

CARD-PAX-USB

USB PROGRAMMING OPTION CARD

1. DESCRIPTION	2
2. SPECIFICATIONS.....	2
2.1. Type	2
2.2. Isolation To Sensor & User Input Commons	2
2.3. Working Voltage	2
2.4. Baud Rate	2
2.5. Unit Address	2
3. INSTALLING AN OPTION CARD	2
4. Ordering information	3
5. USB DRIVER INSTALLATION	3
6. PAX200 SYSTEM REQUIREMENTS	3
7. MODULE 7 - SERIAL COMMUNICATIONS PARAMETERS	4

1. DESCRIPTION

This bulletin serves as a guide for the installation, configuration and operation of the CARD-PAX-USB Programming plug-in card. The plug-in card is a separately purchased option card that plugs into the main circuit board of the meter. The CARD-PAX-USB card in conjunction with the PAX200 programming software enables the user to configure a PAX from a PC. The CARD-PAX-USB requires the installation of drivers that are included with the PAX200 Programming software.

Following installation of the drivers, the card appears as a Virtual communications port.

PAX200 is a Windows® based program that allows configuration of the PAX® meters from a PC. PAX200 offers standard drop-down menu commands that make it easy to program the PAX meters. The PAX program can then be saved in a PC file for future use. A PAX serial plug-in card is required to program the meter using the software.

2. SPECIFICATIONS

2.1. Type

USB Virtual Comms Port

2.2. Isolation To Sensor & User Input Commons

500 Vrms for 1 min.

2.3. Working Voltage

50 V. Not isolated from all other commons.

2.4. Baud Rate

300 to 19.2k

2.5. Unit Address

0 to 99; only 1 meter can be configured at a time

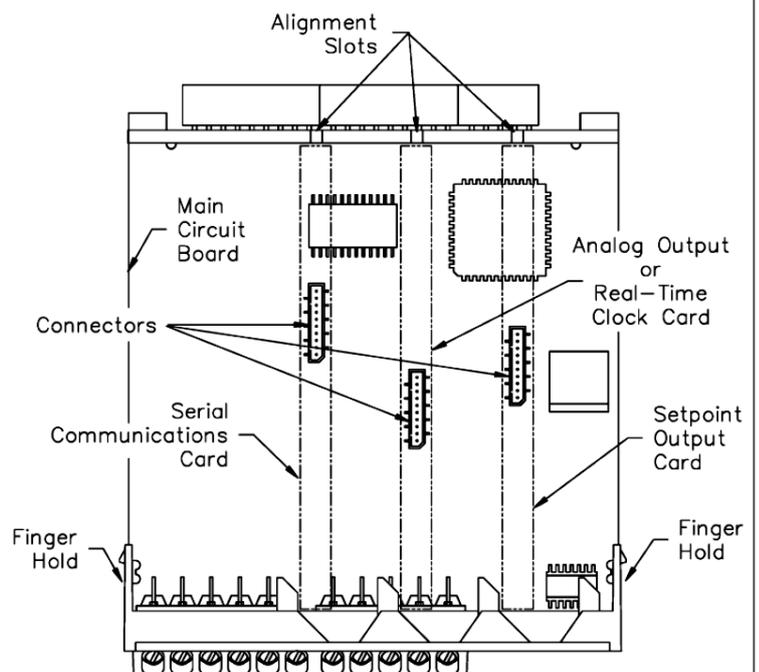
3. INSTALLING AN OPTION CARD



Caution: The option and main circuit cards contain static sensitive components. Before handling the cards, discharge static charges from your body by touching a grounded bare metal object. Ideally, handle the cards at a static controlled clean workstation. Also, only handle the cards by the edges. Dirt, oil or other contaminants that may contact the cards can adversely affect circuit operation.



Warning: Exposed line voltage exists on the circuit boards. Remove all power to the meter AND load circuits before accessing the unit.





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1. Remove the main assembly from the rear of the case. Squeeze the finger holds on the rear cover, or use a small screwdriver to depress the side latches to release it from the case. It is not necessary to separate the rear cover from the main circuit card.
2. Locate the option card connector for the serial communication card. Hold the unit by the rear cover, not the display board, when installing an option card.
3. Install the option card by aligning the option card with the slot in the rear cover. Be sure the connector is fully engaged and the tab on the option card rests in the alignment slot on the display board.
4. Slide the assembly back into the case. Be sure the rear cover latches fully into the case.

4. ORDERING INFORMATION

<u>MODEL NO.</u>	<u>DESCRIPTION</u>	<u>PART NUMBER</u>
CARD-PAX	USB Programming Option Card	CARD-PAX-USB

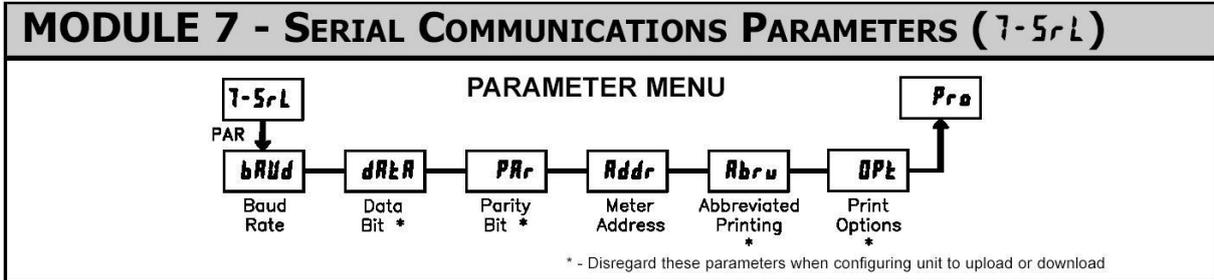
5. USB DRIVER INSTALLATION

1. Download and install the latest PAX200 build on your Windows® compatible PC. To receive PAX200 software, please contact SENSY (info@sensy.com).
2. Install CARD-PAX-USB card into the meter and apply power to the PAX.
3. Connect Type A to mini B USB cable to computer and PAX option card. Windows will prompt you for the location of the drivers for the device. When the hardware setup appears, choose “Install from a list or Specific location”, click Next, and then check “Include this location...” and click the Browse button. Point the Wizard at the location specified above or whatever other location you specified during installation of the software. It is important that you perform this step correctly, or you may have to manually remove the drivers using the Device Manager, and repeat the installation once more.
Note: PAX200’s USB drivers have not been digitally signed by Microsoft®, and you will therefore see a dialog offering you the chance to stop the installation. You should be sure to select the Continue option to indicate that you do indeed wish to install the drivers.
4. Windows will automatically assign a comms port to the CARD-PAX-USB. To determine the port assigned, open “System Properties” from within Windows® Control Panel. Select the Hardware tab, and click the “Device Manager” button. Expand the “Ports” line. Take note of which Comms port is assigned to “RLC Virtual Comm port”. It must be Com4 or lower to operate with PAX200. If higher, right-click on the entry and select “Properties”, “Port Settings” tab, and then “Advanced” button. Select a Coms port that is COM4 or lower and is not physically being used.

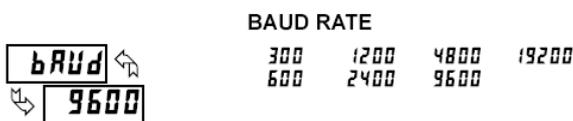
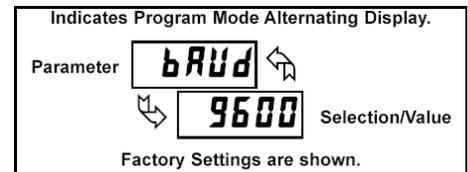
6. PAX200 SYSTEM REQUIREMENTS

- Windows 2000, XP, Seven or Vista
- RAM and free disk space as required by the chosen operating system.
- An additional 50 MB of disk space for software installation.
- A display of at least 800 by 600 pixels
- A USB port for downloading to the PAX

7. MODULE 7 - SERIAL COMMUNICATIONS PARAMETERS



It is necessary to match the PAX meter's serial communications parameters to the host's parameters before communications can be established. This is accomplished by using the PAX front panel keys to enter 7-5rL. The only parameters of concern when utilizing the CARD-PAX-USB programming option card to communicate with PAX200 programming software is the Baud Rate and Meter Address. The Parameters are only accessible when an optional CARD-PAX-USB, RS232 or RS485 serial communications card is installed.



Set the baud rate to match that of other serial communications equipment. Normally, the baud rate is set to the highest value that all of the serial communications equipment is capable of transmitting.



Select either 7 or 8 bit data word lengths. Set the word length to match that of other serial communication equipment. Since the meter receives and transmits 7-bit ASCII encoded data, 7 bit word length is sufficient to request and receive data from the meter.

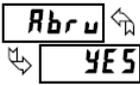


Set the parity bit to match that of the other serial communications equipment used. The meter ignores the parity when receiving data, and sets the parity bit for outgoing data. If no parity is selected with 7-bit word length the meter transmits and receives data with 2 stop bits. (For example: 10 bit frame with mark parity)



Enter the serial node address. With a single unit on a bus, an address is not needed and a value of zero can be used (RS232 applications). Otherwise, with multiple bussed units, a unique address number must be assigned to each meter. The node address applies specifically to RS485 applications.

ABBREVIATED PRINTING *



YES NO

Select abbreviated transmissions (numeric only) or full field transmission. When the data from the meter is sent directly to a terminal for display, the extra characters that are sent identify the nature of the meter parameter displayed. In this case, select **NO**. When the data from the meter goes to a computer, it may be desirable to suppress the node address and mnemonic when transmitting. In this case, set this parameter to **YES**.

PRINT OPTIONS *



YES NO

YES - Enters the sub-menu to select those meter parameters to appear in the block print. For each parameter in the sub-menu select **YES** for the parameter to appear with the block print, and **NO** to disable the parameter.

OPt	Print options	NO	
		YES	GroSS INP tot tArE HILO SPNt

GroSS: Print Gross value, tArE: Print Tares value

* - Disregard these parameters when configuring unit to upload or download with PAX200.