-MULTI-BEAM 3- & 4-wire DC Power Blocks

Hookup Diagrams for DC Power Blocks (continued)

Hookup to MAXI-AMP Logic Module Hookup to B Series Logic Module (MRB Chassis) The current sinking output(s) of MULTI-BEAM power block models PBT and PBT2 may be connected directly to the input The current sinking output(s) of MULTI-BEAM power of CL Series MAXI-AMP modules. A MAXI-AMP which is block models PBT and PBT-2 powered by ac voltage offers a dc supply with enough capacity to power one MULTI-BEAM sensor, as is shown in may be connected directly to the input (terminal #5) or the this hookup diagram. When emitter/receiver pairs are used, auxiliary input (terminal #3) of the emitter should be powered from a separate power source **B**-series any Banner B Series logic mod-Module (e.g.- using PBA-1, etc.) 2 ule. The MULTI-BEAM is PBT PBT2 powered by the MRB chassis CL3RA as shown. Additional logic 4 CL3RB may be added on a longer chas-MRB CL5RA 2 ÷ sis. Banner PLUG-LOGIC CL5RE 60 ſC modules may also be used. ė Hookup to MICRO-AMP Logic (MPS-15 Chassis) **Hookup to Counter** Most counters, totalizers, rate meters, etc., including the battery-powered The current sinking output(s) of LCD types, accept the NPN current MULTI-BEAM power block mod-Ø sinking output of MULTI-Amp Logic els PBT and PBT2 may be con-PBT BEAM power block modnected directly to the primary input PBT2 els PBT and PBT2 as an MODEL MPS-15 (terminal #7) or the other inputs of Count or reset input \cap 3 4 input. Counters which are MICRO-AMP logic modules. The Common Ο powered by ac line voltage 1 2 following logic modules may be 2 usually offer a low voltage used: 6 dc supply with enough ca-10 to 30V dc pacity to power one MA4-2 One shot MULTI-BEAM (≥10V dc MA5 On/off delay 000001 -10 to 30V dc at ≥60mA). MA4G 4-input "AND" MA4L Latch NOTE: MULTI-BEAM dc power blocks cannot be wired in series. **MULTI-BEAM 3- & 4-wire AC Power Blocks Functional Schematic** AC Models **Connections** PBA (Ų) LISTED St. CERTIFIED Switching Element Signal from Logic Module Input: 105 to 130V ac, 50/60Hz. 1 3 L2 (See Specifications) Off Off Solid-State St CERTIFIED Contact (ŲL) LISTED AC Supply Voltage PBB No Connection B (Totally Isolated) Input: 210 to 250V ac, 50/60Hz. 2 4 +8Vdc_(C) 3 4 LOAD (ŲL) LISTED 🚯 🛛 CERTIFIED PBD to Logic Module canner Block 2 Regulated ower Supply Input: 22 to 28V ac, 50/60Hz. Common (D)

PBD-2 Input: 11 to 13V ac, 50/60Hz.

Output: SPST solid-state switch for ac, 3/4 amp maximum (derated to 1/2 amp at 70 degrees C). Maximum inrush: 10 amps for one second or 30 amps for one ac cycle (non-repeating). On-state voltage drop: less than 2.5V ac at full load. Off-state leakage current: less than 100 microamps. Response: add 8.3 milliseconds to the off-time response of the scanner block.

These power blocks are the most commonly used for ac operation. As the typical hookup

shows, they are intended to switch the same ac voltage as is used to power the MULTI-BEAM. However, the output of all four blocks is rated for 250V ac maximum, and all can switch a voltage which is different than the supply as long as both ac circuits share a common neutral. For example, a PBA could switch a 24V ac door chime, etc. Observe local codes when mixing ac voltages in a wiring chamber. These blocks are designed to handle the inrush current of ac inductive loads like motor starters and solenoids. The "holding current" specification of any inductive load should not exceed the 750mA output rating. There is no minimum load requirement. These power blocks will interface directly to all ac programmable controller inputs. All contain built-in transient suppression to prevent false turn-on or damage from inductive loads and line "spikes". Outputs of multiple power blocks may be wired in series or parallel for "AND" and "OR" logic functions.