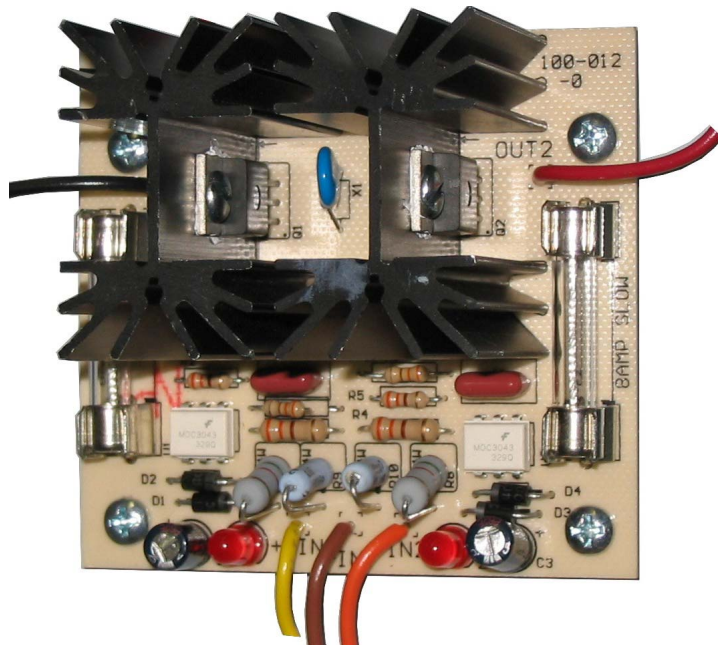


Power Supply Driver Dual 5A Output Installation Guide



Model: PS-DRIVER-2/5A

5-24VAC/DC control input;
Two 5 Amp 120VAC
or 24VAC outputs.

General Purpose Solid State
output module with open collector
control circuits and
two individually fused outputs

NATIONAL TIME
& SIGNAL CORPORATION

28045 OAKLAND OAKS CT. WIXOM, MI 48393

PHONE (248) 380-6264 FAX (248) 380-6268

Bulletin C-439 revB

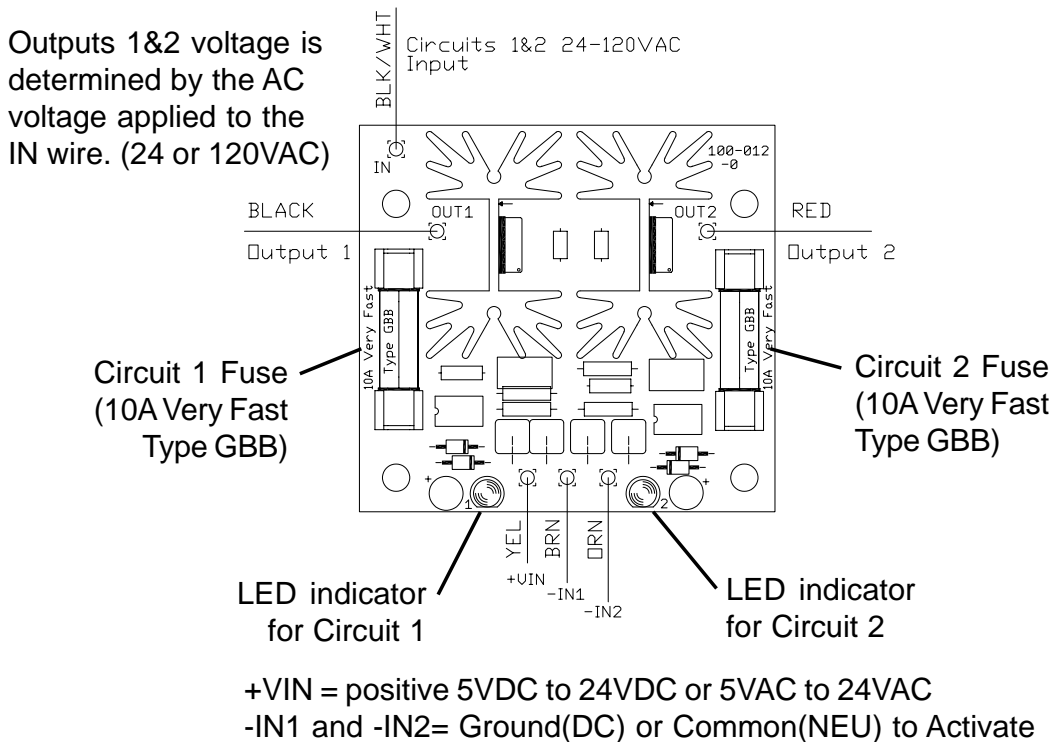
Description:

The **PS-DRIVER-2/5A** output module provides general purpose solid state outputs to be used in conjunction with other National Time products to either add additional outputs or to enhance the performance of a standard relay output. “Zero-Cross” turn on technology greatly reduces inrush currents and contact arcing exhibited by standard relay type control circuits.

A standard MC100 Master Clock’s relay output performance may be enhanced with the addition of the **PS-DRIVER-2/5A** output module. When On-Demand resets are superimposed on an existing synchronous clock circuit, it is recommended to utilize this solid state output to eliminate the contact damaging arcing and high currents caused by high inductive loads like synchronous clock motors.

The 5 amp outputs share a common feed which may be either 120VAC or 24VAC depending upon the clock or auxiliary device requirements. The outputs are individually fused with standard glass fuses.

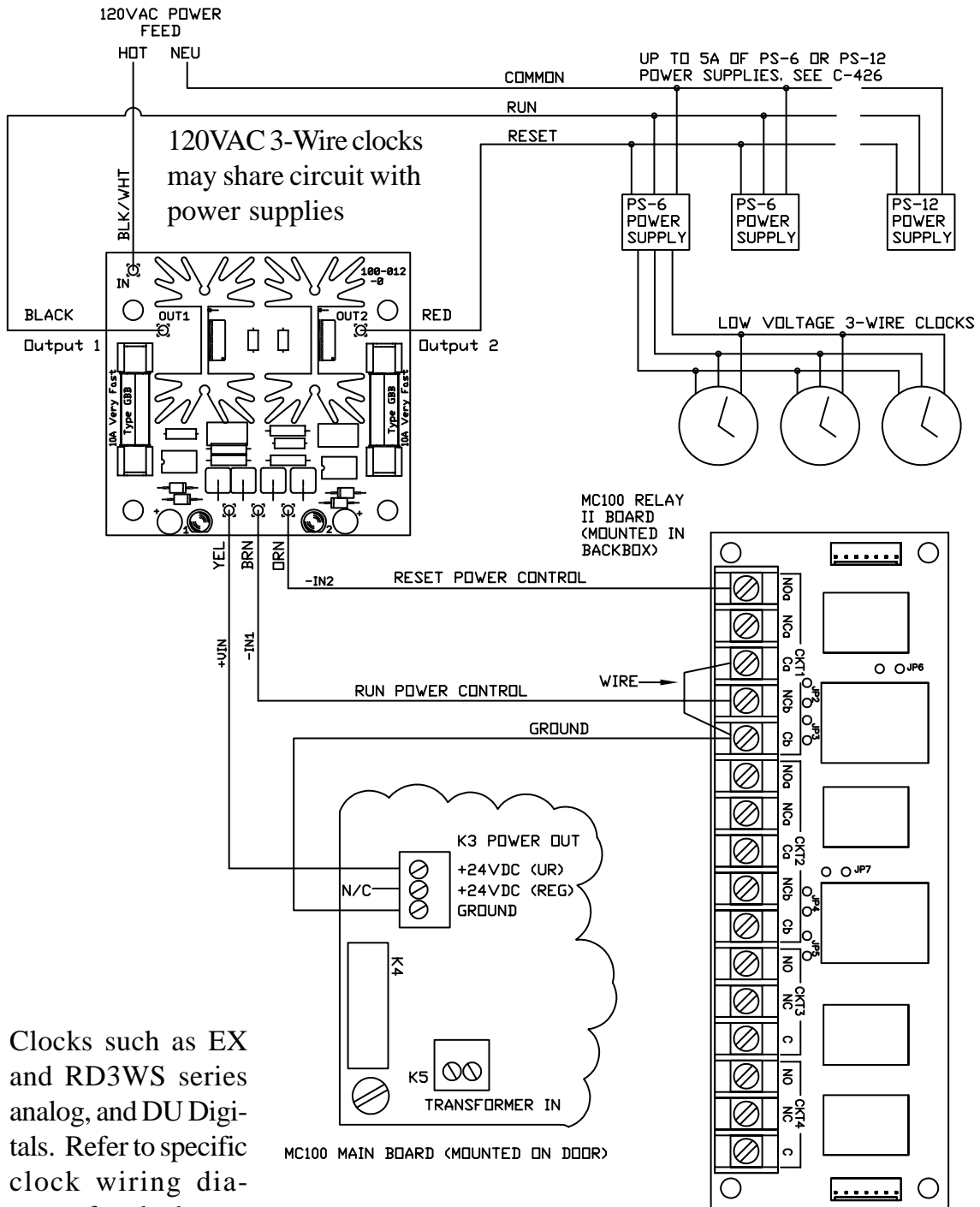
The **PS-DRIVER-2/5A** module may be controlled with equipment by others since the outputs are controlled via two open-collector inputs of either AC or DC power with a wide operating range of 5 to 24 volts.



Tip:

When connecting to an MC100 Master Clock, use the +24VDC(UR) and GROUND connector on the MC100 main board as power to control the open collector inputs.

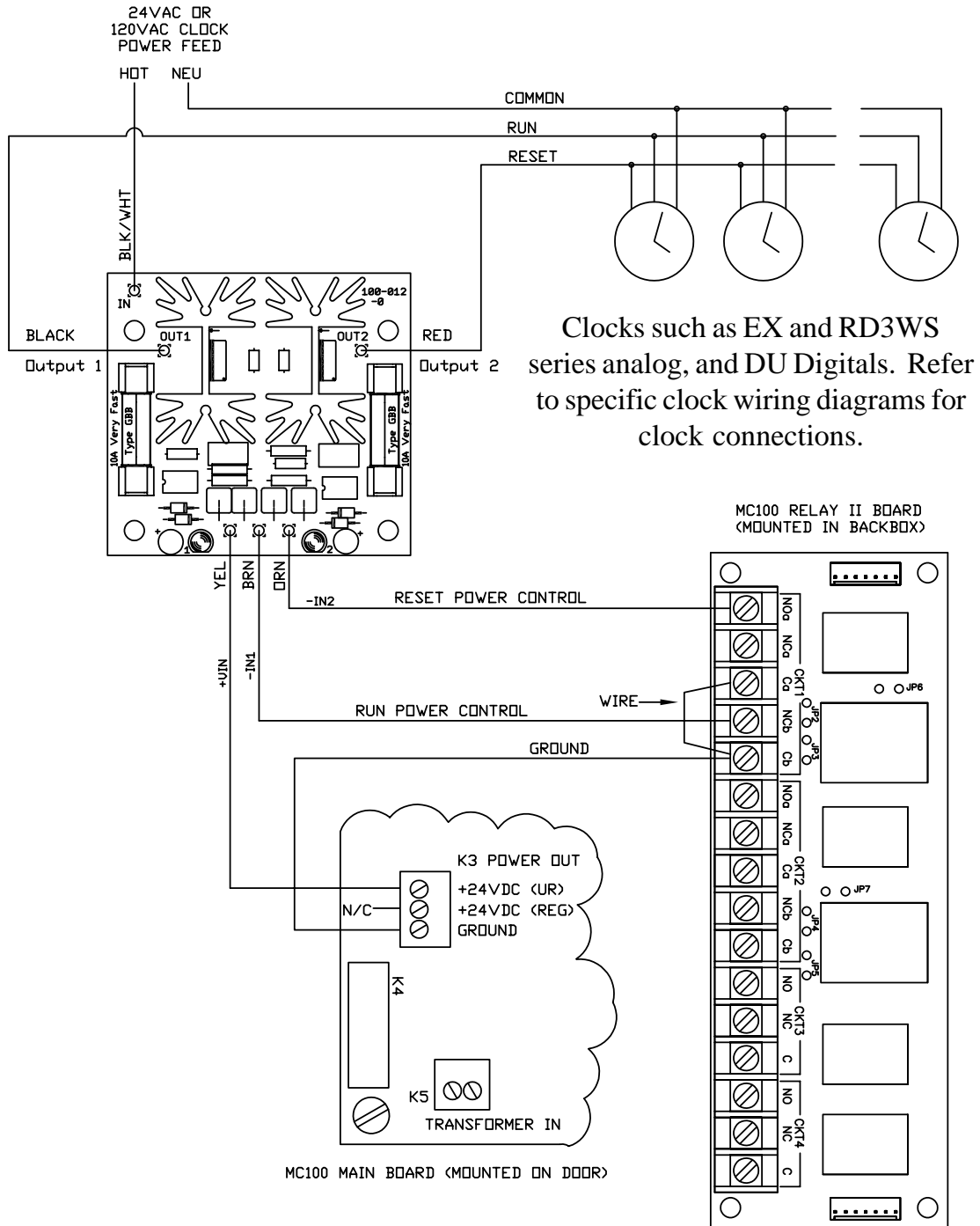
Typical Wiring From MC100 Relay Board to PS-6/12 Power Supplies (3-Wire):



Clocks such as EX and RD3WS series analog, and DU Digital. Refer to specific clock wiring diagrams for clock connections.

Solid state outputs replace relay outputs of MC100. Programming and jumper settings of MC100 are the same as shown in MC100 manual. Circuit 1 shown, circuits 2,5,6,9 or 10 may be wired similarly.

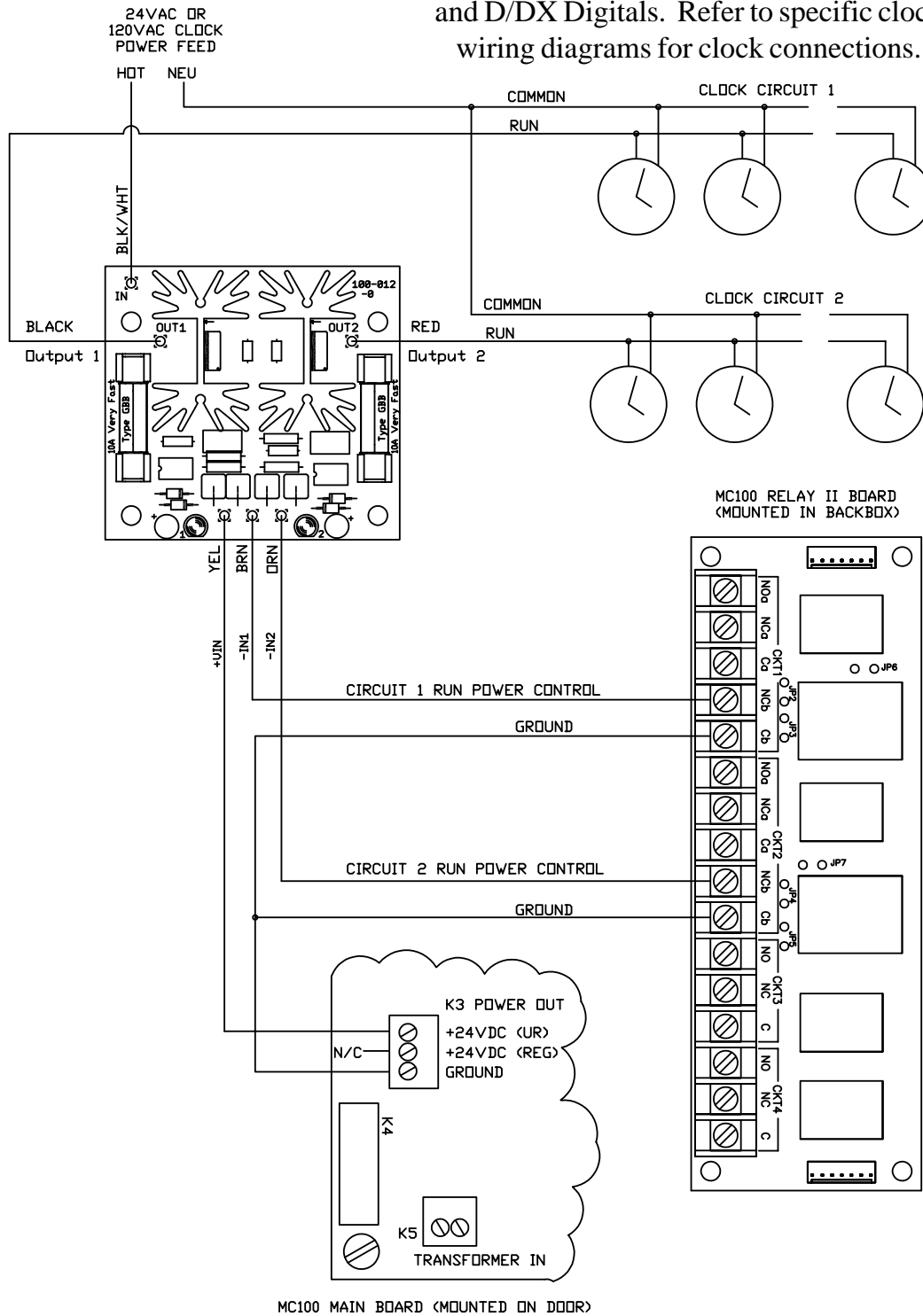
Typical Wiring to MC100 Relay Board Board Clock Circuit (3-Wire):



Solid state outputs replace relay outputs of MC100. Programming and jumper settings of MC100 are the same as shown in MC100 manual. Circuit 1 shown, circuits 2,5,6,9 or 10 may be wired similarly.

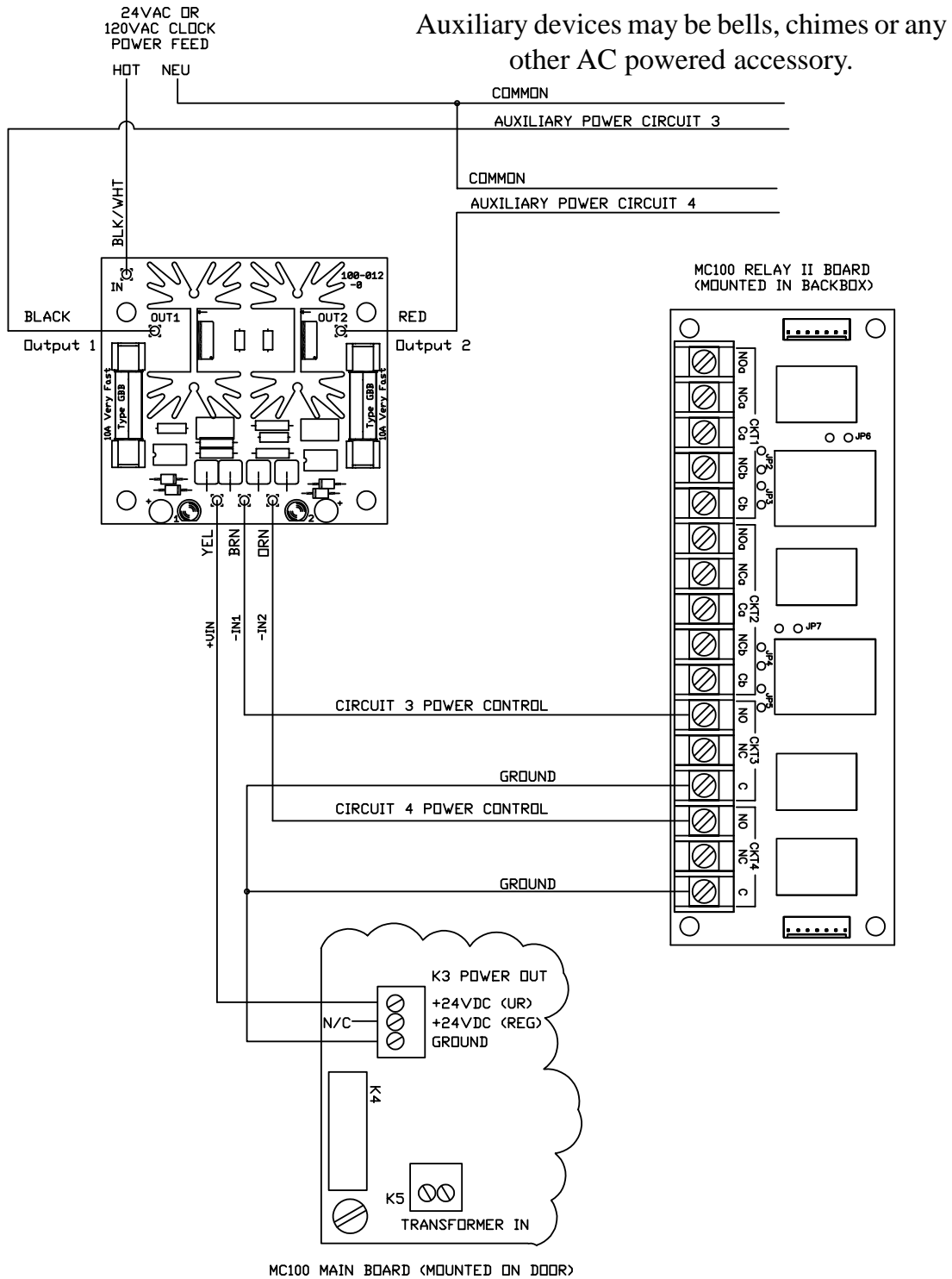
Typical Wiring to MC100 Relay Board Clock Circuits (2-Wire):

Clocks such as RD2WS series analog, and D/DX Digitals. Refer to specific clock wiring diagrams for clock connections.



Solid state outputs replace relay outputs of MC100. Programming and jumper settings of MC100 are the same as shown in MC100 manual. Circuits 1&2 shown, circuits 5,6,9 or 10 may be wired similarly.

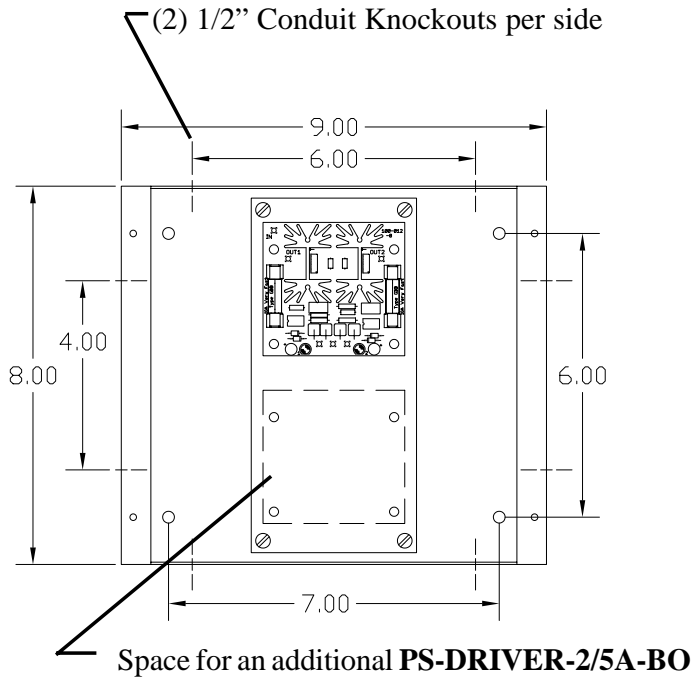
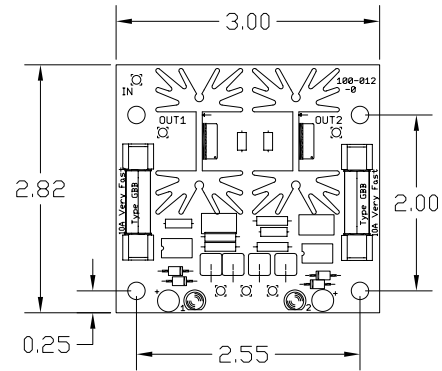
Typical Wiring to MC100 Relay Board Auxiliary Circuits:



Solid state outputs replace relay outputs of MC100. Programming and jumper settings of MC100 are the same as shown in MC100 manual. Circuits 3&4 shown, circuits 7,8,11 or 12 may be wired similarly.

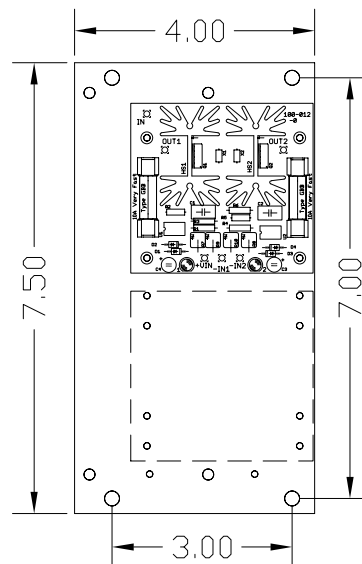
Dimensions:

The **PS-DRIVER-2/5A-BO** Output module (Board Only) may be ordered separately and mounted into a suitable enclosure.



When ordered as **PS-DRIVER-2/5A** Output module, the board comes mounted in a heavy gauge steel enclosure (9"L x 8"W x 4"H). Mounting holes are provided to mount an additional **PS-DRIVER-2/5A-BO** module to provide four outputs in the same enclosure.

When ordered as **PS-DRIVER-2/5A-MP** Output module, the board comes mounted to a heavy gauge steel plate to allow mounting in a separate enclosure or in an MC100 Back Box. (same mounting footprint as an MC100 Relay board. Mounting holes are provided to mount an additional **PS-DRIVER-2/5A-BO** module.



Operation:

When voltage is applied to the open collector input(s) of the **PS-DRIVER-2/5A** output board, the corresponding LED indicator will illuminate. The AC voltage connected to the IN wire (Black/White) will be output to the respective output wire (Black circuit 1, Red circuit 2). The output will be activated upon the next zero voltage crossing of the AC power to minimize inrush current and arcing.

Specifications:

Control Input Power Range: 5-28VAC; 52mA @ 24VAC; 11mA @5VDC
Input Power Voltage: 19-132VAC
Output Voltage: (Input Power Voltage - 1)VAC
Output Power: 5A @ 24VAC; 5A @ 120VAC
Output Fuses: 10A Very Fast Type GBB ONLY
Dimensions: 2.75"W x 3.0"L x 1.75"H (board only)
9" x 8" x 4" (w/ enclosure)

Ordering Information:

Order No.	Description
PS-DRIVER-2/5A	Dual 5A Solid State Output Module in 8x9x4 enclosure
PS-DRIVER-2/5A-BO	Dual 5A Solid State Output Module; Board Only
PS-DRIVER-2/5A-MP	Dual 5A Solid State Output Module; Board w/ mounting plate

NATIONAL
& SIGNAL CORPORATION

visit us on the web. www.NATSCO.net