

Doc No.: AN-205

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Subject: Timer Function

APPLICATION NOTE

TIMER

Type:

Command

Syntax:

TIMER(timer_no, output, pattern, time[,option])

Description:

The TIMER command allows an output or a selection of outputs to be set or cleared for a predefined period of time. There are 8 timer slots available, each can be assigned to any of the first 32 outputs. The timer can be configured to turn the output ON or OFF.

Parameters:

Timer_no:	The timer number in the range 0-7
Output:	Selects the physical output or first output in a group. This should be in the range 0..31.
Pattern:	1 for a single output. If set to a number this represents a binary array of outputs to be turned on
Time:	The period of operation in milliseconds
Option:	Inverts the output, set to 1 to turn OFF at start and ON at end.

Note:

Availability: V1.66 Dev 27 and later.

Example1:

Use the TIMER function to flash an output when there is a motion error. The output lamp should flash with a 50% duty cycle at 5Hz.

```
WAIT UNTIL MOTION_ERROR
WHILE MOTION_ERROR
  TIMER(0,8,1,100) 'turns ON output 8 for 100milliseconds
  WA(200) 'Waits 200 milliseconds to complete the 5Hz period
WEND
```

Example2:

Setting outputs 10, 12 and 13 OFF for 70 milliseconds following a registration event. The first output is set to 10 and the pattern is set to 13 (1 0 1 1 in binary) to enable the three outputs. Output 11 is still available for normal use. The option value is set to 1 to turn OFF the outputs for the period, they return to an ON state after the 70 milliseconds has elapsed.

```
WHILE running
  REGIST(3)
  WAIT UNTIL MARK
  TIMER(1,10,13,70,1)
WEND
```

Example3:

Firing output 10 for 250 milliseconds during the tracking phase of a MOVELINK Profile

```
WHILE feed=ON
  MOVELINK(30,60,60,0,1)
  MOVELINK(70,100,0,60,1)
  WAIT LOADED 'Wait until the tracking phase starts
  TIMER(2,10,1,250) 'Fire the output during the tracking phase
  MOVELINK(-100,200,50,50,1)
WEND
```