

### **TIME DELAY RELAYS**

### **Octal Plug-in & Din**

#### C10 Series

- Solid state analog circuitry
- Delay-on operate timing mode
- DPDT (2 from C) isolated 10 ampere relay contacts
- UL/CSA



#### **DC10 Series**

- Solid state CMOS digital circuitry
- Delay-on operate timing mode
- DPDT (2 from C) isolated 10 ampere relay contacts
- UL/CSA



#### **CI Series**

- Solid state analog circuitry
- One-shot timing mode (interal on)
- DPDT (2 from C) isolated 10 ampere relay contacts
- UL/CSA



#### **CIR Series**

- Solid state analog circuitry
- Triggered 1-shot timing mode (triggered interval on)
- DPDT (2 from C) isolated 10 ampere relay contacts
- UL/CSA



#### **CR10 Series**

- Solid state analog circuitry
- Triggered Delay-on release timing mode
- DPDT (2 from C) isolated 10 ampere relay contacts
- UL/CSA



#### **DCR10 Series**

- Solid state CMOS digital circuitry
- Triggered Delay-on release timing mode
- DPDT (2 from C) isolated 10 ampere relay contacts
- UL/CSA



#### **DOD Series**

- Solid state analog circuitry
- True Delay on Drop-out
- DPDT (2 from C) isolated 4 ampere relay contacts
- UL/CSA



#### **SWDC Series**

- Solid state CMOS digital circuitry
- Delay-on-make with 10 position dip switch
- Timing range span 1023:1 .delays up to 2.8 hours
- DPDT (2 from C) isolated 10 ampere relay contacts



#### **SWPDC Series**

- Solid state CMOS digital circuitry (dip switch)
- Delay on Operate timing mode
- DPDT (2 form C) isolated 10 ampere relay contacts



#### **SWRDC Series**

- Delay on Operate timing mode
- DIN Rail mounting or octal plug-in
- Din-SPDT 8A, Octal - DPDT (2 from C) 10A
- 16 overlapping timing ranges
- 2 LED indicators



#### **SWUDC Series**

- Solid state CMOS digital circuitry
- 4 timing modes available
- DPDT (2 form C) isolated 10 ampere relay contacts
- Dip switch selection
- UL/CSA





## TIME DELAY RELAYS, **AUTOMOTIVE & POWER RELAYS**

#### Miniature & Cube

#### **ADOD Series**

- Solid state digital circuitry
- Automotive voltage range
- delay on Dropout function
- 40 Ampere SPST (Form A)
- Compact size

#### **C** Series

- Solid state analog circuitry
- Delay-on Operate Timing mode
- Low current relay
- Output with SPDT contacts
- UL/CSA



#### **CR Series**

- Solid state analog circuitry
- Triggered Delay-on release timing mode
- Low current relay
- Output with SPDT contacts
- UL/CSA

#### **HDOD Series**

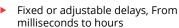
- Solid state CMOS digital circuitry
- True Delay on Drop-out
- DPDT (2 from C) isolated 4 ampere relay contacts

#### **ST1 Series**

- Delay-on operate timing mode
- 100% solid state CMOS circuitry
- Fixed or adjustable delays, From milliseconds to hours
- 1 ampere
- UL/CSA

#### **ST1A Series**

- Delay-on operate timing mode
- 100% solid state CMOS circuitry



2 amperes; 10 amperes avail

#### **ST1D Series**

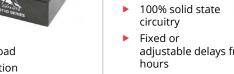
- 100% solid state CMOS digital circuitry
- Delay on Operate timing mode
- 3 ampere continuous load
- Dip switch timing selection

#### **ST2 Series**

- One-shot timing mode (interval
- adjustable delays from milliseconds to hours
- CMOS digital circuitry

#### **STB Series**

- Triggered Delay on Release timing mode
- 100% solid state circuitry
- Fixed or adjustable delays from milliseconds to hours
- CMOS digital circuitry



### **AR2 Series Automotive** Relays

- Automotive Relays
- 40A Rating
- Contact arrangement 2C
- Operating ambient temperature 40 to
- FASTON terminal arrangement



- DPDT (2 from C) contact arrangement
- 10A Rating
- 12, 24 & 110V DC & 120V AC units available
- Quick connect/solder terminals







# FLASHERS, RECYCLE TIMERS **& SEQUENCERS**

#### Miniature & Cube

#### **D** Series

- No moving parts to wear
- 2A load rating
- AC or DC units available
- Fixed flash rates available from 2-1,000 FPM
- No current leakage to load
- **UL/CSA**

#### **DF Series**

- **Universal Input** -24V to 120V AC/DC or single voltage
- 2A load rating
- Fixed flash rates available from 2 to 1,000 FPM
- UL/CSA

#### **DFS Series**

- 100% solid state circuitry
- 3 ampere and 12 ampere models available



- Fixed flash rates from 1 to 1,000 FPM
- Familiar hockey puck enclosure

#### **DFW Series**

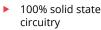
- Ideal for emergency or police vehicular use
- Small, compact, reliable and easy to install with 1/4" Q.C. or #14 gauge wire termination
- 15A relay contacts
- Flash rate fixed at 110 FPM

#### **DFWS Series**

- 100% solid state circuitry
- Alternating output drives two independent loads
- 10 ampere current rating
- Fixed flash rates from 1 to 1,000 FPM

#### **Head-Alert**

- Headlight Modulator
- **Enhances** vehicular lamp illumination



- Quick and simple installation
- Incandescent lamp power rating 120

#### **HDFA Series**

- Adjustable Recycling Timer (flasher)
- Solid state CMOS digital circuitry
- 10 ampere SPDT relay contacts
- Fixed or adjustable delays from milliseconds to hours

#### **SEQ Series**

- Sequential **Recycling Relay** (Flasher)
- 100% Solid state
- Two to four individual load circuits
- 5 ampere load current rating
- Dip switch timing selection

#### **STOP-ALERT & STOP ALERT 2 & 2M**

- Vehicular lamp pulsators
- Solid state circuitry
- Quick and simple 2 terminal installation
- Stop-alert enhances brake light continuously
- Stop Alert 2 & 2M flash 5 seconds then go steady

### **Octal Plug-in**

#### **DFA Series**

- Adjustable Recycling Timer (flasher)
- Solid state CMOS digital circuitry
- DPDT (2 form C) isolated 10 ampere relay contacts
- UL/CSA



#### **DF10 Series**

- Fixed Flash rates available from 10 to 240 FPM
- Solid state annlog circuitry
- DPDT (2 from C) 10Amp relay contacts
- 12V to 120V AC or DC input voltage available
- UL/CSA



#### **DFV Series**

- Knob adjustable 10-120 FPM
- Solid state analog flasher circuitry
- DPDT (2 form C) 10 Amp relay contacts
- 12V to 120V AC or DC input voltage available
- UL/CSA







## **PRODUCT SELECTION CHART**

FUNCTION	SERIES	INPUT VOLTAGE	CONTACT	TIMING RANGE	FEATURES	PACKAGE
DELAY-ON-MAKE (NORMALLY OPEN)	С	5-120 AC/DC	1 FORM A, B OR C; 1 AMP	0.1 SEC - 300 SECS	SOLID STATE ANALOG HYBRID	MINIATURE
	C10	12-240 AC/DC	2 FORM C; 10 AMP	0.1 SECS - 480 SECS	SOLID STATE ANALOG HYBRID	OCTAL/SPADE
	DC10	12-240 AC/DC	2 FORM C; 10 AMP	0.1 SEC - 60 HOURS	SOLID SATE DIGITAL HYBRID	OCTAL/SPADE
	ST1	12-240 AC/DC	1 FORM A; 1 AMP	0.1 SEC - 100 HOURS	SOLID SATE DIGITAL	HOCKEY PUCK
	ST1A	12-230 AC/DC	1 FORM A; 2 AMP	0.1 SEC - 100 HOURS	SOLID SATE DIGITAL	HOCKEY PUCK
	ST1D	12-120 AC/DC	1 FORM A; 3 AMP	0.2 SEC - 1023 SECS	SOLID SATE DIGITAL	HOCKEY PUCK
	SWDC	12-120 AC/DC	2 FORM C; 10 AMP	0.1 SECS - 2.8 HOURS	DIGITAL SET	OCTAL/SPADE
	SWPDC	12-120 AC/DC	2 FORM C; 10 AMP	0.1 SEC - 160 HOURS	SOLID STATE DIGITAL HYBRID	OCTAL/SPADE
	SWRDC	12-120 AC/DC	1 FORM C; 8 AMP, 2 FORM C; 10 AMP	0.1 SECS - 120 MINS	SOLID STATE DIGITAL HYBRID	DIN/OCTAL/ SPADE
	SWUDC	12-140 AC/DC	2 FORM C; 10 AMP	0.1 SECS - 77.5 HOURS	SOLID STATE DIGITAL HYBRID	OCTAL/SPADE
DELAY-ON-RELEASE (FORM A, B OR C CONTACTS)	С	5-120 AC/DC	1 FORM A, B OR C; 1 AMP	0.1 SEC - 300 SECS	SOLID STATE ANALOG HYBRID	MINIATURE
	C10	12-240 AC/DC	2 FORM C; 10 AMP	0.1 SECS - 480 SECS	SOLID STATE ANALOG HYBRID	OCTAL/SPADE
	DC10	12-240 AC/DC	2 FORM C; 10 AMP	0.1 SEC - 60 HOURS	SOLID SATE DIGITAL HYBRID	OCTAL/SPADE
	SWDC	12-120 AC/DC	2 FORM C; 10 AMP	0.1 SECS - 2.8 HOURS	DIGITAL SET	OCTAL/SPADE
	SWPDC	12-120 AC/DC	2 FORM C; 10 AMP	0.1 SEC - 160 HOURS	SOLID STATE DIGITAL HYBRID	OCTAL/SPADE
	SWRDC	12-120 AC/DC	1 FORM C; 8 AMP, 2 FORM C; 10 AMP	0.1 SECS - 120 MINS	SOLID STATE DIGITAL HYBRID	DIN/OCTAL/ SPADE
	SWUDC	12-140 AC/DC	2 FORM C; 10 AMP	0.1 SECS - 77.5 HOURS	SOLID STATE DIGITAL HYBRID	OCTAL/SPADE
TRIGGERED DELAY- ON-RELEASE (FORM A, B OR C CONTACTS)	CR	5-120 AC/DC	1 FORM A, B OR C; 1 AMP	1 SEC - 600 SECS	SOLID STATE ANALOG HYBRID	MINIATURE
	CR10	12-120 AC/DC	2 FORM C; 10 AMP	0.1 SECS - 480 SECS	SOLID STATE ANALOG HYBRID	OCTAL/SPADE
	DCR10	12-120 AC/DC	2 FORM C; 10 AMP	0.1 SEC - 60 HOURS	SOLID SATE DIGITAL HYBRID	OCTAL/SPADE
	SWUDC	12-140 AC/DC	2 FORM C; 10 AMP	0.1 SECS - 77.5 HOURS	SOLID STATE DIGITAL HYBRID	OCTAL/SPADE



## **PRODUCT SELECTION CHART**

FUNCTION	SERIES	INPUT VOLTAGE	CONTACT	TIMING RANGE	FEATURES	PACKAGE
DELAY-ON-DROPOUT (TRUE OFF DELAY)	ADOD	12V DC	1 FORM A; 40 AMP	FIXED; SECS, MINS, HOURS	SOLID SATE DIGITAL	AUTOMOTIVE
	DOD	12-120 AC/DC	2 FORM C; 4 AMP	0.1 SECS - 300 SECS	SOLID STATE ANALOG HYBRID	OCTAL/SPADE
	HDOD	12-120 AC/DC	2 FORM C; 4 AMP	0.1 SECS - HOURS	SOLID STATE DIGITAL	HOCKEY PUCK
INTERVAL (ONE-SHOT, NORMALLY OPEN)	CI	12-120 AC/DC	2 FORM C; 10 AMP	0.1 SEC - 600 SECS	SOLID STATE ANALOG HYBRID	OCTAL/SPADE
	ST2	12-240 AC/DC	1 FORM A; 2 AMP	0.1 SEC - 100 HOURS	SOLID SATE DIGITAL	HOCKEY PUCK
	SWUDC	12-140 AC/DC	2 FORM C; 10 AMP	0.1 SECS - 77.5 HOURS	SOLID STATE DIGITAL HYBRID	OCTAL/SPADE
TRIGGERED INTERVAL (ONE-SHOT, NORMALLY OPEN)	CIR	12-120 AC/DC	2 FORM C; 10 AMP	0.1 SECS - 480 SECS	SOLID STATE ANALOG HYBRID	OCTAL/SPADE
	STB	12-230 AC/DC	1 FORM A; 2 AMP	0.1 SEC - 100 HOURS	SOLID SATE DIGITAL	HOCKEY PUCK
	SWUDC	12-140 AC/DC	2 FORM C; 10 AMP	0.1 SECS - 77.5 HOURS	SOLID STATE DIGITAL HYBRID	OCTAL/SPADE
RECYCLING (FLASHER)	D	6-120 AC/DC	1 FORM A; 2 AMP	FIXED; 2 - 1000 FPM	SOLID STATE ANALOG	MINIATURE
	DF	6-240 AC/DC	1 FORM A; 2 AMP	FIXED; 2 - 1000 FPM	SOLID STATE ANALOG	MINIATURE
	DF10	12-120 AC/DC	2 FORM C; 10 AMP	FIXED; 1 - 240 FPM	SOLID STATE ANALOG	OCTAL/SPADE
	DFA	12-120 AC/DC	2 FORM C; 10 AMP	ADJUSTABLE; 0.1 SECS - 240 HOURS	SOLID STATE DIGITAL HYBRID	OCTAL/SPADE
	DFS	12-240 AC/DC	1 FORM A; 3 or 12 AMP	FIXED; 1 - 1000 FPM	SOLID STATE ANALOG	HOCKEY PUCK
	DFV	12-120 AC/DC	2 FORM C; 10 AMP	ADJUSTABLE; 1 - 240 FPM	SOLID STATE ANALOG	OCTAL/SPADE
	DFW	12-24 DC	2 FORM A; 15 AMP	FIXED; 10 - 120 FPM	SOLID STATE DIGITAL HYBRID	AUTOMOTIVE
	DFWS	12-120 AC/DC	2 FORM A; 10 AMP	FIXED; 1 - 1000 FPM	100% SOLID STATE	AUTOMOTIVE
	HDFA	12-120 AC/DC	1 FORM C; 10 AMP	ADJUSTABLE; .25 SECS - 24 HOURS	SOLID STATE DIGITAL HYBRID	HOCKEY PUCK
	HEAD-ALERT	12V DC	120 WATTS INCANDESCENT	250 Hz MODULATOR FREQUENCY	100% SOLID STATE	MINIATURE
	STOP-ALERT	12V DC	1 FORM B; 5 AMP	300 FPM 85% DUTY CYCLE	SOLID STATE ANALOG	MINIATURE
	STOP-ALERT 2 & 2M	12V DC	1 FORM B; 5 AMP	5 FLASHES THEN STEADY	SOLID STATE ANALOG	MINIATURE
SEQUENTIAL RELAY (FLASHER)	SEQ	12-120 AC/DC	1 FORM A, SPST N.O. ; TRIAC OR MOSFET	2 TO 4 LOADS; MLLISECONDS - MINS	100% SOLID STATE	HOCKEY PUCK
AUTOMOTIVE POWER	AR2	12V DC	1 FORM C, 2 FORM A; 40 AMP	NOT APPLICABLE	AUTOMOTIVE RELAY	MINIATURE
	MP2	12-120 AC/DC	2 FORM C; 10 AMP	NOT APPLICABLE	GENERAL PURPOSE POWER RELAY	MINIATURE