This Chapter	<b>▼</b> ∀
Display, Indicators and Keys	
Getting Started with Timers	
Timer Mode Descriptions	
Signal On Delay 1	
Signal On Delay 2	
Signal Off Delay	
Signal On	
Power On Delay	
Power On Delay Hold	
Repeat Cycle	
Repeat Cycle Hold	
Repeat Cycle 2	
Signal Cumulate	
Signal Twin On-Start	
Signal Twin Off Start	

# **Display, Indicators and Keys**



LCD Display and Indicators				
RST 1/2	Light on when reset signal is detected <b>HMS</b> Hour, minute, second, unit of timer, displayed in Timer function			
K/P 1/2	Light on when key-protected mode is enabled	SET	SV	
OUT 1/2	Light on when output is executing	TMR	Light on in Timer function	
	Ke	y Operation		
	Increase and decrease SV or change paramter settings			
	Left move 1 digit of the selected digit. The indicator of the selected of	ligit will flash.		
MODE	Save the set parameters or switch among functions.			
LOCK	Prevent settings from being changed. Key-protected mode still works after the power is switched off. Press LOCK to enter key-protected mode. In non-key-protected status, press LOCK to enter Lock 1, press LOCK again to enter Lock 2. Press and at the same time to disable key-protected mode. In non-key-protected status, of all keys. Lock 2) allows users to change SV and functions of RESET remain. LOCK only functions in non-key-protected status.			
RESET	Clear and reset PV.			
	Modes: Operation N	lode and Confi	guration Mode	
Operation	When the power is on, the timer/counter/tachometer is in the operati selected digit will flash. After the change is made, press	ion mode. Press <b>1</b> e the setting. If SV or pa	▲ to change SV, or ▲ to make change on a desired digit. The indicator of the aramters are not changed, press	
Configuration	Press <b>Mode</b> in operation mode for more than 3 seconds to enter con for more than 3 seconds.	figuration mode. Press	Moos once to switch among parameters. To return to operation mode, press Moos	



# **Getting Started with Timers**

Below you will find the list of available timer modes with a brief description of operation, for more detailed information about the timing sequences and output operations please see the associated page(s) within this chapter.

Timer Modes	Description	Page Number
Signal On Delay 1	On delay timer with momentary Start Input	3-4
Signal On Delay 2	On delay timer with maintained Start Input	3-6
Signal Off Delay	Off delay timer with momentary Start Input	3-8
Signal On	Off delay timer with latching Start Input	3-10
Power On Delay	On delay timer when power is applied	3-12
Power On Delay Hold	On delay timer when power is applied and actual value storage on power loss	3-14
Repeat Cycle	Repeating On delay timer	3-16
Repeat Cycle Hold	Repeating On delay timer and actual value storage on power loss	3-18
Repeat Cycle 2	Repeating Off delay timer with separate on and off times	3-20
Signal Cumulate	On delay timer with single start and pause input and actual value storage on power loss	3-22
Signal Twin On-Start	Off delay timer with individual setpoints for Off and On times	3-24
Signal Twin Off Start	On delay timer with individual setpoints for On and Off times	3-26



Click on the above thumbnail or go to <u>https://www.automationdirect.com/VID-RL-0008</u> for a short Timer demo video.



Click on the above thumbnail or go to <u>https://www.automationdirect.com/VID-RL-0007</u> for a Timer Set-up video.

# CTT Timer Signal On Delay

#### Signal On Delay 1 (50nd 1)

With power applied to the CTT, the leading edge of the input signal at START will begin the timing period setting value SV (timing up or down based on parameter ( $\blacksquare$  Forfe) or by DIP switch 2). At the end of the timing period both outputs will turn ON momentarily for the time set in the output pulse width parameter ( $\blacksquare$  of the immediate of the timing edge of the "start" signal has no effect on the outputs or timing period.

The leading edge of a "reset" input signal at RST1 will turn OFF the outputs and reset the timing period. The "reset" signal minimum pulse width is set by reset pulse width parameter ( **FESF**) or DIP Switch 8.

The leading edge of a "pause" input signal at GATE will pause the timing period after it has been started. The timing period will continue after the trailing edge of the external switch "pause" (Gate) signal.

When power is removed, both outputs will turn OFF and the timing period will be reset.





# Timer Wiring Examples

# **DIP Switch Set Up of the CTT Parameters:**

Dip Switch Settings - Table 1			
Switch	Function	Off	On
1	Dip switch	Disabled	Enabled
2	Timer mode	Counting up	Counting down
3	Output See Output Mode Tal		It Mode Table
4	mode	- T	able 2
5		-	
6	Displayed	See Displa	ay Units Table
7	unit		4010 0
8	Reset signal pulse width	20 ms	1 ms

Output Mode - Table 2		
Switch 3	Switch 4	Output Mode
OFF	OFF	Sond I
ON	OFF	Sond2
OFF	ON	SoFFd
ON	ON	Son

	Display Un	its - Table	3
Switch 5	Switch 6	Switch 7	<b>Display Units</b>
OFF	OFF	OFF	0.01 sec.
ON	OFF	OFF	0.1 sec.
OFF	ON	OFF	1 sec.
ON	ON	OFF	min., 0.01 sec.
OFF	OFF	ON	min., 0.1 sec.
ON	OFF	ON	0.1 min.
OFF	ON	ON	minute
ON	ON	ON	hr., min., sec.

### 3-4 Digital Counter / Timer / Tach User Manual, 1st Ed.



# Keypad set up of the parameters for Signal On Delay Timing:

To enter the page for parameter setting of the timer, press **MODE** in the main menu for more than 3 seconds. After the setup is complete, press **MODE** for more than 3 seconds under any of the parameter page you are in and return to the main menu.

	Select funtions: There are 4 modes in CTT, (left to right) timer, counter, tachometer and timer + counter.
FUnE	Var File var Fulk var fil
	Select timer mode: timing up and timing down
t ñodE	Vora 4000 do 00
	Select output modes: There are 12 output modes in the timer. The user can choose the mode that best meets the demand.
t otñd	Ina <mark>Sand (</mark> Ina Sand? Ina Saffd Ina San Ina Pand Ina Pandk
MODE	808 - CY 808 - CYH 808 - CYH 808 5Con 808 5Eor 808 5Eorf
•	Select display unit: the min. unit 10ms to the max. unit hour are selectable. Refer to table below.
E Unit	
MODE	$\mathbb{Y}$ is the set of
¥	Select pulse width of output 1: The default output time is 0.02 second. When the parameter is set to 0.00 second, the output status will be maintained on.
t ollt i	Ins Cost Cost
	Select min. width of reset signal: The defaul value is 20ms; can be set to 1ms.
resr	International and the second sec
	Select input signal types: NDN and DND (use NDN if dry contact input)

Setting Time Units				
t Unit				
S 00 (	Sec.	0.01 to 9,999.99	A unit = 10ms	Max. counting = 9,999.99 secs.
501	Sec.	0.1 to 99,999.9	A unit = 0.1 sec.	Max. counting = 99,999.9 secs.
5 1	Sec.	1 to 999,999	A unit = 1 sec.	Max. counting = 999,999 secs.
75 00 I	min., sec.	0.01 to 9,959.99	A unit = 0.01 sec.	Max. counting = 5,999.99 secs.
AS 01	min., sec.	0.1 to 99,959.9	A unit = 0.1 sec.	Max. counting = 59,999.9 secs.
A 01	min.	0.1 to 99,999.9	A unit = 0.1 min.	Max. counting = 99,999.9 mins.
i i	min.	1 to 999,999	A unit = 1 min.	Max. counting = 999,999 mins.
HAS 1	hr., min., sec.	1 to 995,959	A unit = 1 sec.	Max. counting = 359,999 secs. (100 hrs.)
Hā l	hr., min.	1 to 999,959	A unit = 1 min.	Max. counting = 35,999,999 secs. (10,000 hrs.)
H I	hr.	1 to 699,999	A unit = 1 hr.	Max. counting = 699,999 hrs.

# CTT Timer Signal On Delay 2

#### Signal On Delay 2 (500d2)

With power applied to the CTT, the leading edge of the input signal at START will begin the timing period setting value SV (timing up or down based on parameter (E FORE) or by DIP switch 2). At the end of the timing period both outputs will turn ON momentarily for the time set in the output pulse width parameter (EOLE I) or will be maintained ON if the output pulse width parameter (EOLE I) is set to 0.00. The trailing edge of the "start" signal will turn OFF the outputs and reset the timing period.

The leading edge of a "reset" input signal at RST1 will turn OFF the outputs and reset the timing period. The "reset" signal minimum pulse width is set by reset pulse width parameter (reser) or DIP Switch 8.

The leading edge of a "pause" input signal at GATE will pause the timing period after it has been started. The timing period will continue after the trailing edge of the external switch "pause" (Gate) signal.

When power is removed, both outputs will turn OFF and the timing period will be reset.



# **Timer Wiring Examples**



# DIP Switch Set Up of the CTT Parameters:

Dip Switch Settings - Table 1			
Switch	Function	Off	On
1	Dip switch	Disabled	Enabled
2	Timer mode	Counting up	Counting down
3	Output See Output Mode Tat		It Mode Table
4	mode	- T	able 2
5		_	
6	Displayed	See Displa	ay Units Table
7	unit	I	4510 0
8	Reset signal pulse width	20 ms	1 ms

Output Mode - Table 2		
Switch 3	Switch 4	<b>Output Mode</b>
OFF	OFF	Sond I
ON	OFF	Sond2
OFF	ON	SoFFd
ON	ON	Son

Display Units - Table 3			
Switch 5	Switch 6	Switch 7	<b>Display Units</b>
OFF	OFF	OFF	0.01 sec.
ON	OFF	OFF	0.1 sec.
OFF	ON	OFF	1 sec.
ON	ON	OFF	min., 0.01 sec.
OFF	OFF	ON	min., 0.1 sec.
ON	OFF	ON	0.1 min.
OFF	ON	ON	minute
ON	ON	ON	hr., min., sec.



# Keypad set up of the parameters for Signal On Delay 2 Timing:

To enter the page for parameter setting of the timer, press **MODE** in the main menu for more than 3 seconds. After the setup is complete, press **MODE** for more than 3 seconds under any of the parameter page you are in and return to the main menu.

	Select funtions: There are 4 modes in CTT, (left to right) timer, counter, tachometer and timer + counter.
FUnE	Ina <mark>ejhe</mark> Ina <u>Cont</u> Ina <u>erch</u> Ina <u>hit</u>
	Select timer mode: timing up and timing down
t ñodE	Val UP Val doug
	Select output modes: There are 12 output modes in the timer. The user can choose the mode that best meets the demand
t otrīd	EVE Sand I EVE Sond? EVE Soffd EVE Son EVE Pand EVE Pandk
MODE	EME FEY EME FEYH EME FEYE EME SEON EME SEON EME SEOFF
₩	Select display unit: the min. unit 10ms to the max. unit hour are selectable. Refer to table below.
t Unīt	
MODE	Ine A I Ine HAS I Ine HA I Ine A I
↓	Select pulse width of output 1: The default output time is 0.02 second. When the parameter is set to 0.00 second, the output status will be maintained on
t ollt i	
	Select min, width of reset signal: The defaul value is 20ms; can be set to 1ms
resr	
MODE L	
•	Select input signal types: NPN and PNP (use NPN if dry contact input)
InPELE	Val nPn Val PnP

Setting Time Units				
E Unie				
S 00 (	Sec.	0.01 to 9,999.99	A unit = 10ms	Max. counting = 9,999.99 secs.
501	Sec.	0.1 to 99,999.9	A unit = 0.1 sec.	Max. counting = 99,999.9 secs.
5 1	Sec.	1 to 999,999	A unit = 1 sec.	Max. counting = 999,999 secs.
75 00 I	min., sec.	0.01 to 9,959.99	A unit = 0.01 sec.	Max. counting = 5,999.99 secs.
75 0 I	min., sec.	0.1 to 99,959.9	A unit = 0.1 sec.	Max. counting = 59,999.9 secs.
A 01	min.	0.1 to 99,999.9	A unit = 0.1 min.	Max. counting = 99,999.9 mins.
n l	min.	1 to 999,999	A unit = 1 min.	Max. counting = 999,999 mins.
Hā5 I	hr., min., sec.	1 to 995,959	A unit = 1 sec.	Max. counting = 359,999 secs. (100 hrs.)
Ha 1	hr., min.	1 to 999,959	A unit = 1 min.	Max. counting = 35,999,999 secs. (10,000 hrs.)
H I	hr.	1 to 699,999	A unit = 1 hr.	Max. counting = 699,999 hrs.

# CTT Timer Signal Off Delay

#### Signal Off Delay (50FFd)

With power applied to the CTT, the leading edge of the input signal at START will immediately turn ON the outputs. The trailing edge of the "start" signal will begin the timing period setting value SV (timing up or down based on parameter (E ForeE) or by DIP switch 2). At the end of the timing period both outputs will turn OFF. The leading edge of a "start" signal applied during a previously initiated timing period will reset the timing period.

The leading edge of a "reset" input signal at RST1 will turn OFF the outputs and reset the timing period. The "reset" signal minimum pulse width is set by reset pulse width parameter ( **EEF**) or DIP Switch 8.

The leading edge of a "pause" input signal at GATE will pause the timing period after it has been started. The timing period will continue after the trailing edge of the external switch "pause" (Gate) signal.

When power is removed, both outputs will turn OFF and the timing period will be reset.



# Timer Wiring Examples



# **DIP Switch Set Up of the CTT Parameters:**

Dip	Switch Se	ettings - 1	able 1
Switch	Function	Off	On
1	Dip switch	Disabled	Enabled
2	Timer mode	Counting up	Counting down
3	Output	See Output Mode Table	
4	mode	- T	able 2
5		-	
6	Displayed	See Displa - T	y Units Table able 3
7	unit		4510 0
8	Reset signal pulse width	20 ms	1 ms

Output Mode - Table 2			
Switch 3	Switch 4	<b>Output Mode</b>	
OFF	OFF	Sond I	
ON	OFF	Sond2	
OFF	ON	SoFFd	
ON	ON	Son	

	Display Units - Table 3				
	Switch 5	Switch 6	Switch 7	<b>Display Units</b>	
	OFF	OFF	OFF	0.01 sec.	
	ON	OFF	OFF	0.1 sec.	
	OFF	ON	OFF	1 sec.	
]	ON	ON	OFF	min., 0.01 sec.	
	OFF	OFF	ON	min., 0.1 sec.	
	ON	OFF	ON	0.1 min.	
	OFF	ON	ON	minute	
	ON	ON	ON	hr., min., sec.	



# Keypad set up of the parameters for Signal Off Delay Timing:

To enter the page for parameter setting of the timer, press **MODE** in the main menu for more than 3 seconds. After the setup is complete, press **MODE** for more than 3 seconds under any of the parameter page you are in and return to the main menu.

	Select funtions: There are 4 modes in CTT, (left to right) timer, counter, tachometer and timer + counter.
FUnE	Var File var fort var Fult var fil
	Select timer mode: timing up and timing down
t ñodE	Var UP Var dour
	Select output modes: There are 12 output modes in the timer. The user can choose the mode that best meets the demand
t otād	EVE Sond ( EVE Sond2 EVE SoFFd EVE Son EVE Pond EVE PondH
MODE	IMA FEY IMA FEYN IMA FEYZ IMA SEON IMA SEON IMA SEOFF
¥	Select display unit: the min. unit 10ms to the max. unit hour are selectable. Refer to table below.
t Unit	
MODE	va a i va Has i va Ha i
¥	Select pulse width of output 1: The default output time is 0.02 second. When the parameter is set to 0.00 second, the output status will be maintained on.
t out i	
	Select min, width of reset signal: The defaul value is 20ms: can be set to 1ms
resr	
·	Select input signal types: NPN and PNP (use NPN if dry contact input)
InPELE	

	Setting Time Units			
E Unit				
5 00 1	Sec.	0.01 to 9,999.99	A unit = 10ms	Max. counting = 9,999.99 secs.
501	Sec.	0.1 to 99,999.9	A unit = 0.1 sec.	Max. counting = 99,999.9 secs.
5 1	Sec.	1 to 999,999	A unit = 1 sec.	Max. counting = 999,999 secs.
75 00 I	min., sec.	0.01 to 9,959.99	A unit = 0.01 sec.	Max. counting = 5,999.99 secs.
75 0 I	min., sec.	0.1 to 99,959.9	A unit = 0.1 sec.	Max. counting = 59,999.9 secs.
A 0 I	min.	0.1 to 99,999.9	A unit = 0.1 min.	Max. counting = 99,999.9 mins.
n I	min.	1 to 999,999	A unit = 1 min.	Max. counting = 999,999 mins.
HAS 1	hr., min., sec.	1 to 995,959	A unit = 1 sec.	Max. counting = 359,999 secs. (100 hrs.)
Ha I	hr., min.	1 to 999,959	A unit = 1 min.	Max. counting = 35,999,999 secs. (10,000 hrs.)
H 1	hr.	1 to 699,999	A unit = 1 hr.	Max. counting = 699,999 hrs.

# CTT Timer Signal On

#### Signal On (500)

With power applied to the CTT, the leading edge of the input signal at START will immediately turn ON the outputs and begin the timing period setting value SV (timing up or down based on parameter (E FordE) or by DIP switch 2). The trailing edge of the "start" signal has no effect on the outputs or timing period. At the end of the timing period both outputs will turn OFF and the timing period will reset. The leading edge of a "start" signal applied during a previously initiated timing period will not reset the timing period.

The leading edge of a "reset" input signal at RST1 will turn OFF the outputs and reset the timing period. The "reset" signal minimum pulse width is set by reset pulse width parameter (reser) or DIP Switch 8.

The leading edge of a "pause" input signal at GATE will pause the timing period after it has been started. The timing period will continue after the trailing edge of the external switch "pause" (Gate) signal.

When power is removed, both outputs will turn OFF and the timing period will be reset.



# Timer Wiring Examples



### DIP Switch Set Up of the CTT Parameters:

Dip	Dip Switch Settings - Table 1				
Switch	Function	Off	On		
1	Dip switch	Disabled	Enabled		
2	Timer mode	Counting up	Counting down		
3	Output	See Output Mode Table			
4	mode	- T	able 2		
5		_			
6	Displayed	See Displa - T	ay Units Table		
7	unit	·	4510 0		
8	Reset signal pulse width	20 ms	1 ms		

Output Mode - Table 2			
Switch 3	Switch 4	<b>Output Mode</b>	
OFF	OFF	Sond I	
ON	OFF	Sond2	
OFF	ON	SoFFd	
ON	ON	Son	

	Display Units - Table 3				
Switch 5	Switch 6	Switch 7	<b>Display Units</b>		
OFF	OFF	OFF	0.01 sec.		
ON	OFF	OFF	0.1 sec.		
OFF	ON	OFF	1 sec.		
ON	ON	OFF	min., 0.01 sec.		
OFF	OFF	ON	min., 0.1 sec.		
ON	OFF	ON	0.1 min.		
OFF	ON	ON	minute		
ON	ON	ON	hr., min., sec.		



### Keypad set up of the parameters for Signal On Timing:

To enter the page for parameter setting of the timer, press **MODE** in the main menu for more than 3 seconds. After the setup is complete, press **MODE** for more than 3 seconds under any of the parameter page you are in and return to the main menu.

	Select funtions: There are 4 modes in CTT, (left to right) timer, counter, tachometer and timer + counter.
FUnE	Ing Fire Ing Fore Ing Free Fire
	Select timer mode: timing up and timing down
t ñodE	In In Int Int
	Select output modes: There are 12 output modes in the timer. The user can choose the mode that best meets the demand.
t otrīd	EME Sand ( EME Sandd EME Saffa' EME <mark>- San</mark> EME Pand EME Pandk
MODE	Var rey var reyh var reye var Sean var Sear
¥	Select display unit: the min. unit 10ms to the max. unit hour are selectable. Refer to table below.
E Unit	
MODE	va a i va has iva ha i va hi
¥	Select pulse width of output 1: The default output time is 0.02 second. When the parameter is set to 0.00 second, the output status will be maintained on.
t ollt i	In International
	Select min. width of reset signal: The defaul value is 20ms; can be set to 1ms.
resr	UME <b>20</b> UME <b>1</b>
	Select input signal types: NPN and PNP (use NPN if dry contact input)

Setting Time Units				
E Unit				
5 00 1	Sec.	0.01 to 9,999.99	A unit = 10ms	Max. counting = 9,999.99 secs.
501	Sec.	0.1 to 99,999.9	A unit = 0.1 sec.	Max. counting = 99,999.9 secs.
5	Sec.	1 to 999,999	A unit = 1 sec.	Max. counting = 999,999 secs.
75 00 I	min., sec.	0.01 to 9,959.99	A unit = 0.01 sec.	Max. counting = 5,999.99 secs.
75 C I	min., sec.	0.1 to 99,959.9	A unit = 0.1 sec.	Max. counting = 59,999.9 secs.
<u> </u>	min.	0.1 to 99,999.9	A unit = 0.1 min.	Max. counting = 99,999.9 mins.
	min.	1 to 999,999	A unit = 1 min.	Max. counting = 999,999 mins.
HAS (	hr., min., sec.	1 to 995,959	A unit = 1 sec.	Max. counting = 359,999 secs. (100 hrs.)
	hr., min.	1 to 999,959	A unit = 1 min.	Max. counting = 35,999,999 secs. (10,000 hrs.)
H	hr.	1 to 699,999	A unit = 1 hr.	Max. counting = 699,999 hrs.

# CTT Timer Power On Delay

#### Power On Delay (Pond)

When power is applied to the CTT, the timing period setting f value SV will begin (timing up or down based on parameter ( $\Box$  For  $\Xi$ ). At the end of the timing period both outputs will turn ON momentarily for the time set in the output pulse width parameter ( $\Box$  of  $\Xi$ ) or will be maintained ON if the output pulse width parameter ( $\Box$  of  $\Xi$ ) is set to 0.00.

The leading edge of a "reset" input signal at RST1 will turn output signal OFF the outputs and reset the timing period. The "reset" signal suminimum pulse width is set by reset pulse width parameter (FESE).

The leading edge of a "pause" input signal at GATE or signal at START will pause the timing period after it has been started. The timing period will continue after the trailing edge of the external switch "pause" (Gate) or "start" signal.

When power is removed, both outputs will turn OFF and the timing period will be reset.







# Keypad set up of the parameters for Power On Delay Timing:

To enter the page for parameter setting of the timer, press **MODE** in the main menu for more than 3 seconds. After the setup is complete, press **MODE** for more than 3 seconds under any of the parameter page you are in and return to the main menu.

	Select funtions: There are 4 modes in CTT, (left to right) timer, counter, tachometer and timer + counter.
FUnE	I'me Fife I'me Fach I'me Fif
	Select timer mode: timing up and timing down
t ñodE	
	Select output modes: There are 12 output modes in the timer. The user can choose the mode that best meets the demand.
t otād	IMA Sand ( IMA Sandd IMA Soffd IMA San IMA <mark>Pand</mark> IMA Pandk
MODE	802 - 64 802 - 644 802 - 642 802 56an 802 56ar 802 56ar
+	Select display unit: the min. unit 10ms to the max. unit hour are selectable. Refer to table below.
E Unit	
MODE	Ime A I Ime HAS I Ime HA I Ime H I
↓ E oue i	Select pulse width of output 1: The default output time is 0.02 second. When the parameter is set to 0.00 second, the output status will be maintained on.
	Select min. width of reset signal: The defaul value is 20ms; can be set to 1ms.
re5r	
	Select input signal types: NPN and PNP (use NPN if dry contact input)
CAPELE MODE L	EGA DA EGA POP

		Settin	ng Time Units	
E Unie				
5 00 (	Sec.	0.01 to 9,999.99	A unit = 10ms	Max. counting = 9,999.99 secs.
501	Sec.	0.1 to 99,999.9	A unit = 0.1 sec.	Max. counting = 99,999.9 secs.
5 1	Sec.	1 to 999,999	A unit = 1 sec.	Max. counting = 999,999 secs.
75 <u>00</u> I	min., sec.	0.01 to 9,959.99	A unit = 0.01 sec.	Max. counting = 5,999.99 secs.
75 <u>0</u> 1	min., sec.	0.1 to 99,959.9	A unit = 0.1 sec.	Max. counting = 59,999.9 secs.
A 01	min.	0.1 to 99,999.9	A unit = 0.1 min.	Max. counting = 99,999.9 mins.
ā l	min.	1 to 999,999	A unit = 1 min.	Max. counting = 999,999 mins.
HAS 1	hr., min., sec.	1 to 995,959	A unit = 1 sec.	Max. counting = 359,999 secs. (100 hrs.)
Hā l	hr., min.	1 to 999,959	A unit = 1 min.	Max. counting = 35,999,999 secs. (10,000 hrs.)
H I	hr.	1 to 699,999	A unit = 1 hr.	Max. counting = 699,999 hrs.

# CTT Timer Power On Delay Hold

Power On Delay HOLD (PondH)

When power is applied to the CTT, the timing period setting Power signal value SV will begin (timing up or down based on parameter (E Fore). At the end of the timing period both outputs will start signal turn ON momentarily for the time set in the output pulse width parameter (E out i) or will be maintained ON if the output pulse width parameter (E out i) is set to 0.00.

The leading edge of a "reset" input signal at RST1 will turn output signal OFF the outputs and reset the timing period. The "reset" signal minimum pulse width is set by reset pulse width parameter (FESE).

The leading edge of a "pause" input signal at GATE or signal at START will pause the timing period after it has been started. The timing period will continue after the trailing edge of the "pause" (Gate) or "start" signal.

When power is removed, both outputs will turn OFF. The last state of the outputs and the last value of the current timing period will be "stored" in eeprom when power is removed. When power is reapplied the outputs will return to their last state and timing will resume from the last value of the timing period.







# Keypad set up of the parameters for Power On Delay Hold Timing:

To enter the page for parameter setting of the timer, press **MODE** in the main menu for more than 3 seconds. After the setup is complete, press **MODE** for more than 3 seconds under any of the parameter page you are in and return to the main menu.

	Select funtions: There are 4 modes in CTT, (left to right) timer, counter, tachometer and timer + counter.
FUnE	I'MA CONF IMA FACH IMA ACH
	Select timer mode: timing up and timing down
t ñodE	
	Select output modes: There are 12 output modes in the timer. The user can choose the mode that best meets the demand.
t otñd	IME Sand ( IME Sand? IME Saffd IME San IME Pand IME <mark>Pandk</mark>
MODE	IMA FLY IMAFLYH IMAFLYZ IMASION IMA SEON IMA SEOFF
¥	Select display unit: the min. unit 10ms to the max. unit hour are selectable. Refer to table below.
E Unit	
MODE	Ime A 1 Ime HAS 1 Ime HA 1 Ime H 1
ł	Select pulse width of output 1: The default output time is 0.02 second. When the parameter is set to 0.00 second, the output status will be maintained on.
t out i	
	Select min. width of reset signal: The defaul value is 20ms; can be set to 1ms.
resr	
	Select input signal types: NPN and PNP (use NPN if dry contact input)
InPELE	Ind nPn Ind PnP

		Settin	g Time Units	
E Unie				
S 00 (	Sec.	0.01 to 9,999.99	A unit = 10ms	Max. counting = 9,999.99 secs.
501	Sec.	0.1 to 99,999.9	A unit = 0.1 sec.	Max. counting = 99,999.9 secs.
5 1	Sec.	1 to 999,999	A unit = 1 sec.	Max. counting = 999,999 secs.
75 <u>00</u> I	min., sec.	0.01 to 9,959.99	A unit = 0.01 sec.	Max. counting = 5,999.99 secs.
AS 01	min., sec.	0.1 to 99,959.9	A unit = 0.1 sec.	Max. counting = 59,999.9 secs.
A 01	min.	0.1 to 99,999.9	A unit = 0.1 min.	Max. counting = 99,999.9 mins.
ā l	min.	1 to 999,999	A unit = 1 min.	Max. counting = 999,999 mins.
Hās I	hr., min., sec.	1 to 995,959	A unit = 1 sec.	Max. counting = 359,999 secs. (100 hrs.)
Hā I	hr., min.	1 to 999,959	A unit = 1 min.	Max. counting = 35,999,999 secs. (10,000 hrs.)
H	hr.	1 to 699,999	A unit = 1 hr.	Max. counting = 699,999 hrs.

# CTT Timer Repeat Cycle

Repeat Cycle (FEH)

With power applied to the CTT, the leading edge of the input signal at START will begin the timing period setting value SV (timing up or down based on parameter (E FordE). At the end of the timing period, the timing period will reset and repeat automatically.

If the output pulse width parameter (EDIE ) is set to 0.00 both outputs will turn ON at the end of the first timing period, turn OFF at the end of the next timing period, turn ON at the end of the next timing period, etc.

If the output pulse width parameter ( $E_{OUE}$ ) is set to >0.00 both outputs will turn ON momentarily for the time set in the output pulse width parameter ( $E_{OUE}$ ) at the beginning of the each timing period.

The trailing edge of the "start" signal has no effect on the outputs or timing period.

The leading edge of a "reset" input signal at RST1 will turn OFF the outputs and reset the timing period. The "reset" signal minimum pulse width is set by reset pulse width parameter ( **FESF**). The leading edge of a new "start" signal is necessary to restart the cycle.

The leading edge of a "pause" input signal at GATE will pause the timing period after it has been started. The timing period will continue after the trailing edge of the external switch "pause" (Gate) signal.

When power is removed, both outputs will turn OFF and the timing period will be reset.







# Keypad set up of the parameters for Repeat Cycle Timing:

To enter the page for parameter setting of the timer, press **MODE** in the main menu for more than 3 seconds. After the setup is complete, press **MODE** for more than 3 seconds under any of the parameter page you are in and return to the main menu.

	Select funtions: There are 4 modes in CTT, (left to right) timer, counter, tachometer and timer + counter.
FUnE	I'MA CONF IMA FACH IMA ACH
	Select timer mode: timing up and timing down
t ñodE	Val UP Val dojo
	Select output modes: There are 12 output modes in the timer. The user can choose the mode that best meets the demand.
t otñd	I''
MODE	IMA FEY IMAFEYH IMAFEYE IMASEON IMA SEOFF
₩	Select display unit: the min. unit 10ms to the max. unit hour are selectable. Refer to table below.
E Unit	
MODE	va <u>a i</u> va Has i va Ha i
↓	Select pulse width of output 1: The default output time is 0.02 second. When the parameter is set to 0.00 second, the output status will be maintained on.
e oue i	Ins <b>III</b> Ins <b>III</b>
	Select min, width of reset signal: The defaul value is 20ms: can be set to 1ms.
resr	
	Select input signal types: NPN and PNP (use NPN if dry contact input)
InPELE	

		Settin	g Time Units	
E Unie				
5 00 1	Sec.	0.01 to 9,999.99	A unit = 10ms	Max. counting = 9,999.99 secs.
501	Sec.	0.1 to 99,999.9	A unit = 0.1 sec.	Max. counting = 99,999.9 secs.
5 1	Sec.	1 to 999,999	A unit = 1 sec.	Max. counting = 999,999 secs.
75 00 I	min., sec.	0.01 to 9,959.99	A unit = 0.01 sec.	Max. counting = 5,999.99 secs.
AS 01	min., sec.	0.1 to 99,959.9	A unit = 0.1 sec.	Max. counting = 59,999.9 secs.
A 0 I	min.	0.1 to 99,999.9	A unit = 0.1 min.	Max. counting = 99,999.9 mins.
n l	min.	1 to 999,999	A unit = 1 min.	Max. counting = 999,999 mins.
HAS (	hr., min., sec.	1 to 995,959	A unit = 1 sec.	Max. counting = 359,999 secs. (100 hrs.)
Hā l	hr., min.	1 to 999,959	A unit = 1 min.	Max. counting = 35,999,999 secs. (10,000 hrs.)
H 1	hr.	1 to 699,999	A unit = 1 hr.	Max. counting = 699,999 hrs.

# CTT Timer Repeat Cycle Hold

### Repeat Cycle HOLD (FEHR)

With power applied to the CTT, the leading edge of the input signal at START will begin the timing period setting value SV (timing up or down based on parameter (E Forte). At the end of the timing period, the timing period will reset and repeat automatically.

If the output pulse width parameter (EGUE i) is set to 0, both outputs will turn ON at the end of the first timing period, turn OFF at the end of the next timing period, turn ON at the end of the next timing period, etc.

If the output pulse width parameter ( $E_{OUE}$ ) is set to >0.00, both outputs will turn ON momentarily for the time set in the output pulse width parameter ( $E_{OUE}$ ) at the beginning of the each timing period.

The trailing edge of the "start" signal has no effect on the outputs or timing period.

The leading edge of a "reset" input signal at RST1 will turn OFF the outputs and reset the timing period. The "reset" signal minimum pulse width is set by reset pulse width parameter (FESF). The leading edge of a new "start" signal is necessary to restart the cycle.

The leading edge of a "pause" input signal at GATE will pause the timing period after it has been started. The timing period will continue after the trailing edge of the external switch "pause" (Gate) signal.

When power is removed, both outputs will turn OFF. The last state of the outputs and the last value of the current timing period will be "stored" in Eeprom when power is removed. When power is reapplied the outputs will return to their last state and timing will resume from the last value of the timing period by the leading edge of a new "start" signal.







# Keypad set up of the parameters for Repeat Cycle Hold Timing:

To enter the page for parameter setting of the timer, press **MODE** in the main menu for more than 3 seconds. After the setup is complete, press **MODE** for more than 3 seconds under any of the parameter page you are in and return to the main menu.

	Select funtions: There are 4 modes in CTT, (left to right) timer, counter, tachometer and timer + counter.
FUnE	VAR LEAE VAR LEACH VAR ACH
	Select timer mode: timing up and timing down
t ñodE	Vora UP Vora door
	Select output modes: There are 12 output modes in the timer. The user can choose the mode that best meets the demand.
t otñd	Ins Sond ( Ins Sond? Ins Soffd' Ins Son Ins Pond Ins PondH
MODE	IMA FEY IMA FEYN IMA FEYN IMA SEON IMA SEON IMA SEOFF
↓ E UAIE	Select display unit: the min. unit 10ms to the max. unit hour are selectable. Refer to table below. ଅଜଣ <mark>5 ଜଣ :</mark> ଅଜଣ <mark>5 ଜ</mark> ା ଅଜଣ <mark>5 ଜ</mark> ା ଅଜଣ <mark>5 ଜଣ :</mark> ଅଜଣ <mark>5 ଜଣ :</mark> ଅଜଣ <mark>5 ଜଣ :</mark> ଅଜଣ <b>5 ଜଣ</b> : ଅଜଣ <b>5</b> ଜଣ : ଅଜଣ <b>5</b> ଜଣ :
MODE	va a i va has i va ha i va h
↓ E olie i	Select pulse width of output 1: The default output time is 0.02 second. When the parameter is set to 0.00 second, the output status will be maintained on.
	Select min. width of reset signal: The defaul value is 20ms; can be set to 1ms.
resr	EVE Z
	Select input signal types: NPN and PNP (use NPN if dry contact input)
InPELE	Ind open Ind Pop

		Settin	g Time Units	
E Unie				
5 00 1	Sec.	0.01 to 9,999.99	A unit = 10ms	Max. counting = 9,999.99 secs.
501	Sec.	0.1 to 99,999.9	A unit = 0.1 sec.	Max. counting = 99,999.9 secs.
5	Sec.	1 to 999,999	A unit = 1 sec.	Max. counting = 999,999 secs.
75 00 I	min., sec.	0.01 to 9,959.99	A unit = 0.01 sec.	Max. counting = 5,999.99 secs.
75 O I	min., sec.	0.1 to 99,959.9	A unit = 0.1 sec.	Max. counting = 59,999.9 secs.
A 0 I	min.	0.1 to 99,999.9	A unit = 0.1 min.	Max. counting = 99,999.9 mins.
n l	min.	1 to 999,999	A unit = 1 min.	Max. counting = 999,999 mins.
HAS (	hr., min., sec.	1 to 995,959	A unit = 1 sec.	Max. counting = 359,999 secs. (100 hrs.)
HA I	hr., min.	1 to 999,959	A unit = 1 min.	Max. counting = 35,999,999 secs. (10,000 hrs.)
H 1	hr.	1 to 699,999	A unit = 1 hr.	Max. counting = 699,999 hrs.

# CTT Timer Repeat Cycle 2

#### Repeat Cycle 2 (FEHZ)

With power applied to the CTT, the leading edge of the input signal at START will begin the timing period timing up or down based on parameter (**E Foce**). At the end of the timing period, the timing period will reset and repeat automatically.

Both outputs will turn ON at the beginning of the first timing period and turn OFF when the timing period reaches time period setting SV2. The outputs will turn ON again when the time period reaches time period setting SV1.

The trailing edge of the "start" signal has no effect on the outputs or timing period.

The leading edge of a "reset" input signal at RST1 will turn OFF the outputs and reset the timing period. The "reset" signal minimum pulse width is set by reset pulse width parameter (**FESF**). The leading edge of a new "start" signal is necessary to restart the cycle.

The leading edge of a "pause" input signal at GATE will pause the timing period after it has been started. The timing period will continue after the trailing edge of the external switch "pause" (Gate) signal.

When power is removed, both outputs will turn OFF and the timing period will be reset.







# Keypad set up of the parameters for Repeat Cycle 2 Timing:

To enter the page for parameter setting of the timer, press MODE in the main menu for more than 3 seconds. After the setup is complete, press MODE for more than 3 seconds under any of the paramter page you are in and return to the main menu.

	Select funtions:	There are 4 mode	es in CTT, (left to r	ight) timer, counte	r, tachome	eter and t	imer +	counter.
FUnE		ĭor≲ [onb	vr≳ F8CH					
	Select timer mod	de: timing up and	timing down					
t ñodE	ĭor â LIP	≌∝≊ doun						
	Select output mo meets the dema	odes: There are 1 nd.	2 output modes ir	n the timer. The us	er can cho	ose the r	node tł	nat best
t otñd	Vor≳ Sand R	Vor≳ Sanda	? v∝ Soff	vora 500	∵or 🏠 🥇	ond	ĭor î	PondH
MODE	vor 🎗 🦵 🔤	va r[4H	ĭor (\$) <b>- [] - [] - []</b> - [] - [] - [] - [] - []	vr≳ 55an	vorâ	iton	∵or	Stoff
¥	Select display ur	nit: the min. unit 1	0ms to the max. ι	unit hour are selec	table. Refe	er to table	e below	Ι.
E Unit	ĭor≙ <b>5 00 (</b>	ĭor≙ <b>5 🛛 (</b>	ĭorâ <mark>5</mark> ¦	™r≊ <b>⊼5 00</b>	¦ ∵or∴ ,	5 O I	i vor î ∧	⊼ []¦
	ĭor≦ <b>n</b> ¦	ĭor≙ <mark>875</mark>	╏ँ☞ゑ┢ॖॖॖ॑╡	ĭor☆ 片 ¦				
•	Select min. width	n of reset signal: 1	The defaul value i	s 20ms; can be se	et to 1ms.			
resr	vor≲ 20	čor â						
	Select input sign	al types: NPN an	d PNP (use NPN	if dry contact inpu	t)			
InPELE	var	vor â ₽⊓₽						
MODE								

		Settin	ig Time Units	
E Unie				
S 00 (	Sec.	0.01 to 9,999.99	A unit = 10ms	Max. counting = 9,999.99 secs.
501	Sec.	0.1 to 99,999.9	A unit = 0.1 sec.	Max. counting = 99,999.9 secs.
5 1	Sec.	1 to 999,999	A unit = 1 sec.	Max. counting = 999,999 secs.
75 00 I	min., sec.	0.01 to 9,959.99	A unit = 0.01 sec.	Max. counting = 5,999.99 secs.
75 D I	min., sec.	0.1 to 99,959.9	A unit = 0.1 sec.	Max. counting = 59,999.9 secs.
A 01	min.	0.1 to 99,999.9	A unit = 0.1 min.	Max. counting = 99,999.9 mins.
n l	min.	1 to 999,999	A unit = 1 min.	Max. counting = 999,999 mins.
HAS 1	hr., min., sec.	1 to 995,959	A unit = 1 sec.	Max. counting = 359,999 secs. (100 hrs.)
Hā 1	hr., min.	1 to 999,959	A unit = 1 min.	Max. counting = 35,999,999 secs. (10,000 hrs.)
H 1	hr.	1 to 699,999	A unit = 1 hr.	Max. counting = 699,999 hrs.

# CTT Timer Signal Cumulate

#### Signal Cumulate (5500)

With power applied to the CTT, the leading edge of the input signal at START will begin the timing period setting value SV timing up or down based on parameter (E Face). The trailing edge of the "start" signal will pause the timing period. The leading edge of a subsequent "start" signal will resume timing from the last value of the timing period. At the end of the timing period both outputs will turn ON.

The leading edge of a "reset" input signal at RST1 will turn OFF the outputs and reset the timing period. The "reset" signal minimum pulse width is set by reset pulse width parameter ( **FESF** ).

The leading edge of a "pause" input signal at GATE will pause the timing period after it has been started. The timing period will continue after the trailing edge of the external switch "pause" (Gate) signal.

When power is removed, both outputs will turn OFF. The last state of the outputs and the last value of the current timing period will be "stored" when power is removed. When power is reapplied the outputs will return to their last state and timing will resume from the last value of the timing period by the leading edge of a new "start" signal.







# Keypad set up of the parameters for Signal Cumulate Timing:

To enter the page for parameter setting of the timer, press **MODE** in the main menu for more than 3 seconds. After the setup is complete, press **MODE** for more than 3 seconds under any of the parameter page you are in and return to the main menu.

	Select funtions: There are 4 modes in CTT, (left to right) timer, counter, tachometer and timer + counter.
FUnE	Var LILE Var LALH Var LLL
	Select timer mode: timing up and timing down
t ñodE	Var UP Var dojo
	Select output modes: There are 12 output modes in the timer. The user can choose the mode that best meets the demand.
t otād	IMA Sond ( IMA Sonde IMA Soffed Ima Son Ima Pond Ima Pondk
MODE	UMA FEY UMAFEYH UMAFEYZ UMA <mark>sen</mark> uma seon uma seoff
+	Select display unit: the min. unit 10ms to the max. unit hour are selectable. Refer to table below.
E Unit	International in the second
MODE	Ima <mark>a i</mark> Ima <mark>has i</mark> Ima ha i Ima h
+	Select pulse width of output 1: The default output time is 0.02 second. When the parameter is set to 0.00 second, the output status will continue.
<u>t out i</u>	
	Select min. width of reset signal: The defaul value is 20ms; can be set to 1ms.
resr	
	Select input signal types: NPN and PNP (use NPN if dry contact input)
InPELE	International contractions of the second sec

		Settin	ig Time Units	
E Unie				
5 00 (	Sec.	0.01 to 9,999.99	A unit = 10ms	Max. counting = 9,999.99 secs.
501	Sec.	0.1 to 99,999.9	A unit = 0.1 sec.	Max. counting = 99,999.9 secs.
5 1	Sec.	1 to 999,999	A unit = 1 sec.	Max. counting = 999,999 secs.
75 00 I	min., sec.	0.01 to 9,959.99	A unit = 0.01 sec.	Max. counting = 5,999.99 secs.
AS 01	min., sec.	0.1 to 99,959.9	A unit = 0.1 sec.	Max. counting = 59,999.9 secs.
Ā () (	min.	0.1 to 99,999.9	A unit = 0.1 min.	Max. counting = 99,999.9 mins.
	min.	1 to 999,999	A unit = 1 min.	Max. counting = 999,999 mins.
HAS I	hr., min., sec.	1 to 995,959	A unit = 1 sec.	Max. counting = 359,999 secs. (100 hrs.)
Ha I	hr., min.	1 to 999,959	A unit = 1 min.	Max. counting = 35,999,999 secs. (10,000 hrs.)
H I	hr.	1 to 699,999	A unit = 1 hr.	Max. counting = 699,999 hrs.

# CTT Timer Signal Twin ON Start

#### Signal Twin ON-Start (5200)

With power applied to the CTT, the leading edge of the input signal at START will turn ON the outputs and begin the timing period timing up or down based on parameter (E FOCE). When the timing period reaches time setting SV2 the outputs will turn OFF and the time period will reset and restart automatically. When the time period now reaches time setting SV1 the outputs will turn ON again and the time period will reset and repeat automatically.

The trailing edge of the "start" signal has no effect on the outputs or timing period.

The leading edge of a "reset" input signal at RST1 will turn OFF the outputs and reset the timing period. The "reset" signal minimum pulse width is set by reset pulse width parameter ( **FESF**). The leading edge of a new "start" signal is necessary to restart the cycle.

The leading edge of a "pause" input signal at GATE will pause the timing period after it has been started. The timing period will continue after the trailing edge of the external switch "pause" (Gate) signal.

When power is removed, both outputs will turn OFF and the timing period will be reset.







### Keypad set up of the parameters for Signal Twin On Start Timing:

To enter the page for parameter setting of the timer, press **MODE** in the main menu for more than 3 seconds. After the setup is complete, press **MODE** for more than 3 seconds under any of the parameter page you are in and return to the main menu.

	Select funtions: There are 4 modes in CTT, (left to right) timer, counter, tachometer and timer + counter.
FUnE	Ina <mark>EITE</mark> Ina <u>Core</u> Ina <u>ERCH</u> Ina <u>TIU</u>
	Select timer mode: timing up and timing down
t ñodE	In In In Int
	Select output modes: There are 12 output modes in the timer. The user can choose the mode that best meets the demand.
t otād	I'm Sond ( I'm Sond? I'm Soffd I'm Son I'm Pond I'm Pondk
MODE	IMA FEY IMA FEYN IMA FEYN IMA SEan IMA <mark>Sean</mark> Ima Seaff
•	Select display unit: the min. unit 10ms to the max. unit hour are selectable. Refer to table below.
E Unie	Ima <mark>5 00  </mark> Ima <mark>5 0  </mark> Ima <mark>5  </mark> Ima <mark>5 00  </mark> Ima <mark>5 0  </mark> Ima <mark>5 0  </mark> Ima <mark>5 0  </mark> Ima <mark>5 0  </mark> Ima <b>5 0  </b> Ima
MODE	Var 7 1 Var H75 1 Var H7 1 Var H7 1
₩	Select min. width of reset signal: The defaul value is 20ms; can be set to 1ms.
resr	International Contractions of the second sec
	Select input signal types: NPN and PNP (use NPN if dry contact input)
InPELE	I'm I'm I'm Pap

Setting Time Units							
t Unit							
5 00 1	Sec.	0.01 to 9,999.99	A unit = 10ms	Max. counting = 9,999.99 secs.			
501	Sec.	0.1 to 99,999.9	A unit = 0.1 sec.	Max. counting = 99,999.9 secs.			
5 1	Sec.	1 to 999,999	A unit = 1 sec.	Max. counting = 999,999 secs.			
75 00 I	min., sec.	0.01 to 9,959.99	A unit = 0.01 sec.	Max. counting = 5,999.99 secs.			
75 O I	min., sec.	0.1 to 99,959.9	A unit = 0.1 sec.	Max. counting = 59,999.9 secs.			
A 01	min.	0.1 to 99,999.9	A unit = 0.1 min.	Max. counting = 99,999.9 mins.			
ā l	min.	1 to 999,999	A unit = 1 min.	Max. counting = 999,999 mins.			
HAS 1	hr., min., sec.	1 to 995,959	A unit = 1 sec.	Max. counting = 359,999 secs. (100 hrs.)			
Hā l	hr., min.	1 to 999,959	A unit = 1 min.	Max. counting = 35,999,999 secs. (10,000 hrs.)			
H I	hr.	1 to 699,999	A unit = 1 hr.	Max. counting = 699,999 hrs.			

# CTT Timer Signal Twin OFF Start

Signal Twin OFF-Start (560FF)

With power applied to the CTT, the leading edge of an input signal at START will begin the timing period timing up or down based on parameter ( **Gede**). When the timing period reaches time setting SV1 the outputs will turn ON and the time period will reset and restart automatically. When the time period now reaches time setting SV2 the outputs will turn OFF again and the time period will reset and repeat automatically.

The trailing edge of the "start" signal has no effect on the outputs or timing period.

The leading edge of a "reset" input signal at RST1 will turn OFF the outputs and reset the timing period. The "reset" signal minimum pulse width is set by reset pulse width parameter (FEST). The leading edge of a new "start" signal is necessary to restart the cycle.

The leading edge of a "pause" input signal at GATE will pause the timing period after it has been started. The timing period will continue after the trailing edge of the external switch "pause" (Gate) signal.

When power is removed, both outputs will turn OFF and the timing period will be reset.







### Keypad set up of the parameters for Signal Twin Off Start Timing:

To enter the page for parameter setting of the timer, press **MODE** in the main menu for more than 3 seconds. After the setup is complete, press **MODE** for more than 3 seconds under any of the parameter page you are in and return to the main menu.

	Select funtions: There are 4 modes in CTT, (left to right) timer, counter, tachometer and timer + counter.										
FUnE	vora Fiue	it or ît	Cont	vŕ≲	FUCH	¥or ᡬ					
	Select timer mod	le: timin	g up and	timing d	own						
t ñodE	vor â ∐P	vŕ	doūn								
	Select output mo meets the dema	odes: Th nd.	ere are 12	2 output	t modes in	the tim	ner. The us	er can c	hoose the	mode t	that best
t otād	<sup>∵</sup> ∝≳ Sond ¦	it or în	Sonda	Voŕ	Soffd	čor î	Son	i or î	Pond	i or î	PondH
MODE	ĭor à	ĭvr	r[yh	ĭ or î	r[92	it or î	5Con	ĭvor	Ston	vor	SEoFF
•	Select display ur	nit: the n	nin. unit 1	0ms to t	the max. u	nit hou	r are selec	table. R	efer to tabl	e belov	N.
E Unie	<sup>™</sup> 5 00 1	i vor î ∧	501	i≍or î	51	i vor î	AS 00	{ ∛or ☆	75 O	vŕ	ñ []
MODE	Ŭor  👖 🕴	i vor î	HAS	ĭoŕ∧	Hā l	č)or ☆	H 1				
↓	Select min. width	n of rese	et signal: 1	he defa	aul value is	s 20ms;	; can be se	t to 1ms	i.		
resr	vor â 20	it or it is a constant of the second s									
	Select input sign	al types	: NPN and	d PNP (	use NPN i	f dry co	ontact input	:)			
InPELE	vos n₽n	i vor Â	PnP								

Setting Time Units							
E Unit							
S 00 (	Sec.	0.01 to 9,999.99	A unit = 10ms	Max. counting = 9,999.99 secs.			
5 <i>0</i> (	Sec.	0.1 to 99,999.9	A unit = 0.1 sec.	Max. counting = 99,999.9 secs.			
5 1	Sec.	1 to 999,999	A unit = 1 sec.	Max. counting = 999,999 secs.			
75 00 I	min., sec.	0.01 to 9,959.99	A unit = 0.01 sec.	Max. counting = 5,999.99 secs.			
75 O I	min., sec.	0.1 to 99,959.9	A unit = 0.1 sec.	Max. counting = 59,999.9 secs.			
A 01	min.	0.1 to 99,999.9	A unit = 0.1 min.	Max. counting = 99,999.9 mins.			
ā l	min.	1 to 999,999	A unit = 1 min.	Max. counting = 999,999 mins.			
HAS I	hr., min., sec.	1 to 995,959	A unit = 1 sec.	Max. counting = 359,999 secs. (100 hrs.)			
Hā l	hr., min.	1 to 999,959	A unit = 1 min.	Max. counting = 35,999,999 secs. (10,000 hrs.)			
H	hr.	1 to 699,999	A unit = 1 hr.	Max. counting = 699,999 hrs.			