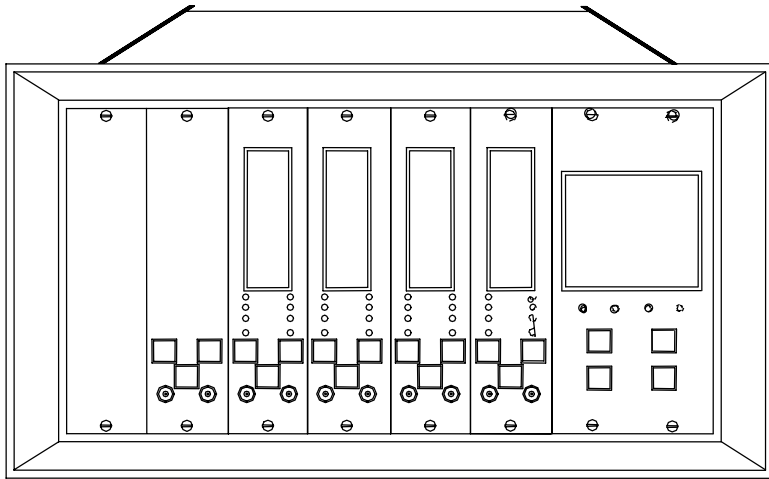


Operation Manual

Bently Nevada™ Asset Condition Monitoring



3300/16 Dual Vibration Monitor



imagination at work

Part Number 86830-01
Rev. P (08/07)

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Contact Information

The following ways of contacting Bently Nevada are provided for those times when you cannot contact your local representative:

Mailing Address	1631 Bently Parkway South Minden, Nevada USA 89423 USA
Telephone	1.775.782.3611 1.800.227.5514
Fax	1.775.215.2873
Internet	www.ge-energy.com/bently

Note:

In this document procedures are given only for channel A. Procedures for channel B are similar except for the obvious substitutions of corresponding switches, terminals, and indicators.

Additional Information

Notice:

This manual does not contain all the information required to operate and maintain the product. Refer to the following manuals for other required information.

3300 System Overview (Part Number 80171-01)

3300 System Installation Instructions (Part Number 80172-01)

3300 System Troubleshooting (Part Number 80173-01)

3300/12 AC Power Supply (Part Number 89602-01)

3300/14 DC Power Supply (Part Number 101256-01)

3300/03 System Monitor (Part Number 89604-01)

3300 Internal Barrier Manual (Part Number 88837-01)

RELATED PARTS

3300/16 Field Wiring Diagram Packet (Part Number 100311-01)

3300/16 Data Sheet (Part Number 141498-01)

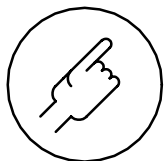
3300/16 Meter Scales (Part Number 84113-16)

Product Disposal Statement

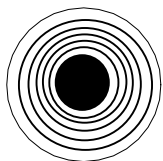
Customers and third parties, who are not member states of the European Union, who are in control of the product at the end of its life or at the end of its use, are solely responsible for the proper disposal of the product. No person, firm, corporation, association or agency that is in control of product shall dispose of it in a manner that is in violation of any applicable federal, state, local or international law. Bently Nevada LLC is not responsible for the disposal of the product at the end of its life or at the end of its use.

SYMBOLS

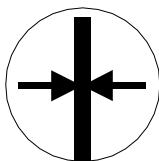
Special symbols are used in the manual to illustrate specifics in the step-by-step processes. For example:



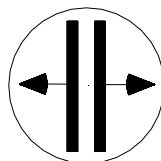
Press



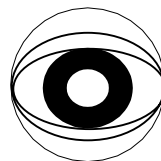
Flashing



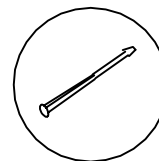
Connect



Disconnect



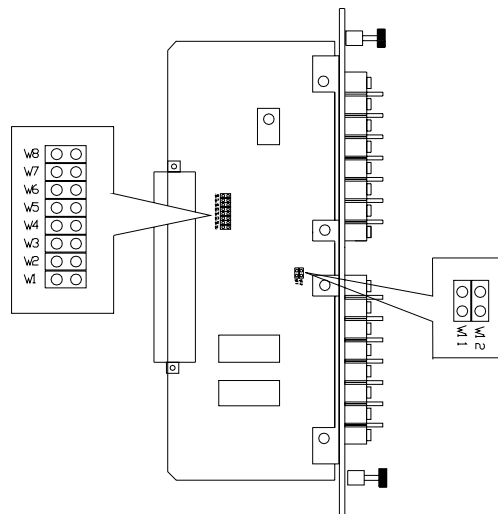
Observe



Screwdriver

9.3.2 Dual Relay Module Options

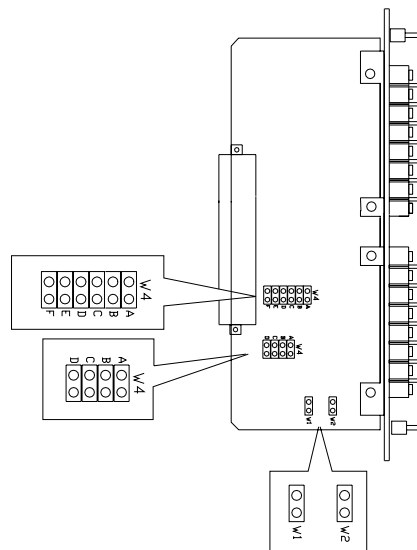
Alert Relay	Jumper	
	In	Out
Normally Energized	W3	W4, W11
Normally De-energized*	W4, W11	W3
Danger Relay	Jumper	
	In	Out
Normally Energized	W2	W1, W12
Normally De-energized*	W1, W12	W2
OR Bus**	Jumper	
	In	Out
No Options*	-----	W5 - W8
Alert & Danger Bus 1	W6, W8	W5, W7
Alert & Danger Bus 2	W5, W7	W6, W8



Note: For relay configuration of monitors with internal safety barriers, refer to the 3300 Internal Barrier Installation Manual or the 3300 System Installation Manual.

9.3.3 Quad Relay Module Options

Alert Relays	Jumper	
	In	Out
Normally Energized	W3A,W4C	W2,W3C W3B,W4D
Normally De-energized*	W2,W3C W3D,W4D	W1A, W4C
Danger Relays	Jumper	
	In	Out
Normally Energized	W4B,W4F	W1,W3B W4A,W4E
Normally De-energized*	W1,W3B W4A,W4E	W4B,W4F



NOTE: For Quad Relays, AND voting logic must be done externally by wiring the contacts in series.

* Shipped as options

** OR Bus option is not available with Quad relays. See 80172 System Installation Guide.

10. Monitor Options

PART NUMBER	FULL SCALE RANGE	TRANSDUCER INPUT	ALARM RELAY	AGENCY APPROVAL
3300/16 - AXX -		BXX -	CXX -	DXX
01 = 0 - 3 mil pp		01 = 3300 8mm or	00 = NONE	00 = NOT REQUIRED
02 = 0 - 5 mil pp		7200 5mm & 8mm or	01 = EPOXY SEALED	01 = CSA/NRTL
03 = 0 - 10 mil pp		3300XL 8mm	02 = HERMETICALLY	02 = BASEEFA
04 = 0 - 15 mil pp		Proximito [®] Sensor	SEALED	
05 = 0 - 20 mil pp		200 mV/mil	03 = QUAD RELAY	
11 = 0 - 100 µm pp		02 = 3000 Proximito [®]		
12 = 0 - 150 µm pp		Sensor		
13 = 0 - 200 µm pp		200 mV/mil		
14 = 0 - 400 µm pp		03 = 7200 11mm		
15 = 0 - 500 µm pp		Proximito [®] Sensor		
		100mV/mil		
		04 = 3300 HTPS 16mm		
		7200 14 mm		
		3300 XL 11 mm		
		Proximito [®] Sensor		
		100 mV/mil		
		05 = 3300 RAM		
		Proximito [®] Sensor		
		200 mV/mil		

BARRIERS USED

TRIP MULTIPLY

EXX - FXX

00 = NO	00 = NONE
01 =EXTERNAL *	01 = 2X TRIP MULTIPLY
02 = INTERNAL	02 = 3X TRIP MULTIPLY

* External barriers should only be used with 3300 8mm or 7200 5mm & 8 mm or 3300XL 8mm Proximito[®] Sensors and 3300 RAM Proximito[®] Sensors. * See Calibration Section **17.2** for more information.

NOTE: Verify that the transducer power supply level (-Vt) is appropriate for the transducer being used. Both the Power Supply and the System Monitor must be programmed to supply the correct voltage. The 3000 transducer requires a

supply voltage of -18 Vdc, while the 3300 and 7200 transducers require -24 Vdc. Power converter (part number 89634-01) can be used to convert -24 Vdc to -18 Vdc for use with the 3000 transducer.

IMPORTANT!

Due to continuing changes in technology, the Main PWA (printed wiring assembly) has been upgraded to improve functionality and manufacturability. The Main PWA in the Dual Vibration Monitor can be one of three versions depending on when you purchased your monitor.

The general functionality of all three PWAs is the same, except Error Code #9 has been updated to test additional circuitry on PWA 140720-01.

Since the different versions require that you use different jumpers to set programmable options, you need to use different Appendices of this manual to program your monitor. The following table shows how to identify your PWA and lists which Appendix to use to program your monitor.

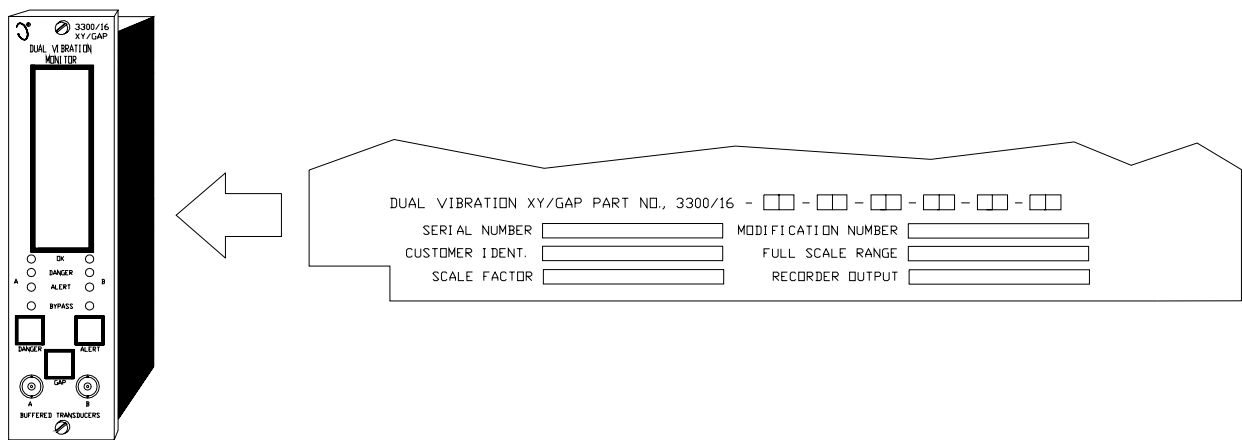
PWA Version	PWA Number (printed on the top side of the board)	Section that shows jumper locations and the jumper settings for each PWA
Original	86739-01	Appendix C
Second Generation	135305-01	Appendix B
Third Generation	140720-01	Appendix A

24. Recommended Spare Parts

QTY PER MONITOR	DESCRIPTION	REPLACEMENT PART NUMBER
1	FRONT PANEL ASSEMBLY	Order complete catalog number *
1	MONITOR CIRCUIT ASSEMBLY	
1	SPARE JUMPERS (100 PIECES)	88706-01
1	SIGNAL INPUT RELAY MODULE	
	NO RELAY	81544-01 *
	EPOXY SEALED RELAY	81545-01 *
	HERMETICALLY SEALED RELAY	81546-01 *
	QUAD EPOXY SEALED	84152-01 *
	NO RELAY WITH INTERNAL BARRIERS	88984 -03 *
	EPOXY SEALED RELAY WITH INTERNAL BARRIERS	88984-02 *
	HERMETICALLY SEALED RELAY WITH INTERNAL BARRIERS	88984-01 *

* To order replacement parts, specify the complete catalog number, 3300/16 - AXX - BXX - CXX - DXX - EXX - FXX, and the replacement part number.

If the monitor has been modified, specify the modification number on the parts



order. User must set programmable options (reference section **21, 22, or 23** of this manual). If in doubt about the part number, call your local sales representative before ordering.