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Metrix SV6300 (Two-Wire) Velocity Sensor Connecting to 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 SV6300 2-wire Velocity Sensor (Note: The SV6300 is not polarity sensitive).

2.0 REFERENCES

- SV6300 Datasheet-1058371
- SV6300 Manual-1058404
- 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.
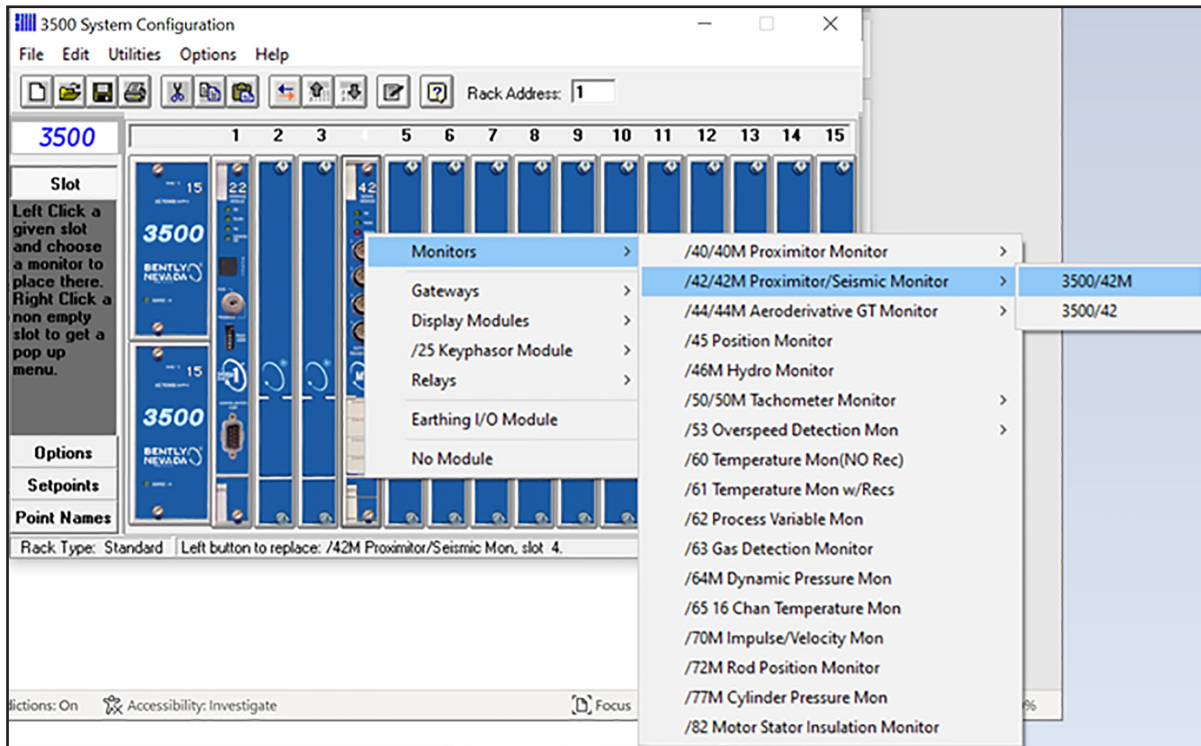
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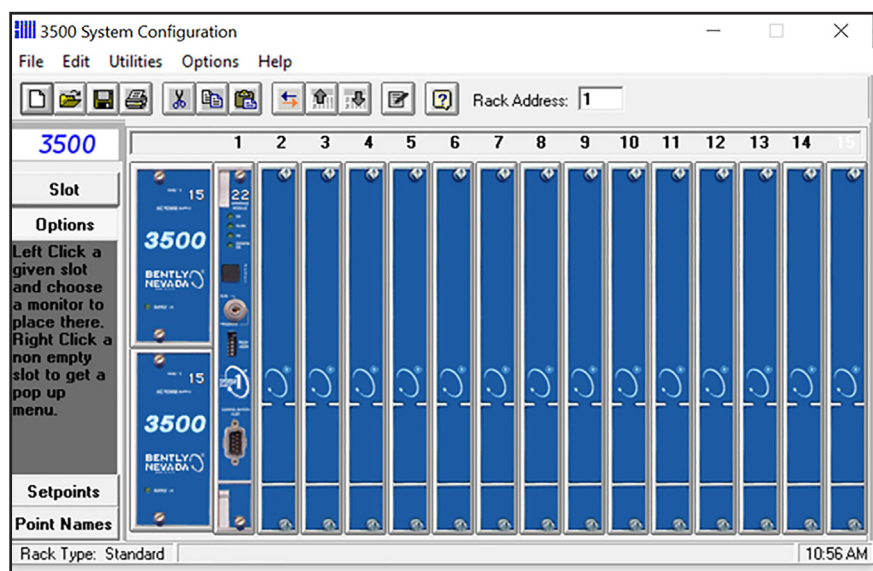
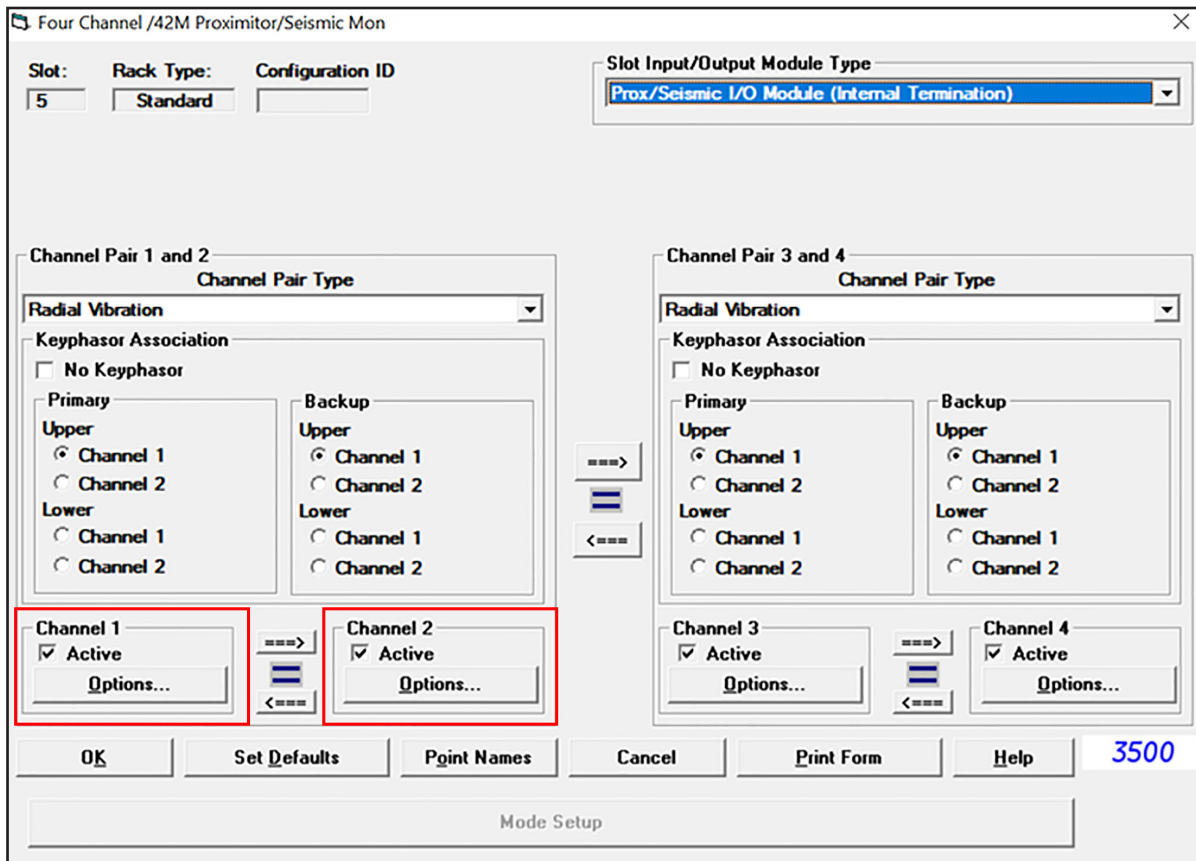From 3500 configuration software, click File > Connect > Direct.
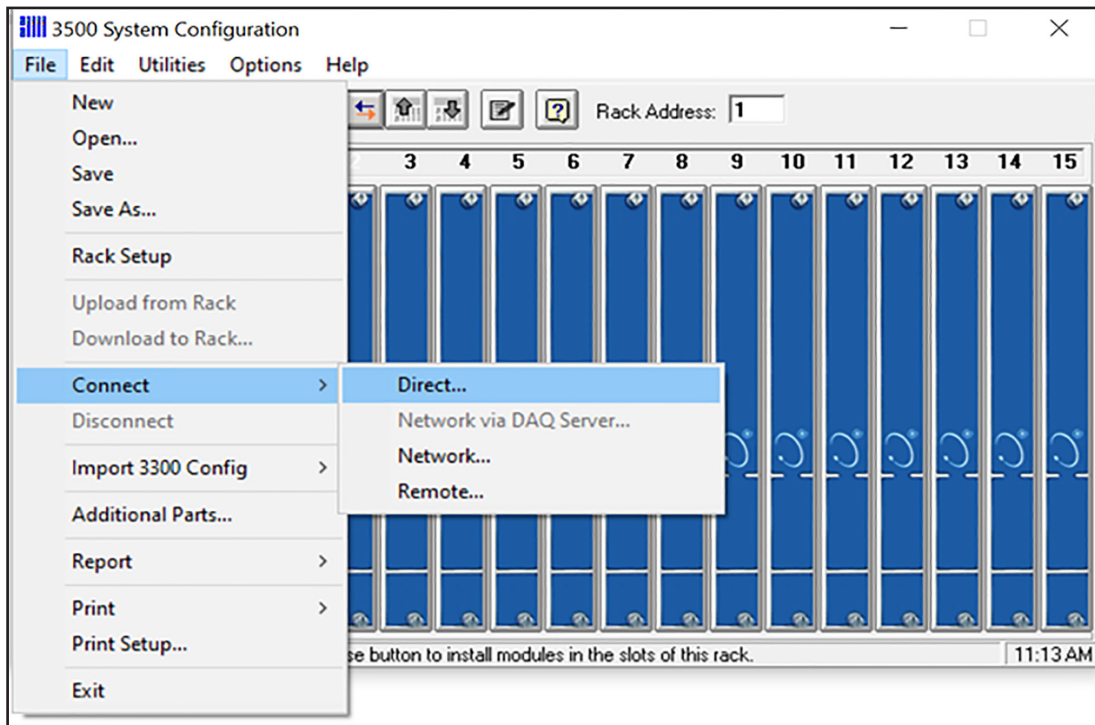
5. Verify Rack Address and center Connect Password

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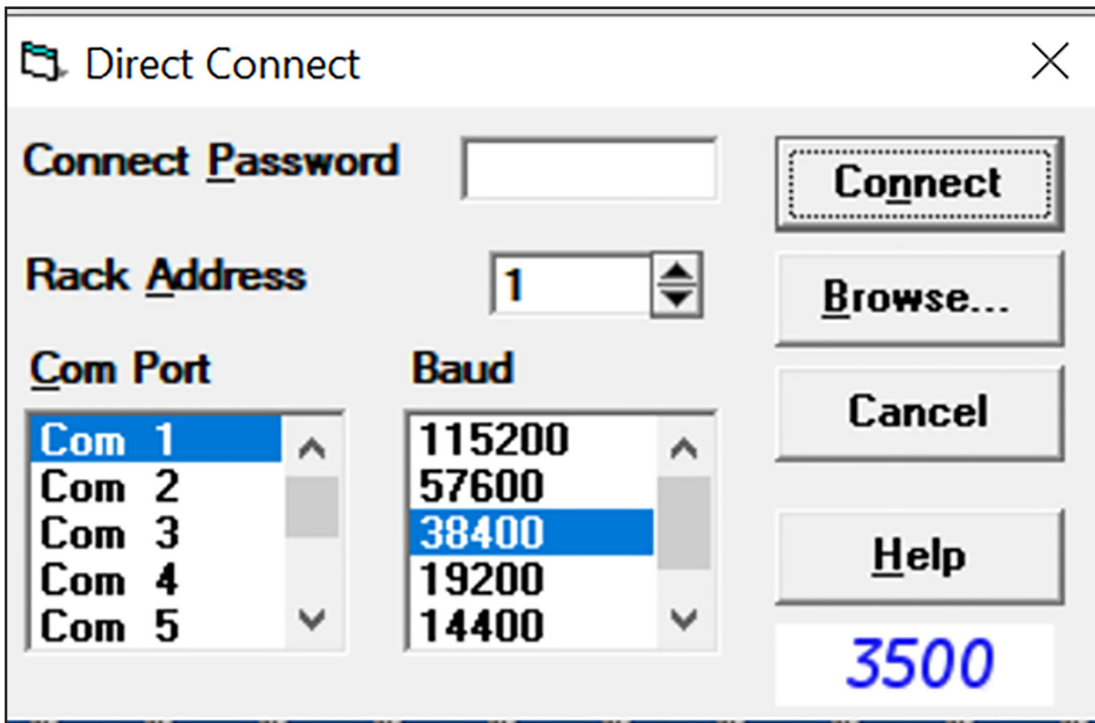
Place arrow over 3500/42M module, right-click on Monitors > 42/42M Proximitor/Seismic Monitor > 3500/42M

Make sure both chanels are set-up as Active

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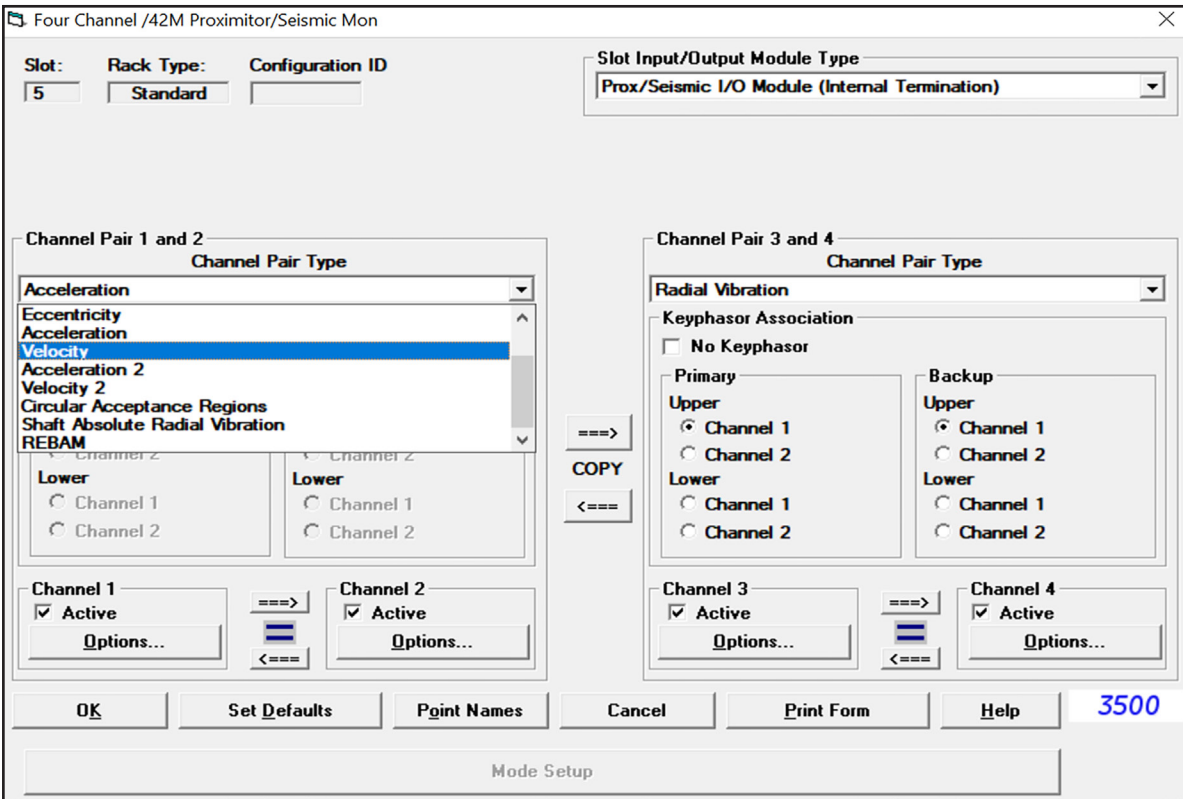
Click on options for Channel 1

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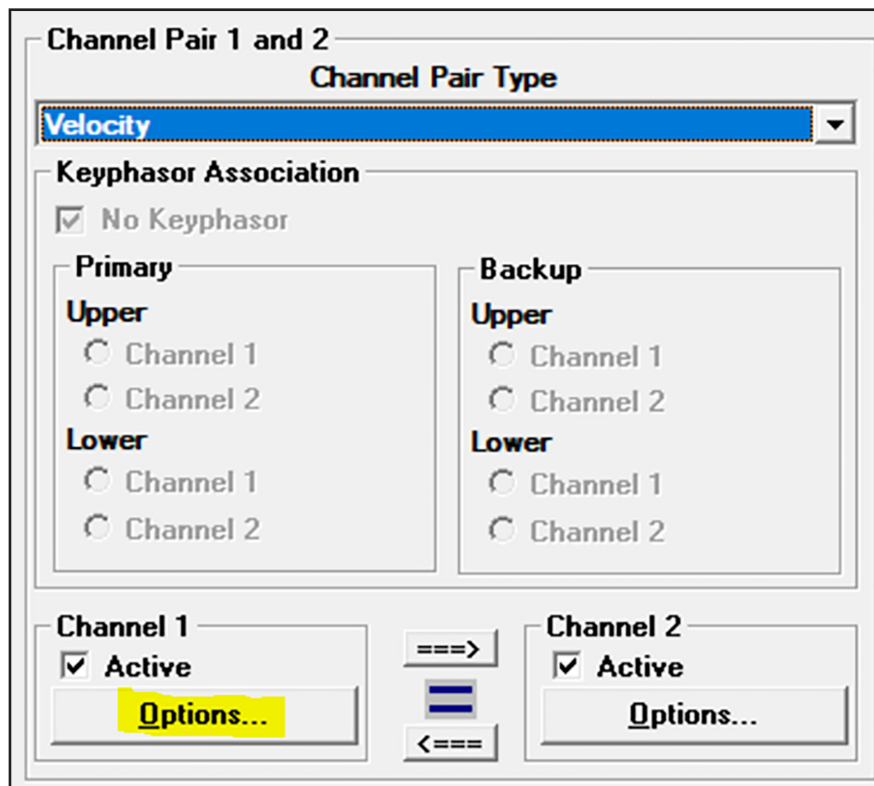
Click on drop down box for Transducer Selection and Select Nonstandard

Velocity - ✕

| Channel: 1 (Active) | Slot: 5 | Rack Type: Standard |

Channel Frequency Support   3 – 5.500 Hz

Enable

| Full-scale Range | Clamp Value |
| Direct 0-0.5 in/s pk ▼ | 0.000 ⇕ |

☐ Integrate

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

Transducer Selection

Recorder Out
None ▼ ☐ Two mA Clamp

Type Velomitor ▼ Customize...

9200 2-wire Seismoprobe
47633 2-wire Seismoprobe
86205 2-wire Seismoprobe
Nonstandard 2-wire Seismoprobe
Velomitor
Nonstandard

Corner Frequencies

☐ High-pass Filter   None ▼
3 – 400 Hz

☐ Low-pass Filter   None ▼
40 – 5.500 Hz

Alarm   ○ Internal

Alert   ○ MTL 787(-) Zener Ext.

⦿ Latching
○ Nonlatching

OK Mode
○ Latching
⦿ Nonlatching

Delay

Alert	Danger
3 ⇕	1.0 ⇕ ☐ 100 ms
1 – 60 s	1.0 – 60.0 s

Danger
⦿ Latching
○ Nonlatching

Timed OK Channel Defeat
⦿ Enabled ○ Disabled

| OK | Set Defaults | Cancel | CP Mod | Print Form | Help | 3500 |

Select Scale Factor 100 mV/ips (inches per second or millimeters per second).

Nonstandard Transducer ✕

| (None) | 1 | 5 |
| Rack File | Channel | Slot |

Scale Factor

100.0 ⇕ ⦿ mV / in/s   Adjust...
90.0 to 575.0 ○ mV / mm/s

OK Limits

Upper	Lower
-17.95 ⇕	<	-2.05 ⇕	Volts
0.00 to -23.00	0.00 to -23.00

| Set Defaults | Print Form |

| OK | Cancel | Help | 3500

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Make selection for Full-scale Range (e.g. select 0-1 in/s pk, 0-25 mm/s, etc.).

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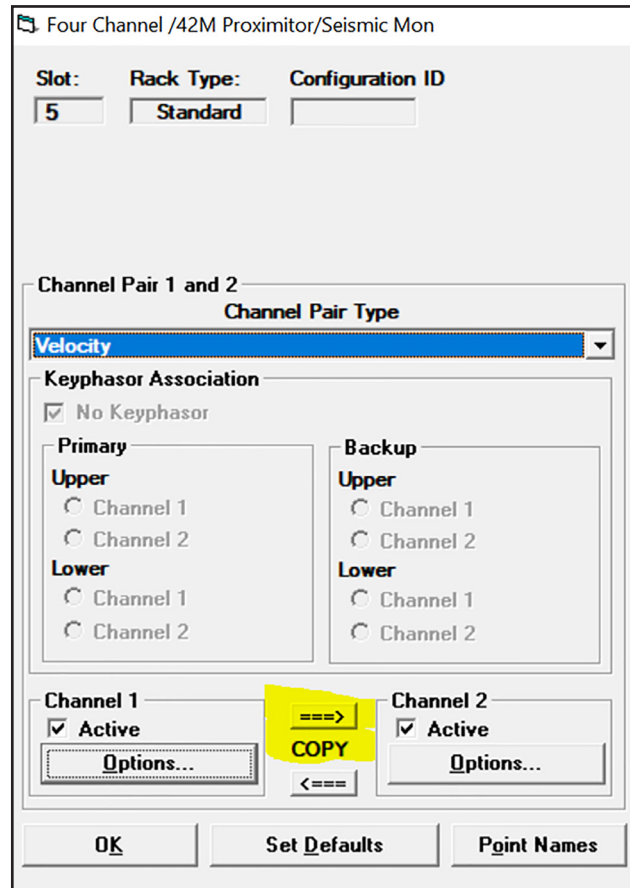
From the Options screens, Slot Input/Output Module Type, use the drop down box and select Prox/Seismic I/O Module (Internal Termination). This procedure assumes you are connecting the velocity sensor directly to the rack, if not use External Termination.

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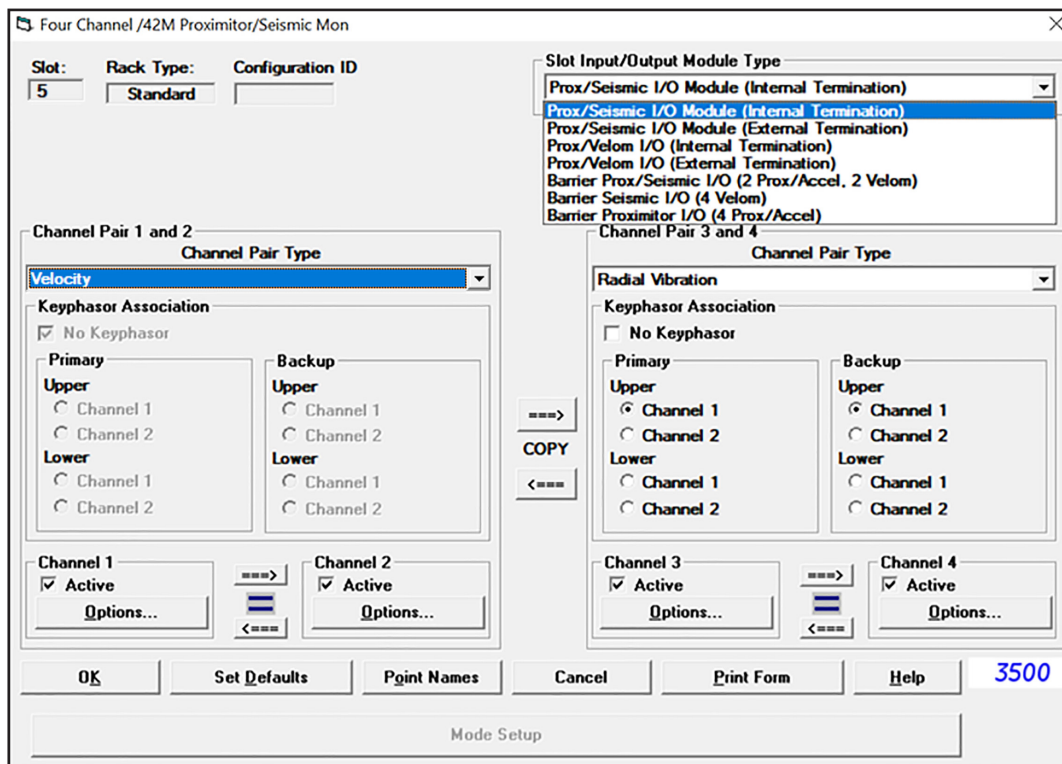
From the Transducer Selection box, Type "Nonstandard" select Customize. This will present the Nonstandard Transducer Jumper Selection box.

From the Nonstandard Transducer Jumper Selection box, select Velomitor, then click OK

Make sure jumpers are applied to the Prox/Seismic I/O module for the Velomitor jumpers for the associated 42M you are configuring.
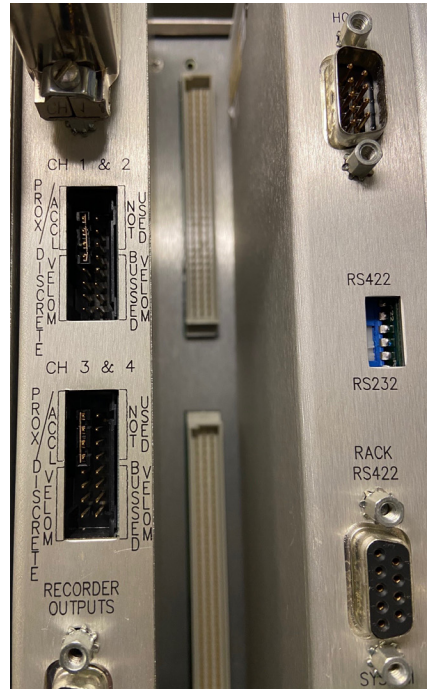
Use only PWR/B and SIG/A for the wired connection for the 2-wire velocity sensor.

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