EMERSON.
Industrial Automation

The Application Note is pertinent to the Unidrive SP, Commander GP20
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 and Commander SK and GP20 drives.
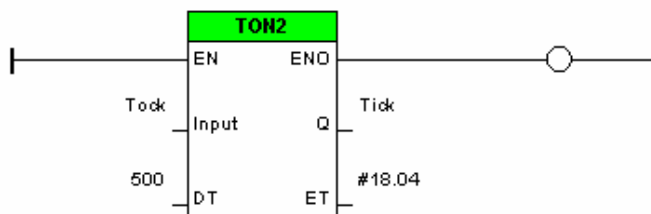To obtain SyPT Lite click here→ **SyPT Lite**

Free

Implementation

The SyPT Lite library includes a very convenient cyclic Timer function block. This function block will allow one to create a simple but useful symmetric astable multi-vibrator (kinda kinky by today's vernacular).
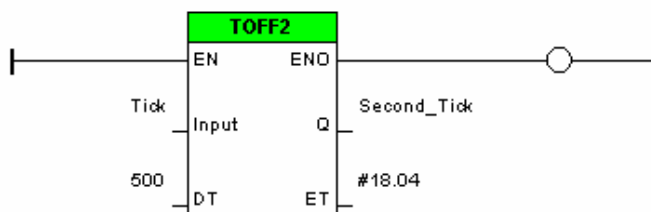

(* One Half of Seconds Clock Generator *)
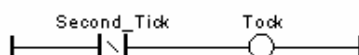
Existing Aliases:	
Alias	**Parameter**
Tick	#18.47
Second_Tick	#18.48
Tock	#18.50

(* 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

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 the previous code fragment click --→   Multivibrator

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.

Logic Function 1

Pulsing Relay output for Overload Alarm indicator
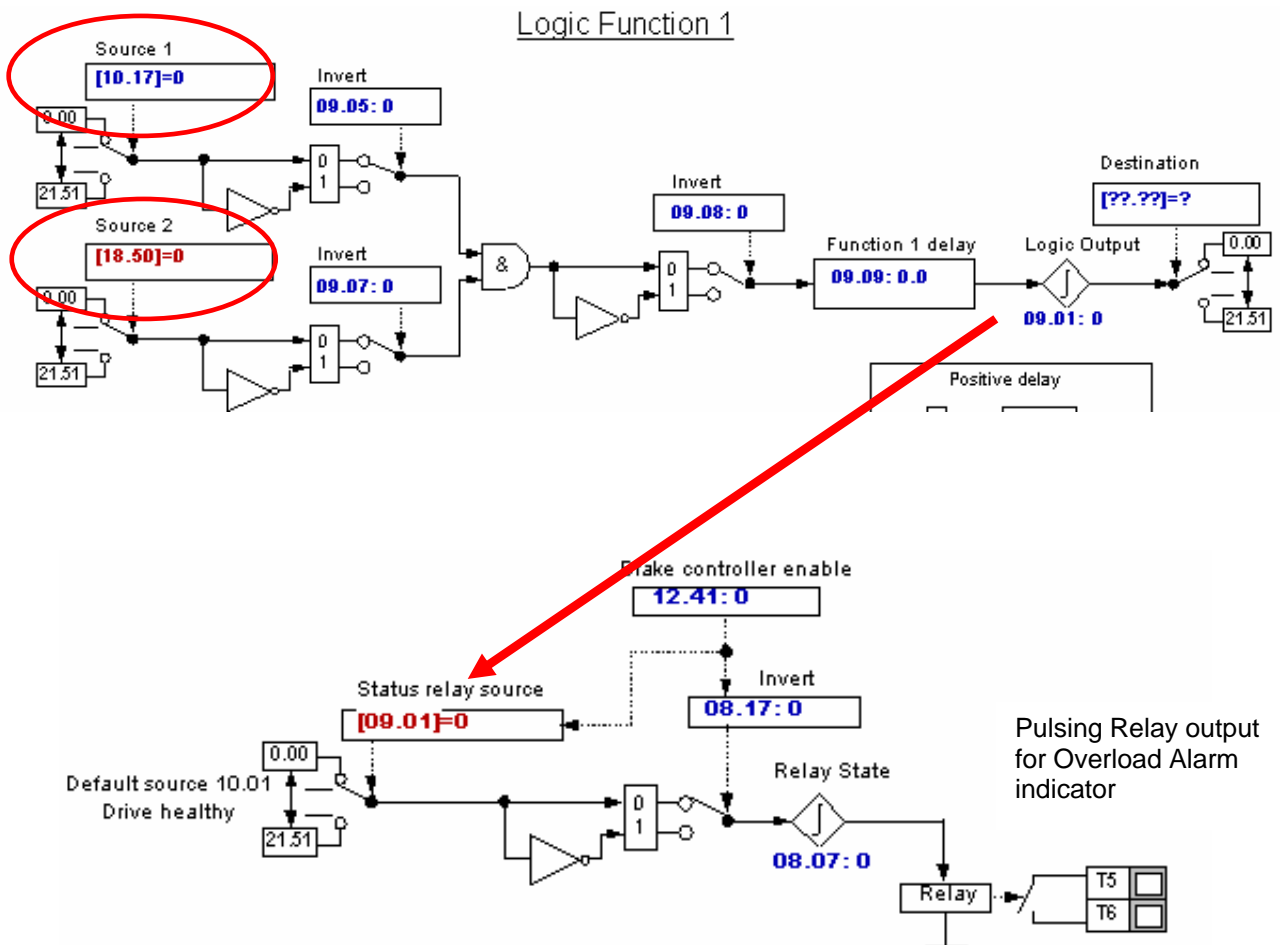
Disclaimer

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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