

# **RACAL INSTRUMENTS**

## **1260-30**

### **SIGNAL / MULTIPLEXER**

**PUBLICATION NO. 980673-005**

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1. Product serial number
2. Product model number
3. Your company and contact information

You may contact your customer service advisor by:

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Telephone:	+1 800 722 3262	(USA)
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## **RETURN of PRODUCT**

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Authorization is required from EADS North America Defense Test and Services, Inc. before you send us your product for service or calibration. Call or contact the Customer Support Department at 1-800-722-3262 or 1-949-859-8999 or via fax at 1-949-859-7139. We can be reached at: [helpdesk@eads-nadefense.com](mailto:helpdesk@eads-nadefense.com).

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# FOR YOUR SAFETY

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Before undertaking any troubleshooting, maintenance or exploratory procedure, read carefully the **WARNINGS** and **CAUTION** notices.



This equipment contains voltage hazardous to human life and safety, and is capable of inflicting personal injury.



If this instrument is to be powered from the AC line (mains) through an autotransformer, ensure the common connector is connected to the neutral (earth pole) of the power supply.



Before operating the unit, ensure the conductor (green wire) is connected to the ground (earth) conductor of the power outlet. Do not use a two-conductor extension cord or a three-prong/two-prong adapter. This will defeat the protective feature of the third conductor in the power cord.



Maintenance and calibration procedures sometimes call for operation of the unit with power applied and protective covers removed. Read the procedures and heed warnings to avoid “live” circuit points.

Before operating this instrument:

1. Ensure the proper fuse is in place for the power source to operate.
2. Ensure all other devices connected to or in proximity to this instrument are properly grounded or connected to the protective third-wire earth ground.

If the instrument:

- fails to operate satisfactorily
- shows visible damage
- has been stored under unfavorable conditions
- has sustained stress

Do not operate until, performance is checked by qualified personnel.

# Racal Instruments

## EC Declaration of Conformity

We

Racal Instruments Inc.  
4 Goodyear Street  
Irvine, CA 92718

declare under sole responsibility that the

**1260-30A Signal Multiplexer, P/N 404767-001**  
**1260-30B Signal Multiplexer, P/N 404767-002**  
**1260-30C Signal Multiplexer, P/N 404767-003**  
**and 1260-30D Signal Multiplexer, P/N 404767-004**

conform to the following Product Specifications:

**Safety:** EN 61010-1

**EMC:** CISPR 11:1990/EN 55011 (1991): Group 1 Class A  
IEC 801-2:1991/EN 50082-1 (1992): 4 kV CD, 8 kV AD  
IEC 801-3:1984/EN 50082-1 (1992): 3 V/m, 27-500 MHz  
IEC 801-4:1988/EN 50082-1 (1992): 1 kV

**Supplementary Information:**

The above specifications are met when the product is installed in a Racal Instruments certified mainframe with faceplates installed over all unused slots, as applicable.

The product herewith complies with the requirements of the Low Voltage Directive 73/23/EEC and the EMC Directive 89/336/EEC.

Irvine, CA, January 24, 1996

  
Quality Manager

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## **NOTE FOR SYSTEMS WITH 1260-OPT 01T**

The "Module-Specific Syntax" section of this manual shows the command syntax for the 1260-01S Smart Card. If you are using the newer 1260-01T Smart Card, the commands will NOT work as shown.

Consult the 1260-01T Manual for a description of the commands which may be used with the 1260-01T Smart Card.

The channel numbers described in this manual are valid for the 1260-01T. The channel numbers continue to be used for the 1260-01T.

The syntax of the commands which use channel numbers has changed for those cards controlled by the 1260-01T.

The new syntax used to close a channel is:

```
CLOSE (@ <module address> ( <channel> ) )
```

For example, with for a relay module whose <module address> is set to 7, closing <channel> 0 is performed with the command:

```
CLOSE (@ 7 (0))
```

Using the older 1260-01S, the command would be (as shown in this manual):

```
CLOSE 7.0
```

Many other command syntax differences exist. Please consult chapter 2 of the 1260-01T manual for a description of the commands which are available for the 1260-01T.

### Control Information for the 1260-30A

The following information describes the control-register-to-relay-channel mapping for a 1260-30A Relay Module. This information may be used to control a 1260-30A when using a 1260-01T in the register-based mode of operation.

Each relay on this module is controlled by setting or clearing a single bit within a Control Register. Control Registers on the module operate 8 channels simultaneously. There are eight control bits per Control Register. Setting the bit to a 1 closes the relay; setting the bit to a 0 opens the relay.

The table below shows the mapping from logical channels to control bits. The logical channels are used when operating the relay module in message-based mode. The control bits within the Control Registers are used to operate the module in register-based mode.

Each Control Register is located 2 addresses from the previous Control Register. That is, each Control Register is located at an odd address. This is shown in Table 2-2 of the 1260-01T manual. Control Register 0 is located at the "Base A24 Address" for the module. Consult the "Register-Based Operation" Section of Chapter 2 of the 1260-01T manual for a description of calculating control register addresses:

Channel	Control Register	Control Bit
0	0	0
1	0	1
2	0	2
3	0	3
4	0	4
5	0	5
6	0	6
7	0	7
8	1	0
9	1	1
10	1	2
11	1	3
12	1	4
13	1	5
14	1	6
15	1	7
16	2	0
17	2	1
18	2	2
19	2	3
20	2	4
21	2	5
22	2	6
23	2	7
24	3	0
25	3	1
26	3	2
27	3	3
28	3	4
29	3	5
30	3	6
31	3	7
32	4	0
33	4	1
34	4	2
35	4	3
36	4	4
37	4	5
38	4	6
39	4	7



### Control Information for the 1260-30B

The following information describes the control-register-to-relay-channel mapping for a 1260-30B Relay Module. This information may be used to control a 1260-30B when using a 1260-01T in the register-based mode of operation.

Each relay on this module is controlled by setting or clearing a single bit within a Control Register. Control Registers on the module operate 8 channels simultaneously. There are eight control bits per Control Register. Setting the bit to a 1 closes the relay; setting the bit to a 0 opens the relay.

The table below shows the mapping from logical channels to control bits. The logical channels are used when operating the relay module in message-based mode. The control bits within the Control Registers are used to operate the module in register-based mode.

Each Control Register is located 2 addresses from the previous Control Register. That is, each Control Register is located at an odd address. This is shown in Table 2-2 of the 1260-01T manual. Control Register 0 is located at the “Base A24 Address” for the module. Consult the “Register-Based Operation” Section of Chapter 2 of the 1260-01T manual for a description of calculating control register addresses:

Channel	Control Register	Control Bit
0	0	0
1	0	1
2	0	2
3	0	3
4	0	4
5	0	5
6	0	6
7	0	7
8	1	0
9	1	1
10	1	2
11	1	3
12	1	4
13	1	5
14	1	6
15	1	7
16	2	0
17	2	1
18	2	2
19	2	3
100	2	4
101	2	5
102	2	6
103	2	7
104	3	0
105	3	1
106	3	2
107	3	3
108	3	4
109	3	5
110	3	6
111	3	7
112	4	0
113	4	1
114	4	2
115	4	3
116	4	4
117	4	5
118	4	6
119	4	7

### Control Information for the 1260-30C

The following information describes the control-register-to-relay-channel mapping for a 1260-30C Relay Module. This information may be used to control a 1260-30C when using a 1260-01T in the register-based mode of operation.

Each relay on this module is controlled by setting or clearing a single bit within a Control Register. Control Registers on the module operate 8 channels simultaneously. There are eight control bits per Control Register. Setting the bit to a 1 closes the relay; setting the bit to a 0 opens the relay.

The table below shows the mapping from logical channels to control bits. The logical channels are used when operating the relay module in message-based mode. The control bits within the Control Registers are used to operate the module in register-based mode.

Each Control Register is located 2 addresses from the previous Control Register. That is, each Control Register is located at an odd address. This is shown in Table 2-2 of the 1260-01T manual. Control Register 0 is located at the "Base A24 Address" for the module. Consult the "Register-Based Operation" Section of Chapter 2 of the 1260-01T manual for a description of calculating control register addresses:

Channel	Control Register	Control Bit
0	0	0
1	0	1
2	0	2
3	0	3
4	0	4
5	0	5
6	0	6
7	0	7
8	1	0
9	1	1
100	1	2
101	1	3
102	1	4
103	1	5
104	1	6
105	1	7
106	2	0
107	2	1
108	2	2
109	2	3
200	2	4
201	2	5
202	2	6
203	2	7
204	3	0
205	3	1
206	3	2
207	3	3
208	3	4
209	3	5
300	3	6
301	3	7
302	4	0
303	4	1
304	4	2
305	4	3
306	4	4
307	4	5
308	4	6
309	4	7

### Control Information for the 1260-30D

The following information describes the control-register-to-relay-channel mapping for a 1260-30D Relay Module. This information may be used to control a 1260-30D when using a 1260-01T in the register-based mode of operation.

Each relay on this module is controlled by setting or clearing a single bit within a Control Register. Control Registers on the module operate 8 channels simultaneously. There are eight control bits per Control Register. Setting the bit to a 1 closes the relay; setting the bit to a 0 opens the relay.

The table below shows the mapping from logical channels to control bits. The logical channels are used when operating the relay module in message-based mode. The control bits within the Control Registers are used to operate the module in register-based mode.

Each Control Register is located 2 addresses from the previous Control Register. That is, each Control Register is located at an odd address. This is shown in Table 2-2 of the 1260-01T manual. Control Register 0 is located at the “Base A24 Address” for the module. Consult the “Register-Based Operation” Section of Chapter 2 of the 1260-01T manual for a description of calculating control register addresses:

Channel	Control Register	Control Bit
0	0	0
1	0	1
2	0	2
3	0	3
4	0	4
100	0	5
101	0	6
102	0	7
103	1	0
104	1	1
200	1	2
201	1	3
202	1	4
203	1	5
204	1	6
300	1	7
301	2	0
302	2	1
303	2	2
304	2	3
400	2	4
401	2	5
402	2	6
403	2	7
404	3	0
500	3	1
501	3	2
502	3	3
503	3	4
504	3	5
600	3	6
601	3	7
602	4	0
603	4	1
604	4	2
700	4	3
701	4	4
702	4	5
703	4	6
704	4	7

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# Chapter 1

## MODULE SPECIFICATION

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### 1260-30 Module Specification

The 1260-30 Signal/Multiplexer Scanner Module is a 1 X 40 multiplexer. It switches two lines per channel, and has the capability of being configured as two 1 X 20 matrices, four 1 X 10 matrices or eight 1 X 5 matrices (refer to the diagram in **Figure 1-2**).

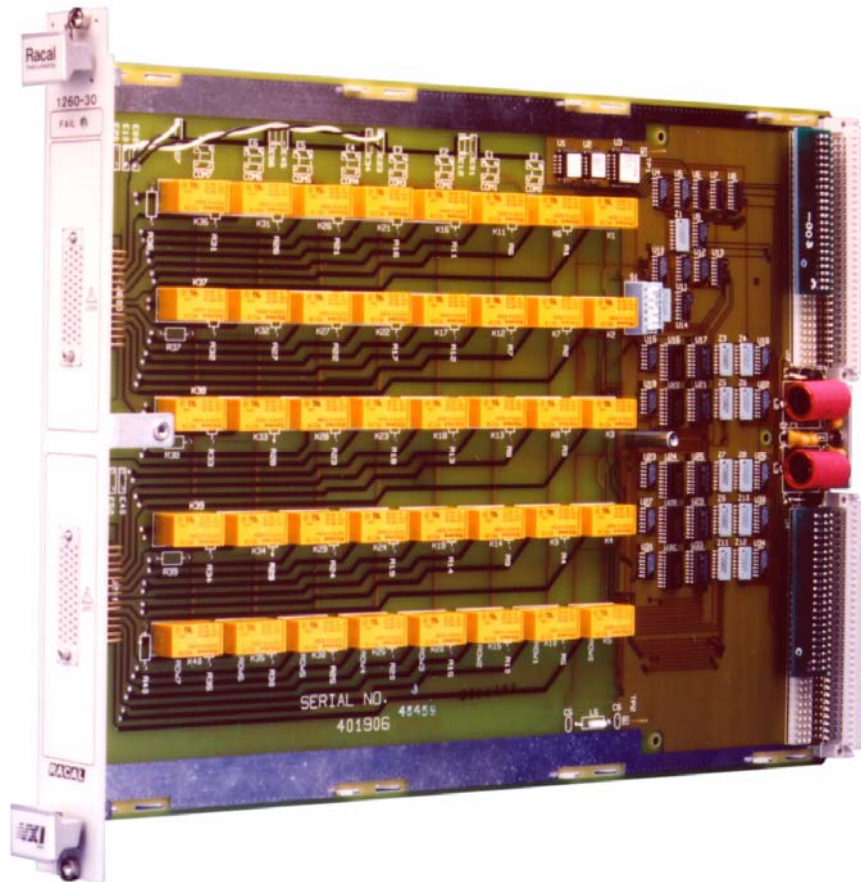


Figure 1-1, 1260-30 Signal/Multiplexer Scanner Module

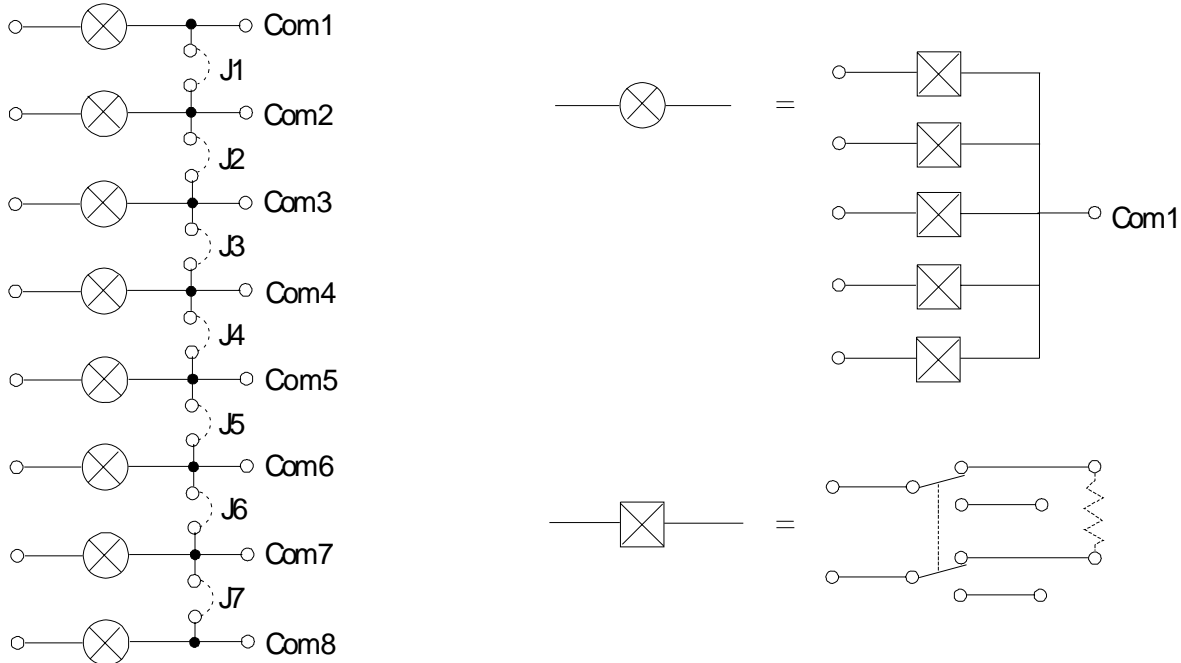


Figure 1-2, 1260-30 Relay Matrix

## Specifications

Maximum Switchable Voltage (Terminal-Terminal or Terminal-Chassis) 220VDC, 250VAC RMS

Maximum Switchable Current 2A DC or RMS

Maximum Switchable Power Per Channel 60W DC, 62.5VA AC

## DC Performance

Isolation  $>10^9\Omega$

## AC Performance

Capacitance  
 Open Channel < 40pF  
 Channel-Chassis < 60pF  
 Hi-Lo < 280pF

Bandwidth (-3dB, 50Ω) 10MHz (Typical)

Insertion Loss (50Ω)  
 < 0.1dB @ 100kHz  
 < 0.1db @ 1MHz  
 < 1.3dB @ 10MHz

Crosstalk (50Ω)  
 < -55dB @ 100kHz  
 < -45dB @ 1MHz  
 < -30dB @ 10MHz

**General**

Cooling	
Airflow Backpressure	4.0 liters/sec, 0.5mm H <sub>2</sub> O
Power Requirements	
+5V, I <sub>pm</sub>	0.4A (2.8A with Option 01 installed)
+24V, I <sub>dm</sub>	10mA per energized relay
User Connector	SMPL 4 FOTO LB
Weight	2.59lbs (1.17Kg) 2.87lbs (1.29Kg) with Option 01

**Minimum Option 01 Firmware**

Revision	17.1
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**Ordering Information**

Model Number	Description	Part Number
1260-30A	2-wire, One, 1x40 Multiplexer	404767-001
1260-30B	2-wire, Two, 1x20 Multiplexer	404767-002
1260-30C	2-wire, Four, 1x10 Multiplexer	404767-003
1260-30D	2-wire, Eight, 1x5 Multiplexer	404767-004

**Safety**

Refer to the “FOR YOUR SAFETY” page preceding the Table of Contents. Following all NOTES, CAUTIONS, and WARNINGS to ensure personal safety and prevent damage to the instrument.

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## INSTALLATION INSTRUCTIONS

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### Unpacking and Inspection

1. Remove the 1260-30 module and inspect it for damage. If any damage is apparent, inform the carrier immediately. Retain shipping carton and packing material for the carrier's inspection.
2. Verify that the pieces in the package you received contain the correct 1260-30 module option and the 1260-30 User Manual. Notify EADS North America Defense Test and Services, Inc. if the module appears damaged in any way. Do not attempt to install a damaged module into a VXI chassis.
3. The 1260-30 module is shipped in an anti-static bag to prevent electrostatic damage to the module. Do not remove the module from the anti-static bag unless it is in a static-controlled area.

---

**CAUTION:**

**Proper ESD handling procedures must always be used when packing, unpacking or installing any 1260 Series cards. Failure to do so may cause damage to the unit.**

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### Reshipment Instructions

1. Use the original packing when returning the switching module to EADS North America Defense Test and Services, Inc. for calibration or servicing. The original shipping carton and the instrument's plastic foam will provide the necessary support for safe reshipment.
2. If the original packing material is unavailable, wrap the switching module in an ESD Shielding bag and use plastic spray foam to surround and protect the instrument.
3. Reship in either the original or a new shipping carton.

## Option 01 Installation

Installation of the Option 01 into the 1260-30 is described in the Installation section of the 1260 Series VXI Switching Cards Manual.

## Module Installation

Installation of the 1260-30 Switching Module into a VXI mainframe, including the setting of DIP switches, is described in the Installation section of the 1260 Series VXI Switching Cards Manual. Configuration of the PCBA and setting DIP switches SW1-5 and SW1-6 are described in the following sections.

---

## Configuration Settings

The 1260-30 is configurable as 1x40, two 1x20, four 1x10, or eight 1x5 multiplexers. The configuration is set by the installation of 24 gage jumpers to the board as follows:

Model	Configuration	Jumpers
1260-30A	One 1X40	All
1260-30B	Two 1X20	J1, J2, J3, J5, J6. and J7
1260-30C	Four 1X10	J1, J3, J5, and J7
1260-30D	Eight 1X5	None

Note this illustrates the principle of the 1260-30 configuration setting. The connections to be made on the PCB are given on the following pages.

## 1260-30A

The following connections are required to configure the 1260-30 as a 1260-30A. To configure the 1260-30A from any other 1260-30 configuration, remove all connections not on this list, and install 22 gauge solid jumpers, listed below, unless otherwise specified.

COM 01 to E01	COM 22 to E22	COM 51 to E51
COM 02 to E02	COM 31 to E31	COM 52 to E52
COM 11 to E11	COM 32 to E32	COM 61 to E61
COM 12 to E12	COM 41 to E41	COM 62 to E62
COM 21 to E21	COM 42 to E42	COM 71 to E71

COM 72 to E72  
W1-1 to W1-2  
E01-1 to E12-1  
E01-2 to E12-2  
E23-2 to E34-1  
E45-1 to E56-1  
E45-2 to E56-2

\*E67 1 to E00-1 Teflon stranded, 24 gauge, white  
E67-2 to E00-2 Teflon stranded, 24 gauge, black

\*Twisted Pair

## 1260-30B

The following connections are required to configure the 1260-30 as a 1260-30B. To configure the 1260-30B from any other 1260-30 configuration, remove all connections not on this list and install 22 gauge solid jumpers, listed, below unless otherwise specified.

COM 01 to E01	COM 22 to E22	COM 51 to E51
COM 02 to E02	COM 31 to E31	COM 52 to E52
COM 11 to E11	COM 32 to E32	COM 61 to E61
COM 12 to E12	COM 41 to E41	COM 62 to E62
COM 21 to E21	COM 42 to E42	COM 71 to E72

COM 72 to E72  
W1-1 to W1-2  
E01-1 to E12-1  
E01-2 to E12-2  
E45-1 to E56-1  
E45-2 to E56-2

\*E67-1 to E10-1 Teflon stranded, 24 gauge, white

E67-2 to E10-2 Teflon stranded, 24 gauge, black

\*E23-1 to E00-1 Teflon stranded, 24 gauge, white  
E23-2 to E00-2 Teflon stranded, 24 gauge, black

\*Twisted Pair

## 1260-30C

The following connections are required to configure the 1260-30 as a 1260-30C. To configure the 1260-30C from any other 1260-30 configuration, remove all connections not on this list and install 22 gauge solid jumpers, listed below, unless otherwise specified.

COM 01 to E10	COM 31 to E31	COM 61 to E61
COM 02 to E02	COM 32 to E32	COM 62 to E62
COM 11 to E11	COM 41 to E41	COM 71 to E71
COM 12 to E12	COM 42 to E42	COM 72 to E72
COM 21 to E21	COM 51 to E51	W1-1 to W1-2
COM 22 to E22	COM 52 to E52	

\*E01-1 to E00-1 Teflon stranded, 24 gauge, white  
E01-2 to E00-2 Teflon stranded, 24 gauge, black

\*E23-1 to E10-1 Teflon stranded, 24 gauge, white  
E23-2 to E10-2 Teflon stranded, 24 gauge, black

\*E45-1 to E20-1 Teflon stranded, 24 gauge, white  
E45-2 to E20-2 Teflon stranded, 24 gauge, black

\*E67-1 to E30-1 Teflon stranded, 24 gauge, white  
E67-2 to E30-2 Teflon stranded, 24 gauge, black

\*Twisted Pair



## 1260-30D

The following connections are required to configure the 1260-30 as a 1260-30D. To configure the 1260-30B from any other 1260-30 configuration, remove all connections not on this list and install 22 gauge solid jumpers, listed below, unless otherwise specified.

*COM 01 to E00-1 COM 02 to E00-2	Teflon stranded, 24 gauge, white Teflon stranded, 24 gauge, black
*COM 11 to E10-1 COM 12 to E10-2	Teflon stranded, 24 gauge, white Teflon stranded, 24 gauge, black
*COM 21 to E20-1 COM 22 to E20-2	Teflon stranded, 24 gauge, white Teflon stranded, 24 gauge, black
*COM 31 to E30-1 COM 32 to E30-2	Teflon stranded, 24 gauge, white Teflon stranded, 24 gauge, black
*COM 41 to E40-1 COM 42 to E40-2	Teflon stranded, 24 gauge, white Teflon stranded, 24 gauge, black
*COM 51 to E50-1 COM 52 to E50-2	Teflon stranded, 24 gauge, white Teflon stranded, 24 gauge, black
*COM 61 to E60-1 COM 62 to E60-2	Teflon stranded, 24 gauge, white Teflon stranded, 24 gauge, black
*COM 71 to E70-1 COM 72 to E70-2	Teflon stranded, 24 gauge, white Teflon stranded, 24 gauge, black

W1-1 to W1-2

\*Twisted Pair

---

## 1260-30 ID Byte

Each configuration of the 1260-30 will respond to different sets of values for <group number> and <channel>. The set of values is controlled by switches 5 and 6 on DIP switch S1 on the PCB. The switch settings that correspond to the four configurations are as follows:

Model	Configuration	S1 Switches	
		5	6
1260-30A	One 1X40	Off	Off
1260-30B	Two 1X20	On	Off
1260-30C	Four 1X10	Off	On
1260-30D	Eight 1X5	On	On

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## MODULE SPECIFIC SYNTAX

---

### 1260-30 Module Specific Syntax

The Module Specific Syntax for the 1260-30 is required in the use of the OPEN and CLOSE commands. It will also appear in data output by the Master in response to the PDATAOUT and PSETUP commands.

---

### Syntax

The Module Specific Syntax for the 1260-30 Signal Multiplexer/Scanner module is as follows:

OPEN <module address>.<group number><channel>

where <module address> is the address.

<group number> is the number of switching groups implemented in the module. The range of values for <group number> is up to 0-7

<channel> is the path in the group to be switched. For 1260-30 configurations containing more than one group, the values for <channel> are repeated for each group.

---

**NOTE:**

The <module address> used here is NOT the VXibus defined logical address of the 1260 Master. It is peculiar to the 1260 Series and describes the switching module in relation to the Master. This address corresponds to the binary value of the switch setting of SW1 on the switching module PCB.

---

The valid values of <group number> and <channel> for the different 1260-30 configurations are as follows:

Configuration	<channel>	<group numbers>
One 1X40	00-39	0
Two 1X20	00-19	0,1
Four 1X10	00-09	0,1,2, and 3
Eight 1X5	00-04	0,1,2,3,4,5,6, and 7

Refer to **Figure 3-1** for connector pin configurations, and to **Figure 3-2** for the command codes required to open and close the various <channels> for the four configurations.

---

## CLOSE Command

The Module Specific Syntax for the CLOSE command is the same as for the OPEN command.

**Example:** OPEN 3.002

This open command will open channel 2 in Group 0 on the 1260-30 module at switch card address 3.

---

## PSETUP Command

The PSETUP command causes the specified module setup to be transmitted to the VXI Controller. The syntax used is:

PSETUP <module address>[;<module address>] [;<module address>] where <module address> is the switch card address.

The responses to the PSETUP command for the 1260-30A Signal Multiplexer/Scanner is as follows:

<module address>.1260-30A 40-channel Signal Multiplexer/Scanner  
Module

<module address>.BBM

<module address>.END

1260-30B:

<module address>.1260-30B 20-channel Signal Multiplexer/Scanner  
Module

<module address>.BBM

<module address>.END

1260-30C:

<module address>.1260-30C 10-channel Signal Multiplexer/Scanner  
Module

<module address>.BBM

<module address>.END

1260-30D:

<module address>.1260-30D 5-channel Signal Multiplexer/Scanner  
Module

<module address>.BBM

<module address>.END

The response to the PSETUP command consists of a header on the first line. The header describes the model number followed by an A or B designating four or two-wire, respectively. The next line designates the setup mode for scanning which, by default, is Break-Before-Make (BBM). The last line containing the 'END'<sup>1</sup> characters denotes no more information to report.

---

## **PDATAOUT Command**

The PDATAOUT command causes the specified module to transmit the CLOSED state of the relays within the switching module to the 1260 Controller. The syntax used is:

PDATAOUT <module address>[.<module address>] [;<module  
address>]

The responses to the PDATAOUT command is as follows:

1260-30A:

<module address>.1260-30A 40-channel Signal Multiplexer/Scanner  
Module

<module address>.<channel>[,<channel>] [,<channel>]

<module address>.END

1260-30B:

<module address>.1260-30B 20-channel Signal Multiplexer/Scanner  
Module

<module address>.<channel>[,<channel>] [,<channel>]

<module address>.END

1260-30C:

<module address>.1260-30C 10-channel Signal Multiplexer/Scanner  
Module

<module address>.<channel>[,<channel>] [,<channel>]

<module address>.END

1260-30D:

<module address>.1260-30D 5-channel Signal Multiplexer/Scanner  
Module

<module address>.<channel>[,<channel> [,<channel>]

<module address>.END

The response to the PDATAOUT command consists of a header on the first line as with the PSETUP response. The next line details the channels currently closed on the module and is blank when no channels are closed. Again, the last line is denoted by the "END" string of characters.

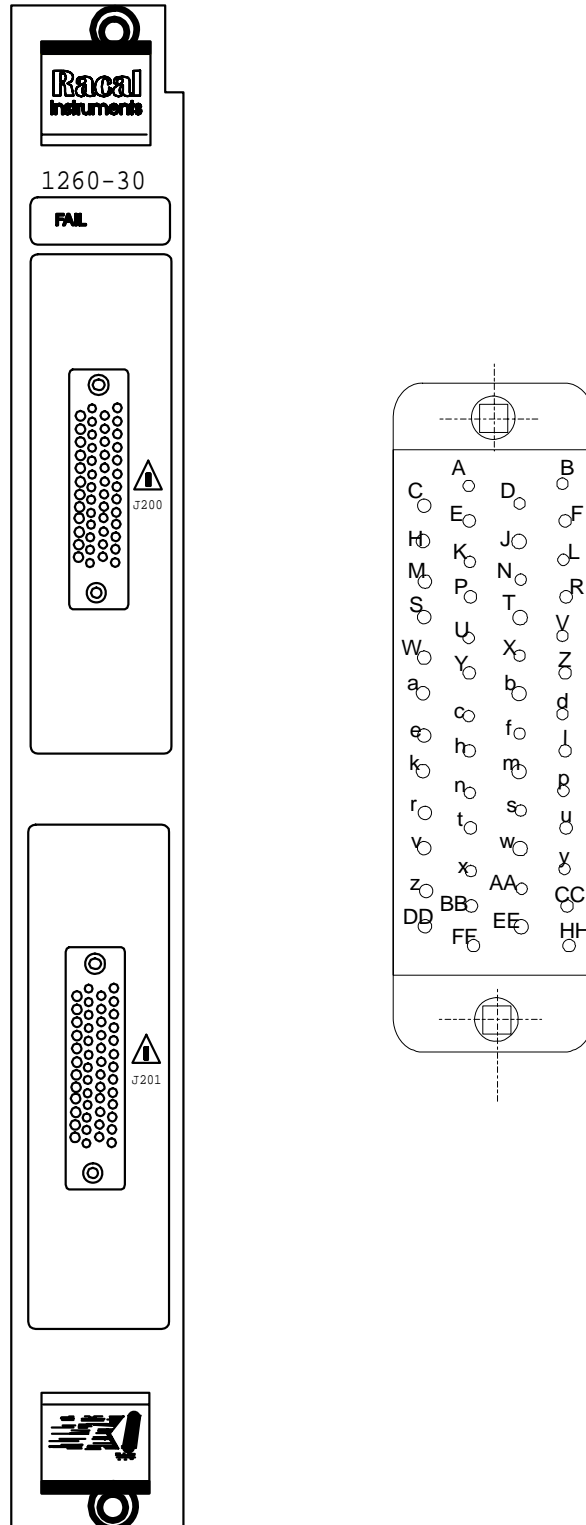
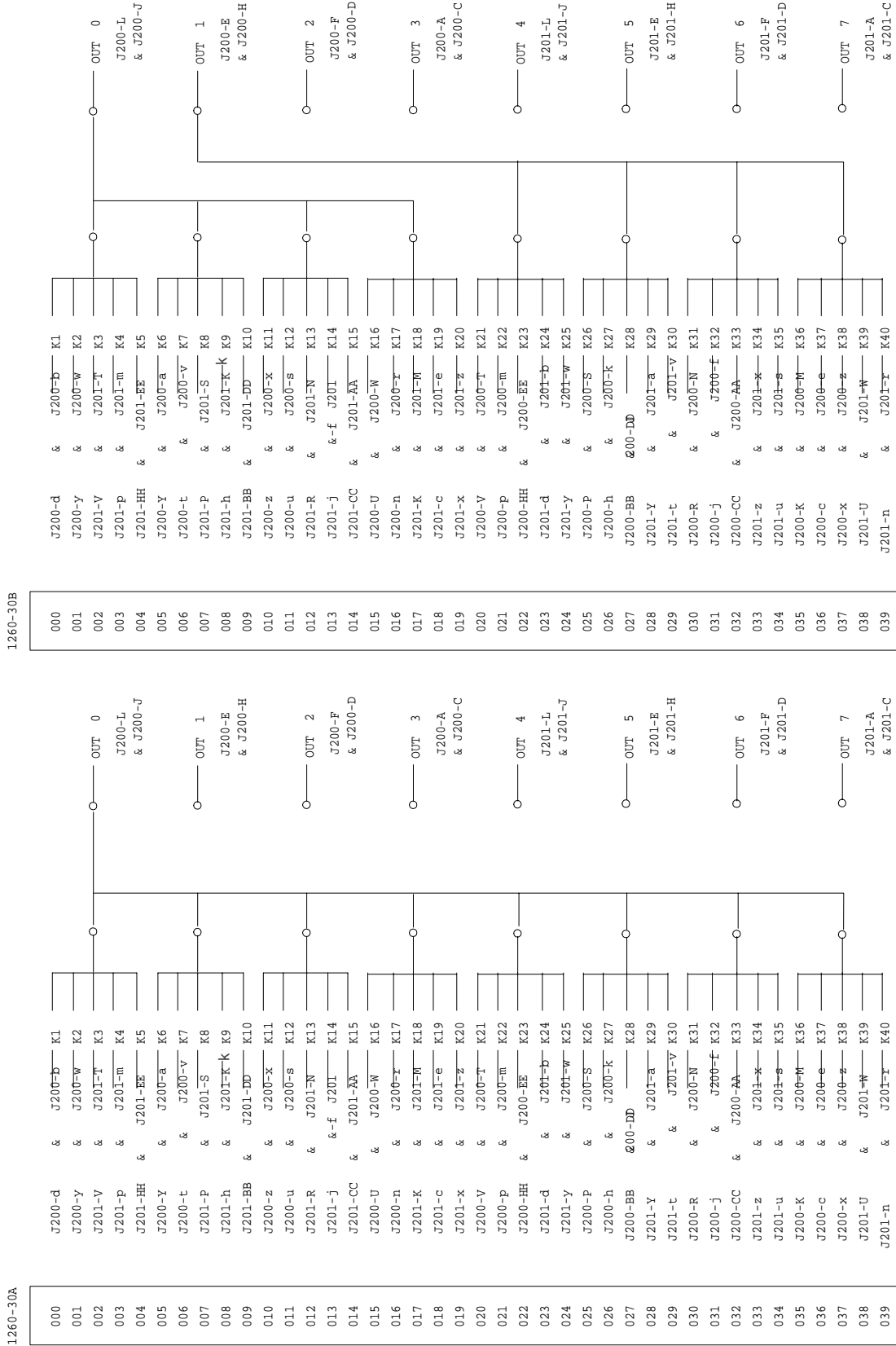


Figure 3-1, 1260-30 J200 and J201 Connector Pin Configuration



J200-B, J200-FF, J201-B, J201-FF are chassis ground.

Figure 3-2, 1260-30 Configurations and Command Codes



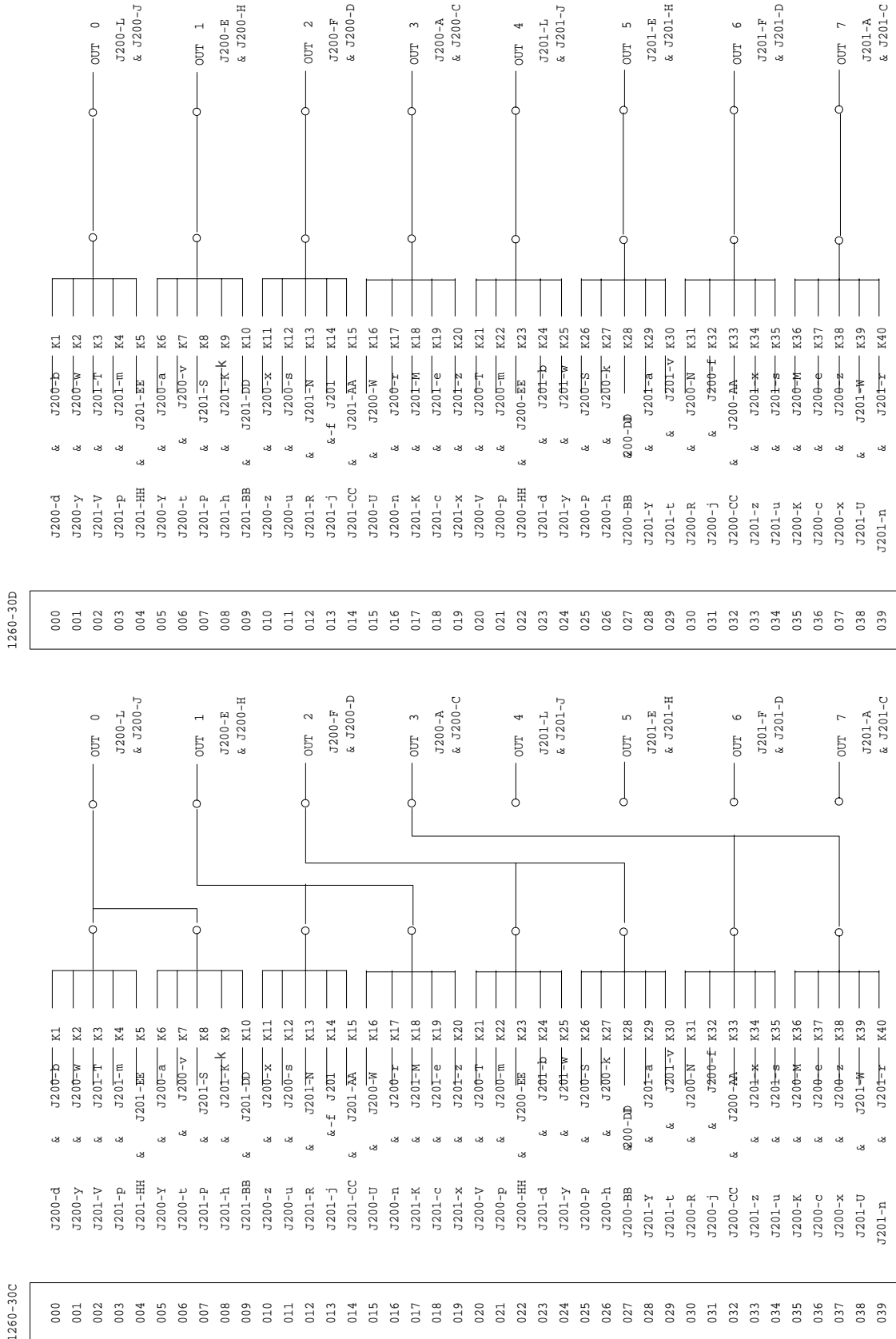


Figure 3-2, 1260-30 Configurations and Command Codes (continued)

J200-B, J200-FF, J201-B, J201-FF, are chassis ground.

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## Chapter 4

# OPTIONAL HARNESS ASSEMBLIES

---

The following harness assemblies are used to connect 1260-30 to Freedom Series Test Receiver Interfaces.

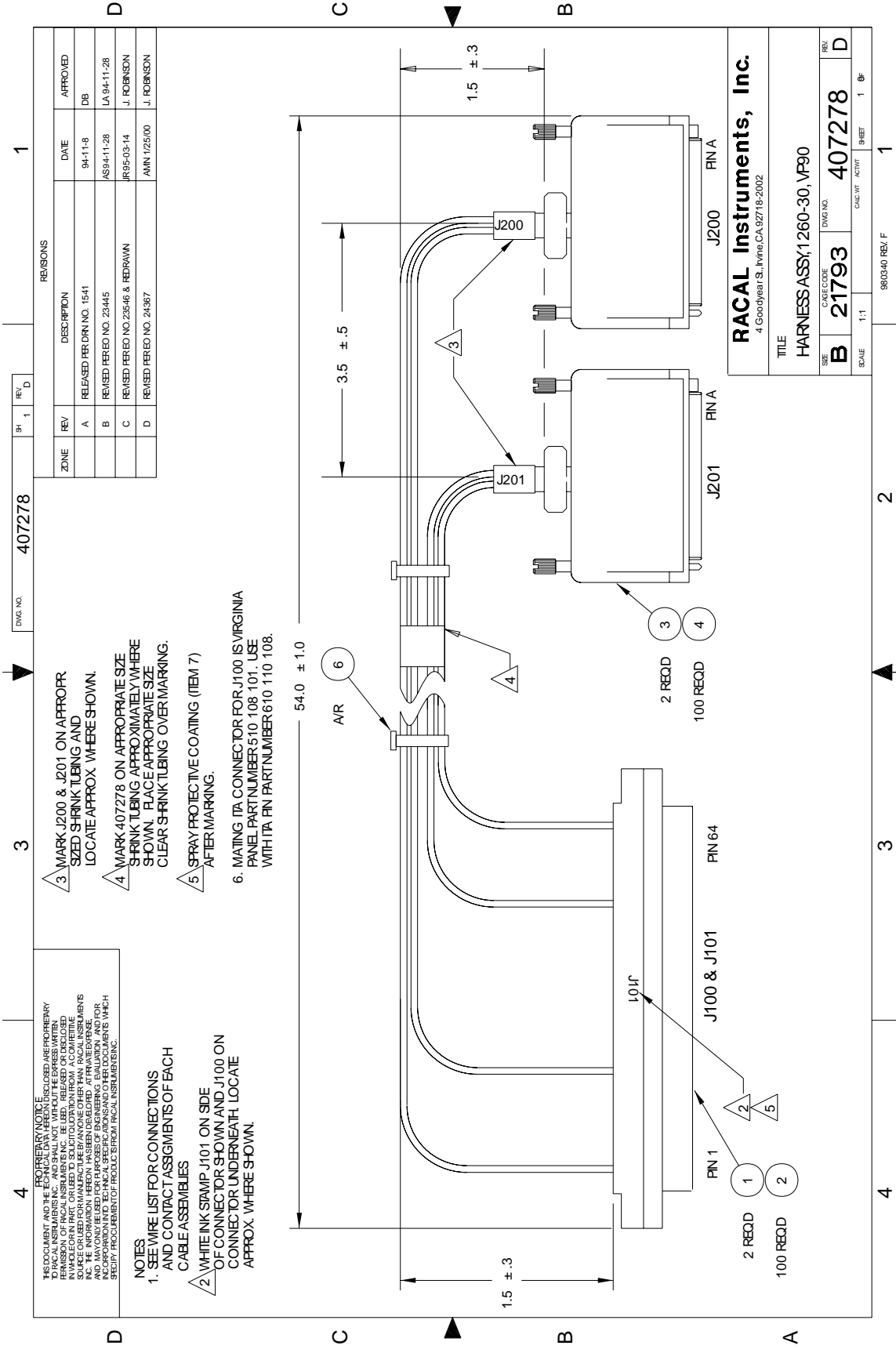
Each harness documentation consists of an assembly drawing, parts list, system wire list and wire list.

407278	Virginia Panel, Inc. Series VP90 Interface Harness
--------	---

407279	TTI Testron, Inc. Interface Harness
--------	-------------------------------------

For more information on complete line of Test Receivers Interface solution, contact your Sales Representative.

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## ENGINEERING WIRE LIST

WIRE	FROM	TO	TYPE	PART #	WIRE LEN	REFERENCE															
	BLK AA (J100)	Uxx-SLOT yy (J200,J201)	CABLE	407278		SYSTEM WIRE LIST															
	BLK AA (J101)	Uxx-SLOT yy (J200,J201)	CABLE	407278																	
<p>This system wirelist serves as a template for incorporating this harness assembly into the overall system wirelist. It does not in any way affect the fabrication of this harness assembly.</p>																					
<div style="display: flex; justify-content: space-around;"> <div style="border: 1px solid black; width: 20%; height: 100px;"></div> <div style="border: 1px solid black; width: 20%; height: 100px;"></div> <div style="border: 1px solid black; width: 20%; height: 100px;"></div> <div style="border: 1px solid black; width: 20%; height: 100px;"></div> </div>																					
<p><b>RACAL Instruments, Inc., 4 Goodyear St., Irvine, CA 92718</b></p> <table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 40%;">DOCUMENT TITLE</td> <td style="width: 10%;">SIZE</td> <td style="width: 15%;">CODE NO.</td> <td style="width: 20%;">DOCUMENT NO.</td> <td style="width: 15%;">REV</td> </tr> <tr> <td>HARNESS ASSY, 1260-30, VP90</td> <td>A</td> <td>21793</td> <td>407278</td> <td>D</td> </tr> <tr> <td></td> <td>DRN</td> <td></td> <td></td> <td>SHEET 3 of 9</td> </tr> </table>							DOCUMENT TITLE	SIZE	CODE NO.	DOCUMENT NO.	REV	HARNESS ASSY, 1260-30, VP90	A	21793	407278	D		DRN			SHEET 3 of 9
DOCUMENT TITLE	SIZE	CODE NO.	DOCUMENT NO.	REV																	
HARNESS ASSY, 1260-30, VP90	A	21793	407278	D																	
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DOC. NO. 407278

## ENGINEERING WIRE LIST

WIRE	FROM	TO	TYPE	PART #	WIRE LEN	REFERENCE
1	J100-1 (602201-001)	J200-L 602092-001	24 AWG WHT	602201- 806	54"	COMMON 00 HI
2	J100-33 (602201-001)	J200-J 602092-001	24 AWG WHT	602201- 806	54"	COMMON 00 LO
3	J100-2 (602201-001)	J200-d 602092-001	24 AWG WHT	602201- 806	54"	CHANNEL 00 HI
4	J100-34 (602201-001)	J200-b 602092-001	24 AWG WHT	602201- 806	54"	CHANNEL 00 LO
5	J100-3 (602201-001)	J200-y 602092-001	24 AWG WHT	602201- 806	54"	CHANNEL 01 HI
6	J100-35 (602201-001)	J200-w 602092-001	24 AWG WHT	602201- 806	54"	CHANNEL 01 LO
7	J100-4 (602201-001)	J201-V 602092-001	24 AWG WHT	602201- 806	54"	CHANNEL 02 HI
8	J100-36 (602201-001)	J201-T 602092-001	24 AWG WHT	602201- 806	54"	CHANNEL 02 LO
9	J100-5 (602201-001)	J201-p 602092-001	24 AWG WHT	602201- 806	54"	CHANNEL 03 HI
10	J100-37 (602201-001)	J201-m 602092-001	24 AWG WHT	602201- 806	54"	CHANNEL 03 LO
11	J100-6 (602201-001)	J201-HH 602092-001	24 AWG WHT	602201- 806	54"	CHANNEL 04 HI
12	J100-38 (602201-001)	J201-BE 602092-001	24 AWG WHT	602201- 806	54"	CHANNEL 04 LO
13	J100-7 NO CONNECT					
14	J100-39 NO CONNECT					
15	J100-8 (602201-001)	J200-E 602092-001	24 AWG WHT	602201- 806	54"	COMMON 01 HI
16	J100-40 (602201-001)	J200-H 602092-001	24 AWG WHT	602201- 806	54"	COMMON 01 LO
17	J100-9 (602201-001)	J200-Y 602092-001	24 AWG WHT	602201- 806	54"	CHANNEL 05 HI
18	J100-41 (602201-001)	J200-a 602092-001	24 AWG WHT	602201- 806	54"	CHANNEL 05 LO
19	J100-10 (602201-001)	J200-t 602092-001	24 AWG WHT	602201- 806	54"	CHANNEL 06 HI
20	J100-42 (602201-001)	J200-v 602092-001	24 AWG WHT	602201- 806	54"	CHANNEL 06 LO
21	J100-11 (602201-001)	J201-P 602092-001	24 AWG WHT	602201- 806	54"	CHANNEL 07 HI
22	J100-43 (602201-001)	J201-S 602092-001	24 AWG WHT	602201- 806	54"	CHANNEL 07 LO
23	J100-12 (602201-001)	J201-h 602092-001	24 AWG WHT	602201- 806	54"	CHANNEL 08 HI
24	J100-44 (602201-001)	J201-k 602092-001	24 AWG WHT	602201- 806	54"	CHANNEL 08 LO
25	J100-13 (602201-001)	J201-BB 602092-001	24 AWG WHT	602201- 806	54"	CHANNEL 09 HI
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## ENGINEERING WIRE LIST

WIRE	FROM	TO	TYPE	PART #	WIRE LEN	REFERENCE
26	J100-45 (602201-001)	J201-DD 602092-001	24 AWG WHT	602201- 806	54"	CHANNEL 09 LO
27	J100-14 NO CONNECT					
28	J100-46 NO CONNECT					
29	J100-15 (602201-001)	J200-F 602092-001	24 AWG WHT	602201- 806	54"	COMMON 02 HI
30	J100-47 (602201-001)	J200-D 602092-001	24 AWG WHT	602201- 806	54"	COMMON 02 LO
31	J100-16 (602201-001)	J200-Z 602092-001	24 AWG WHT	602201- 806	54"	CHANNEL 10 HI
32	J100-48 (602201-001)	J200-X 602092-001	24 AWG WHT	602201- 806	54"	CHANNEL 10 LO
33	J100-17 (602201-001)	J200-u 602092-001	24 AWG WHT	602201- 806	54"	CHANNEL 11 HI
34	J100-49 (602201-001)	J200-s 602092-001	24 AWG WHT	602201- 806	54"	CHANNEL 11 LO
35	J100-18 (602201-001)	J201-R 602092-001	24 AWG WHT	602201- 806	54"	CHANNEL 12 HI
36	J100-50 (602201-001)	J201-N 602092-001	24 AWG WHT	602201- 806	54"	CHANNEL 12 LO
37	J100-19 (602201-001)	J201-j 602092-001	24 AWG WHT	602201- 806	54"	CHANNEL 13 HI
38	J100-51 (602201-001)	J201-f 602092-001	24 AWG WHT	602201- 806	54"	CHANNEL 13 LO
39	J100-20 (602201-001)	J201-CC 602092-001	24 AWG WHT	602201- 806	54"	CHANNEL 14 HI
40	J100-52 (602201-001)	J201-AA 602092-001	24 AWG WHT	602201- 806	54"	CHANNEL 14 LO
41	J100-21 NO CONNECT					
42	J100-53 NO CONNECT					
43	J100-22 (602201-001)	J200-A 602092-001	24 AWG WHT	602201- 806	54"	COMMON 03 HI
44	J100-54 (602201-001)	J200-C 602092-001	24 AWG WHT	602201- 806	54"	COMMON 03 LO
45	J100-23 (602201-001)	J200-U 602092-001	24 AWG WHT	602201- 806	54"	CHANNEL 15 HI
46	J100-55 (602201-001)	J200-W 602092-001	24 AWG WHT	602201- 806	54"	CHANNEL 15 LO
47	J100-24 (602201-001)	J200-n 602092-001	24 AWG WHT	602201- 806	54"	CHANNEL 16 HI
48	J100-56 (602201-001)	J200-r 602092-001	24 AWG WHT	602201- 806	54"	CHANNEL 16 LO
49	J100-25 (602201-001)	J201-K 602092-001	24 AWG WHT	602201- 806	54"	CHANNEL 17 HI
50	J100-57 (602201-001)	J201-M 602092-001	24 AWG WHT	602201- 806	54"	CHANNEL 17 LO
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## ENGINEERING WIRE LIST

WIRE	FROM	TO	TYPE	PART #	WIRE LEN	REFERENCE
51	J100-26 (602201-001)	J201-c 602092-001	24 AWG WHT	602201- 806	54"	CHANNEL 18 HI
52	J100-58 (602201-001)	J201-e 602092-001	24 AWG WHT	602201- 806	54"	CHANNEL 18 LO
53	J100-27 (602201-001)	J201-x 602092-001	24 AWG WHT	602201- 806	54"	CHANNEL 19 HI
54	J100-59 (602201-001)	J201-z 602092-001	24 AWG WHT	602201- 806	54"	CHANNEL 19 LO
55	J100-28 NO CONNECT					
56	J100-60 NO CONNECT					
57	J100-29 (602201-001)	J200-B 602092-001	24 AWG WHT	602201- 806	54"	CHASSIS GND
58	J100-61 NO CONNECT	J200-FF 602092-001	24 AWG WHT	602201- 806	54"	CHASSIS GND
59	J100-30 NO CONNECT					
60	J100-62 NO CONNECT					
61	J100-31 NO CONNECT					
62	J100-63 NO CONNECT					
63	J100-32 NO CONNECT					
64	J100-64 NO CONNECT					
65	J101-1 (602201-001)	J201-L 602092-001	24 AWG WHT	602201- 806	54"	COMMON 04 HI
66	J101-33 (602201-001)	J201-J 602092-001	24 AWG WHT	602201- 806	54"	COMMON 04 LO
67	J101-2 (602201-001)	J200-V 602092-001	24 AWG WHT	602201- 806	54"	CHANNEL 20 HI
68	J101-34 (602201-001)	J200-T 602092-001	24 AWG WHT	602201- 806	54"	CHANNEL 20 LO
69	J101-3 (602201-001)	J200-p 602092-001	24 AWG WHT	602201- 806	54"	CHANNEL 21 HI
70	J101-35 (602201-001)	J200-m 602092-001	24 AWG WHT	602201- 806	54"	CHANNEL 21 LO
71	J101-4 (602201-001)	J200-HH 602092-001	24 AWG WHT	602201- 806	54"	CHANNEL 22 HI
72	J101-36 (602201-001)	J200-EE 602092-001	24 AWG WHT	602201- 806	54"	CHANNEL 22 LO
73	J101-5 (602201-001)	J201-d 602092-001	24 AWG WHT	602201- 806	54"	CHANNEL 23 HI
74	J101-37 (602201-001)	J201-b 602092-001	24 AWG WHT	602201- 806	54"	CHANNEL 23 LO
75	J101-6 (602201-001)	J201-y 602092-001	24 AWG WHT	602201- 806	54"	CHANNEL 24 HI

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## ENGINEERING WIRE LIST

WIRE	FROM	TO	TYPE	PART #	WIRE LEN	REFERENCE
76	J101-38 (602201-001)	J201-w 602092-001	24 AWG WHT	602201- 806	54"	CHANNEL 24 LO
77	J101-7 NO CONNECT					
78	J101-39 NO CONNECT					
79	J101-8 (602201-001)	J201-E 602092-001	24 AWG WHT	602201- 806	54"	COMMON 05 HI
80	J101-40 (602201-001)	J201-H 602092-001	24 AWG WHT	602201- 806	54"	COMMON 05 LO
81	J101-9 (602201-001)	J200-P 602092-001	24 AWG WHT	602201- 806	54"	CHANNEL 25 HI
82	J101-41 (602201-001)	J200-S 602092-001	24 AWG WHT	602201- 806	54"	CHANNEL 25 LO
83	J101-10 (602201-001)	J200-h 602092-001	24 AWG WHT	602201- 806	54"	CHANNEL 26 HI
84	J101-42 (602201-001)	J200-k 602092-001	24 AWG WHT	602201- 806	54"	CHANNEL 26 LO
85	J101-11 (602201-001)	J200-BB 602092-001	24 AWG WHT	602201- 806	54"	CHANNEL 27 HI
86	J101-43 (602201-001)	J200-DD 602092-001	24 AWG WHT	602201- 806	54"	CHANNEL 27 LO
87	J101-12 (602201-001)	J201-Y 602092-001	24 AWG WHT	602201- 806	54"	CHANNEL 28 HI
88	J101-44 (602201-001)	J201-a 602092-001	24 AWG WHT	602201- 806	54"	CHANNEL 28 LO
89	J101-13 (602201-001)	J201-t 602092-001	24 AWG WHT	602201- 806	54"	CHANNEL 29 HI
90	J101-45 (602201-001)	J201-v 602092-001	24 AWG WHT	602201- 806	54"	CHANNEL 29 LO
91	J101-14 NO CONNECT					
92	J101-46 NO CONNECT					
93	J101-15 (602201-001)	J201-F 602092-001	24 AWG WHT	602201- 806	54"	COMMON 06 HI
94	J101-47 (602201-001)	J201-D 602092-001	24 AWG WHT	602201- 806	54"	COMMON 06 LO
95	J101-16 (602201-001)	J200-R 602092-001	24 AWG WHT	602201- 806	54"	CHANNEL 30 HI
96	J101-48 (602201-001)	J200-N 602092-001	24 AWG WHT	602201- 806	54"	CHANNEL 30 LO
97	J101-17 (602201-001)	J200-j 602092-001	24 AWG WHT	602201- 806	54"	CHANNEL 31 HI
98	J101-49 (602201-001)	J200-f 602092-001	24 AWG WHT	602201- 806	54"	CHANNEL 31 LO
99	J101-18 (602201-001)	J200-CC 602092-001	24 AWG WHT	602201- 806	54"	CHANNEL 32 HI
100	J101-50 (602201-001)	J200-AA 602092-001	24 AWG WHT	602201- 806	54"	CHANNEL 32 LO
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## ENGINEERING WIRE LIST

WIRE	FROM	TO	TYPE	PART #	WIRE LEN	REFERENCE
101	J101-19 (602201-001)	J201-Z 602092-001	24 AWG WHT	602201- 806	54"	CHANNEL 33 HI
102	J101-51 (602201-001)	J201-X 602092-001	24 AWG WHT	602201- 806	54"	CHANNEL 33 LO
103	J101-20 (602201-001)	J201-u 602092-001	24 AWG WHT	602201- 806	54"	CHANNEL 34 HI
104	J101-52 (602201-001)	J201-s 602092-001	24 AWG WHT	602201- 806	54"	CHANNEL 34 LO
105	J101-21 NO CONNECT					
106	J101-53 NO CONNECT					
107	J101-22 (602201-001)	J201-A 602092-001	24 AWG WHT	602201- 806	54"	COMMON 07 HI
108	J101-54 (602201-001)	J201-C 602092-001	24 AWG WHT	602201- 806	54"	COMMON 07 LO
109	J101-23 (602201-001)	J200-K 602092-001	24 AWG WHT	602201- 806	54"	CHANNEL 35 HI
110	J101-55 (602201-001)	J200-M 602092-001	24 AWG WHT	602201- 806	54"	CHANNEL 35 LO
111	J101-24 (602201-001)	J200-c 602092-001	24 AWG WHT	602201- 806	54"	CHANNEL 36 HI
112	J101-56 (602201-001)	J200-e 602092-001	24 AWG WHT	602201- 806	54"	CHANNEL 36 LO
113	J101-25 (602201-001)	J200-x 602092-001	24 AWG WHT	602201- 806	54"	CHANNEL 37 HI
114	J101-57 (602201-001)	J200-z 602092-001	24 AWG WHT	602201- 806	54"	CHANNEL 37 LO
115	J101-26 (602201-001)	J201-U 602092-001	24 AWG WHT	602201- 806	54"	CHANNEL 38 HI
116	J101-58 (602201-001)	J201-W 602092-001	24 AWG WHT	602201- 806	54"	CHANNEL 38 LO
117	J101-27 (602201-001)	J201-n 602092-001	24 AWG WHT	602201- 806	54"	CHANNEL 39 HI
118	J101-59 (602201-001)	J201-r 602092-001	24 AWG WHT	602201- 806	54"	CHANNEL 39 LO
119	J101-28 NO CONNECT					
120	J101-60 NO CONNECT					
121	J101-29 (602201-001)	J201-B 602092-001	24 AWG WHT	602201- 806	54"	CHASSIS GND
122	J101-61 (602201-001)	J201-FF 602092-001	24 AWG WHT	602201- 806	54"	CHASSIS GND
123	J101-30 NO CONNECT					
124	J101-62 NO CONNECT					
125	J101-31 NO CONNECT					

DOC. NO. 407278

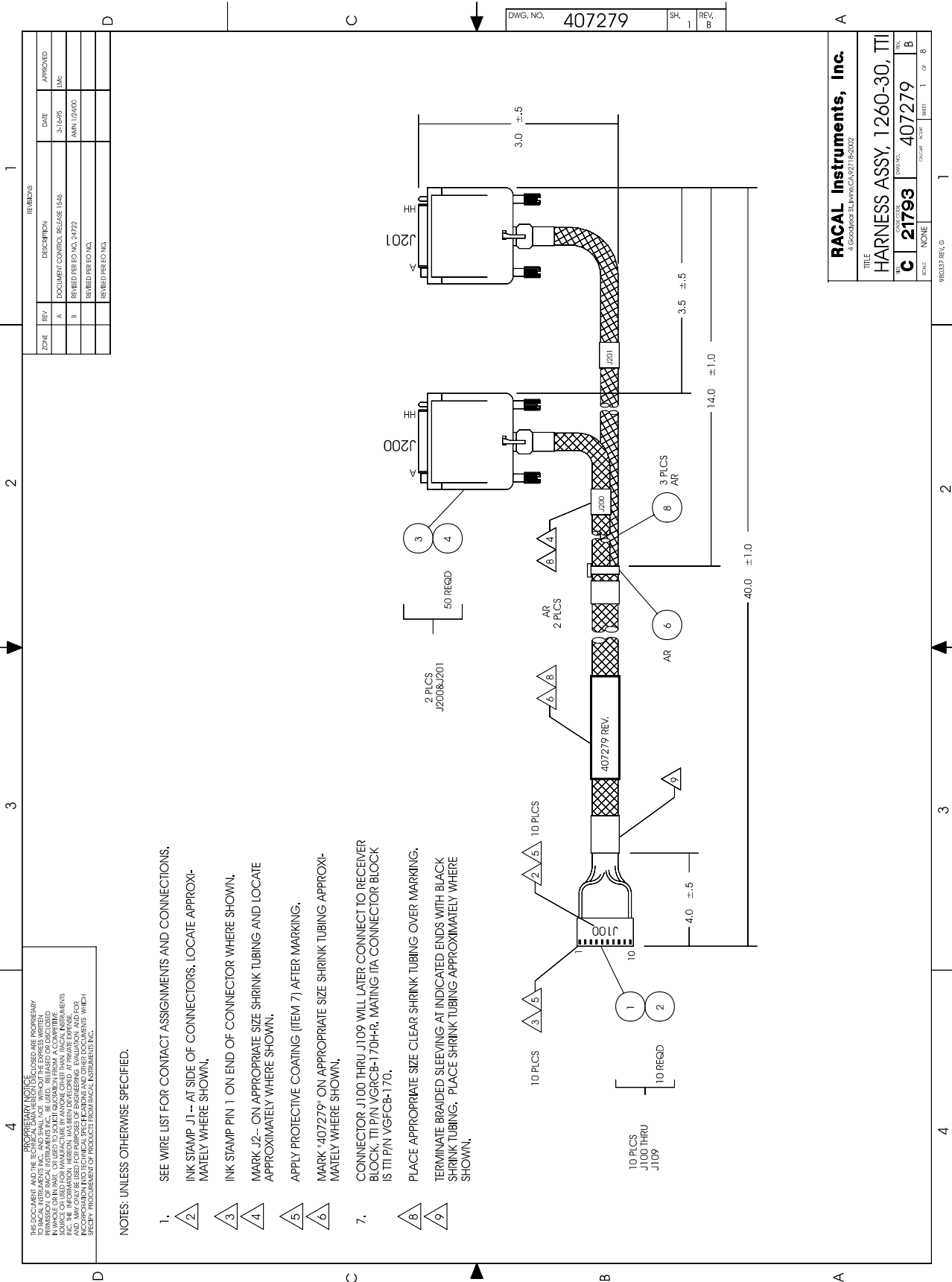
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	DRN			SHEET 8 of 9

## ENGINEERING WIRE LIST

WIRE	FROM	TO	TYPE	PART #	WIRE LEN	REFERENCE
126	J101-63 NO CONNECT					
127	J101-32 NO CONNECT					
128	J101-64 NO CONNECT					
<b>RACAL Instruments, Inc., 4 Goodyear St., Irvine, CA 92718</b>						
DOCUMENT TITLE			SIZE	CODE NO.	DOCUMENT NO.	REV
HARNESS ASSY, 1260-30, VP90			A	21793	407278	D
			DRN	SHEET 9 of 9		

DOC. NO. 407278



ZONE	REV	DESCRIPTION	DATE	APPROVED
A		DOCUMENT CONTROL RELEASE 1346	3-11-95	LUC
B		REVISED PER EC NO. 24722	11/11/00	
		REVISED PER EC NO.		
		REVISED PER EC NO.		

DWG. NO. 407279 SH. REV. #

<b>RACAL Instruments, Inc.</b> 3, Goodhope St., Irvine, CA 92714-5002			
TITLE HARNESS ASSY, 1260-30, TII			
REV. C	DATE CODE 21793	DWG. NO. 407279	REV. B
SCALE	NONE	CUSTOM	SHEET 1 OF 8

NOTES: UNLESS OTHERWISE SPECIFIED.

1. SEE WIRE LIST FOR CONTACT ASSIGNMENTS AND CONNECTIONS.
2. INK STAMP J1 -- AT SIDE OF CONNECTORS. LOCATE APPROXIMATELY WHERE SHOWN.
3. INK STAMP PIN 1 ON END OF CONNECTOR WHERE SHOWN.
4. MARK J2-- ON APPROPRIATE SIZE SHRINK TUBING AND LOCATE APPROXIMATELY WHERE SHOWN.
5. APPLY PROTECTIVE COATING (ITEM 7) AFTER MARKING.
6. MARK "407279" ON APPROPRIATE SIZE SHRINK TUBING APPROXIMATELY WHERE SHOWN.
7. CONNECTOR J100 THRU J109 WILL LATER CONNECT TO RECEIVER BLOCK, TII P/N VGRCB-170HR, MATING I/A CONNECTOR BLOCK IS TII P/N VFCB-170.
8. PLACE APPROPRIATE SIZE CLEAR SHRINK TUBING OVER MARKING.
9. TERMINATE BRAIDED SLEEVING AT INDICATED ENDS WITH BLACK SHRINK TUBING. PLACE SHRINK TUBING APPROXIMATELY WHERE SHOWN.



## ENGINEERING WIRE LIST

WIRE	FROM	TO	TYPE	PART #	WIRE LEN	REFERENCE
	BLK AAx RW 01 (J100)	Uxx-SLOT yy (J200-J201)	CABLE	407279		SYSTEM WIRE LIST
	BLK AAx RW 02 (J101)	Uxx-SLOT yy (J200-J201)	CABLE	407279		
	BLK AAx RW 03 (J102)	Uxx-SLOT yy (J200-J201)	CABLE	407279		
	BLK AAx RW 04 (J103)	Uxx-SLOT yy (J200-J201)	CABLE	407279		
	BLK AAx RW 05 (J104)	Uxx-SLOT yy (J200-J201)	CABLE	407279		
	BLK AAx RW 06 (J105)	Uxx-SLOT yy (J200-J201)	CABLE	407279		
	BLK AAx RW 07 (J106)	Uxx-SLOT yy (J200-J201)	CABLE	407279		
	BLK AAx RW 08 (J107)	Uxx-SLOT yy (J200-J201)	CABLE	407279		
	BLK AAx RW 09 (J108)	Uxx-SLOT yy (J200-J201)	CABLE	407279		
	BLK AAx RW 10 (J109)	Uxx-SLOT yy (J200-J201)	CABLE	407279		
<p>This system wirelist serves as a template for incorporating this harness assembly into the overall system wirelist. It does not in any way affect the fabrication of this harness assembly.</p>						

DOC. NO. 407279

<b>RACAL Instruments, Inc., 4 Goodyear St., Irvine, CA 92718</b>			
DOCUMENT TITLE	SIZE	CODE NO.	DOCUMENT NO.
HARNESS ASSY, 1260-30, TTI	A	21793	407279
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## ENGINEERING WIRE LIST

WIRE	FROM	TO	TYPE	PART #	WIRE LEN	REFERENCE
1	J100-1 602199-001	J200-L 602092-001	24 AWG WHT	524999	40"	COMMON 00 HI
2	J100-2 602199-001	J200-J 602092-001	24 AWG WHT	524999	40"	COMMON 00 LO
3	J100-3 602199-001	J200-d 602092-001	24 AWG WHT	524999	40"	CHANNEL 00 HI
4	J100-4 602199-001	J200-b 602092-001	24 AWG WHT	524999	40"	CHANNEL 00 LO
5	J100-5 602199-001	J200-y 602092-001	24 AWG WHT	524999	40"	CHANNEL 01 HI
6	J100-6 602199-001	J200-w 602092-001	24 AWG WHT	524999	40"	CHANNEL 01 LO
7	J100-7 602199-001	J201-V 602092-001	24 AWG WHT	524999	40"	CHANNEL 02 HI
8	J100-8 602199-001	J201-T 602092-001	24 AWG WHT	524999	40"	CHANNEL 02 LO
9	J100-9 602199-001	J201-p 602092-001	24 AWG WHT	524999	40"	CHANNEL 03 HI
10	J100-10 602199-001	J201-m 602092-001	24 AWG WHT	524999	40"	CHANNEL 03 LO
11	J101-10 602199-001	J201-HH 602092-001	24 AWG WHT	524999	40"	CHANNEL 04 HI
12	J101-9 602199-001	J201-EE 602092-001	24 AWG WHT	524999	40"	CHANNEL 04 LO
13	J101-8 602199-001	J200-E 602092-001	24 AWG WHT	524999	40"	COMMON 01 HI
14	J101-7 602199-001	J200-H 602092-001	24 AWG WHT	524999	40"	COMMON 01 LO
15	J101-6 602199-001	J200-Y 602092-001	24 AWG WHT	524999	40"	CHANNEL 05 HI
16	J101-5 602199-001	J200-a 602092-001	24 AWG WHT	524999	40"	CHANNEL 05 LO
17	J101-4 602199-001	J200-t 602092-001	24 AWG WHT	524999	40"	CHANNEL 06 HI
18	J101-3 602199-001	J200-v 602092-001	24 AWG WHT	524999	40"	CHANNEL 06 LO
19	J101-2 602199-001	J201-P 602092-001	24 AWG WHT	524999	40"	CHANNEL 07 HI
20	J101-1 602199-001	J201-S 602092-001	24 AWG WHT	524999	40"	CHANNEL 07 LO
21	J102-1 602199-001	J201-h 602092-001	24 AWG WHT	524999	40"	CHANNEL 08 HI
22	J102-2 602199-001	J201-k 602092-001	24 AWG WHT	524999	40"	CHANNEL 08 LO
23	J102-3 602199-001	J201-BB 602092-001	24 AWG WHT	524999	40"	CHANNEL 09 HI
24	J102-4 602199-001	J201-DD 602092-001	24 AWG WHT	524999	40"	CHANNEL 09 LO
25	J102-5 602199-001	J200-F 602092-001	24 AWG WHT	524999	40"	COMMON 02 HI
<b>RACAL Instruments, Inc., 4 Goodyear St., Irvine, CA 92618</b>						
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## ENGINEERING WIRE LIST

WIRE	FROM	TO	TYPE	PART #	WIRE LEN	REFERENCE
26	J102-6 602199-001	J200-D 602092-001	24 AWG WHT	524999	40"	COMMON 02 LO
27	J102-7 602199-001	J200-Z 602092-001	24 AWG WHT	524999	40"	CHANNEL 10 HI
28	J102-8 602199-001	J200-X 602092-001	24 AWG WHT	524999	40"	CHANNEL 10 LO
29	J102-9 602199-001	J200-u 602092-001	24 AWG WHT	524999	40"	CHANNEL 11 HI
30	J102-10 602199-001	J200-s 602092-001	24 AWG WHT	524999	40"	CHANNEL 11 LO
31	J103-10 602199-001	J201-R 602092-001	24 AWG WHT	524999	40"	CHANNEL 12 HI
32	J103-9 602199-001	J201-N 602092-001	24 AWG WHT	524999	40"	CHANNEL 12 LO
33	J103-8 602199-001	J201-j 602092-001	24 AWG WHT	524999	40"	CHANNEL 13 HI
34	J103-7 602199-001	J201-f 602092-001	24 AWG WHT	524999	40"	CHANNEL 13 LO
35	J103-6 602199-001	J201-CC 602092-001	24 AWG WHT	524999	40"	CHANNEL 14 HI
36	J103-5 602199-001	J201-AA 602092-001	24 AWG WHT	524999	40"	CHANNEL 14 LO
37	J103-4 602199-001	J200-A 602092-001	24 AWG WHT	524999	40"	COMMON 03 HI
38	J103-3 602199-001	J200-C 602092-001	24 AWG WHT	524999	40"	COMMON 03 LO
39	J103-2 602199-001	J200-U 602092-001	24 AWG WHT	524999	40"	CHANNEL 15 HI
40	J103-1 602199-001	J200-W 602092-001	24 AWG WHT	524999	40"	CHANNEL 15 LO
41	J104-1 602199-001	J200-n 602092-001	24 AWG WHT	524999	40"	CHANNEL 16 HI
42	J104-2 602199-001	J200-r 602092-001	24 AWG WHT	524999	40"	CHANNEL 16 LO
43	J104-3 602199-001	J201-K 602092-001	24 AWG WHT	524999	40"	CHANNEL 17 HI
44	J104-4 602199-001	J201-M 602092-001	24 AWG WHT	524999	40"	CHANNEL 17 LO
45	J104-5 602199-001	J201-c 602092-001	24 AWG WHT	524999	40"	CHANNEL 18 HI
46	J104-6 602199-001	J201-e 602092-001	24 AWG WHT	524999	40"	CHANNEL 18 LO
47	J104-7 602199-001	J201-x 602092-001	24 AWG WHT	524999	40"	CHANNEL 19 HI
48	J104-8 602199-001	J201-z 602092-001	24 AWG WHT	524999	40"	CHANNEL 19 LO
49	J104-9 602199-001	J201-L 602092-001	24 AWG WHT	524999	40"	COMMON 04 HI
50	J104-10 602199-001	J201-J 602092-001	24 AWG WHT	524999	40"	COMMON 04 LO
<b>RACAL Instruments, Inc., 4 Goodyear St., Irvine, CA 92618</b>						
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## ENGINEERING WIRE LIST

WIRE	FROM	TO	TYPE	PART #	WIRE LEN	REFERENCE
51	J105-10 602199-001	J200-V 602092-001	24 AWG WHT	524999	40"	CHANNEL 20 HI
52	J105-9 602199-001	J200-T 602092-001	24 AWG WHT	524999	40"	CHANNEL 20 LO
53	J105-8 602199-001	J200-p 602092-001	24 AWG WHT	524999	40"	CHANNEL 21 HI
54	J105-7 602199-001	J200-m 602092-001	24 AWG WHT	524999	40"	CHANNEL 21 LO
55	J105-6 602199-001	J200-HH 602092-001	24 AWG WHT	524999	40"	CHANNEL 22 HI
56	J105-5 602199-001	J200-EE 602092-001	24 AWG WHT	524999	40"	CHANNEL 22 LO
57	J105-4 602199-001	J201-d 602092-001	24 AWG WHT	524999	40"	CHANNEL 23 HI
58	J105-3 602199-001	J201-b 602092-001	24 AWG WHT	524999	40"	CHANNEL 23 LO
59	J105-2 602199-001	J201-y 602092-001	24 AWG WHT	524999	40"	CHANNEL 24 HI
60	J105-1 602199-001	J201-w 602092-001	24 AWG WHT	524999	40"	CHANNEL 24 LO
61	J106-1 602199-001	J201-E 602092-001	24 AWG WHT	524999	40"	COMMON 05 HI
62	J106-2 602199-001	J201-H 602092-001	24 AWG WHT	524999	40"	COMMON 05 LO
63	J106-3 602199-001	J200-P 602092-001	24 AWG WHT	524999	40"	CHANNEL 25 HI
64	J106-4 602199-001	J200-S 602092-001	24 AWG WHT	524999	40"	CHANNEL 25 LO
65	J106-5 602199-001	J200-h 602092-001	24 AWG WHT	524999	40"	CHANNEL 26 HI
66	J106-6 602199-001	J200-k 602092-001	24 AWG WHT	524999	40"	CHANNEL 26 LO
67	J106-7 602199-001	J200-BB 602092-001	24 AWG WHT	524999	40"	CHANNEL 27 HI
68	J106-8 602199-001	J200-DD 602092-001	24 AWG WHT	524999	40"	CHANNEL 27 LO
69	J106-9 602199-001	J201-Y 602092-001	24 AWG WHT	524999	40"	CHANNEL 28 HI
70	J106-10 602199-001	J201-a 602092-001	24 AWG WHT	524999	40"	CHANNEL 28 LO
71	J107-10 602199-001	J201-t 602092-001	24 AWG WHT	524999	40"	CHANNEL 29 HI
72	J107-9 602199-001	J201-v 602092-001	24 AWG WHT	524999	40"	CHANNEL 29 LO
73	J107-8 602199-001	J201-F 602092-001	24 AWG WHT	524999	40"	COMMON 06 HI
74	J107-7 602199-001	J201-D 602092-001	24 AWG WHT	524999	40"	COMMON 06 LO
75	J107-6 602199-001	J200-R 602092-001	24 AWG WHT	524999	40"	CHANNEL 30 HI
<b>RACAL Instruments, Inc., 4 Goodyear St., Irvine, CA 92618</b>						
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## ENGINEERING WIRE LIST

WIRE	FROM	TO	TYPE	PART #	WIRE LEN	REFERENCE
76	J107-5 602199-001	J200-N 602092-001	24 AWG WHT	524999	40"	CHANNEL 30 LO
77	J107-4 602199-001	J200-j 602092-001	24 AWG WHT	524999	40"	CHANNEL 31 HI
78	J107-3 602199-001	J200-f 602092-001	24 AWG WHT	524999	40"	CHANNEL 31 LO
79	J107-2 602199-001	J200-CC 602092-001	24 AWG WHT	524999	40"	CHANNEL 32 HI
80	J107-1 602199-001	J200-AA 602092-001	24 AWG WHT	524999	40"	CHANNEL 32 LO
81	J108-1 602199-001	J201-Z 602092-001	24 AWG WHT	524999	40"	CHANNEL 33 HI
82	J108-2 602199-001	J201-X 602092-001	24 AWG WHT	524999	40"	CHANNEL 33 LO
83	J108-3 602199-001	J201-u 602092-001	24 AWG WHT	524999	40"	CHANNEL 34 HI
84	J108-4 602199-001	J201-s 602092-001	24 AWG WHT	524999	40"	CHANNEL 34 LO
85	J108-5 602199-001	J201-A 602092-001	24 AWG WHT	524999	40"	COMMON 07 HI
86	J108-6 602199-001	J201-C 602092-001	24 AWG WHT	524999	40"	COMMON 07 LO
87	J108-7 602199-001	J200-K 602092-001	24 AWG WHT	524999	40"	CHANNEL 35 HI
88	J108-8 602199-001	J200-M 602092-001	24 AWG WHT	524999	40"	CHANNEL 35 LO
89	J108-9 602199-001	J200-c 602092-001	24 AWG WHT	524999	40"	CHANNEL 36 HI
90	J108-10 602199-001	J200-e 602092-001	24 AWG WHT	524999	40"	CHANNEL 36 LO
91	J109-10 602199-001	J200-x 602092-001	24 AWG WHT	524999	40"	CHANNEL 37 HI
92	J109-9 602199-001	J200-z 602092-001	24 AWG WHT	524999	40"	CHANNEL 37 LO
93	J109-8 602199-001	J201-U 602092-001	24 AWG WHT	524999	40"	CHANNEL 38 HI
94	J109-7 602199-001	J201-W 602092-001	24 AWG WHT	524999	40"	CHANNEL 38 LO
95	J109-6 602199-001	J201-n 602092-001	24 AWG WHT	524999	40"	CHANNEL 39 HI
96	J109-5 602199-001	J201-r 602092-001	24 AWG WHT	524999	40"	CHANNEL 39 LO
97	J109-4 602199-001	J200-B 602092-001	24 AWG WHT	524999	40"	CHASSIS GND
98	J109-3 602199-001	J200-FF 602092-001	24 AWG WHT	524999	40"	CHASSIS GND
99	J109-2 602199-001	J201-B 602092-001	24 AWG WHT	524999	40"	CHASSIS GND
<b>RACAL Instruments, Inc., 4 Goodyear St., Irvine, CA 92618</b>						
DOCUMENT TITLE			SIZE	CODE NO.	DOCUMENT NO.	REV
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## ENGINEERING WIRE LIST

WIRE	FROM	TO	TYPE	PART #	WIRE LEN	REFERENCE
100	J109-1 602199-001	J201-FF 602092-001	24 AWG WHT	524999	40"	CHASSIS GND
RACAL Instruments, Inc., 4 Goodyear St., Irvine, CA 92618						
DOCUMENT TITLE			SIZE	CODE NO.	DOCUMENT NO.	REV
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## Chapter 5

# PRODUCT SUPPORT

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### Product Support

EADS North America Defense Test and Services, Inc. has a complete Service and Parts Department. If you need technical assistance or should it be necessary to return your product for repair or calibration, call 1-800-722-3262. If parts are required to repair the product at your facility, call 1-949-859-8999 and ask for the Parts Department.

When sending your instrument in for repair, complete the form in the back of this manual.

For worldwide support and the office closest to your facility, refer to the website for the most complete information <http://www.eads-nadefense.com>.

### Warranty

Use the original packing material when returning the 1260-30 to EADS North America Defense Test and Services, Inc. for calibration or servicing. The original shipping container and associated packaging material will provide the necessary protection for safe reshipment.

If the original packing material is unavailable, contact EADS North America Defense Test and Services, Inc. Customer Service at 1-800-722-3262 for information.

**REPAIR AND CALIBRATION REQUEST FORM**

To allow us to better understand your repair requests, we suggest you use the following outline when calling and include a copy with your instrument to be sent to the EADS North America Defense Test and Service, Inc. Repair Facility.

Model \_\_\_\_\_ Serial No. \_\_\_\_\_ Date \_\_\_\_\_

Company Name \_\_\_\_\_ Purchase Order # \_\_\_\_\_

Billing Address \_\_\_\_\_  
City \_\_\_\_\_

State/Province \_\_\_\_\_ Zip/Postal Code \_\_\_\_\_ Country \_\_\_\_\_

Shipping Address \_\_\_\_\_  
City \_\_\_\_\_

State/Province \_\_\_\_\_ Zip/Postal Code \_\_\_\_\_ Country \_\_\_\_\_

Technical Contact \_\_\_\_\_ Phone Number ( ) \_\_\_\_\_

Purchasing Contact \_\_\_\_\_ Phone Number ( ) \_\_\_\_\_

1. Describe, in detail, the problem and symptoms you are having. Please include all set up details, such as input/output levels, frequencies, waveform details, etc.

\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

2. If problem is occurring when unit is in remote, please list the program strings used and the controller type.

\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

3. Please give any additional information you feel would be beneficial in facilitating a faster repair time (i.e., modifications, etc.)

\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

4. Is calibration data required?    Yes    No    (please circle one)

Call before shipping  
Note: We do not accept  
"collect" shipments.

Ship instruments to nearest support office.