

1.0 Introduction

This Analog Output Option Card provides two additional analog outputs from the P5 series drive. Each output can be either 0-10VDC or 4-20mA and can be configured to 1 of 4 possible monitors: output current, output frequency, output voltage, or output kilowatts. The signals have a resolution of 8 bits and are used for monitoring purposes.

2.0 Hardware Installation

This section describes steps necessary to install the option card and configure the drive for its use. Since this option is available pre-installed or in kit form, many of these steps may have been completed at the factory.

Refer to **Figure 1** for the physical location of switches and connectors.

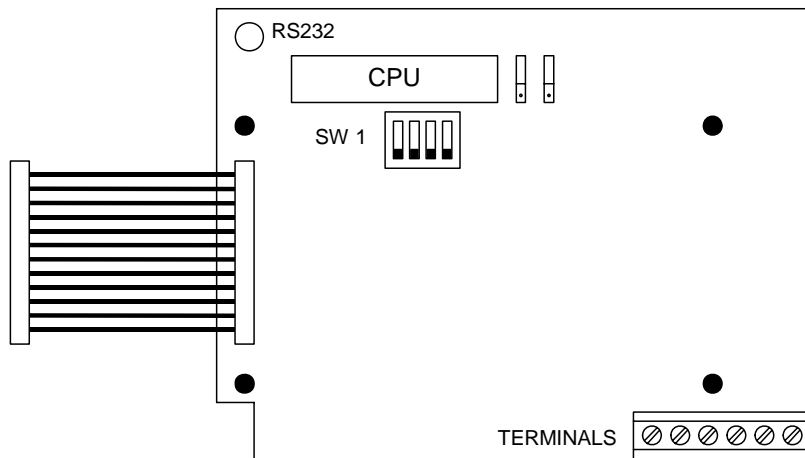


Figure 1. Option Card Layout

CAUTION

Input Power to The Drive Must be TURNED OFF and the CHARGE Lamp Inside the Drive Must be OFF Before The Option Card Can be Installed.

- Step 1.** Remove the digital operator, applying pressure to the locking plate on its lower right side, as illustrated in Figure 2. Lift the operator out by pulling forward.

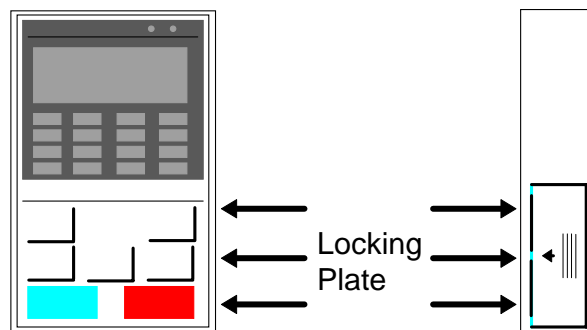


Figure 2. Operator Removal

Step 2. Remove the drive cover, applying pressure to the locking tabs on either side of the cover as illustrated in Figure 3. With the locking tabs disengaged, pivot the cover out from the bottom. Continue pivoting it until the top hinge disengages.

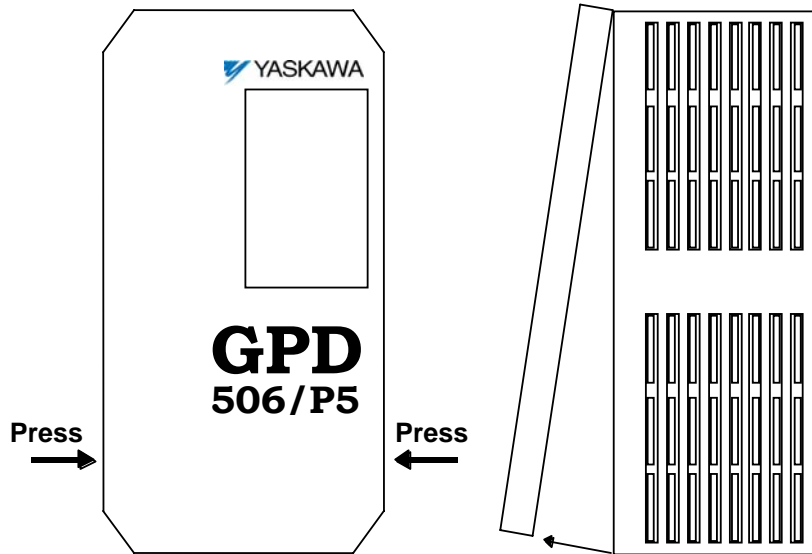


Figure 3. Cover Removal

Step 3. Position the option card so that the 12-pin interface cable is to the left, as illustrated in Figure 4. Carefully press the attached cable connector into connector 2CN until it is firmly seated. Please note the orientation of the locking tab relative to the connector mounted on the control board.

Step 4. Position the option board mounting holes directly over the four standoffs on the control board. Carefully press the option board onto the standoffs until it is firmly seated.

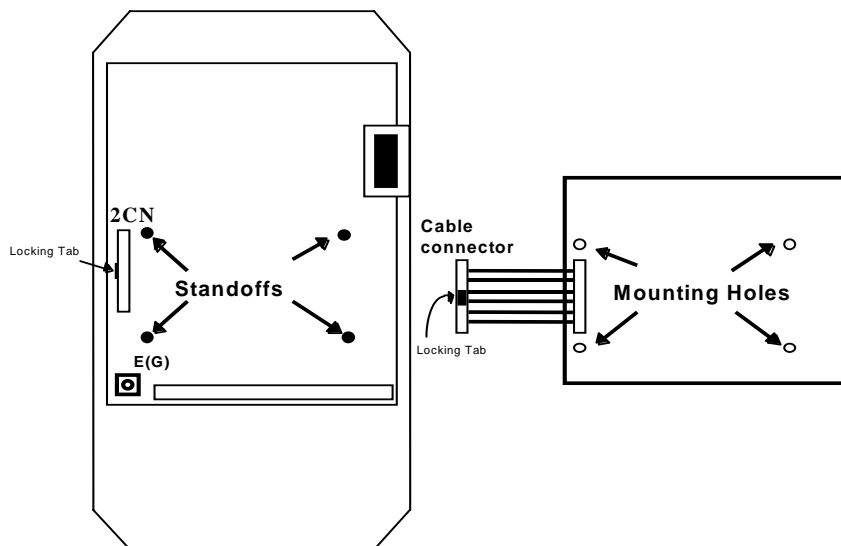


Figure 4. Option Card Positioning

3.0 Option Setup

This card has two independent analog channels, and each channel can be either 0-10V or 4-20mA. Each of these channels can also be configured to monitor 1 of 4 possible signals: kilowatts, voltage, current and frequency.

4.0 Wiring

- Each channel can be configured for either a 0-10VDC or 4-20mA output.
- The type of output is selected by wiring the device to the proper terminals, see Figure 5.
- A twisted shielded wire, 20 to 16AWG, should be used; the shield must be connected to terminal G on the GPD506/P5 side only.
- Although two signal levels are available for each channel, only one type from each channel can be used at any one time.

CAUTION

The Card will be Damaged if Both Signal Levels (0-10VDC and 4-20mA) from The Same Channel are Connected Simultaneously.

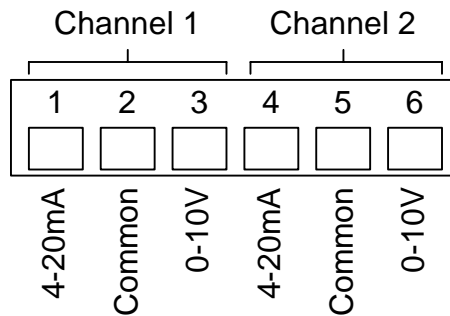


Figure 5 Option Card Terminal Wiring

5.0 Signal Selection

The card can output 1 of 4 possible signals. The selection is done through dipswitches located on the board, **Figure 6**. The information that it can monitor is current, frequency, voltage and kilowatts. These signals are also accessible from the digital operator through the U1 monitors (refer to technical manual TM4506).

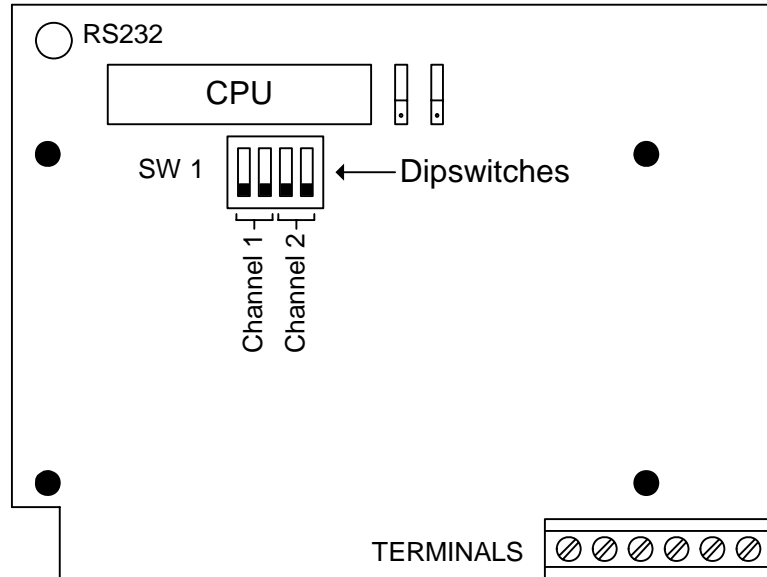


Figure 6 Dip Switch location

To select the proper signal to be monitored, refer to the table below.

	SW 1	kW	Volts	Current	Frequency
Channel 1	1	Off	On	Off	On
	2	Off	Off	On	On
Channel 2	3	Off	On	Off	On
	4	Off	Off	On	On

From SW 1, switches 1 & 2 are used to setup channel 1 and switches 3 & 4 are used to setup channel 2.

Example, for channel 1 to read voltage: switch 1 must be ON and switch 2 must be OFF. The signal selection can be changed when the drive is powered on and running.

6.0 Drive Set-Up

The drive must be properly configured to communicate with the option card, as described below:

Drive Parameter	Setting	Description
n104	1	Address (01)
n105	2	Baud Rate (9600)
n106	0	Parity (None)

Important

Parameter n001 must be set to 3 to change these parameters.

New settings will not take affect until drive power is cycled.

If any one setting is incorrect, the green LED (labeled RS232) on the card will be off.