

# Time Delay Relay Functions

Detailed descriptions and timing charts

Function	Description	Timing Chart	Relays
<b>On Delay (A)</b>	The time delay starts when applying the power supply and the output switches to the operate condition after the setting time has elapsed.		821, 822, TDR782, TDRPRO-5100, TDRPRO-5101, TDRPRO-5102, TDRSOX
<b>Repeat Cycle: Starting Open (B)</b>	After a predetermined time, the output periodically switches on and off with substantially identical pulse on time and pulse off time.		821, 822, TDRPRO-5100, TDRPRO-5101, TDRPRO-5102, TDRSOX
<b>Interval (C)</b>	The output immediately switches to the operate condition and the time delay starts when applying the power supply, and the output switches to the release condition after the setting time has elapsed.		821, 822, TDRPRO-5100, TDRPRO-5101, TDRPRO-5102
<b>Repeat Cycle: Starting Closed (F)</b>	The output immediately begins to switch off and on periodically with substantially identical pulse off time and pulse on time.		821, 822, TDRPRO-5100, TDRPRO-5101
<b>Pulse Generator (G)</b>	The time delay starts when applying the power supply; the output momentarily switches for an interval to the operate condition after the time delay has elapsed.		821, 822, TDRPRO-5100, TDRPRO-5101

## Timing Chart Key

**U** = Input voltage (Power supply)  
**R** = Relay contacts  
**T** = Setting time

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Function	Description	Timing Chart	Relays
<b>Off Delay (D)</b>	The output immediately switches to the operate condition when applying the power supply and the control signal; the time delay starts when removing the control signal, and the output switches to the release condition after the setting time has elapsed.		821, 822, TDRPRO-5100, TDRPRO-5101, TDRPRO-5102, TDRSRX
<b>Retriggerable One Shot (E)</b>	The output immediately switches to the operate condition and the time delay starts when applying the power supply and the control signal; the output switches to the release condition after the setting time has elapsed. Cycling the control signal during the time delay will retrigger the time delay.		821, 822, TDRPRO-5100, TDRPRO-5101, TDRPRO-5102, TDRSRX
<b>One Shot (H)</b>	The output immediately changes to the operate condition and the time delay starts when applying the power supply and the control signal; the output switches to the release condition after the setting time has elapsed. Cycling the control signal during the time delay will not retrigger the time delay.		821, 822, TDRPRO-5100, TDRPRO-5101
<b>On and Off Delay (I)</b>	The output switches to the operate condition when applying the power supply and the control signal and after the setting time has elapsed; the output switches to the release condition when the control signal is removed and after the setting time has elapsed.		821, 822, TDRPRO-5100, TDRPRO-5101
<b>Memory Latch (J)</b>	Upon application of the coil voltage, the relay waits for trigger signaling. The contacts transfer each time the trigger closes. There is no timing function involved (i.e. flip-flop function).		821, 822, TDRPRO-5100, TDRPRO-5101

### Timing Chart Key

- U** = Input voltage (Power supply)
- S** = Switch trigger (Control switch)
- R** = Relay contacts
- T** = Setting time

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