GT3D Series — Digital Timers

Key features of the GT3D series include:

- **Precise time setting using digital thumbwheel switches**
- **Elapsed or time remaining LED display**
- **6 time ranges, 16 timing functions**
- **Time delays up to 99.9 hours**

UL Recognized
File No.E55996

CSA Certified
File No.LR58183
LR96764
LR83814

Cert. No.
BL9801133323911 (LVD)
E9971113332388 (EMC)

Specifications

		GT3D-2	GT3D-3	GT3D-4	GT3D-8
Operation System		Solid state CMOS circuitry			
Operation		Multi-mode			Multi-mode. one-shot output
Time Range		0.01s to 99.9 hours			
Rated Voltage		100 to 240V AC (50/60Hz), 24V AC (50/60Hz)/24V DC			
Contact Ratings		125V AC/250V AC, 3A; 30V DC/1A (resistive load)	125V AC/250V AC, 5A; 30V DC/5A (resistive load)		
Contact Form		Delayed SPDT + instantaneous SPDT	Delayed DPDT	Delayed DPDT	Delayed DPDT
Minimum Applicable Load		5V, 10mA (reference value)			
Voltage Tolerance		AF20 (100–240V AC): 85 to 264V AC AD24 (AC): 20.4 to 26.4V AC AD24 (DC): 21.6 to 26.4V DC			
Error		±0.3% ±50ms (voltage, repeat, and temperature)			
Setting Error		±0.5% ±50ms			
Reset Time		60ms maximum			
Insulation Resistance		100MΩ minimum			
Dielectric Strength		Between power and output terminals: 2,000V AC, 1 minute Between contacts of different poles: 2,000V AC, 1 minute Between contacts of the same pole: 750V AC, 1 minute			
Power Consumption (approximate)	**AF20**	11.8VA	11.6VA	3.7VA (100V AC, 60Hz) 11.6VA (200V AC, 60Hz)	
	AD24 AC/DC	1VA/0.8W	2.1VA/0.9W	2.1VA /0.9W	
Mechanical Life		10,000,000 operations minimum	5,000,000 operations minimum		
Electrical Life (at rated load)		50,000 operations minimum	100,000 operations minimum		
Outputs	**Relay**	250V AC, 3A, 30V DC, 1A (resistive load)	240V AC/, 24V DC, 5A (resistive load)		
Vibration Resistance		100N (approximate 10G)			
Shock Resistance		Operating extremes: 100N (approximate 10G) Damage limits: 500N (approximate 50G)			
Operating Temperature		–10 to +50°C			
Storage Temperature		–30 to +80°C			
Operating Humidity		45 to 85% RH			
Weight (approximate)		70g	75g	76g	
Housing Color		Gray			

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Part Number List

Part Numbers: GT3D-1/GT3D-2/GT3D-3

Mode of Operation	Time Range	Output	Contact	Rated Voltage Code	Complete Part No.	
					8-Pin	11-Pin
1-A: ON-delay 1 1-B: Interval 1 first 1-C: Cycle 1 (OFF first) 1-D: Cycle 3 (ON first)	0.01s to 99.9 hours	250V AC, 3A, 30V DC, 1A (resistive load)	Delayed SPDT + instantaneous SPDT	100 to 240V AC (50/60Hz)	GT3D-2AF20	GT3D-2EAF20
				24V AC/DC	GT3D-2AD24	—
		240V AC/, 24V DC, 5A (resistive load)	Delayed DPDT	100 to 240V AC (50/60Hz)	GT3D-3AF20	GT3D-3EAF20
				24V AC/DC	GT3D-3AD24	—

Part Numbers: GT3D-4

Mode of Operation	Time Range	Output	Contact	Rated Voltage Code	Complete Part No.	
					A (11-pin)	B (11-pin)
1-A: ON-delay 1 1-B: Interval 1 first 1-C: Cycle 1 (OFF first) 1-D: Cycle 3 (ON first) 2-A: ON-delay 2 2-B: Cycle 2 2-C: Signal ON/OFF-delay 1 2-D: Signal OFF-delay 1 2-E: Interval 2 2-F: One-shot cycle 3-A: Signal ON/OFF-delay 2 3-B: Signal OFF-delay 2 3-C: One-shot 1 3-D: One-shot ON-delay 3-E: One-shot 2 3-F: Signal ON/OFF-delay 3	0.01s to 99.9 hours	240V AC/24V DC, 5A (resistive load)	Delayed DPDT	100 to 240V AC (50/60Hz)	GT3D-4AF20	GT3D-4EAF20
				24V AC/DC	GT3D-4AD24	—

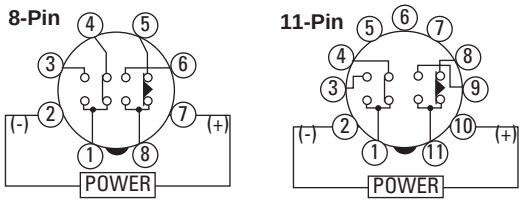
Part Numbers: GT3D-8

Mode of Operation	Time Range	Output	Contact	Rated Voltage Code	Complete Part No. (11-pin)
1: ON-delay one-shot 1 2: Cycle one-shot 3: ON-delay one-shot 2	0.01s to 99.9 hours	240V AC/24V DC, 5A (resistive load)	Delayed DPDT	100 to 240V AC (50/60Hz)	GT3D-8AF20
				24V AC/DC	GT3D-8AD24

1. *For wiring schematics and timing diagrams GT3D, see pages G-25 to G-32.*
2. *For more details about time ranges, see instructions on page G-33.*
3. *A (11-pin) and B (11-pin) differ in the way inputs are wired.*
4. *For socket and accessory part numbers, see page G-48.*
5. *For timing diagrams overview, see page G-4.*

GT3D-2 Timing Diagrams

Contact	Delayed SPDT + Instantaneous SPDT

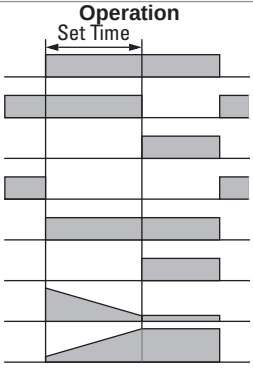


ON-Delay 1

Time Remaining **1** — **A**

Time Elapsed 1 — **A**

Item		Terminal No.
Power	(Power)	2-7 (8p) 2-10 (11p)
Delayed Contact	(NC)	1-4, 5-8 (8p) 1-4, 8-11 (11p)
	(NO)	1-3, 6-8 (8p) 1-3, 9-11 (11p)
Instan-taneous Contact	(NC)	1-4
	(NO)	1-3
Indicator		OUT
Digital Time Display		DOWN
		UP

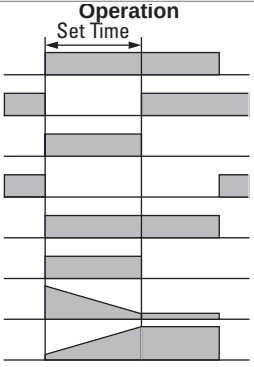


Interval 1

Time Remaining **1** — **B**

Time Elapsed 1 — **B**

Item		Terminal No.
Power	(Power)	2-7 (8p) 2-10 (11p)
Delayed Contact	(NC)	1-4, 5-8 (8p) 1-4, 8-11 (11p)
	(NO)	1-3, 6-8 (8p) 1-3, 9-11 (11p)
Instan-taneous Contact	(NC)	1-4
	(NO)	1-3
Indicator		OUT
Digital Time Display		DOWN
		UP

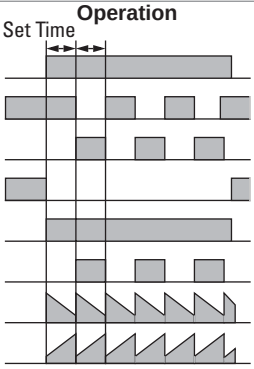


Cycle 1 (OFF first)

Time Remaining **1** — **C**

Time Elapsed 1 — **C**

Item		Terminal No.
Power	(Power)	2-7 (8p) 2-10 (11p)
Delayed Contact	(NC)	1-4, 5-8 (8p) 1-4, 8-11 (11p)
	(NO)	1-3, 6-8 (8p) 1-3, 9-11 (11p)
Instan-taneous Contact	(NC)	1-4
	(NO)	1-3
Indicator		OUT
Digital Time Display		DOWN
		UP

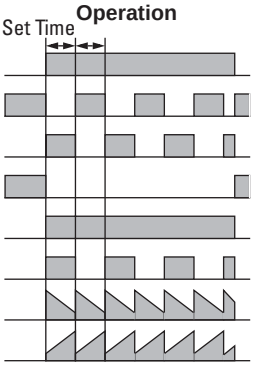


Cycle 3 (ON first)

Time Remaining **1** — **D**

Time Elapsed 1 — **D**

Item		Terminal No.
Power	(Power)	2-7 (8p) 2-10 (11p)
Delayed Contact	(NC)	1-4, 5-8 (8p) 1-4, 8-11 (11p)
	(NO)	1-3, 6-8 (8p) 1-3, 9-11 (11p)
Instan-taneous Contact	(NC)	1-4
	(NO)	1-3
Indicator		OUT
Digital Time Display		DOWN
		UP



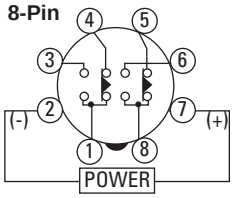
G Timers

GT3D-3 Timing Diagrams

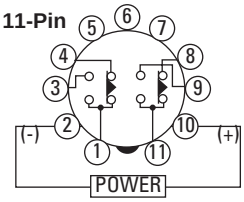
Contact	Delayed DPDT

Operation Mode Selection

8-Pin



11-Pin

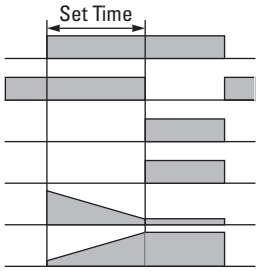


ON-Delay 1

Time Remaining: 1 — A

Time Elapsed: 1 — A

Item	Terminal No.	Operation
Power	(Power) 2-7 (8p), 2-10 (11p)	
Delayed Contact	(NC) 1-4, 5-8 (8p), 1-4, 8-11 (11p)	
	(NO) 1-3, 6-8 (8p), 1-3, 9-11 (11p)	
Indicator	OUT	
Digital Time Display	DOWN	
	UP	

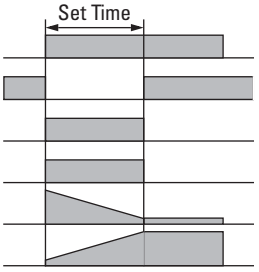


Interval 1

Time Remaining: 1 — B

Time Elapsed: 1 — B

Item	Terminal No.	Operation
Power	(Power) 2-7 (8p), 2-10 (11p)	
Delayed Contact	(NC) 1-4, 5-8 (8p), 1-4, 8-11 (11p)	
	(NO) 1-3, 6-8 (8p), 1-3, 9-11 (11p)	
Indicator	OUT	
Digital Time Display	DOWN	
	UP	

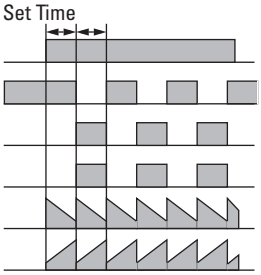


Cycle 1 (OFF first)

Time Remaining: 1 — C

Time Elapsed: 1 — C

Item	Terminal No.	Operation
Power	(Power) 2-7 (8p), 2-10 (11p)	
Delayed Contact	(NC) 1-4, 5-8 (8p), 1-4, 8-11 (11p)	
	(NO) 1-3, 6-8 (8p), 1-3, 9-11 (11p)	
Indicator	OUT	
Digital Time Display	DOWN	
	UP	

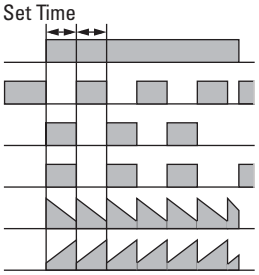


Cycle 3 (ON first)

Time Remaining: 1 — D

Time Elapsed: 1 — D

Item	Terminal No.	Operation
Power	(Power) 2-7 (8p), 2-10 (11p)	
Delayed Contact	(NC) 1-4, 5-8 (8p), 1-4, 8-11 (11p)	
	(NO) 1-3, 6-8 (8p), 1-3, 9-11 (11p)	
Indicator	OUT	
Digital Time Display	DOWN	
	UP	



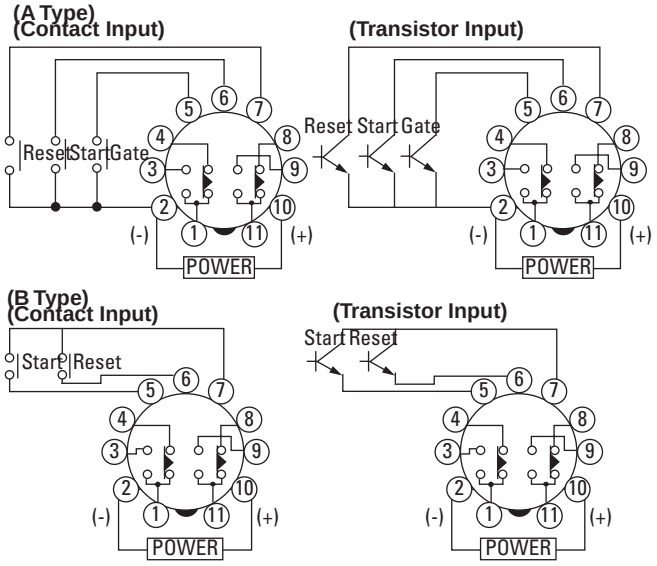
G Timers

GT3D-4 Timing Diagrams

These timers require a start input. A gate and reset input are optional. Inputs are controlled by external pushbuttons. Reset occurs when the power is removed or when the reset input is supplied. The gate signal can be used to interrupt (freeze) timer functions. Timer functions resume when the gate input is removed. B style timers are not equipped for gate input.

GT3D-4

Delayed DPDT



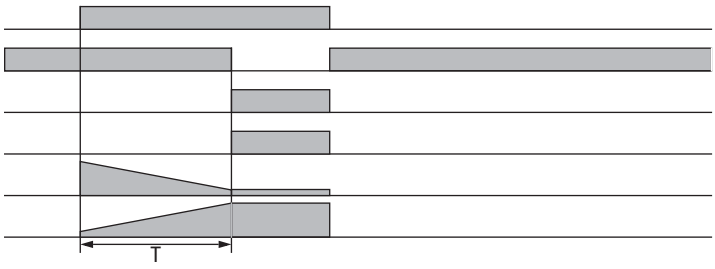
ON-Delay 1

Time Remaining: 1 — A

Time Elapsed: 1 — A

Item		Terminal No. GT3D-4	
Power		2-10 (POWER)	
Delayed Contact	(NC)	1-4 8-11	8-11
	(NO)	1-3 9-11	9-11
Indicator		OUT	
Digital Time Display		DOWN	
		UP	
Set Time			

Operation



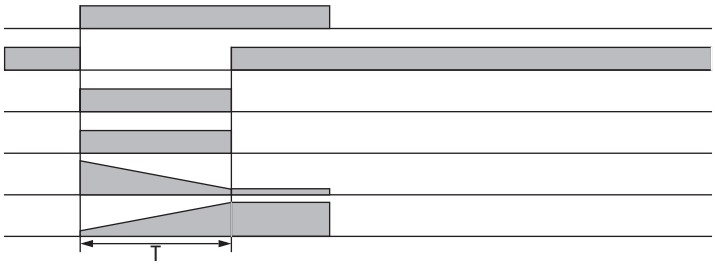
Interval 1

Time Remaining: 1 — B

Time Elapsed: 1 — B

Item		Terminal No. GT3D-4	
Power		2-10 (POWER)	
Delayed Contact	(NC)	1-4 8-11	8-11
	(NO)	1-3 9-11	9-11
Indicator		OUT	
Digital Time Display		DOWN	
		UP	
Set Time			

Operation



G Timers

GT3D-4 Timing Diagrams, continued

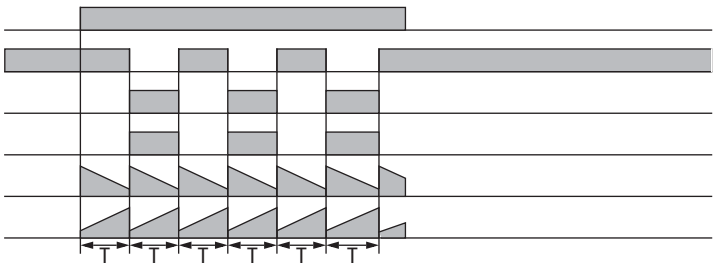
Cycle 1 (OFF first)

Time Remaining: 1 — C

Time Elapsed: 1 — C

Item		Terminal No. GT3D-4	
Power		2-10 (POWER)	
Delayed Contact	(NC)	1-4 8-11	8-11
	(NO)	1-3 9-11	9-11
Indicator		OUT	
Digital Time Display		DOWN	
		UP	
Set Time			

Operation



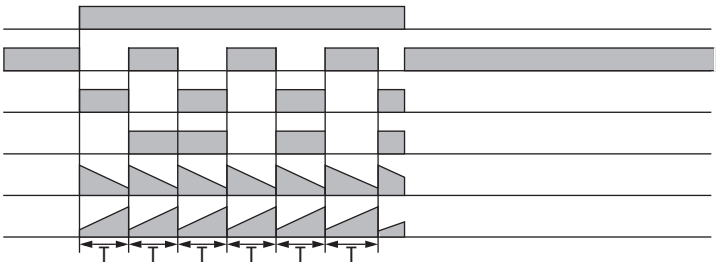
Cycle 3 (ON first)

Time Remaining: 1 — D

Time Elapsed: 1 — D

Item		Terminal No. GT3D-4	
Power		2-10 (POWER)	
Delayed Contact	(NC)	1-4 8-11	8-11
	(NO)	1-3 9-11	9-11
Indicator		OUT	
Digital Time Display		DOWN	
		UP	
Set Time			

Operation



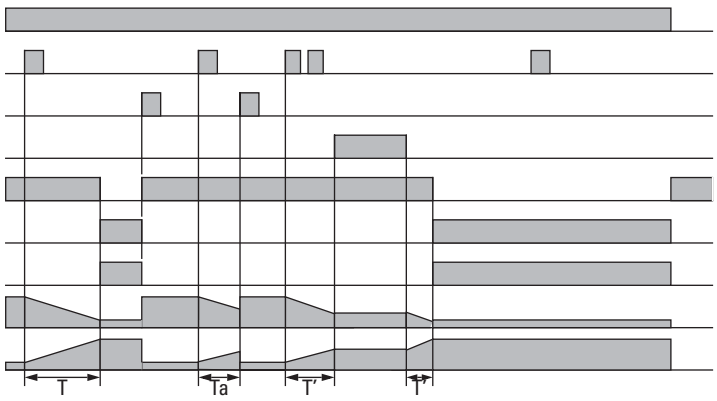
ON-Delay 2

Time Remaining: 2 — A

Time Elapsed: 2 — A

Item			Terminal No. GT3D-4	
Power			2-10 (POWER)	
Input	Start	ON or L	2-6 (A) 5-7 (B)	3-6
	Reset	ON or L	2-7 (A) 6-7 (B)	3-7
	Gate	ON or L	2-5 (A)	3-5
Delayed Contact		(NC)	1-4 8-11	8-11
		(NO)	1-3 9-11	9-11
Indicator			OUT	
Digital Time Display			DOWN	
			UP	
Set Time				

Operation



GT3D-4 Timing Diagrams, continued

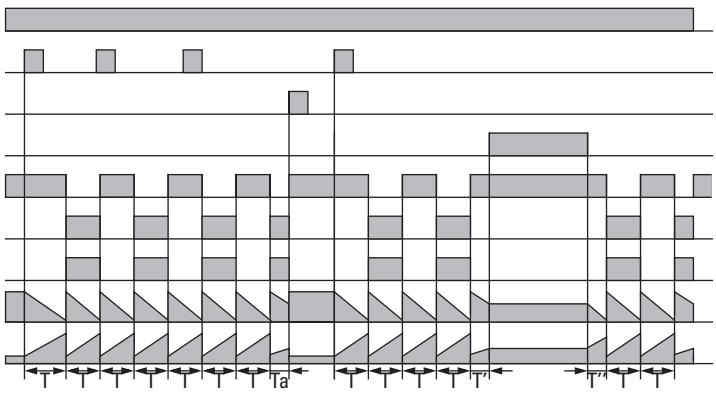
Cycle 2

Time Remaining **2** — **B**

Time Elapsed 2 — **B**

Item			Terminal No. GT3D-4
Power			2-10 (POWER)
Input	Start	ON or L	2-6 (A) 5-7 (B) 3-6
	Reset	ON or L	2-7 (A) 6-7 (B) 3-7
	Gate	ON or L	2-5 (A) 3-5
Delayed Contact		(NC)	1-4 8-11 8-11
		(NO)	1-3 9-11 9-11
Indicator			OUT
Digital Time Display			DOWN
			UP
Set Time			

Operation



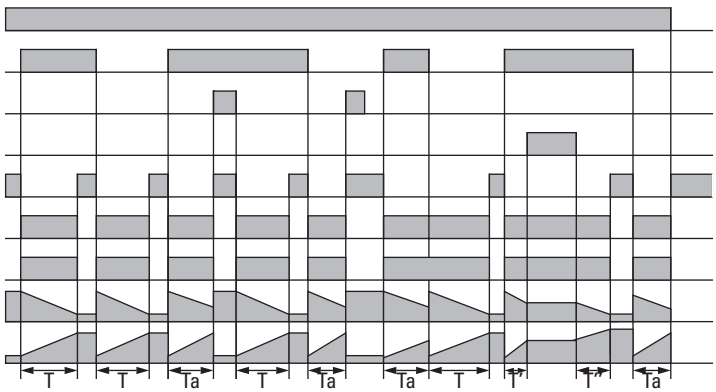
Signal ON/OFF-Delay 1

Time Remaining **2** — **C**

Time Elapsed 2 — **C**

Item			Terminal No. GT3D-4
Power			2-10 (POWER)
Input	Start	ON or L	2-6 (A) 5-7 (B) 3-6
	Reset	ON or L	2-7 (A) 6-7 (B) 3-7
	Gate	ON or L	2-5 (A) 3-5
Delayed Contact		(NC)	1-4 8-11 8-11
		(NO)	1-3 9-11 9-11
Indicator			OUT
Digital Time Display			DOWN
			UP
Set Time			

Operation



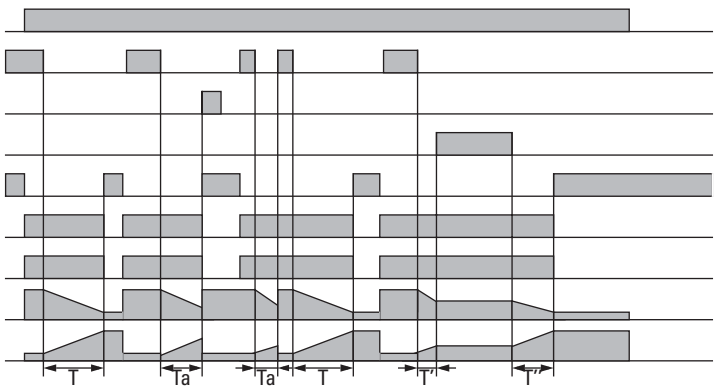
Signal OFF-Delay 1

Time Remaining **2** — **D**

Time Elapsed 2 — **D**

Item			Terminal No. GT3D-4
Power			2-10 (POWER)
Input	Start	ON or L	2-6 (A) 5-7 (B) 3-6
	Reset	ON or L	2-7 (A) 6-7 (B) 3-7
	Gate	ON or L	2-5 (A) 3-5
Delayed Contact		(NC)	1-4 8-11 8-11
		(NO)	1-3 9-11 9-11
Indicator			OUT
Digital Time Display			DOWN
			UP
Set Time			

Operation



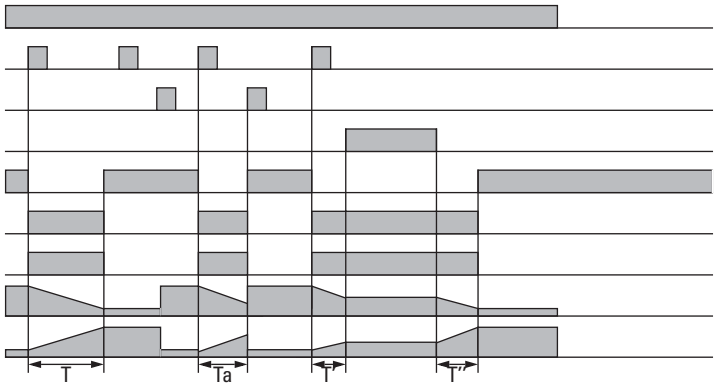
Interval 2

Time Remaining **2** — **E**

Time Elapsed 2 — **E**

Item			Terminal No. GT3D-4
Power			2-10 (POWER)
Input	Start	ON or L	2-6 (A) 5-7 (B) 3-6
	Reset	ON or L	2-7 (A) 6-7 (B) 3-7
	Gate	ON or L	2-5 (A) 3-5
Delayed Contact		(NC)	1-4 8-11 8-11
		(NO)	1-3 9-11 9-11
Indicator			OUT
Digital Time Display			DOWN
			UP
Set Time			

Operation



G Timers

GT3D-4 Timing Diagrams, continued

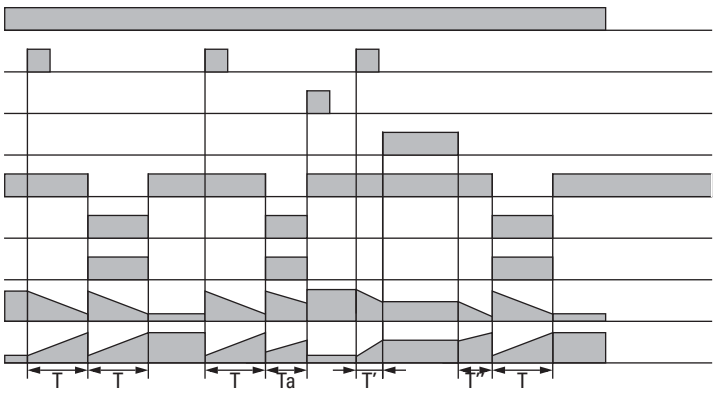
One-Shot Cycle

Time Remaining: 2 — F

Time Elapsed: 2 — F

Item		Terminal No. GT3D-4	
Power		2-10 (POWER)	
Input: Start	ON or L	2-6 (A) 5-7 (B)	3-6
Input: Reset	ON or L	2-7 (A) 6-7 (B)	3-7
Input: Gate	ON or L	2-5 (A)	3-5
Delayed Contact	(NC)	1-4 8-11	8-11
Delayed Contact	(NO)	1-3 9-11	9-11
Indicator		OUT	
Digital Time Display		DOWN	
		UP	
Set Time			

Operation



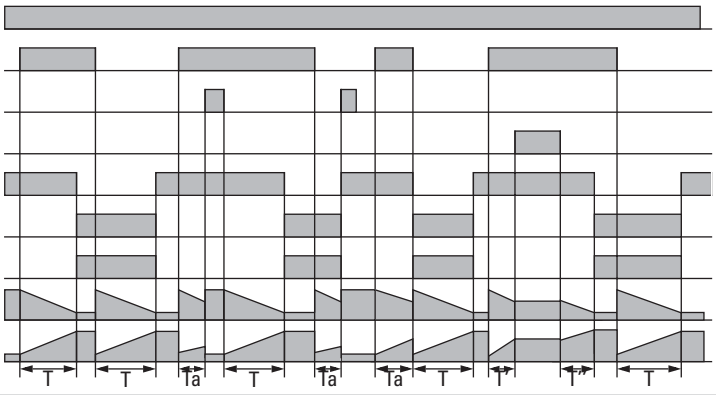
Signal ON/OFF-Delay 2

Time Remaining: 3 — A

Time Elapsed: 3 — A

Item		Terminal No. GT3D-4	
Power		2-10 (POWER)	
Input: Start	ON or L	2-6 (A) 5-7 (B)	3-6
Input: Reset	ON or L	2-7 (A) 6-7 (B)	3-7
Input: Gate	ON or L	2-5 (A)	3-5
Delayed Contact	(NC)	1-4 8-11	8-11
Delayed Contact	(NO)	1-3 9-11	9-11
Indicator		OUT	
Digital Time Display		DOWN	
		UP	
Set Time			

Operation



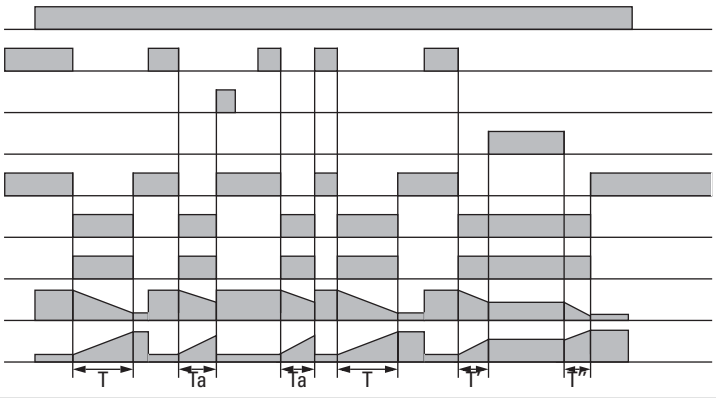
Signal OFF-Delay 2

Time Remaining: 3 — B

Time Elapsed: 3 — B

Item		Terminal No. GT3D-4	
Power		2-10 (POWER)	
Input: Start	ON or L	2-6 (A) 5-7 (B)	3-6
Input: Reset	ON or L	2-7 (A) 6-7 (B)	3-7
Input: Gate	ON or L	2-5 (A)	3-5
Delayed Contact	(NC)	1-4 8-11	8-11
Delayed Contact	(NO)	1-3 9-11	9-11
Indicator		OUT	
Digital Time Display		DOWN	
		UP	
Set Time			

Operation



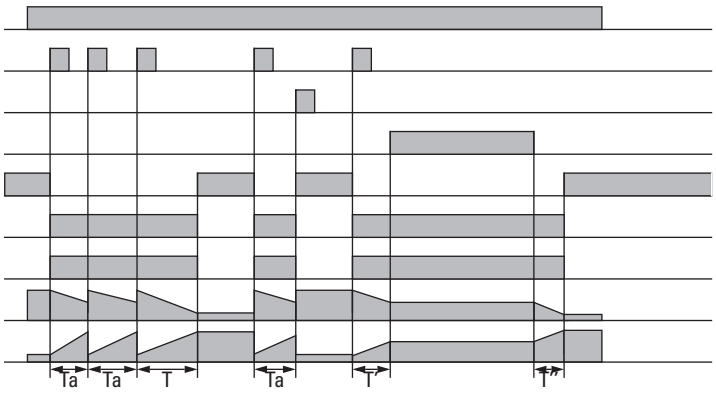
One-Shot 1

Time Remaining: 3 — C

Time Elapsed: 3 — C

Item		Terminal No. GT3D-4	
Power		2-10 (POWER)	
Input: Start	ON or L	2-6 (A) 5-7 (B)	3-6
Input: Reset	ON or L	2-7 (A) 6-7 (B)	3-7
Input: Gate	ON or L	2-5 (A)	3-5
Delayed Contact	(NC)	1-4 8-11	8-11
Delayed Contact	(NO)	1-3 9-11	9-11
Indicator		OUT	
Digital Time Display		DOWN	
		UP	
Set Time			

Operation



GT3D-4 Timing Diagrams, continued

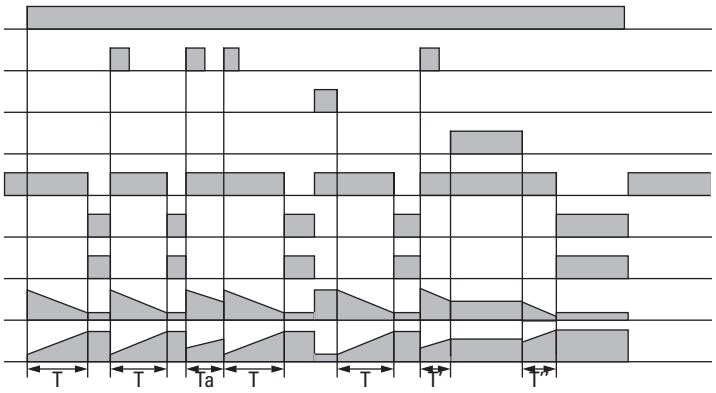
One-Shot ON-Delay

Time Remaining: 3 — D

Time Elapsed: 3 — D

Item			Terminal No. GT3D-4	
Power			2-10 (POWER)	
Input	Start	ON or L	2-6 (A) 5-7 (B)	3-6
	Reset	ON or L	2-7 (A) 6-7 (B)	3-7
	Gate	ON or L	2-5 (A)	3-5
Delayed Contact		(NC)	1-4 8-11	8-11
		(NO)	1-3 9-11	9-11
Indicator			OUT	
Digital Time Display			DOWN	
			UP	
Set Time				

Operation



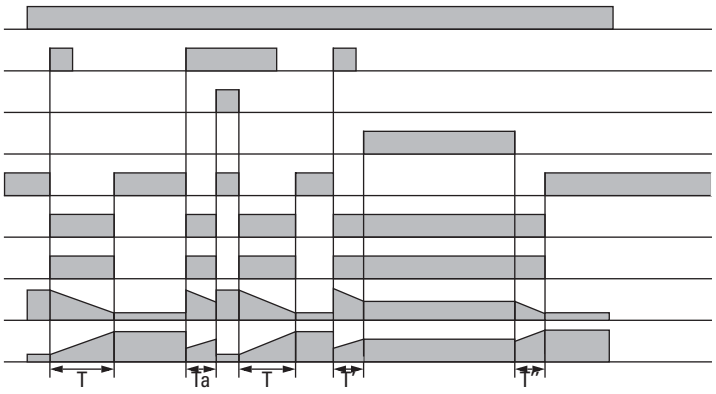
One Shot 2

Time Remaining: 3 — E

Time Elapsed: 3 — E

Item			Terminal No. GT3D-4	
Power			2-10 (POWER)	
Input	Start	ON or L	2-6 (A) 5-7 (B)	3-6
	Reset	ON or L	2-7 (A) 6-7 (B)	3-7
	Gate	ON or L	2-5 (A)	3-5
Delayed Contact		(NC)	1-4 8-11	8-11
		(NO)	1-3 9-11	9-11
Indicator			OUT	
Digital Time Display			DOWN	
			UP	
Set Time				

Operation



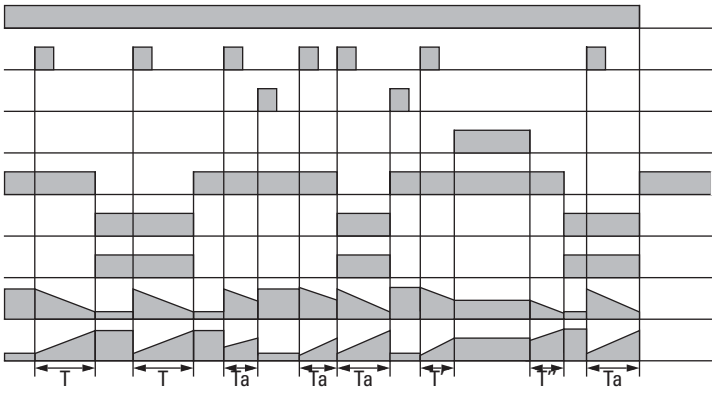
Signal ON/OFF-Delay 3

Time Remaining: 3 — F

Time Elapsed: 3 — F

Item			Terminal No. GT3D-4	
Power			2-10 (POWER)	
Input	Start	ON or L	2-6 (A) 5-7 (B)	3-6
	Reset	ON or L	2-7 (A) 6-7 (B)	3-7
	Gate	ON or L	2-5 (A)	3-5
Delayed Contact		(NC)	1-4 8-11	8-11
		(NO)	1-3 9-11	9-11
Indicator			OUT	
Digital Time Display			DOWN	
			UP	
Set Time				

Operation

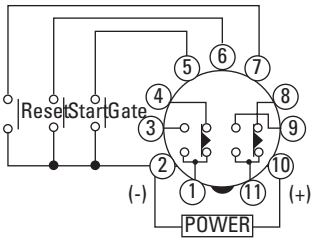


G Timers

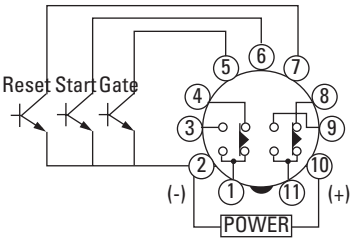
GT3D-8 Timing Diagrams

Delayed DPDT

(Contact Input)



(Transistor Input)



Note: T = Set time
Ta = Shorter than set time
Tb = Shorter than single-shot output time
T = T′ + T″
T0 = Single-shot output time (selected from A, B, C, D, E or F)

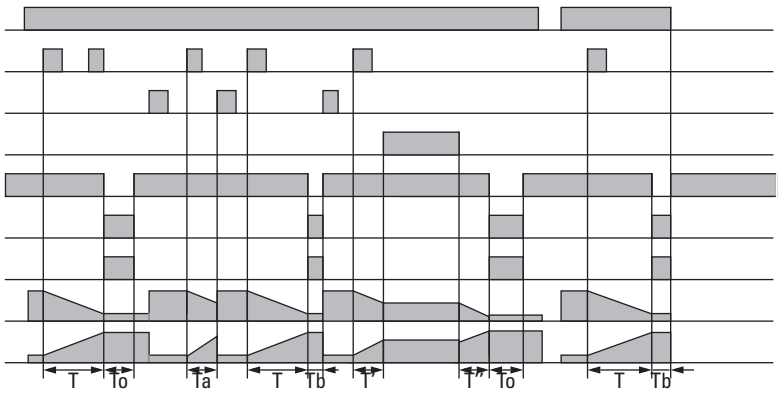
ON-Delay One-Shot 1

Time Remaining 1

Time Elapsed 1

Item		Terminal No.
Power		2-10 (POWER)
Input	Start	ON or L 2-6
	Reset	ON or L 2-7
	Gate	ON or L 2-5
Delayed Contact	(NC)	1-4, 8-11
	(NO)	1-3, 9-11
Indicator		OUT
Digital Time Display		DOWN
		UP
Set Time		

Operation



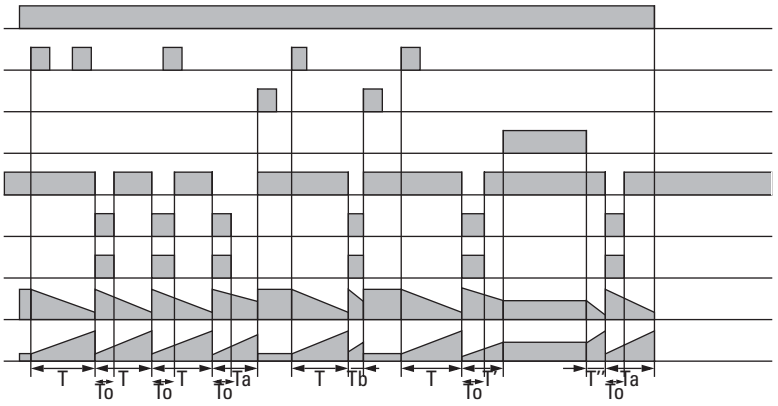
Cycle One-Shot

Time Remaining 2

Time Elapsed 2

Item		Terminal No.
Power		2-10 (POWER)
Input	Start	ON or L 2-6
	Reset	ON or L 2-7
	Gate	ON or L 2-5
Delayed Contact	(NC)	1-4, 8-11
	(NO)	1-3, 9-11
Indicator		OUT
Digital Time Display		DOWN
		UP
Set Time		

Operation



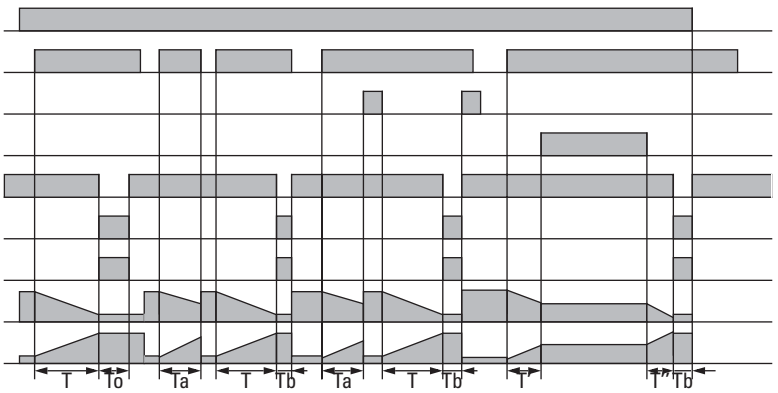
ON-Delay One-Shot 2

Time Remaining 3

Time Elapsed 3

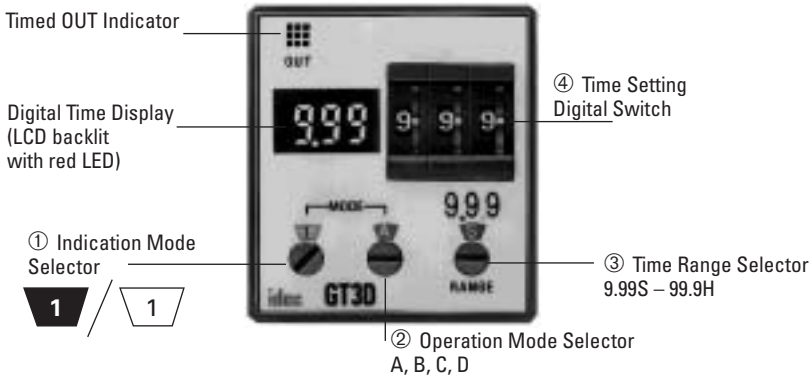
Item		Terminal No.
Power		2-10 (POWER)
Input	Start	ON or L 2-6
	Reset	ON or L 2-7
	Gate	ON or L 2-5
Delayed Contact	(NC)	1-4, 8-11
	(NO)	1-3, 9-11
Indicator		OUT
Digital Time Display		DOWN
		UP
Set Time		

Operation



G Timers

Instructions: Setting GT3D-2, GT3D-3 Timers



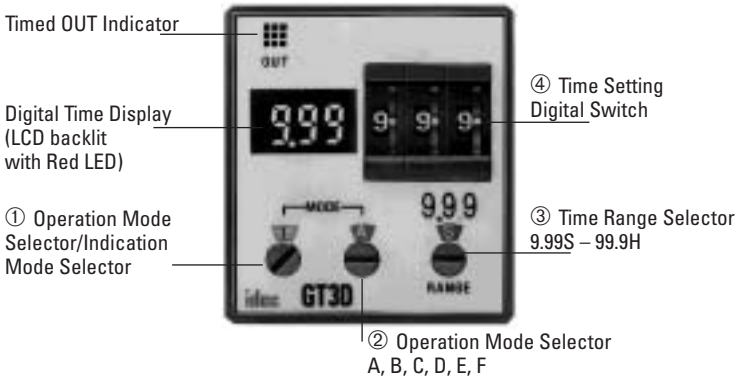
Step 1	Desired Mode/Selection				Remarks
	Time Display Mode	**① Indicator Mode Selector**	**Operation Mode**	**② Operation Mode Selector**	
Select the desired time display and operation modes.	Time elapsed	1	ON-delay 1	A	1. Use the flat screwdriver to set the selectors. Since selectors do not turn all the way around, both clockwise and counterclockwise rotation may be necessary. 2. The ① Indicator Mode Selector determines whether the Digital Time Display shows the time elapsed or time remaining. The ② Operation Mode Selector determines the desired operation mode. Decide which display and mode is desired, then use these two selectors①② to set the operation mode. 3. The ② Operation Mode Selector has two blank modes which are not intended for use. Always have this selector set to A, B, C, or D.
	Time remaining	1		A	
	Time elapsed	1	Interval	B	
	Time remaining	1		B	
	Time elapsed	1	Cycle 1	C	
	Time remaining	1		C	
	Time elapsed	1	Cycle 3	D	
	Time remaining	1		D	

Step 2	Desired Operation	Selection		Remarks
	Base Time Ranges	**③ Time Range Selector**		
		Decimal Point Indicator	**Time Increment Indicator**	
Select a time range that contains the desired period of time.	0.01 seconds to 9.99 seconds	9.99	S	1. The ③ Time Range Selector controls both the decimal point indicator (9.99, 99.9, 999) and the time increment indicators S (seconds), M (minutes), and H (hours). 2. Chose which base time range contains the targeted timer setting. Then use the ③ Time Range Selector to set the decimal point indicator and time increment indicator to its corresponding pair of settings. 3. Since these configurations offer a complete range of settings from 0.01 seconds to 99.9 hours, the setting of 9.99 for minutes and the 9.99 and 999 settings for hours are not listed and should not be used.
	0.1 seconds to 99.9 seconds	99.9	S	
	1 second to 999 seconds	999	S	
	0.1 minutes to 99.9 minutes	99.9	M	
	1 minute to 999 minutes	999	M	
	0.1 hours to 99.9 hours	99.9	H	

Step 3	Desired Operation	Selection	Remarks
Set the precise period of time desired by using the ④ Time Setting Digital Switch.			Use the ④ Time Setting Digital Switch to set the desired period of time. It is important to remember that the setting of the ③ Time Range Selector determines the units of time measurement as well as the implied decimal point location.

It is important to remember that the ③ Time Range Selector not only selects the time range but also influences the interpretation of the Digital Time Display. Changing the ③ Time Range Selector setting changes the units of time measurement (seconds, minutes, hours) as well as the decimal point location.

Instructions: Setting GT3D-4 Timers



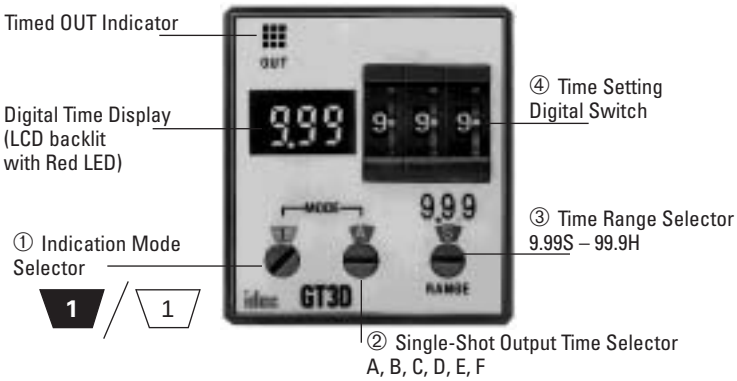
Step 1	Desired Mode/Selection				Remarks
	Time Display Mode	① Indicator Mode Selector	Operation Mode	② Operation Mode Selector	1. Use a flat screwdriver to set the selectors. Since selectors do not turn all the way around, both clockwise and counterclockwise rotation is necessary. 2. The ① Indicator Mode Selector determines whether the Digital Time Display shows the time elapsed or time remaining. The ② Operation Mode Selector determines the desired operation mode. Decide which display and mode is desired; then use these two selectors①② to set the operation mode. 3. When using the indicator mode setting "1," the ② Operation Mode Selector has two blank modes which are not intended for use. When using mode setting "1," always have the operation mode selector set to A, B, C, or D.
Select the desired time display and operation modes.	Time elapsed	1	ON-delay 1 Interval 1 Cycle 1 D: Cycle 3	A B C D	
	Time remaining	1			
	Time elapsed	2	ON-delay 2 Cycle 2 Signal ON/OFF-delay 2 Signal OFF-delay 1 Interval 2 One-shot cycle	A B C D E F	
	Time remaining	2			
	Time elapsed	3	Signal ON/OFF-delay 2 Signal OFF-delay 2 One-shot 1 One-shot ON-delay One-shot 2 Signal ON/OFF-delay 3	A B C D E F	
	Time remaining	3			

Step 2	Desired Operation	Selection		Remarks
	Base Time Ranges	③ Time Range Selector		1. The ③ Time Range Selector controls both the decimal point indicator (9.99, 99.9, 999) and the time increment indicator: S (seconds), M (minutes), and H (hours). 2. Choose the base time range which contains the targeted timer setting. Then use the ③ Time Range Selector to set the decimal point indicator and time increment indicator to its corresponding pair of settings. 3. Since these configurations offer a complete range of settings from 0.01 seconds to 99.9 hours, the setting of 9.99 for minutes and the 9.99 and 999 settings for hours are not listed and should not be used.
		Decimal Point Indicator	Time Increment Indicator	
Select a time range that contains the desired period of time.	0.01 seconds to 9.99 seconds	9.99	S	
	0.1 seconds to 99.9 seconds	99.9		
	1 seconds to 999 seconds	999		
	0.1 minutes to 99.9 minutes	99.9	M	
	1 minute to 999 minutes	999		
	0.1 hours to 99.9 hours	99.9	H	

Step 3	Desired Operation	Selection	Remarks
Select the desired period of time by using the ④Time Setting Digital Switch.			Use the ④ Time Setting Digital Switch to set the desired period of time. It is important to remember that the setting of the ③ Time Range Selector determines the units of time measurement as well as the implied decimal point location.

It is important to remember that the ③ Time Range Selector not only selects the time range, but also influences the interpretation of the Digital Time Display. Changing the ③ Time Range Selector setting changes the units of time measurement (seconds, minutes, hours) as well as the implied decimal point location.

Instructions: Setting GT3D-8 Timers



Step 1	Desired Mode of Operation		Selection	Remarks
	Operation Mode	**Time Display Mode**	**① Indicator Mode Selector**	
Select the time display and operation modes.	ON-Delay One-Shot	Time elapsed	1	1. Use a flat screwdriver to set the selectors. Since selectors do not turn all the way around, both clockwise and counterclockwise rotation is necessary. 2. The GT3D-8 ① Indicator Mode Selector selects both whether the Digital Time Display displays the time elapsed or time remaining and also the mode of operation. Decide which display and mode is desired. Then use this selector to set the operation mode.
		Time remaining	**1**	
	Cycle one-shot	Time elapsed	2	
		Time remaining	**2**	
	ON-delay one-shot 2	Time elapsed	3	
		Time remaining	**3**	

Step 2	Desired Mode of Operation	Selection	Remarks
	Desired Single-Shot Output Time	**② Single-Shot Output Time Selector**	
Select the single shot output time.	0.1 seconds	A	On the GT3D-8 timers, the desired single-shot output time can be selected from the A, B, C, D, E, and F modes using the ② One-Shot Output Time Selector.
	0.5 seconds	B	
	1 second	C	
	5 seconds	D	
	10 seconds	E	
	50 seconds	F	

Step 3	Desired Mode of Operation	Selection		Remarks
	Base Time Ranges	**③ Time Range Selector**		1. The ③ Time Range Selector controls both the decimal point indicator (9.99, 99.9, 999) and the time increment indicator: S (seconds), M (minutes), and H (hours). 2. Chose which base time range contains the targeted timer setting. Then use the ③ Time Range Selector to set the decimal point indicator and time increment indicator to its corresponding pair of settings. 3. Since these configurations offer a complete range of settings from 0.01s to 99.9 hours, the setting of 9.99 for minutes and the 9.99 and 999 settings for hours are not listed and should not be used.
		Decimal Point Indicator	**Time Increment Indicator**	
Select the time range that contains the desired period of time.	0.01 seconds to 9.99 seconds	9.99	**S**	
	0.1 seconds to 99.9 seconds	99.9		
	1 second to 999 seconds	999		
	0.1 minutes to 99.9 minutes	99.9	**M**	
	1 minute to 999 minutes	999		
	0.1 hours to 99.9 hours	99.9	**H**	

Step 4	Desired Mode of Operation	Selection	Remarks
Select the desired period of time by using the ④ Time Setting Digital Switch.			Use the ④ Time Setting Digital Switch to set the desired period of time. It is important to remember that the setting of the ③ Time Range Selector selects the units of time measurement as well as the implied decimal point location.

It is important to remember that the ③ Time Range Selector not only selects the time range, but also influences the interpretation of the Digital Time Display. Changing the ③ Time Range Selector setting changes the units of time measurement (seconds, minutes, hours) as well as the decimal point location.