

VALU-BEAM 912 Series Sensors

Hookup Diagrams for dc SM912 Series Sensors

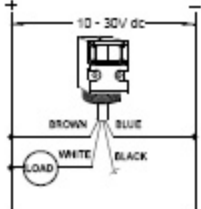
For emitter hookup, see below.

NOTE: each output has a maximum load capacity of 250mA.

Hookup to dc Relay or Solenoid (using sinking output)

The diagram below shows hookup of a dc VALU-BEAM to a dc load using the sensor's *sinking* output, which is rated at 250mA maximum.

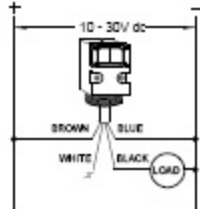
The BLACK wire is not used.



Hookup to dc Relay or Solenoid (using sourcing output)

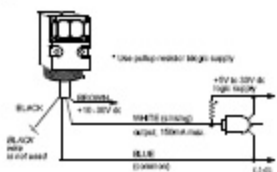
The diagram below shows hookup of a dc VALU-BEAM to a dc load using the sensor's *sourcing* output, which is rated at 250mA maximum.

The WHITE wire is not used.



Hookup to a Logic Gate

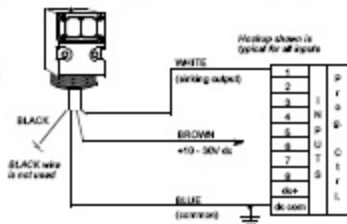
The diagram below shows hookup of a dc VALU-BEAM to a logic gate. A logic zero (0 volts dc) is applied to the gate input when the VALU-BEAM output is energized. When de-energized, a logic one is applied. The logic supply negative must be common to the VALU-BEAM supply negative.



Hookup to Programmable Controller (sinking output)

This diagram shows hookup of a dc VALU-BEAM to a programmable controller requiring a current sink, using the sensor's *sinking* output. The BLACK wire is not used.

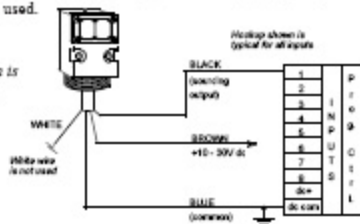
Hookup shown is typical for all inputs.



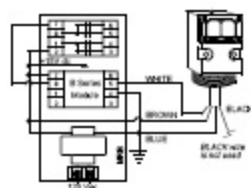
Hookup to Programmable Controller (sourcing output)

This diagram shows hookup of a dc VALU-BEAM to a programmable controller requiring a current source, using the sensor's *sourcing* output. The WHITE wire is not used.

Hookup shown is typical for all inputs.



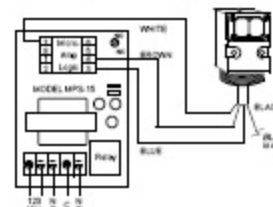
Hookup to B Series Logic (MRB chassis)



The current sinking output (white wire) of the VALU-BEAM is shown connected to the input (pin 5) of a B Series module. It may be connected to the auxiliary input (pin 3) if desired. (See description of module for function of aux. input). Any B Series module may be used. Banner PLUG LOGIC modules may also be used (contact the factory for further information).

Hookup to MICRO-AMP Logic (MPS-15 chassis)

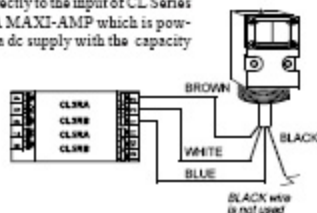
The current sinking (white) output of the VALU-BEAM is shown connected to the primary input (pin 7) of a MICRO-AMP logic module. It may be connected, instead, to the other inputs (see logic module descriptions in the Banner product catalog). The following logic modules may be used:



- MA4-2 One-shot
- MA5 On/off delay
- MA4G 4-input "AND"
- MA4L Latch

Hookup to MAXI-AMP Logic Module

The current sinking output(s) of VALU-BEAM sensors may be connected directly to the input of CL Series MAXI-AMP modules. A MAXI-AMP which is powered by ac voltage offers a dc supply with the capacity to power one VALU-BEAM sensor (see hookup diagram). When emitter/receiver pairs are used, the emitter should be powered from a separate power source.



Emitter Hookup (ac or dc power)

