Delay-on-Make: (ProgramaCube® Function M) (ON-delay, Delay on Operate, On Delay, Operate Delay, Delay On, Prepurge Delay) OPERATION: Upon application of input voltage, the time delay begins. The output (relay or solid state) is de-energized before and during the time delay. At the end of the time delay, the output energizes and remains energized until input voltage is removed. RESET: Removing input voltage resets the time delay and output. See: HRPS, KRPS, KSPS, KSPU, NHPS, NHPU, TDM, TRDU Accumulating Time Delay Feature: (ProgramaCube® Function AM) Some DOM timers allow the time delay to be stopped and held and then resumed by opening and closing an external switch. The total time delay, TD is the sum of the accumulated partial time delays, "t". See: KRPD, KRPS, HRPS, NHPS, KSPD, KSPS, TRDU

# Interval: (ProgramaCube® Function I)

(Impulse-ON, Single Pulse on Operate, On Interval, Interval On, Pulse Shaping, Bypass Timing) OPERATION: Upon application of input voltage, the time delay begins. The output (relay or solid state) energizes during the time delay. At the end of time delay the output de-energizes and remains de-energized until input voltage is removed.

RESET: Removing input voltage resets the time delay and output.

See: HRPS, KRPS, KSPS, KSPU, NHPS, NHPU, TDI, TSD2

# Recycling: (ProgramaCube®Functions RE, RD, RXE, RXD)

(Flasher, Pulse Generator, Recycle Timing, Repeat Cycle, Duty Cycling)

OPERATION: Upon application of input voltage, the output (relay or solid state) energizes and the ON time begins. At the end of the ON time, the output de-energizes and the OFF time begins. At the end of the OFF time, the output energizes and the cycle repeats as long as input voltage is applied. The OFF time may be the first delay in some recycling timers. RESET: Removing input voltage resets the output and time delays, and returns the sequence to the first delay.

The time delays in some recycling timers are equal TD1=TD2. Flashers are an example of this type of recycling timer. Others have separately selectable time delays.

See: HRPD, HRPS, KRPD, KRPS, KSPD, KSPS, KSPU, NHPD, NHPS, NHPU, TDR

### Delay-on-Break: (ProgramaCube® Function B)

(Delay on Release, OFF-delay, Release Delay, Postpurge Delay)

OPERATION: Input voltage must be applied before and during timing. Upon closure of the initiate switch, the output (relay or solid state) energizes. The time delay begins when the initiate switch is opened. The output remains energized during timing. At the end of the time delay, the output deenergizes. The output will energize if the initiate switch is closed when input voltage is applied. RESET: Reclosing the initiate switch during timing resets the time delay. Removing input voltage resets

the time delay and output.

See: HRPS, HRPU, KRPS, KSPS, KSPU, NHPS, NHPU, TRDU, TDB

#### Inverted Delay-on-Break: (ProgramaCube® Function UB)

OPERATION: Input voltage must be applied before and during timing. Upon closure of the initiate switch S1, the output (relay or solid state) de-energizes. The time delay begins when S1 is opened. The output remains de-energized during timing. At the end of the time delay, the output energizes. The output remains de-energized if S1 is closed when input voltage is applied

RESET: Reclosing S1 during timing resets the time delay. Removing input voltage resets the time delay and output.

See: HRPS, HRPU, KRPS, KSPS, KSPU, NHPS, NHPU, TRDU

#### Single Shot: (ProgramaCube® Functions S or SD)

(Pulse Former, One Shot Relay, Single Shot Interval, Pulse Shaping)

OPERATION: Input voltage must be applied before and during timing. Upon momentary or maintained closure of the initiate switch, the output (relay or solid state) energizes and the time delay begins. At the end of the delay, the output de-energizes. Opening or reclosing the initiate switch during timing has no effect on the time delay. Note (for most single shot timers): If the initiate switch is closed when input voltage is applied, the output energizes and the time delay begins.

RESET: Reset occurs when the time delay is complete and the initiate switch is opened. Removing input

voltage resets the time delay and output.

See: HRPS, HRPU, KRPS, KSPS, KSPU, NHPS, NHPU, TDS, TSDS, TRDU

Retriggerable Single Shot (Motion Detector): (ProgramaCube® Function PSD) (Motion Detector, Zero Speed Switch, Watchdog Timer, Missing Pulse Timer)

OPERATION: Input voltage must be applied prior to and during timing. The output (relay or solid state) is de-energized. When the initiate switch S1 closes momentarily or maintained, the output energizes and the time delay begins. Upon completion of the delay, the output de-energizes.

RESET: Reclosing S1 resets the time delay and restarts timing. Removing input voltage resets the time delay and output.

See: HRD9, HRPS, HRPU, KRD9, KRPS, KSPS, KSPU, NHPS, NHPU, TRDU, TRU

## Inverted Single Shot: (ProgramaCube Function US)

OPERATION: Input voltage must be applied before and during timing. Upon momentary or maintained closure of the initiate switch S1, the output (relay or solid state) de-energizes. At the end of the time delay, the output energizes. Opening or reclosing S1 during timing has no affect on the time delay. The output will remain de-energized if S1 is closed when input voltage is applied. RESET: Reset occurs when the time delay is complete and S1 is open. Removing input voltage resets the time delay and output.

See: HRPS, HRPU, KRPS, KSPS, KSPU, NHPS, NHPU, TRDU

### Trailing Edge Single Shot (Impulse-OFF): (ProgramaCube Function TS)

OPERATION: Input voltage must be applied before and during timing. When the initiate switch S1 opens, the output (relay or solid state) energizes. At the end of the time delay, the output de-energizes. Reclosing and opening S1 during timing has no affect on the time delay. The output will not energize if S1 is open when input voltage is applied.

RESET: Reset occurs when the time delay is complete and S1 is closed. Removing input voltage resets the time delay and output. See: HRPS, KRPS, KSPS, KSPU, NHPU, TRDU

### Leading edge flip-flop: (ProgramaCube® Function F)

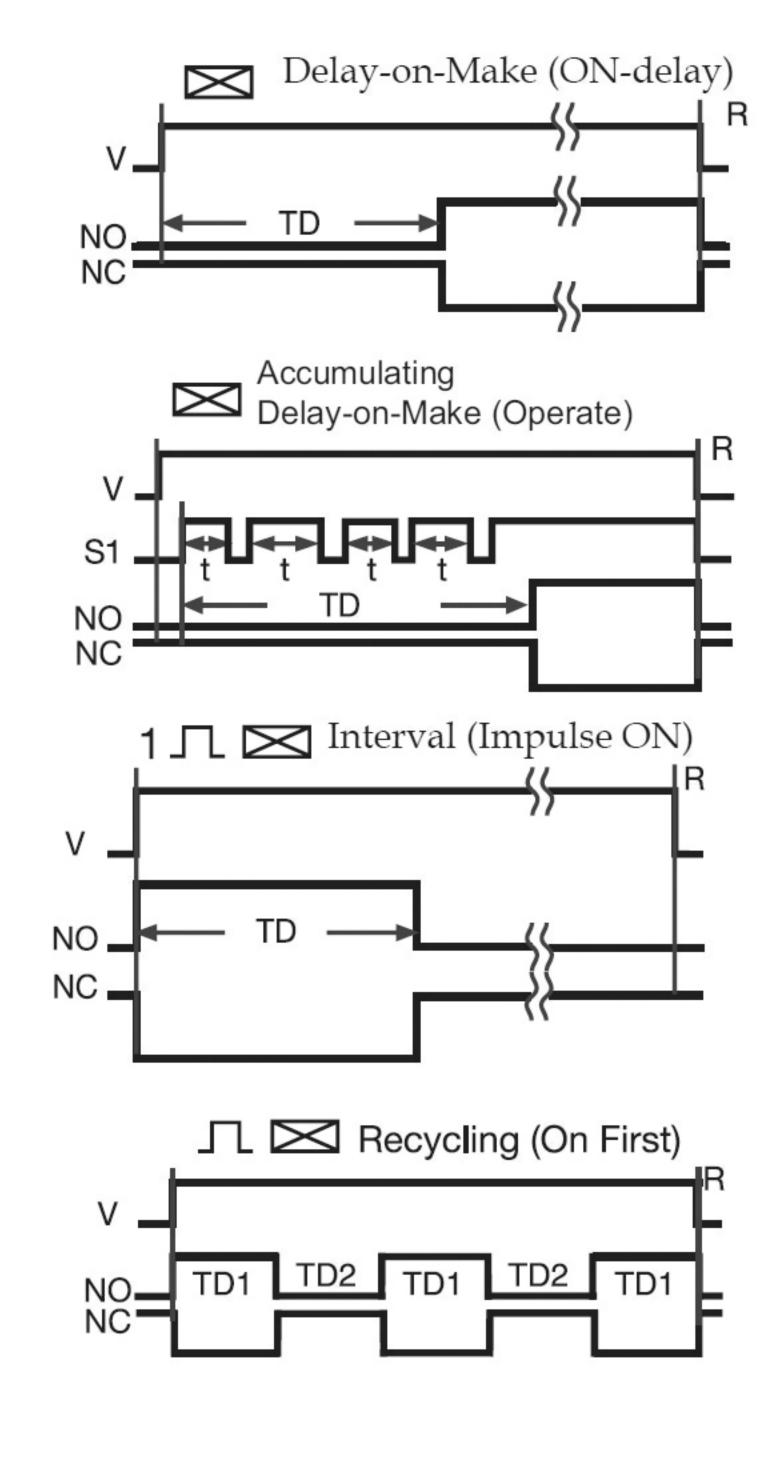
OPERATION: Input voltage must be applied before and during operation. The operation begins with the output (relay or solid state) de-energized. Upon momentary or maintained closure (leading edge triggered) of the initiate switch S1, the time delay begins. At the end of the time delay, the output energizes and remains energized. Opening or re-closing S1 during timing has no affect. After the output transfers, the next closure of S1 starts a new operation. Each time an S1 closure is recognized, the time delay occurs and then the output transfers, ON to OFF, OFF to ON, ON to OFF. The first operation will occur if S1 is closed when input voltage is applied.

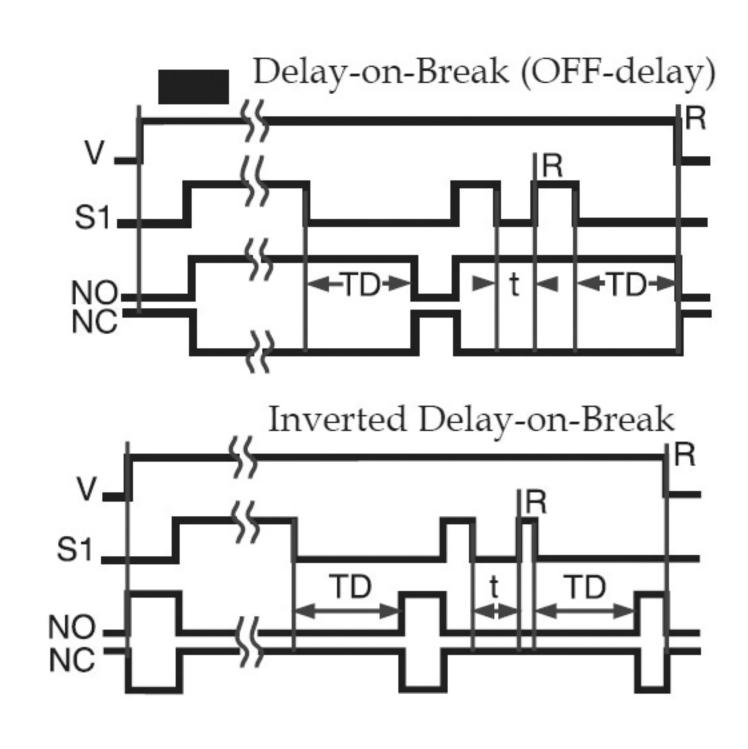
RESET: Removing input voltage resets the time delay and the output to the de-energized state.

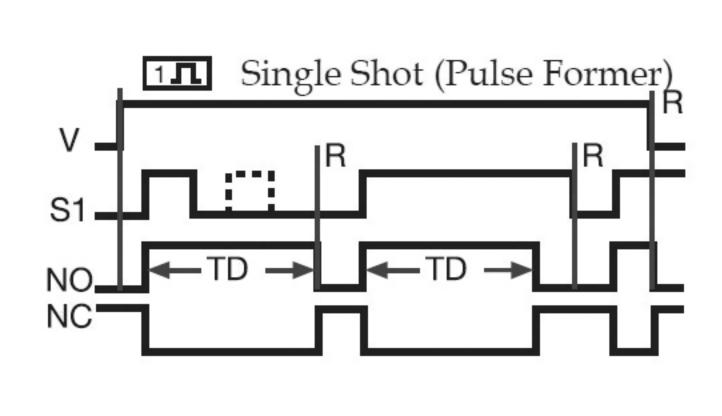
Function can be applied to ProgramaCube Series: HRPS, KRPS, KSPS

# Alternating Relay (Trailing edge flip-flop): (ProgramaCube® Function FT)

OPERATION: Input voltage must be applied at all times for proper operation. The operation begins with the output (relay or solid state) de-energized. Closing S1 enables the next alternating operation. When S1 opens (trailing edge triggered), the time delay begins. At the end of the time delay, the output energizes and remains energized until S1 is (re-closed and) re-opened. Then the output relay de-energizes and remains until S1 opens again. Each time S1 opens the time delay occurs and the output transfers. RESET: Removing input voltage resets the output and the time delay. See: ARP, HRPS, KRPS







Motion Detector (PSD)

Retriggerable Single Shot

