



Metrix SV6300 (Two-Wire) Velocity Sensor Connecting to BN 3500 Rack

Installation Manual

Section	Page
1.0 PURPOSE	2
2.0 REFERENCES	2
3.0 PROCEDURE	2

1.0 PURPOSE

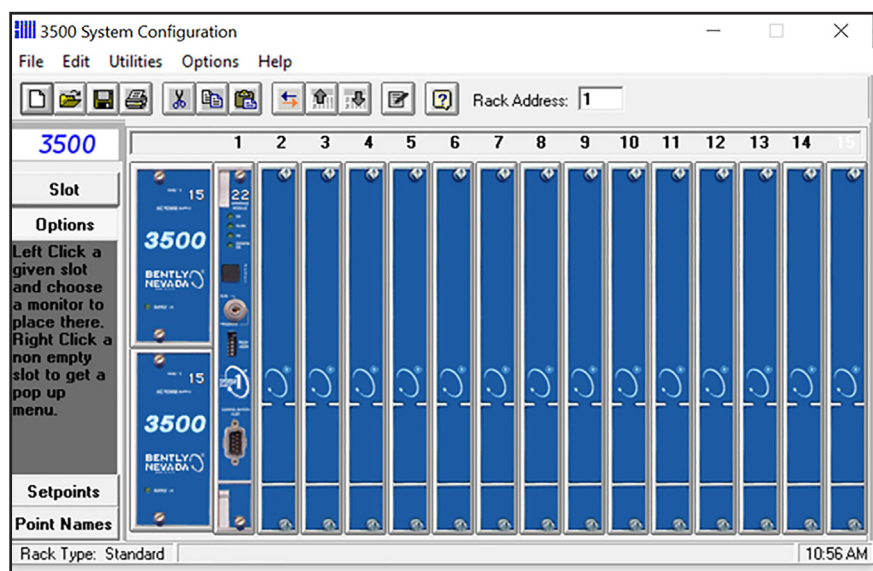
The purpose of this procedure is to configure the BN 3500 rack to be compatible with a Metrix SV6300 2-wire Velocity Sensor (Note: The SV6300 is not polarity sensitive).

2.0 REFERENCES

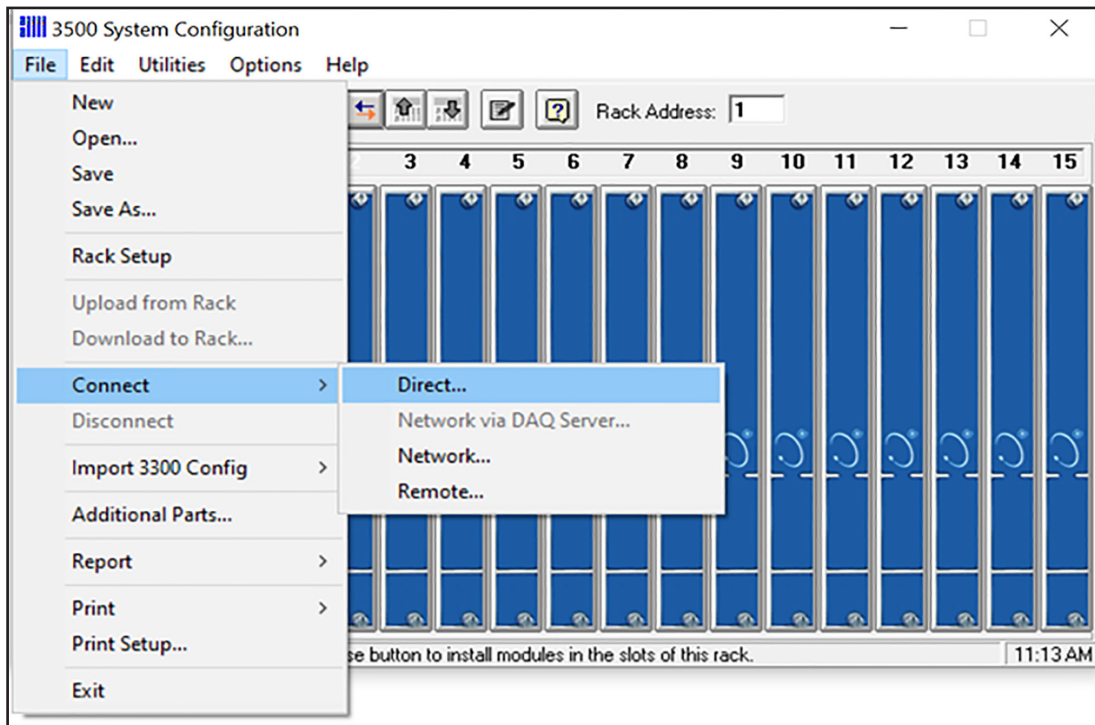
- SV6300 Datasheet-1058371
- SV6300 Manual-1058404
- BN 3500/42M Datasheet-143694
- BN 3500 Rack Configuration Manual

2.0 PROCEDURE

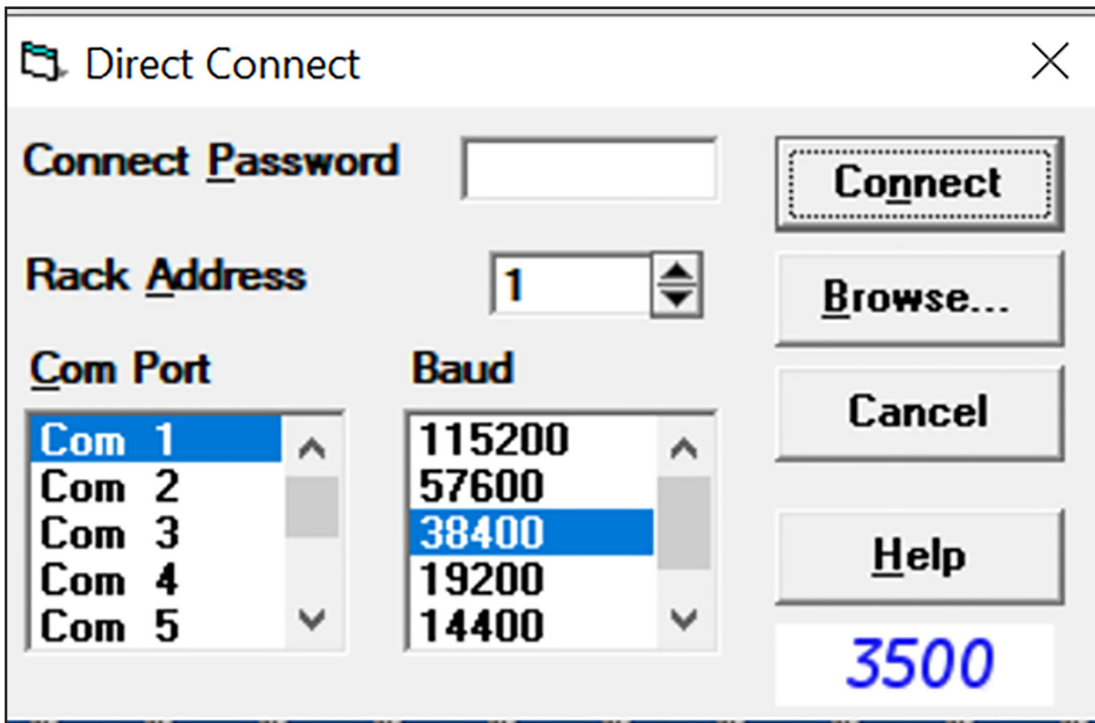
Prior to installation, one needs to have access to the BN software with password and username. This may require a purchase in order to make changes to the set-up and configuration. You will need an USB to RS232 communications cable. The USB plugs into the operator's laptop and the 9-way D-type connector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



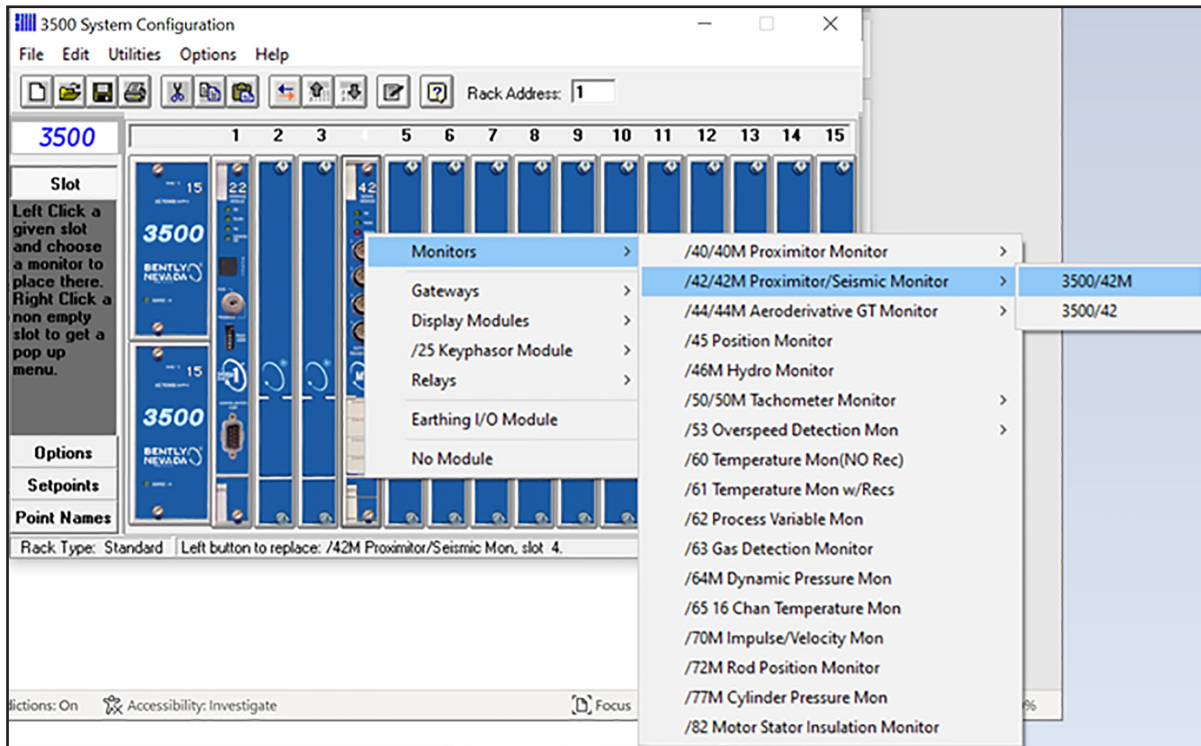
From 3500 configuration software, click File > Connect > Direct.



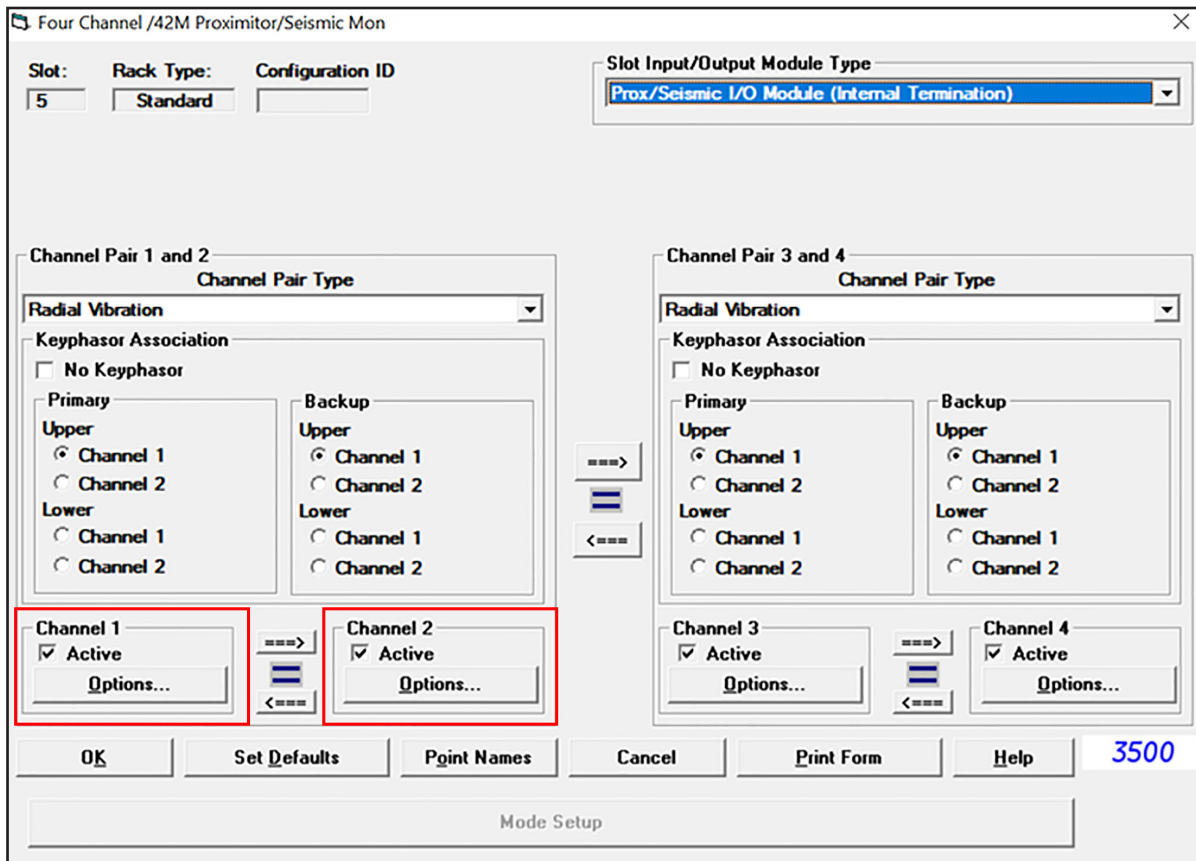
5. Verify Rack Address and center Connect Password



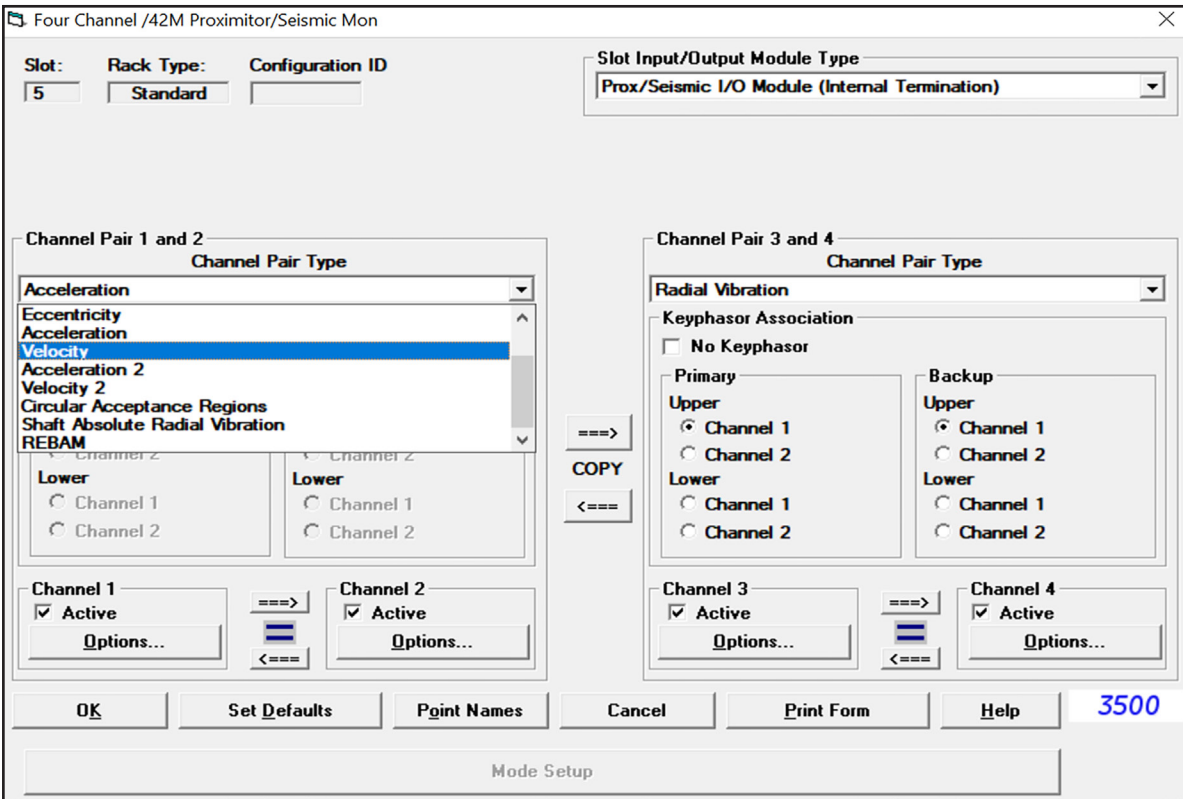
Place arrow over 3500/42M module, right-click on Monitors > 42/42M Proximator/Seismic Monitor > 3500/42M



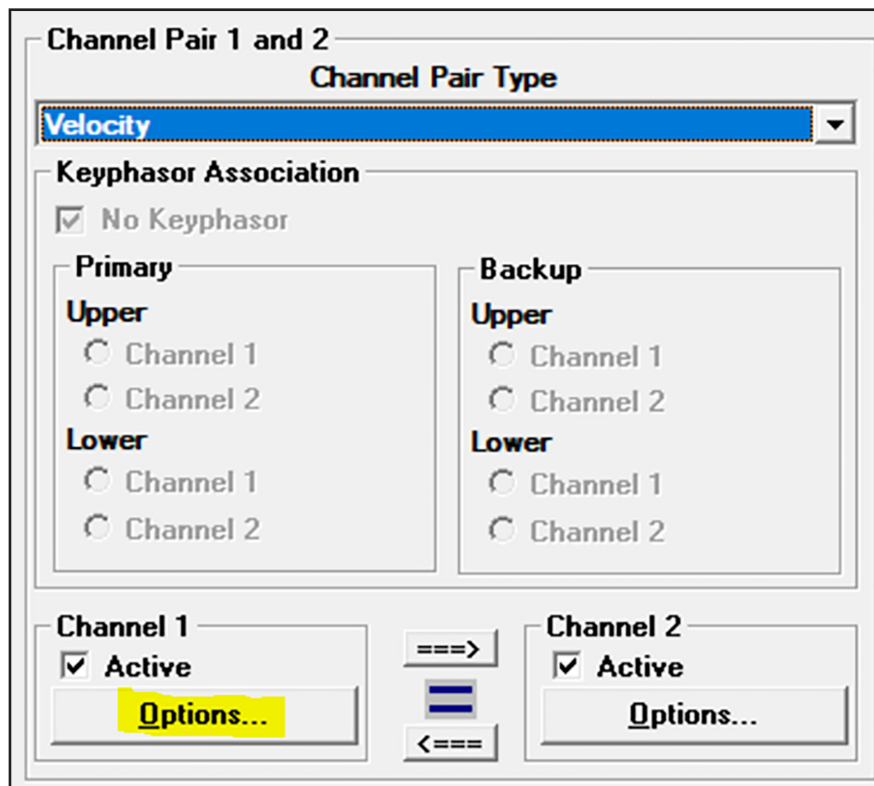
Make sure both channels are set-up as Active



Click drop down box for Channel Pair Type and select 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



Click on drop down box for Transducer Selection and Select Nonstandard

The screenshot shows the 'Velocity' configuration window. At the top, it displays 'Channel: 1 (Active)', 'Slot: 5', and 'Rack Type: Standard'. The 'Channel Frequency Support' is set to '3 - 5,500 Hz'. Under the 'Enable' section, 'Full-scale Range' is '0-0.5 in/s pk' and 'Clamp Value' is '0.000'. The 'Recorder Out' is set to 'None'. The 'Corner Frequencies' section has 'High-pass Filter' set to 'None' (3 - 400 Hz) and 'Low-pass Filter' set to 'None' (40 - 5,500 Hz). The 'Delay' section has 'Alert' set to '3' (1 - 60 s) and 'Danger' set to '1.0' (1.0 - 60.0 s). The 'Transducer Selection' dropdown menu is open, showing options: 'Velomitor', '9200 2-wire Seismoprobe', '47633 2-wire Seismoprobe', '86205 2-wire Seismoprobe', 'Nonstandard 2-wire Seismoprobe', and 'Velomitor Nonstandard'. The 'Nonstandard' option is selected. Other settings include 'Trip Multiply' at '1.00', 'Alarm' set to 'Latching', and 'OK Mode' set to 'Nonlatching'. The window has buttons for 'OK', 'Set Defaults', 'Cancel', 'CP Mod', 'Print Form', 'Help', and a display showing '3500'.

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

The screenshot shows the 'Nonstandard Transducer' configuration window. It displays 'Rack File: (None)', 'Channel: 1', and 'Slot: 5'. The 'Scale Factor' is set to '100.0' (90.0 to 575.0) with the unit 'mV / in/s' selected. The 'OK Limits' section has 'Upper' set to '-17.95' (0.00 to -23.00) and 'Lower' set to '-2.05' (0.00 to -23.00) Volts. The window has buttons for 'Set Defaults', 'Print Form', 'OK', 'Cancel', 'Help', and a display showing '3500'.

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

Velocity -

Channel: (Active) Slot: Rack Type:

Channel Frequency Support

Enable

Direct Full-scale Range Clamp Value

Integrate

Recorder Out Two mA Clamp

Corner Frequencies

High-pass Filter 3 - 400 Hz

Low-pass Filter 40 - 5,500 Hz

Delay

Alert 1 - 60 s

Danger 1.0 - 60.0 s 100 ms

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 764(-) Zener Ext.

OK Mode

Latching

Nonlatching

Timed OK Channel Defeat

Enabled Disabled

Velocity -

Channel: (Active) Slot: Rack Type:

Channel Frequency Support

Enable

Direct Full-scale Range Clamp Value

Integrate

Recorder Out Two mA Clamp

Corner Frequencies

High-pass Filter 3 - 400 Hz

Low-pass Filter 40 - 5,500 Hz

Delay

Alert 1 - 60 s

Danger 1.0 - 60.0 s 100 ms

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 764(-) Zener Ext.

OK Mode

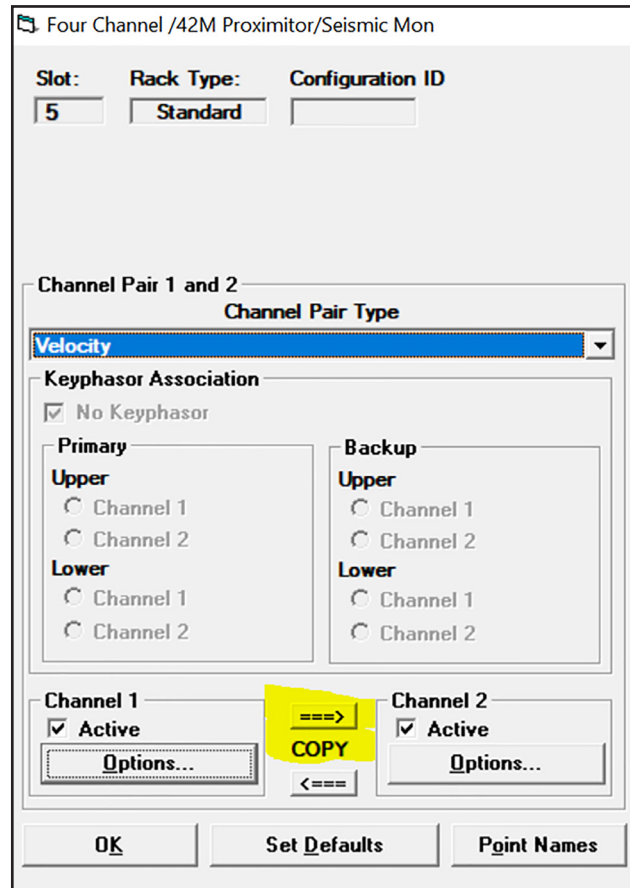
Latching

Nonlatching

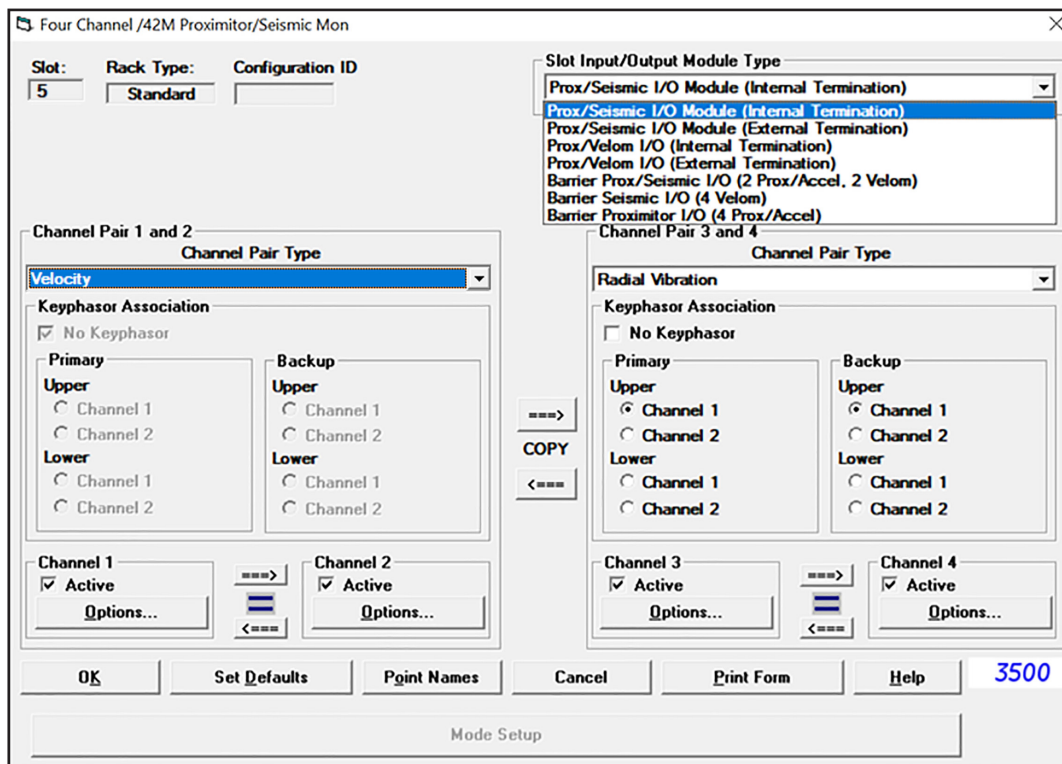
Timed OK Channel Defeat

Enabled Disabled

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.



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

Slot: 5 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 Velomitor, then click OK

Nonstandard Transducer Jumper Selection: SLOT 4

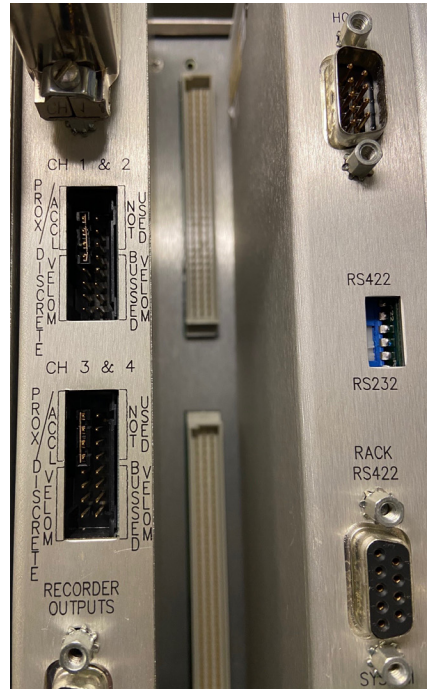
Select Jumper Position

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 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.

