

# Model VL Expandable

## VL Expandable Switchable Junction Boxes



### DESCRIPTION

The expandable junction box allows the customer to begin with a 12 channel junction box, and as needs arise, expand to a total of 48 channels in a single enclosure. Each card has:

- 12 inputs
- 2 part plug / socket type
- one selector knob
- a single BNC output connector for easy data collection
- cards can be purchased separately or as an assembly

Presently, the assembly is made up of one to four cards (VL12EX, VL24EX, VL36EX, VL48EX). The cards are encased in a Thermoplastic NEMA 4X enclosure. Thermoplastic is a material that withstands many types of industrial environments. The junction box can be ordered with three options. The first option is a BOV meter. Each card comes complete with a receptacle for a BOV meter. Allowing the customer to monitor the Bias output Voltage (BOV) of each sensor that is terminated to that card. Other options include cable grips or conduit fitting. The cable grip allows twelve individual cables to be routed into the box through each cable grip fitting. One cable grip or conduit fitting is required for each card in the junction box.

The VL Expandable junction boxes permit easy interface of multiple sensors to portable data collectors, FFT analyzers, recorders, oscilloscopes, and vibration meters. They allow sensor readings to be recorded from a safe, central location, solving the problem of taking measurements in noisy, inconvenient, or harsh machinery locations.

### FEATURES

- Expandable from 12 to 48 channels
- Low cost and durable construction
- For use with all 2-wire sensors
- Increases Safety and simplifies data collection in:
  - Confined or difficult locations
  - Dangerous height areas
  - Mechanical hazard areas
  - Guarded machinery
- Differential switching of both signal and common reduce problems with noise and ground loops
- Ferrite beads for RF rejection prevents EMI pick-up that can cause "ski slopes" in data
- All wiring is in the printed circuit board and shielded by two ground planes to minimize RF pickup from portable radios that can lead to "ski slopes" in data

### SPECIFICATIONS

#### Input

Connectors .....	2 part plug / socket type
Channels .....	12 channels per card

#### Output

Connector	
Local .....	single BNC per card
Gain .....	1

#### Models Available:

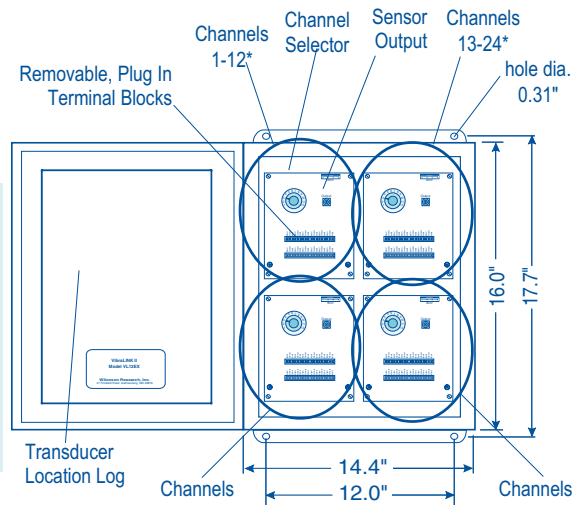
Model	Description
VL12	12 Channel Add-on Board Only
VL12EX	12 Channel Junction Box
VL24EX	24 Channel Junction Box
VL36EX	36 Channel Junction Box
VL48EX	48 Channel Junction Box

#### Available Enclosures:

Designator	Material	Rating	Dimensions
L	Thermoplastic	NEMA 4X	16x14x6
S	Stainless Steel	NEMA 4X	16x14x6

#### Other Options:

G	Cable grip installed with insert drilled for 12 cables, 0.190" dia
M	BOV meter installed
C	Conduit fitting



**\*NOTE:** Channels are subject to the size box you purchase.  
Example: VL24 will only have (2) 12 channel boards.

**ACCESSORIES SUPPLIED:** Installation Instructions; Transducer log.