



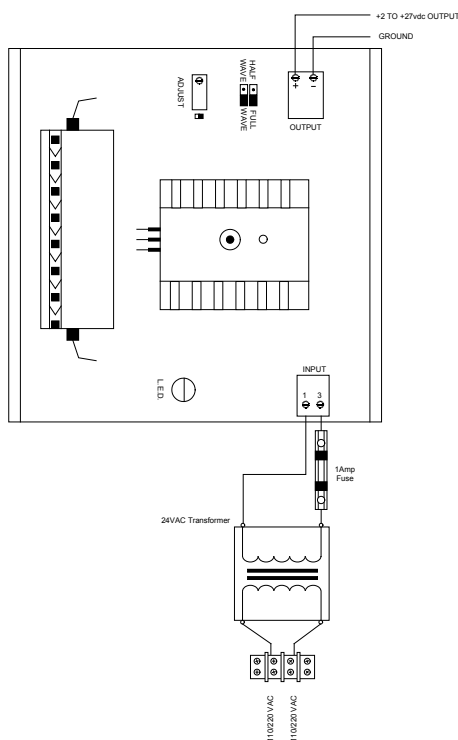
## CP1030 Series

Variable Output  
Regulated Power Supply

## Description

The CP1030 is a powerful supply for Basys controls, transmitters and interface devices. The CP1030 takes a 24 VAC input and provides a regulated and adjustable 2 to 27VDC @ 1 amp output.

CP1030



## Mounting

The CP1030 is available in a snap track mounting style. Remove the circuit board from the snap-track and mount the snap-track with two #10 sheet metal screws using the center screw access hole provided. Replace the circuit board when finished.

## Wiring

### WARNING!!!

TCS Basys Controls products must be powered from a separate transformer. All TCS Basys Controls devices are "halfwave" rectified whereby the power ground is common with the signal ground.

**Power:** Connect the AC voltage to the terminal blocks labeled "INPUT" in the circuit board. The AC input should not exceed 28 VAC. Terminal "1" is the positive (+) lead and terminal "3" is the negative (-) lead.

**Output:** Connect the DC voltage output to terminals labeled "+" and "-". Observe the correct polarity when wiring transmitters or other devices to the CP1030 output.

**Note:** Disconnect power to the AC transformer before wiring the CP1030, and when wiring transmitters or other devices.

**Caution:** Wiring should not be run in the same conduit as line voltage wiring or other conductors that supply highly inductive loads such as generators, motors, contractors etc.

# Setup

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Based on the application and the appropriate wiring method, select either the half-wave rectification method. Place two shorting blocks (in a horizontal position) next to the appropriate label, as indicated in the following diagram.

## FULL WAVE RECTIFICATION

HALF WAVE  FULL WAVE

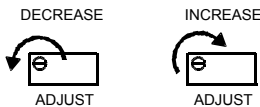
## HALF WAVE RECTIFICATION

HALF WAVE  FULL WAVE

**WARNING:** Incorrect placement of rectification shorting blocks, will cause serious damage to equipment!

2. Measure the output voltage prior to wiring and adjust the output voltage accordingly. All wiring is low voltage and should be in accordance with local regulations and the National Electrical Code.

## Voltage Adjustment



# Application Notes

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Because the CP1030 is powered with a 24 VAC transformer, grounding problems can occur. Problems can also occur when the same 24 VAC transformer is used to power the CP1030 in addition to another device. If it is known that the device is half-wave rectified, select "HALF WAVE" rectification. If the rectification of the other device is unknown, it is recommended that a separate transformer is used to power the CP1030, it doesn't matter whether half-wave or full-wave rectification is selected.

The CP1030 features an L.E.D. supply power indicator. When the CP1030 is correctly powered, an indicator light is illuminated. If this indicator does not turn on, immediately remove supply voltage and recheck all electrical wiring connections.