



Metrix SA6200A (Two-Wire) Accelerometer Replacing 3-Wire Accelerometer on BN 3500 Rack

Installation Manual

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1.0 PURPOSE

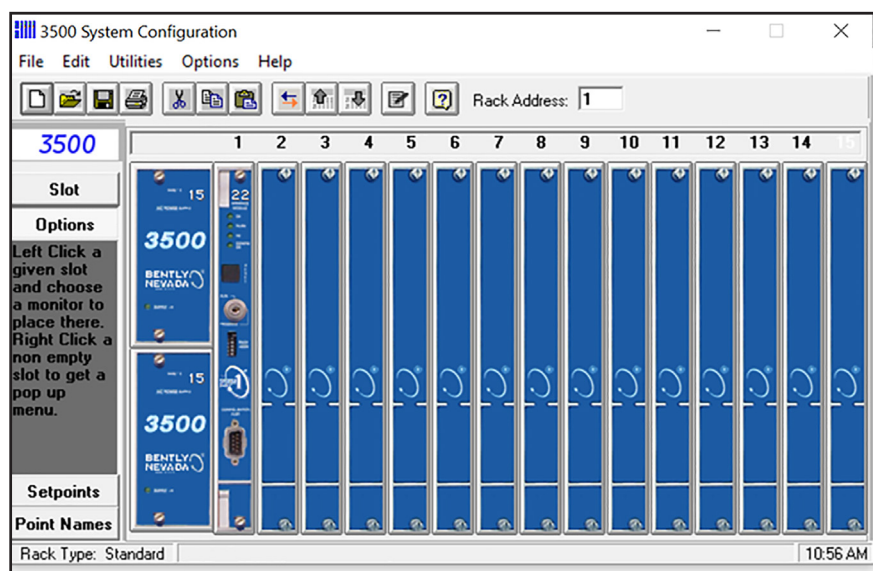
The purpose of this procedure is to configure the BN 3500 rack to be compatible with a Metrix SA6200A 2-wire Accelerometer (Note: The SA6200A is not polarity sensitive).

2.0 REFERENCES

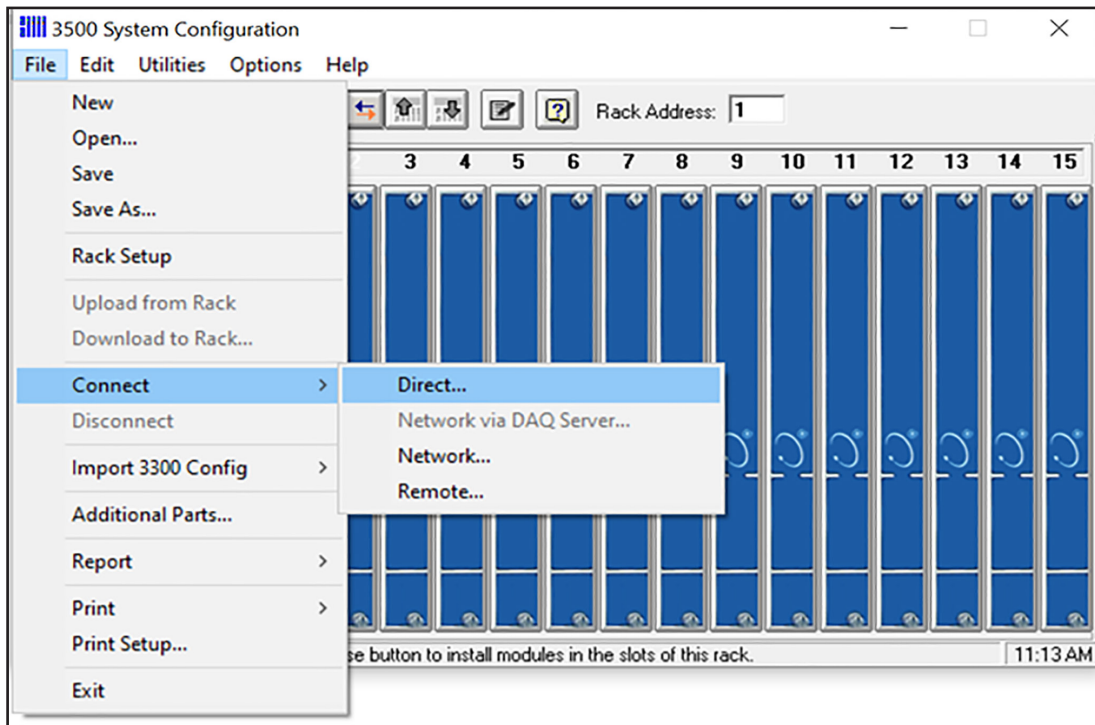
- SA6200A Datasheet-1009516
- SA6200A Manual-M9313
- BN 3500/42M Datasheet-143694
- BN 3500 Rack Configuration Manual

2.0 PROCEDURE

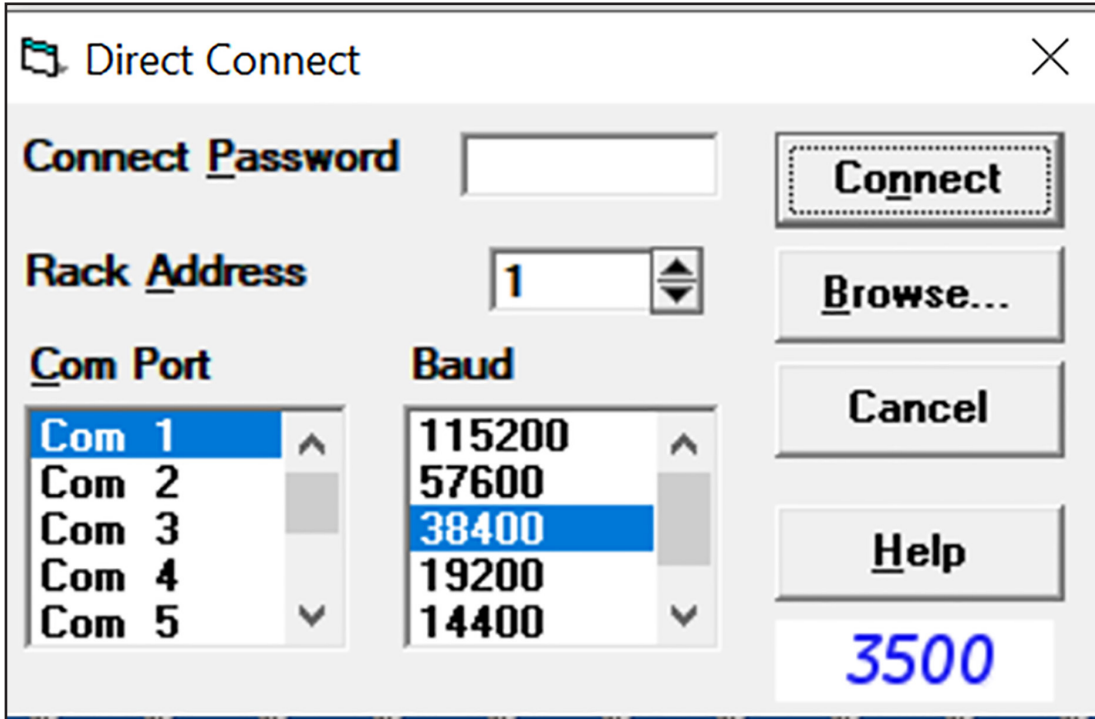
Prior to installation, one needs to have access to the BN software with password and username. This may require a purchase in order to make changes to the set-up and configuration. You will need an USB to RS232 communications cable. The USB plugs into the operator's laptop and the 9-way D-type connector into the BN 3500 rack.



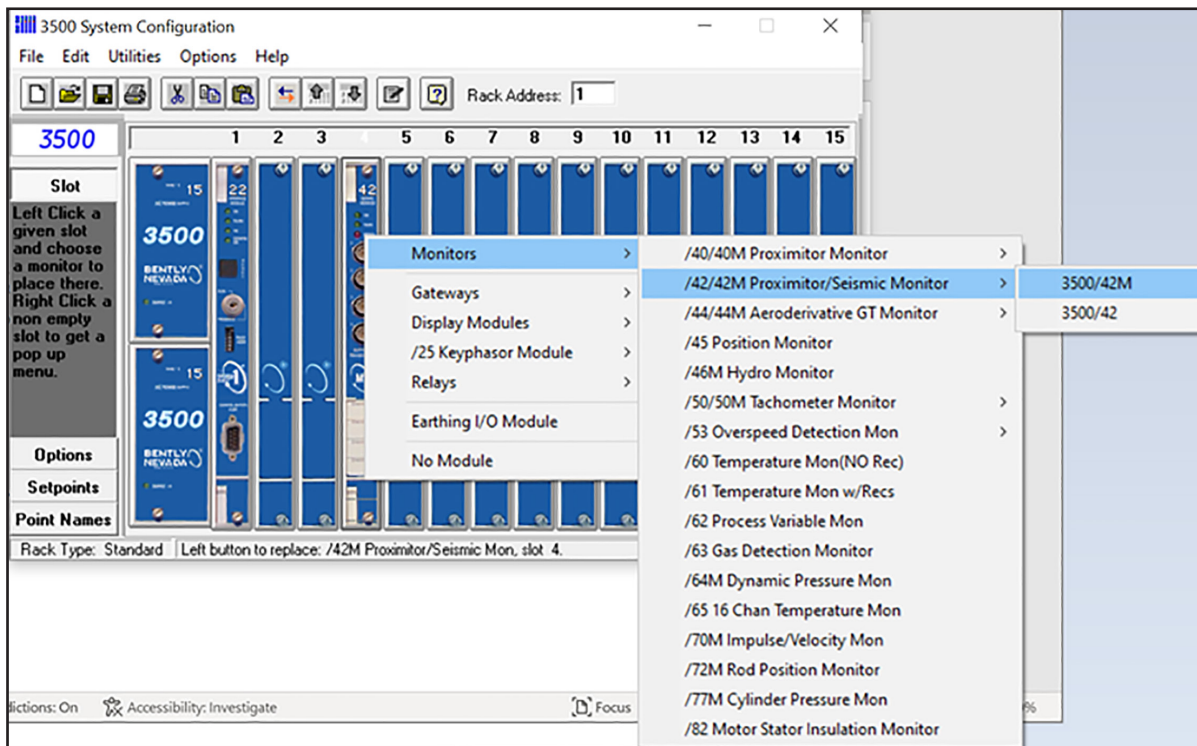
From 3500 configuration software, click File > Connect > Direct.



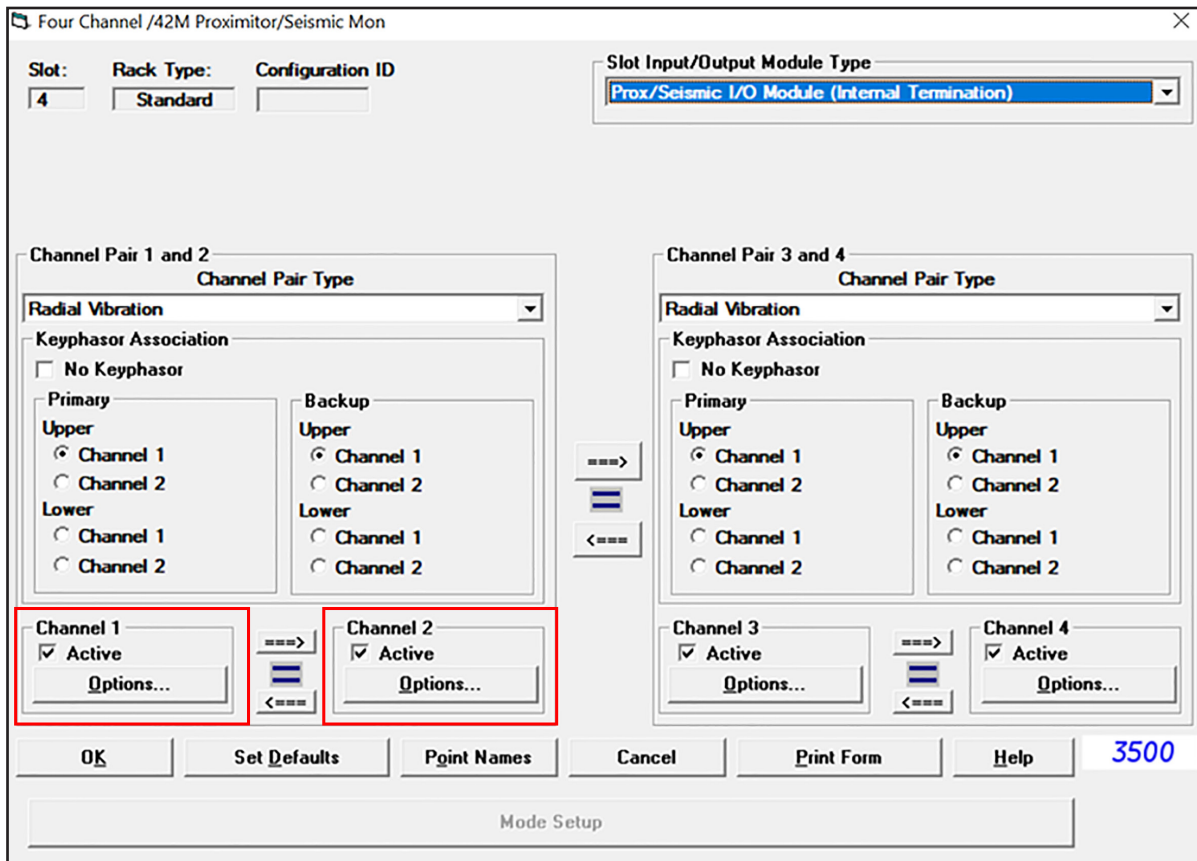
5. Verify Rack Address and center Connect Password



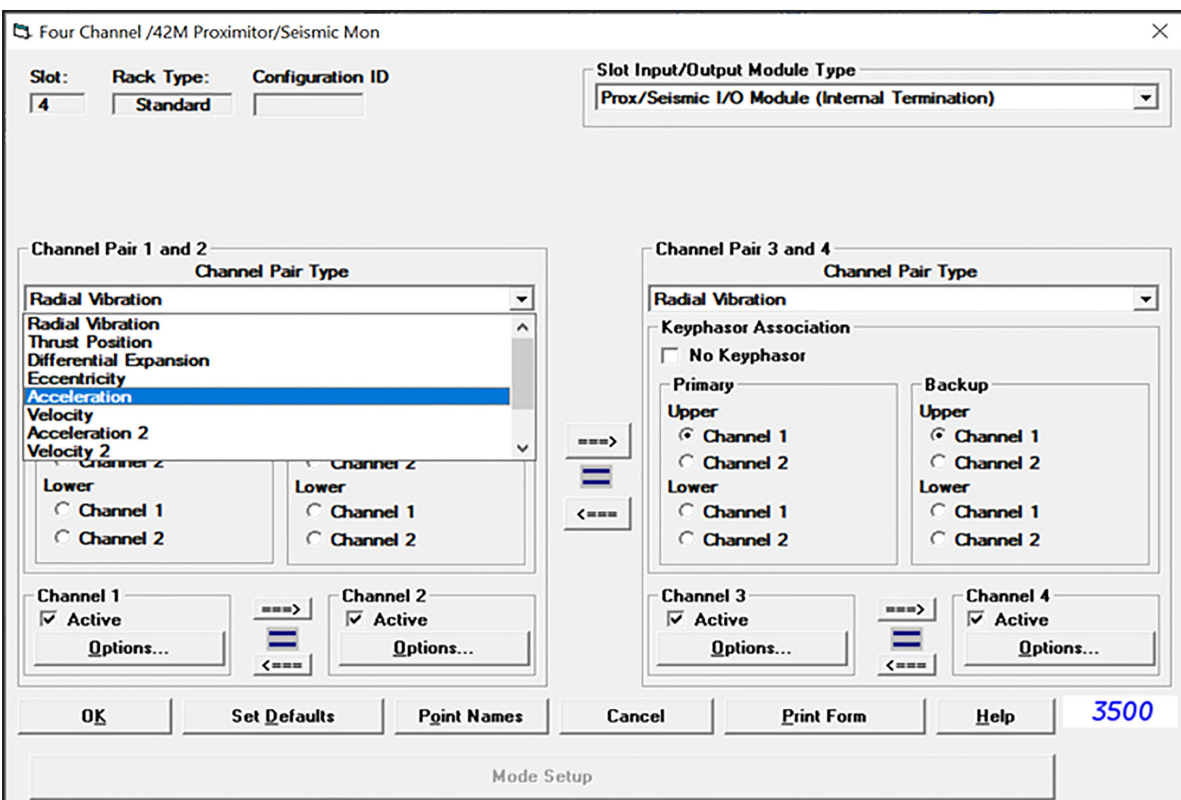
Place arrow over 3500/42M module, right-click on Monitors > 42/42M Proximator/Seismic Monitor > 3500/42M



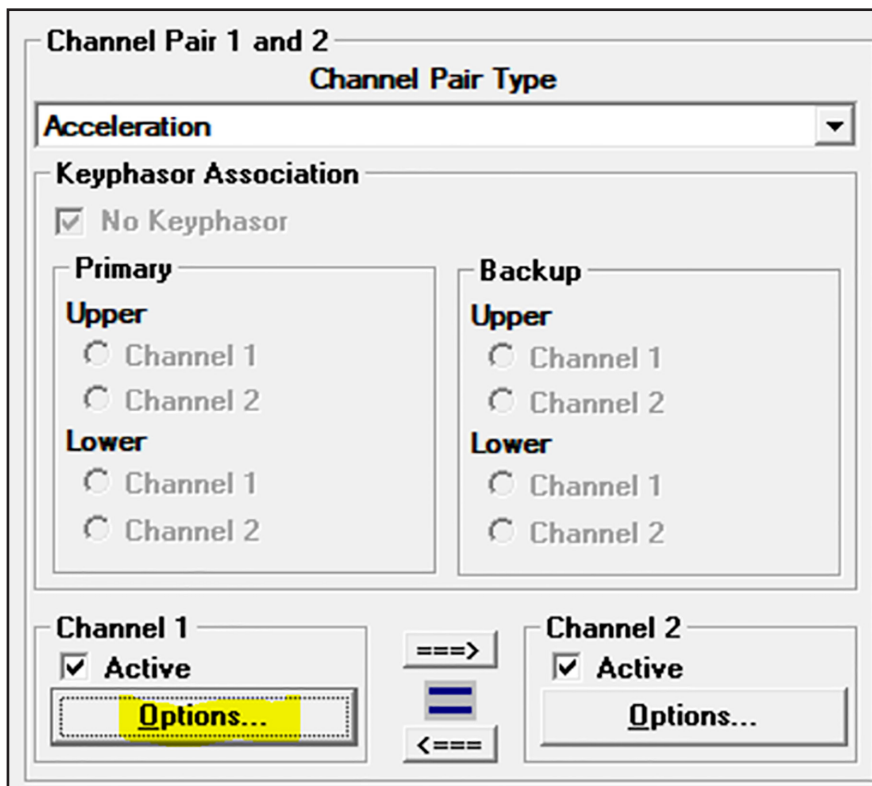
Make sure both channels are set-up as Active



Click drop down box for Channel Pair Type and select Acceleration. Channels come in pairs: 1 & 2 and 3 & 4 which mean if Channel 1 is set-up as acceleration, then Channel 2 must have acceleration inputs as well.



Click on options for Channel 1



Click on drop down box for Transducer Selection and Select Nonstandard

Acceleration -

Channel: 1 (Active) Slot: 4 Rack Type: Standard

Channel Frequency Support: 3 - 30,000 Hz

Enable

Full-scale Range: Direct 0-2 g pk Clamp Value: 0.00

Recorder Output: None Two mA Clamp

Corner Frequencies

High-pass Filter: None 3 - 2,000 Hz

Low-pass Filter: None 20 - 8,000 Hz

Delay

Alert: 3 1 - 60 s Danger: 1.0 100 ms 1.0 - 60.0 s

Trip Multiply: 1.00 1.00 to 3.00 (steps of 0.25)

Transducer Selection

Type: 23733-03 Std Acceleration

Alarm

Alert: Nonlatching

Danger

Alert: Latching Nonlatching

OK Mode

Alert: Nonlatching

Timed OK Channel Defeat: Enabled Disabled

Buttons: OK, Set Defaults, Cancel, CP Mod, Print Form, Help, 3500

Select Scale Factor 100 mV/g.

Nonstandard Transducer

Rack File: (None) Channel: 1 Slot: 4

Scale Factor

100 mV/g

5.0 to 115.0 mV/m/s^2

Adjust...

OK Limits

Upper: -15.05 Volts (0.00 to -23.00)

Lower: -2.75 Volts (0.00 to -23.00)

Buttons: Set Defaults, Print Form, OK, Cancel, Help, 3500

Make selection for Full-scale Range (e.g. select 0-10g's pk, 0-1 in/s pk, etc.).

Acceleration -

Channel: (Active) Slot: Rack Type:

Channel Frequency Support

Enable

Direct Full-scale Range Clamp Value

Integrate

Recorder Output Two mA Clamp

Corner Frequencies

High-pass Filter 3 - 2,000 Hz

Low-pass Filter 40 - 8,000 Hz

Delay

Alert 1 - 60 s

Danger 100 ms 1.0 - 60.0 s

Trip Multiply 1.00 to 3.00 (steps of 0.25)

Transducer Selection

Type

I/O Module Attached - Jumper Position:

Alarm Mode

Alert

Latching Nonlatching

Danger

Latching Nonlatching

Barriers

None Internal

MTL 796(-) Zener Ext.

Galvanic Isolator

OK Mode

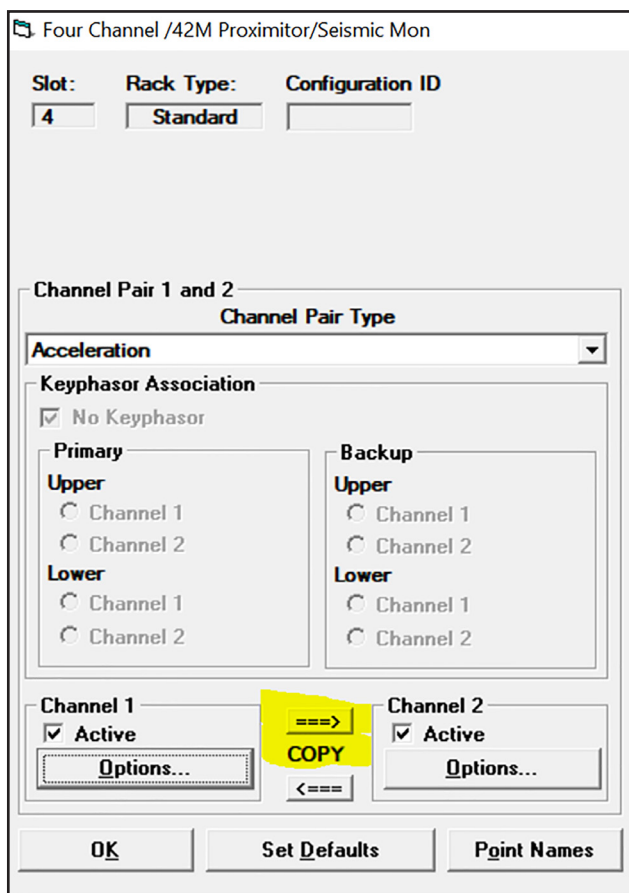
Latching Nonlatching

Timed OK Channel Defeat

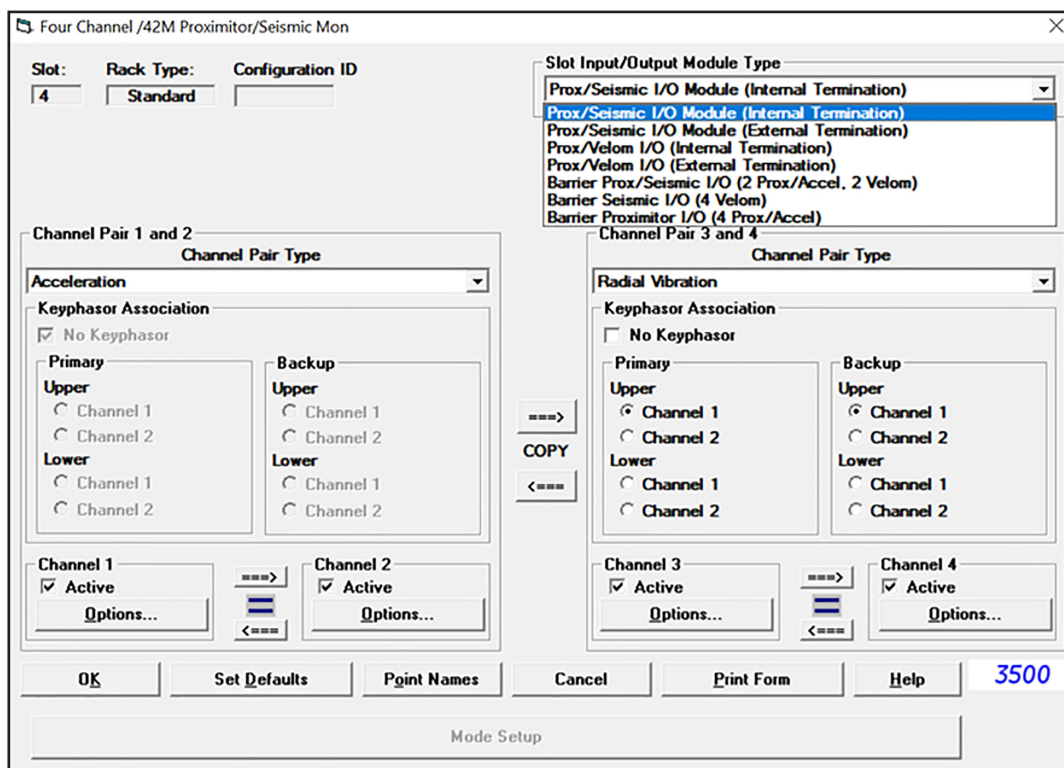
Enabled Disabled

3500

If more than one input, then select Copy. This will duplicate Channel 1 set-up into Channel 2. If not duplicating, then set up Channel 2 to required configuration. Note: Both Channel 1 and Channel 2 must be Acceleration.



From the Options screens, Slot Input/Output Module Type, use the drop down box and select Prox/Seismic I/O Module (Internal Termination). This procedure assumes you are connecting the accelerometer directly to the rack, if not use External Termination.



From the Transducer Selection box, Type “Nonstandard” select Customize. This will present the Nonstandard Transducer Jumper Selection box.

Slot: 4 Rack Type: Standard

Trip Multiply 1.00 1.00 to 3.00 (steps of 0.25)

Transducer Selection

Type Nonstandard Customize...

I/O Module Attached - Jumper Position:
N/A

Alarm Mode

Alert
 Latching
 Nonlatching

Danger
 Latching
 Nonlatching

Barriers

None Internal
 MTL 796(-) Zener Ext.
 Galvanic Isolator

OK Mode

Latching
 Nonlatching

Timed OK Channel Defeat

Enabled Disabled

CP Mod Print Form Help 3500

From the Nonstandard Transducer Jumper Selection box, select Prox/Accel, then click OK

Nonstandard Transducer Jumper Selection: SLOT 4

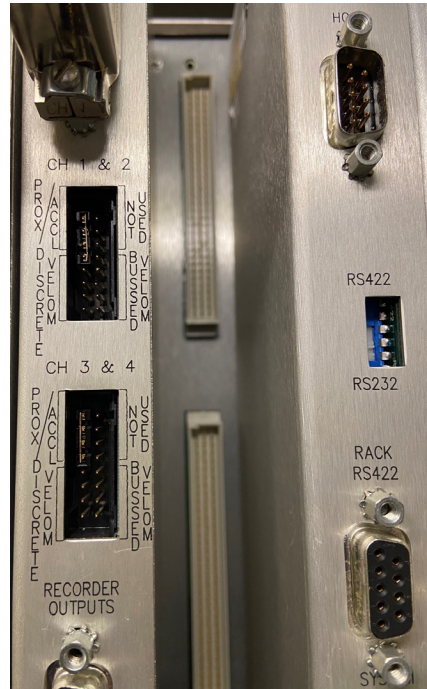
Select Jumper Position

Prox/Accel
 Velomitor
 Seismic without Barriers
 Seismic with Barriers

Please indicate where the Jumper will be positioned on the I/O module for the Nonstandard transducers on Channel Pair 1 and 2

OK

Make sure jumpers are applied to the Prox/Seismic I/O module for the Prox/Accel jumpers for the associated 42M you are configuring.



Use only PWR/B and SIG/A for the wired connection for the 2-wire accelerometer.

