# GNT400 Series Logic Signals Theory of Operation

Below is a description of the J3 connector logic signals for the GNT400 Series power supplies. The part of the schematic from which the signals are derived is pasted in below.

- PS Off & Inhibit: Pins 1 & 2 are the control signals for PS Off and Inhibit. They both perform the same function in turning off the output voltage, but they give you a choice of using either a high or a low input signal. Both are inactive during normal operation. R62 pulls up the Inhibit signal internally to 5 V. R68 pulls PS Off down to Return. Then, as the waveforms show, changing the state of either signal will turn off the output voltage.

- The DC OK signal (pin 4) goes high (5 V) when output voltage exceeds 92% of nominal voltage.

- The PWR OK signal (pin 3) monitors the ac input voltage and goes high 100-200 ms after DC OK goes high. It will then go low when it senses impending loss of sufficient ac power and will do so at least 4 ms before output voltage drops out of spec. This is meant to provide enough warning time to allow your logic system to perform any housekeeping needed right before power is lost.

- 5V standby (pin 6) is a voltage that is always on, even during inhibit. It can be used to power one of the control signals or power some logic during a sleep mode. The max current rating is 100 mA.

- Remote Sense: (pins 7 & 8) These terminals can either be ignored which leaves the output voltage point of regulation to be at the output terminals, or can be strategically connected to the user's load to create a new point of regulation. Use of these pins is recommended only if very tight regulation is required at the load.