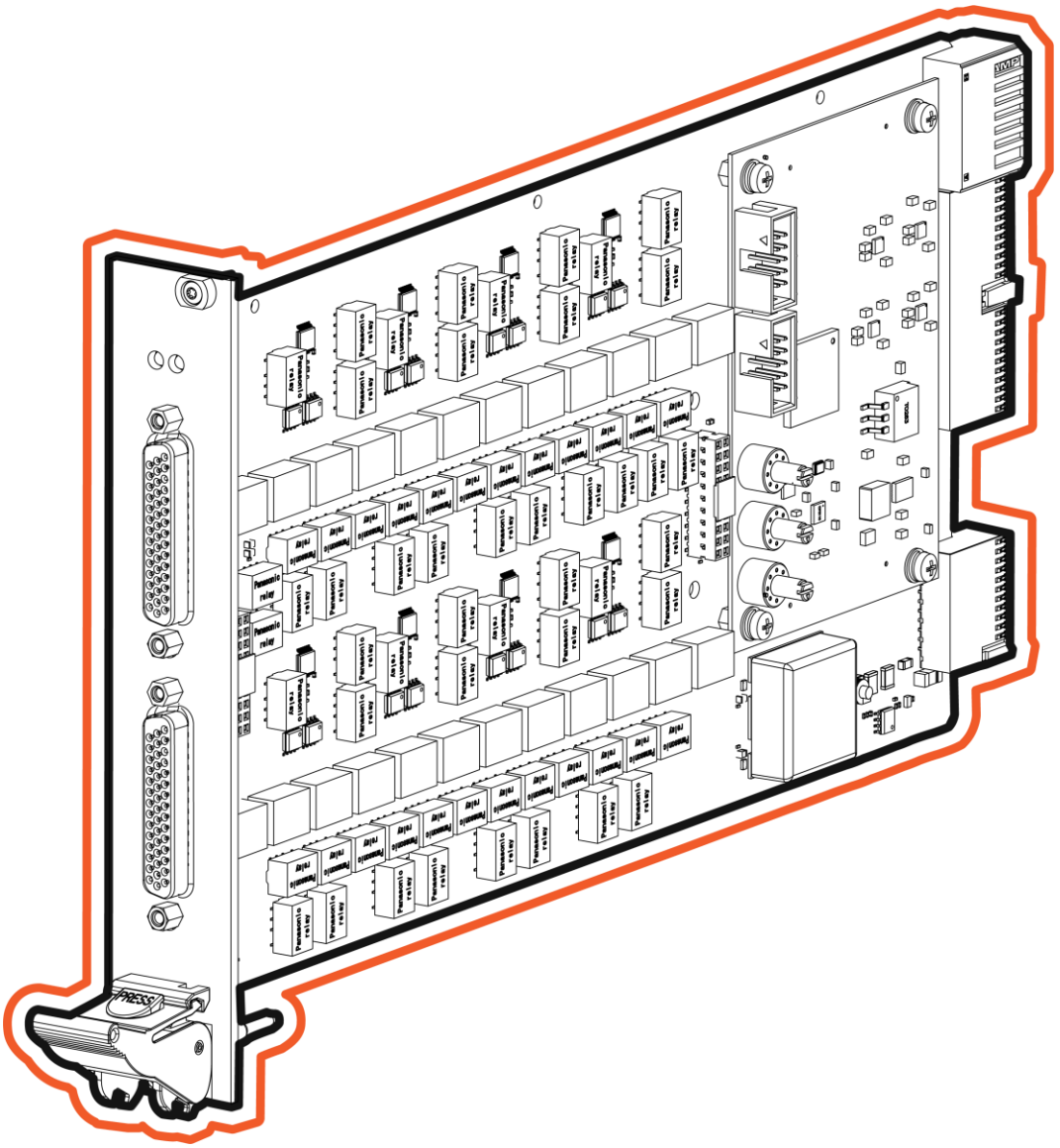
DE9200 DATASHEET

SLSC VDT SIMULATION MODULE



DEICO

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DESCRIPTION

DE9200 SLSC VDT Simulation Module is an 8 channel VDT simulation module which is used in SLSC chassis and connected to test equipment and DUTs. Signal outputs are relay controlled. Relays are controlled by the controller block. SLSC chassis is necessary for module usage.

The general features of DE9200 are listed below:

- ⇨ 8 independent channels
- ⇨ 5-wire & 6-wire VDT mode
- ⇨ Integrated self-test with 400Hz, 800Hz, 1kHz, 10kHz excitation signals and 10V control signals (Optional)
- ⇨ Relay controlled outputs
- ⇨ SLSC chassis compatible
- ⇨ Integrated instrumentation structure

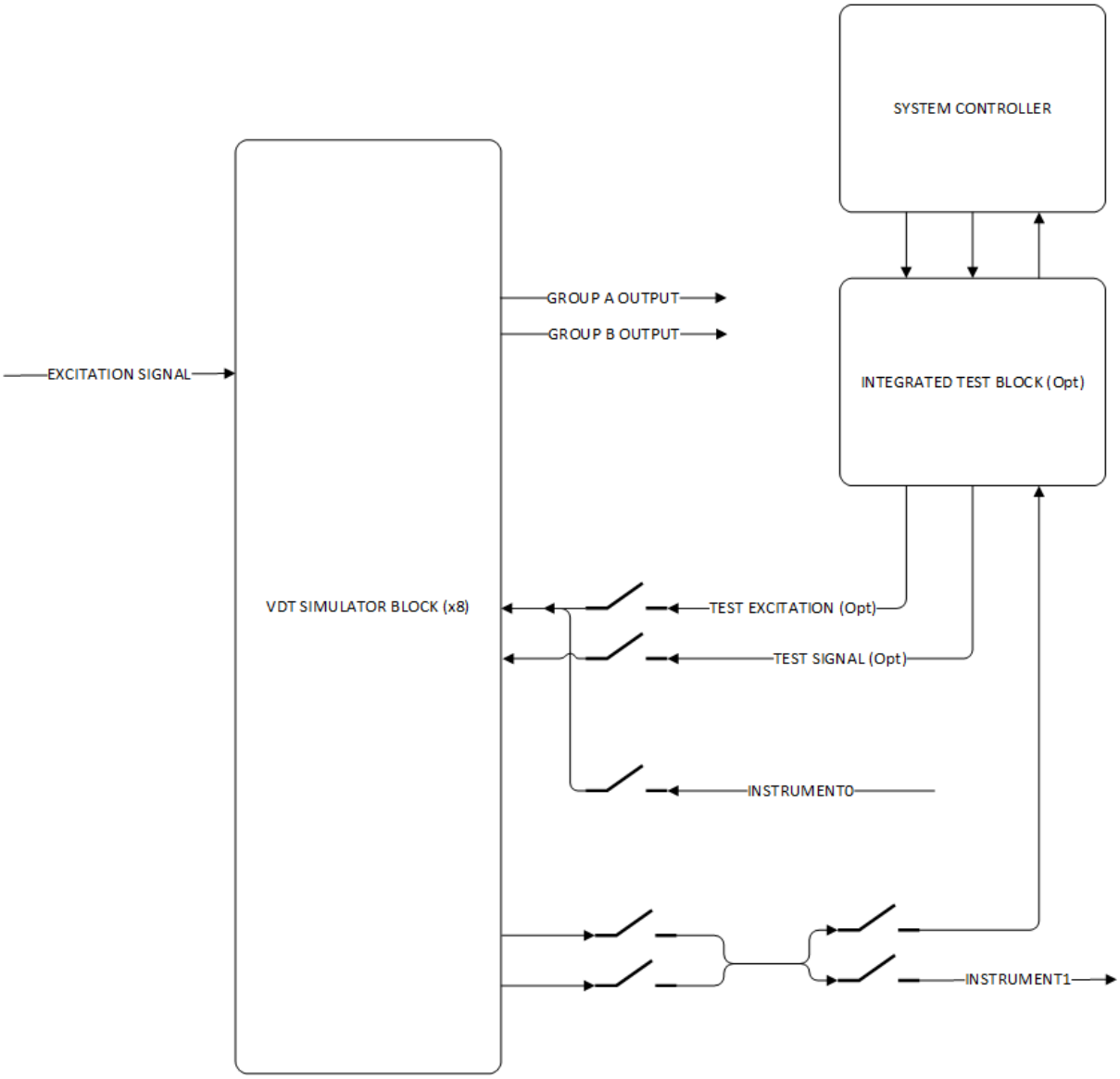
DE9200 is compatible with *IEC 60068-2-1/ IEC 60068-2-2/ IEC 60068-2-78/ IEC 60068-2-27/ IEC 60068-2-64/ EN 61326 (IEC 61326) / EN 55011 (CISPR 11) / AS/NZS CISPR 11/ FCC 47 CFR Part 15B/ ICES-001* standards.

Areas of application include:

- ⇨ HIL Testing
- ⇨ VDT Simulation

HARDWARE OVERVIEW

Circuitry



Hardware Specifications

Electrical

Specification	Minimum	Typical	Maximum	Notes
Input Voltage	10V	24V	50V	—
Input Current	—	—	2A	—
Channels	—	8	—	8 independent channels with dual operation (A and B group)
Accuracy	—	0.1%	—	—
Excitation Frequency	400Hz	—	10kHz	—
Update Rate	—	—	5ms	—
CNTL Voltage	-10V	—	10V	—
Excitation Voltage	—	±10V	—	Typically sine excitation
VDT Output Signal Voltage	—	±10V	—	—

Physical

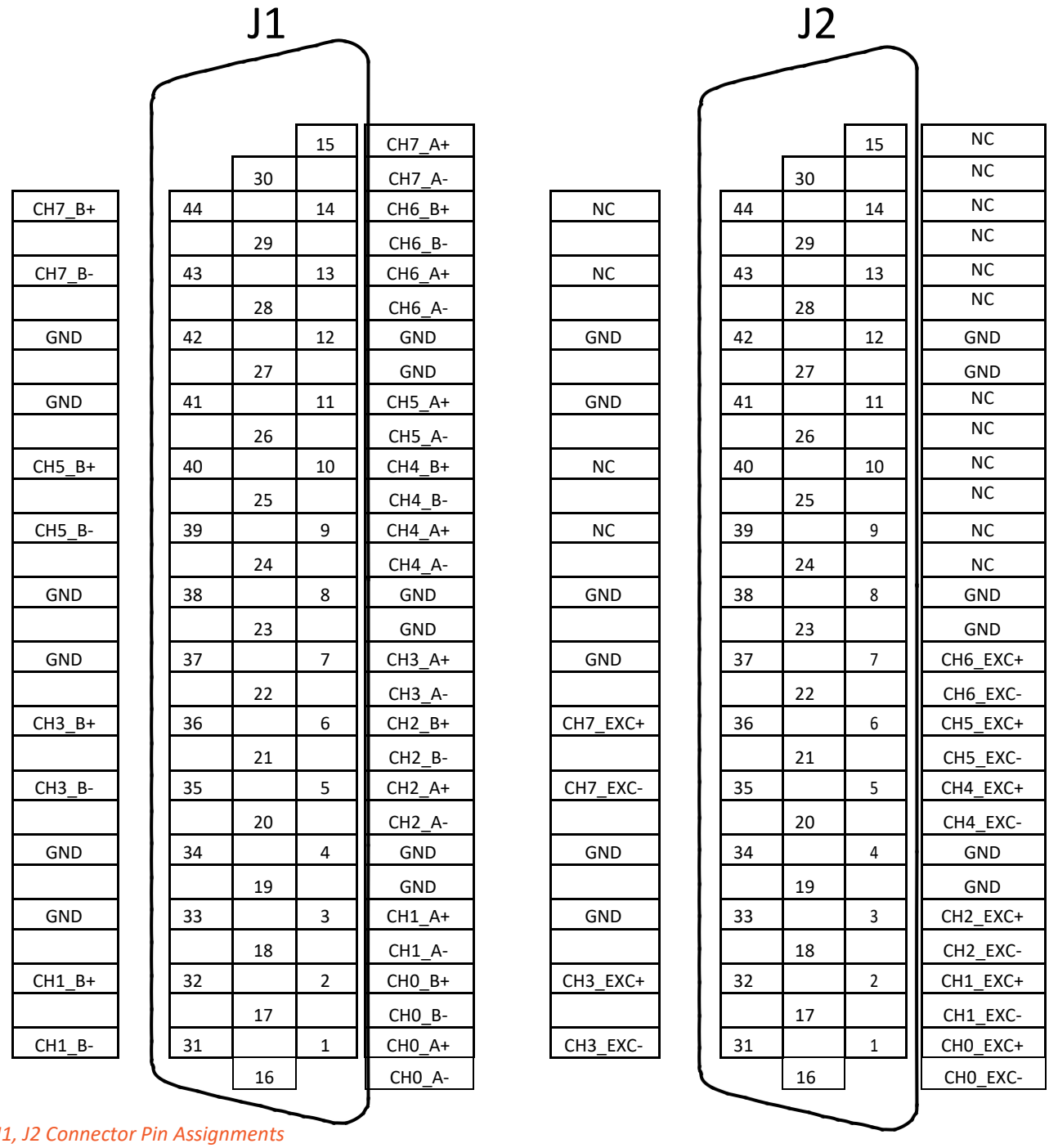
Specification	Typical	Notes
Dimensions	144.32mm x 30.48mm x 302mm (excluding ejector)	SLSC Standard Dimensions
Front panel connectors (x2)	HD44F	MPN: 2311770-1

Environmental

Specification	Condition	Value
Operating Humidity	Relative, non-condensing	10% - 90%
Storage Humidity	Relative, non-condensing	5% - 95%
Operating Temperature	Forced-air cooling from chassis	0°C - 40°C
Storage Temperature	Non-operational	-40°C - 85°C

SIGNAL CONNECTIONS

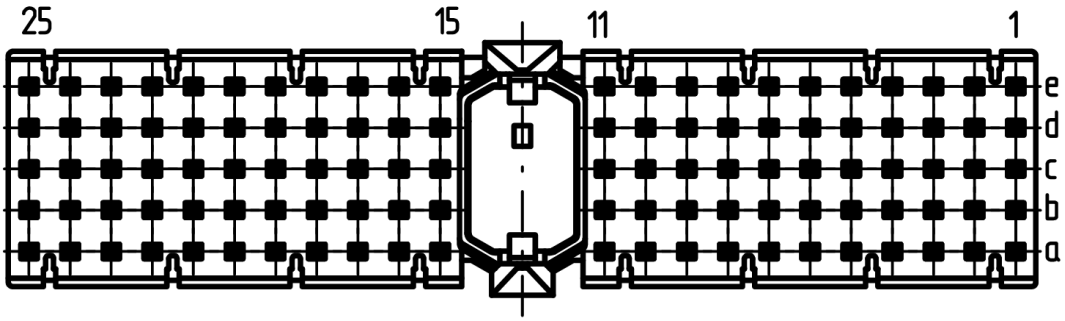
J1, J2 Pinout (Front)



J1, J2 Connector Pin Assignments

Signal	Description
CHx_A	VDT A Group Output Channel x
CHx_B	VDT B Group Output Channel x
CHx_EXC	VDT Excitation Input Channel x
GND	Ground connection
NC	No connection

XJ2 Connector Pinout (Rear)



XJ2 Connector Pin Assignments

Row	a	b	c	d	e
1	CH0_CTRL_A+	CH0_CTRL_A-	NC	CH0_CTRL_B+	CH0_CTRL_B-
2	CH1_CTRL_A+	CH1_CTRL_A-	NC	CH1_CTRL_B+	CH1_CTRL_B-
3	GND	GND	GND	GND	GND
4	CH2_CTRL_A+	CH2_CTRL_A-	NC	CH2_CTRL_B+	CH2_CTRL_B-
5	CH3_CTRL_A+	CH3_CTRL_A-	NC	CH3_CTRL_B+	CH3_CTRL_B-
6	GND	GND	GND	GND	GND
7	CH4_CTRL_A+	CH4_CTRL_A-	NC	CH4_CTRL_B+	CH4_CTRL_B-
8	CH5_CTRL_A+	CH5_CTRL_A-	NC	CH5_CTRL_B+	CH5_CTRL_B-
9	GND	GND	GND	GND	GND
10	CH6_CTRL_A+	CH6_CTRL_A-	NC	CH6_CTRL_B+	CH6_CTRL_B-
11	CH7_CTRL_A+	CH7_CTRL_A-	NC	CH7_CTRL_B+	CH7_CTRL_B-
15	NC	NC	NC	NC	NC
16	NC	NC	NC	NC	NC
17	GND	GND	GND	GND	GND
18	NC	NC	NC	NC	NC
19	NC	NC	NC	NC	NC
20	GND	GND	GND	GND	GND
21	NC	NC	NC	NC	NC
22	NC	NC	NC	NC	NC
23	GND	GND	GND	GND	GND
24	NC	NC	NC	NC	NC
25	NC	NC	NC	NC	NC

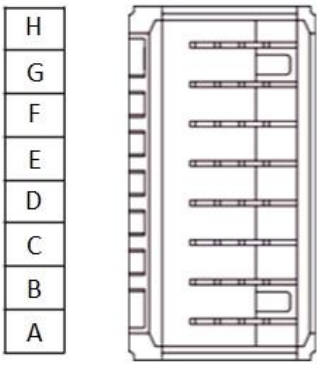
XJ2 Connector Signal Descriptions

Signal	Description
CHx_CTRL_A	VDT A Group Control Signal Input Channel x
CHx_CTRL_B	VDT B Group Control Signal Input Channel x
GND	Ground connection
NC	No connection

XJ3 Connector Pinout (Rear)

XJ3 Connector Pin Assignments

Pins	Signal
A	NC
B	NC
C	NC
D	NC
E	Instrument 1-
F	Instrument 1+
G	Instrument 0-
H	Instrument 0+
A	NC



CONFIGURATION

DE9200 control is based on NI-SLSC API. Before installing the device, NI-SLSC 19.5 or later must be installed. After installing software & the device, the device appears in the <LabVIEW Folder>\examples\ SLSC\Configuration.vi front panel under the related SLSC Chassis when the VI is executed. If the device does not appear in Configuration VI, use the following troubleshooting guidelines:

- ⇨ Verify that the related SLSC Chassis is present on NI MAX and Configuration VI.
- ⇨ Use 'Refresh' button on the Configuration VI for the SLSC Chassis.
- ⇨ Use 'Restart' button on the Configuration VI to restart the SLSC Chassis.
- ⇨ Power off and unplug the chassis, and install the device in a different slot.

PROGRAMMING THE DEVICE

Programming the Device in Software

To use DE9200 in software, DE9200 LabVIEW Driver must also be installed on the system. After the driver is installed, device control VIs can be found on Instrument I/O>Instr Drivers>DE9200 palette in LabVIEW. Driver also provides programming examples. For more information on the subject, refer to the User Manual of DE9200.

SAFETY GUIDELINES

Caution Do not operate the DE9200 in a manner not specified in this document. Product misuse can result in a hazard. You can compromise the safety protection built into the product if the product is damaged in any way. If the product is damaged, return it for repair.

COMPATIBILITY GUIDELINES

Electromagnetic Compatibility Guidelines

This product was tested and complies with the regulatory requirements and limits for electromagnetic compatibility (EMC). These requirements and limits provide reasonable protection against harmful interference when the product is operated in the intended operational electromagnetic environment.

This product is intended for use in industrial locations. However, harmful interference may occur in some installations, if the product is connected to a peripheral device or test object, or if the product is used in residential or commercial areas. To minimize interference with radio and television reception and prevent unacceptable performance degradation, install and use this product in strict accordance with the instructions specified in the product documentation.

Furthermore, any changes or modifications to the product not expressly approved by DEICO could void your authority to operate it under your local regulatory rules.

Caution To ensure the specified EMC performance, operate this product only with shielded cables and accessories.
Caution To ensure the specified EMC performance, the length of any cable attached to connectors J1 and J2 must not be longer than 3 m (10 ft.)

NOTES

Contact

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