

This Application Note is pertinent to the Unidrive SP, Commander GP20 Affinity and Commander SK using SyPT Lite

### Flasher/Pulser using SyPT Lite

#### Introduction

Quite often a common function that is required when completing a customer application is a flashing light or pulsing warning horn. This application note will illustrate how one can create a simple Flasher/Pulser that when AND'd with a signal of interest will create a flashing light or pulsing horn when that signal is active. ( Another application of this code segment could be applied as a system watchdog/heartbeat. )

This application note will use the Free software SyPT Lite that can be utilized by our Unidrive SP, Commander SK , Affinity and GP20 drives.

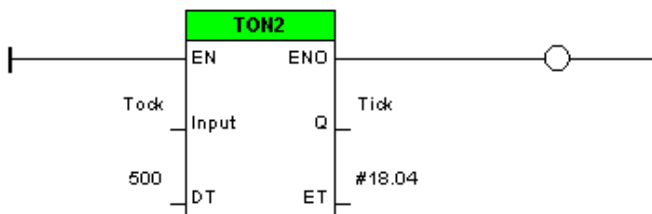
To obtain your free copy of SyPT Lite simply click here→ [SyPT Lite](#)



#### Implementation

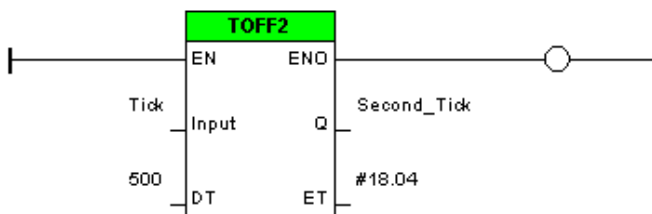
SyPT Lite provides a fairly rich library of function blocks for your use. For this application, I chose to cross couple an ON Delay and OFF Delay to create a simple symmetric astable multi-vibrator (kinda kinky by today's vernacular ).

(^ One Half of Seconds Clock Generator ^)

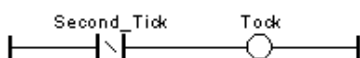


Existing Aliases:	
Alias	Parameter
Tick	#18.47
Second_Tick	#18.48
Tock	#18.50

(^ Other Half of Seconds Clock Generator ^)



(^ Tock is at a 1 second rate which can be used by the AND gates in menu 9 to create a pulsing output for such things as sonic alarms or flashing lights ^)



- Each timer was set for 500mSec
- I didn't need to see the Elapsed Time but needing to satisfy the compiler, I assigned each to #18.04
- Any of these assignments can be changed for your needs or to avoid conflicts

## Summary

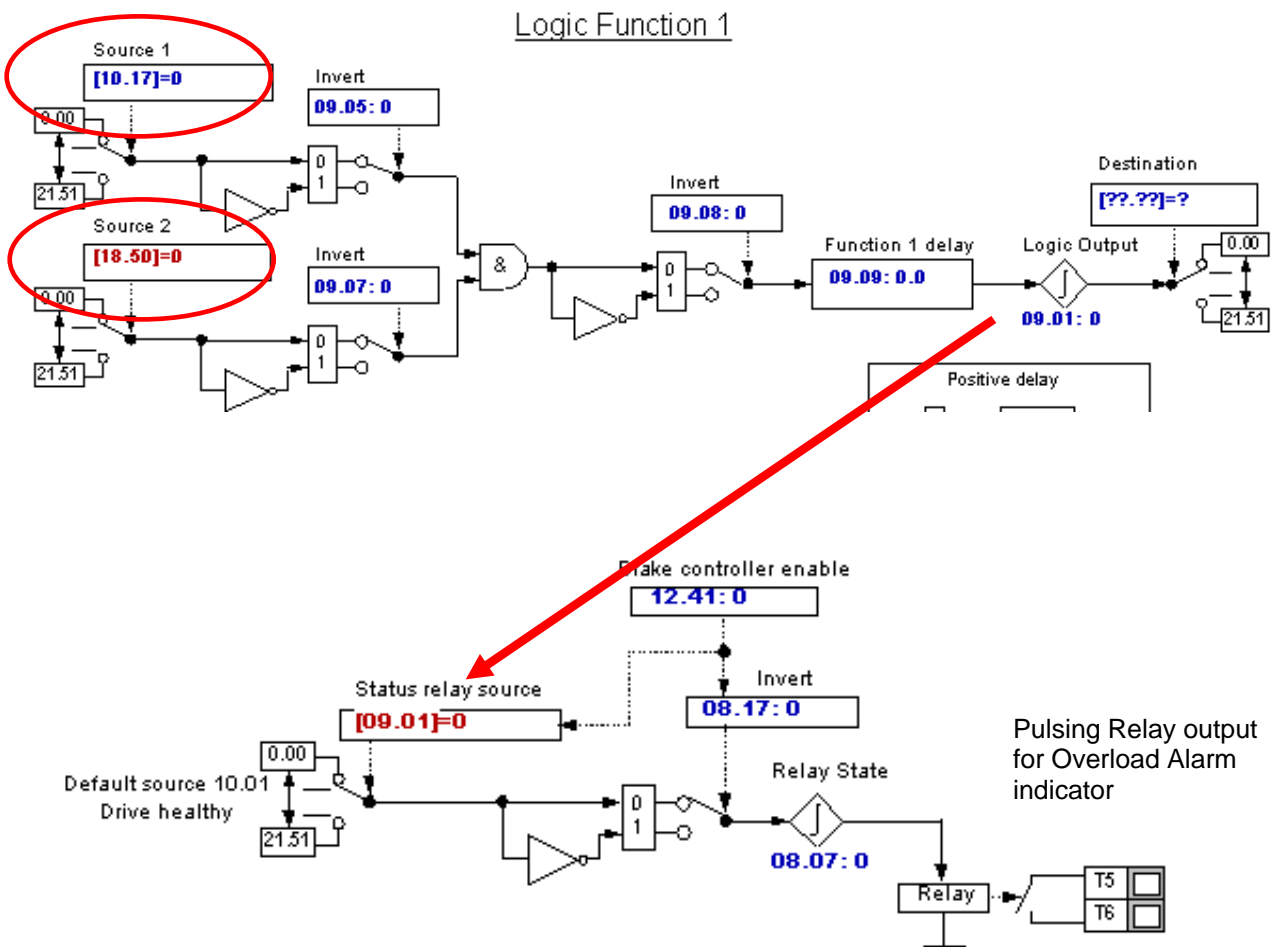
From this SyPT Lite example, Tock ( or #18.50 ) could be used within the drive by **AND**ing with a bit of interest in Menu 9.

To obtain this code fragment click --> [CTSL001.dpl](#)

**Note:** This example was compiled for Commander SK drive. You could use this on our other drives by selecting the appropriate target and recompiling.

The Commander SK will need the Logic Stick to execute SyPT Lite programs.

For example, if one needed a blinking light to inform an Operator that the motor drive is in an Overload condition you could create that function by **AND**ing the *In Overload* bit (#10.17) with Tock or #18.50 ( in this example ) and pick this **AND**'d result up by a digital output or programmable relay and you would have it.

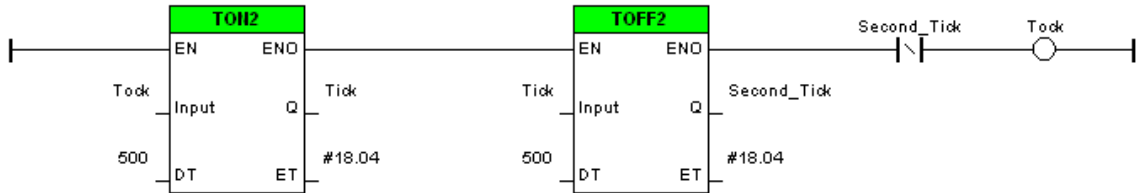


Don't forget to depress the RED reset button on the drive so that these new assignments take effect !!

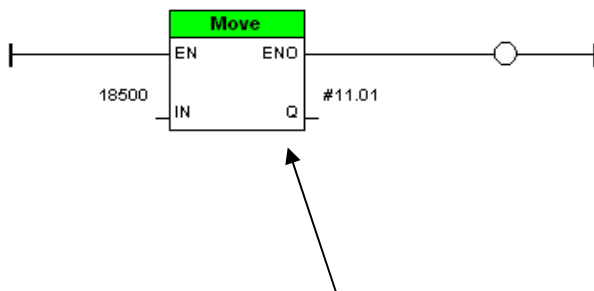
This is the same program but placed on a single rung to keep all function contiguous and condense the rung usage a bit as well.

⌚ Seconds Clock Generator

Tock is at a 1 second rate which can be used by the AND gates in menu 9 to create a pulsing output for such things as sonic alarms or flashing lights\*)



⌚ This merely sets up Pr71 so that you can observe Tock at Pr61 in Commander SK\*)



One could add this rung for an SK drive so that you could observe the action of **Tock** at Pr61 !!!

**Disclaimer**

The SyPT Lite examples provided here are just that, **examples**. They can be used for reference when creating your own application solutions. Control Techniques does not warrant these examples "as is" for actual use. The examples are intended to stimulate ideas and facilitate application solutions. One always needs to consider and test **all aspects** of a system implementation to insure integrity and safety of their particular intended application.

**Questions ?? Ask the Author:**

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