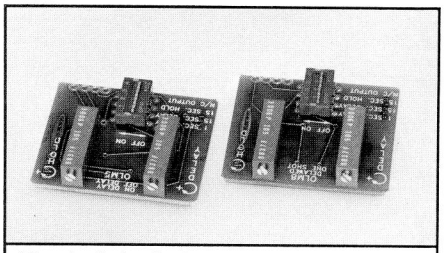
OMNI-BEAM™ Logic Modules

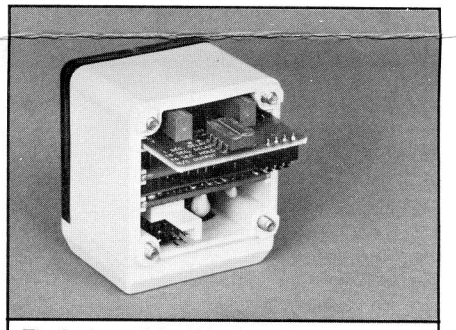
BANNER
the photoelectric specialist

OMNI-BEAM sensors easily accept the addition of timing logic, when needed. Two multiple-function logic modules are available (see photo, upper right). Model OLM5 is programmable for ON-delay, OFF-delay, or ON/OFF-delay timing logic. Models OLM8 and OLM8M1 offer either ONE-SHOT or DELAYED ONE-SHOT functions. Programming of the logic function, the timing range, and the output state is done via a set of four switches located on the logic module.

Both logic modules feature 15-turn clutched potentiometers for accurate timing adjustments. The logic module simply slides into the sensor head housing and interconnects without wires (see photo, lower right). Timing adjustments are easily accessible at the top of the sensor head, and are protected by the sensor head's transparent, gasketed LEXAN® cover.



Plug-in timing logic modules are available for either delay or pulse timing functions.



The logic module slides into the sensor head and interconnects without wires.

OMNI-BEAM Logic Module Specifications:

Operating Temperature: 0 to +50°C (+32 to +122°F) when used in OMNI-BEAM E-series sensors.

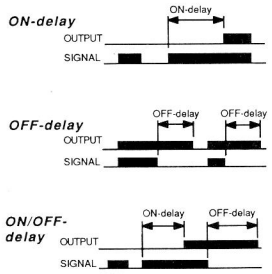
Timing Adjustments: Two 15-turn clutched potentiometers with brass elements, accessible from outside at top of sensor block, beneath gasketed cover.

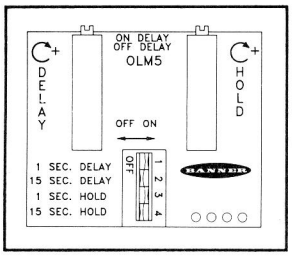
Timing Repeatability: Plus or minus 2% of timing range (maximum). Assumes conditions of constant temperature and power supply.

Useful Time Range: Useful range is from maximum time down to 10% of maximum for all models. When timing potentiometer is set fully counterclockwise, time will be approximately 1% of maximum for models OLM5 and OLM8, and 2% of maximum for model OLM8M1.

OLM5 Delay Timer Logic Module

Model **OLM5** is programmable for ON-DELAY *or* OFF-DELAY *or* ON/OFF DELAY timing functions. Each delay function may be independently adjusted and separately programmed for either a long or short adjustment range.



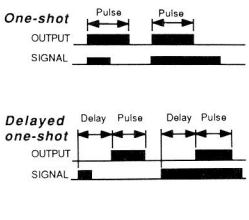


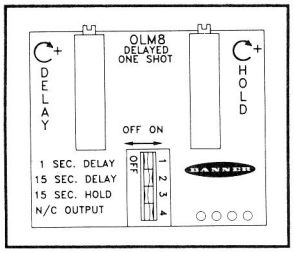
Timing Logic Function and Timing Range(s)		Switch Positions #1	#2	#3	#4
ON-DELAY	1 second maximum	**ON**	OFF	OFF	OFF
ON-DELAY	15 seconds maximum	OFF	**ON**	OFF	OFF
OFF-DELAY	1 second maximum	OFF	OFF	**ON**	OFF
OFF DELAY	15 seconds maximum	OFF	OFF	OFF	**ON**
ON-DELAY & **OFF-DELAY**	1 second maximum 1 second maximum	**ON**	OFF	**ON**	OFF
ON-DELAY & **OFF-DELAY**	1 second maximum 15 seconds maximum	**ON**	OFF	OFF	**ON**
ON-DELAY & **OFF-DELAY**	15 seconds maximum 1 second maximum	OFF	**ON**	**ON**	OFF
ON-DELAY & **OFF-DELAY**	15 seconds maximum 15 seconds maximum	OFF	**ON**	OFF	**ON**

NOTE 1: if both ranges of either delay function are selected (i.e., if both 1 second and 15 second switches are "on"), the delay time range becomes 16 seconds, maximum.
NOTE 2: with switches #1 and #2 "off" (no ON-DELAY programmed), ON-DELAY is adjustable from "negligible" up to 100 milliseconds, maximum.
NOTE 3: with switches #3 and #4 "off" (no OFF-DELAY programmed), OFF-DELAY is adjustable from "negligible" up to 100 milliseconds, maximum.

OLM8(M1) Pulse Timer Logic Modules

Models **OLM8** and **OLM8M1** are programmable for either a ONE-SHOT ("single-shot") pulse timer or a DELAYED ONE-SHOT logic timer. DELAY and PULSE times may be independently adjusted and separately programmed for either a long or short adjustment range. OLM8M1 maximum times are 1/10 those of model OLM8.





Logic Function and Timing Ranges: models OLM8 & *OLM8M1**		Switch Positions #1	#2	#3	#4
ONE-SHOT	1 *(.1)* second max. pulse	OFF	OFF	OFF	-----
ONE-SHOT	15 *(1.5)* seconds max. pulse	OFF	OFF	**ON**	-----
DELAYED **ONE-SHOT**	1 *(.1)* second max. delay 1 *(.1)* second max. pulse	**ON**	OFF	OFF	-----
DELAYED **ONE-SHOT**	15 *(1.5)* seconds max. delay 1 *(.1)* second max. pulse	OFF	**ON**	OFF	-----
DELAYED **ONE-SHOT**	1 *(.1)* second max. delay 15 *(1.5)* seconds max. pulse	**ON**	OFF	**ON**	-----
DELAYED **ONE-SHOT**	15 *(1.5)* seconds max. delay 15 *(1.5)* seconds max. pulse	OFF	**ON**	**ON**	-----

For normally open outputs (outputs conduct during pulse time) ——— OFF
For normally closed outputs (outputs open during pulse time) ——— ON
**** Timing specifications for model OLM8M1 are printed in italics***

NOTE 1: DELAY is non-retriggerable. Pulse is retriggerable if the DELAY time is less than the ONE-SHOT pulse time.
NOTE 2: if both ranges of the delay function are selected (i.e., if both 1 second and 15 second switches are "on"), the delay time range becomes 16 *(1.6)* seconds, maximum.
NOTE 3: with switches #1 and #2 "off" (no DELAY programmed), DELAY is adjustable from "negligible" up to 10 *(4.5)* milliseconds, maximum.

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