# RACAL INSTRUMENTS ${ }^{\text {™ }}$ 1260-35 SWITCH MODULE 

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

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## FOR YOUR SAFETY

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


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
1260-35 Signal Multiplexer/Scanner, P/N 404944
1260-35A Signal Multiplexer/Scanner, P/N 404944-001

They conform to the following Product Specifications:
Safety: EN61010-1:1993+A2:1995
EMC: EN61326:1997+A1:1998

## 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 (modified by 93/68/EEC).

Irvine, CA, May 8, 2002

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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 126001T 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 1260-35A

The 1260-35A operates as a 4 -wire MUX. Thus, when a channel is operated, 2 relays must be operated in parallel. For each channel, when a bit of Control Register $X$ is set (or cleared), the same bit of Control Register X+6 must also be set (or cleared).

Each channel on this module is therefore controlled by setting or clearing two bits, one each in two different Control Registers. 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 between logical channels used to operate the relay module in message-based mode and the bits within the Control Registers which may be used to operate the channel 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 "RegisterBased Operation" Section of Chapter 2 of the 1260-01T manual for a description of calculating control register addresses.

For example, when closing channel 13, both byte 1 and byte 7 must have bit 5 set.

| Channel | Control Register | Control Bit |
| :---: | :---: | :---: |
| 0 | 0 and 6 | 0 |
| 1 | 0 and 6 | 1 |
| 2 | 0 and 6 | 2 |
| 3 | 0 and 6 | 3 |
| 4 | 0 and 6 | 4 |
| 5 | 0 and 6 | 5 |
| 6 | 0 and 6 | 6 |
| 7 | 0 and 6 | 7 |
| 8 | 1 and 7 | 0 |
| 9 | 1 and 7 | 1 |
| 10 | 1 and 7 | 2 |
| 11 | 1 and 7 | 3 |
| 12 | 1 and 7 | 4 |
| 13 | 1 and 7 | 5 |
| 14 | 1 and 7 | 6 |
| 15 | 1 and 7 | 7 |
| 16 | 2 and 8 | 0 |
| 17 | 2 and 8 | 1 |
| 18 | 2 and 8 | 2 |
| 19 | 2 and 8 | 3 |
| 20 | 2 and 8 | 4 |
| 21 | 2 and 8 | 5 |
| 22 | 2 and 8 | 6 |
| 23 | 2 and 8 | 7 |
| 24 | 3 and 9 | 0 |
| 25 | 3 and 9 | 1 |
| 26 | 3 and 9 | 2 |
| 27 | 3 and 9 | 3 |
| 28 | 3 and 9 | 4 |
| 29 | 3 and 9 | 5 |
| 30 | 3 and 9 | 6 |
| 31 | 3 and 9 | 7 |
| 32 | 4 and 10 | 0 |
|  |  | 2 |


| Channel | Control Register | Control Bit |
| :---: | :---: | :---: |
| 33 | 4 and 10 | 1 |
| 34 | 4 and 10 | 2 |
| 35 | 4 and 10 | 3 |
| 36 | 4 and 10 | 4 |
| 37 | 4 and 10 | 5 |
| 38 | 4 and 10 | 6 |
| 39 | 4 and 10 | 7 |
| 40 | 5 and 11 | 0 |
| 41 | 5 and 11 | 1 |
| 42 | 5 and 11 | 2 |
| 43 | 5 and 11 | 3 |
| 44 | 5 and 11 | 4 |
| 45 | 5 and 11 | 5 |
| 46 | 5 and 11 | 6 |
| 47 | 5 and 11 | 7 |

## Control Information for the 1260-35B

The following information describes the control-register-to-relay-channel mapping for a 1260-35B Relay Module. This information may be used to control a 1260-35B 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 "RegisterBased 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 |


| Channel | Control Register | Control Bit |
| :---: | :---: | :---: |
| 37 | 4 | 5 |
| 38 | 4 | 6 |
| 39 | 4 | 7 |
| 40 | 5 | 0 |
| 41 | 5 | 1 |
| 42 | 5 | 2 |
| 43 | 5 | 3 |
| 44 | 5 | 4 |
| 45 | 5 | 5 |
| 46 | 5 | 6 |
| 47 | 5 | 7 |
| 48 | 6 | 0 |
| 49 | 6 | 1 |
| 50 | 6 | 2 |
| 51 | 6 | 3 |
| 52 | 6 | 4 |
| 53 | 6 | 5 |
| 54 | 6 | 6 |
| 55 | 6 | 7 |
| 56 | 7 | 0 |
| 57 | 7 | 1 |
| 58 | 7 | 2 |
| 59 | 7 | 3 |
| 60 | 7 | 4 |
| 61 | 7 | 5 |
| 62 | 7 | 6 |
| 63 | 7 | 7 |
| 64 | 8 | 0 |
| 65 | 8 | 1 |
| 66 | 8 | 2 |
| 67 | 8 | 3 |
| 68 | 8 | 4 |
| 69 | 8 | 5 |
| 70 | 8 | 6 |
| 71 | 8 | 7 |
| 72 | 9 | 0 |
| 73 | 9 | 1 |
| 74 | 9 | 2 |
| 75 | 9 | 3 |
| 76 | 9 | 4 |
| 77 | 9 | 5 |
| 78 | 9 | 6 |
| 79 | 9 | 7 |
| 80 | 10 | 0 |
| 81 | 10 | 1 |
| 82 | 10 | 2 |
| 83 | 10 | 3 |
| 84 | 10 | 4 |
| 85 | 10 | 5 |
| 86 | 10 | 6 |
| 87 | 10 | 7 |
| 88 | 11 | 0 |
| 89 | 11 | 1 |
| 90 | 11 | 2 |
| 91 | 11 | 3 |
| 92 | 11 | 4 |
| 93 | 11 | 5 |
| 94 | 11 | 6 |
| 95 | 11 | 7 |
| 96 | 12 | 0 |

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## Chapter 1

## MODULE SPECIFICATION

## 1260-35 Module Specification

The 1260-35 Signal Multiplexer/Scanner Module is a $1 \times 96$ multiplexer. It switches two lines per channel and has the capability of being configured as two $1 \times 48$ multiplexers, four $1 \times$ 24 multiplexers, eight $1 \times 12$ multiplexers, or sixteen $1 \times 6$ multiplexers. The configuration is user selectable, but is supplied by the factory in one $1 \times 96$ two-wire mode. A block diagram of the module is shown in Figure 3-1


Figure 1-1, 1260-35 Signal Multiplexer/Scanner Module

## Specifications

| Switch Configurations <br> Four-wire Mode <br> Two-wire Mode | Any configuration <br> Any configuration |
| :--- | :--- |
| User Connector | 64-Pin (2 Row) |
| IDC Quick Disconnec |  |
| Maximum Switchable Voltage |  |
| (Terminal-Terminal or Terminal-Chassis |  |
| 220VD, 250VAC R |  |

## Cooling Requirement

## Ordering <br> Information

Safety

Model Number
1260-35
1260-35A

Airflow<br>Backpressure

Power Requirements
$+5 \mathrm{~V}, \mathrm{I}_{\mathrm{pm}}$
$+24 \mathrm{~V}, \mathrm{I}_{\mathrm{dm}}$
Weight
4.0 liters/sec
$0.5 \mathrm{~mm} \mathrm{H}_{2} \mathrm{O}$

Minimum Option 01 Firmware
Revision
17.1

Description
$1 \times 96$ Signal Multiplexer/
Scanner, User Conn: IDC
$1 \times 96$ Signal Multiplexer/
Scanner, User Conn: Crimp

Part Number
404944
404944-001

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.

## 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.eadsnadefense.com.

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## Chapter 2

## INSTALLATION INSTRUCTIONS

## Unpacking and Inspection

SENSITIVE ELECTRONIC DEVICES
DO NOT SHIP OR STORE NEAR
STRONG ELECTROSTATIC, RADIOACTIVE FIELDS

## Reshipment Instructions

1. Remove the 1260-35 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 1260-35 module option and the 1260-35 Users 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 1260-35 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 staticcontrolled area.
4. 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.
5. 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.
6. Reship in either the original or a new shipping carton.

Option 01 Installation

Module<br>Installation

1260-35 ID Byte

## Configuration

Installation of the Option 01 to the $1260-35$ is described in the Installation section of the 1260 Series VXI Switching Cards Manual.

Installation of the 1260-35 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 of the DIP switches SW1-5 and SW1-6 are described in the following sections.

Each configuration responds to different sets of values for <channel number>. The set of values the 1260-35 responds to is controlled by switch 5 on DIP switch 51 on the PCB. The switch settings that correspond to the two configurations are as follows:

Configuration S1 Switch 5 S1 Switch 6

| Four-wire | Off | Off |
| :--- | :--- | :--- |
| Two-wire | On | Off |

The 1260-35 Scanner Multiplexer is a user configurable switching module. Ten different configurations are available as follows:

1) Sixteen $1 \times 6$ two-wire scanner/multiplexers, P/N 404944-206
2) Eight $1 \times 6$ four-wire scanner/multiplexers, P/N 404944-406
3) Eight $1 \times 12$ two-wire scanner/multiplexers, P/N 404944-212
4) Four $1 \times 12$ four-wire scanner/multiplexers, P/N 404944-412
5) Four $1 \times 24$ two-wire scanner/multiplexers, P/N 404944-224
6) Two $1 \times 24$ four-wire scanner/multiplexers, P/N 404944-424
7) Two $1 \times 48$ two-wire scanner/multiplexers, P/N 404944-248
8) One $1 \times 48$ four-wire scanner/multiplexers, P/N 404944-448
9) One $1 \times 96$ two-wire scanner/multiplexers, P/N 404944-296
10) One $1 \times 192$ one-wire scanner/multiplexers, P/N 404944

Unless otherwise specified, the $1260-35$ is shipped from the factory in the $1 \times 192$ single wire configuration. Table 2-1 gives the
necessary information to configure the module into the other possible configurations

Table 2-1, 1260-35 Jumper Installation
An $X$ indicates a jumper is to be fitted. $A n(X)$ indicates the jumper is optional depending on whether access to the analog bus is required. A blank indicates no jumper is to be fitted.

| $\begin{aligned} & \text { 16(1x6) } \\ & \text { 2-wire } \end{aligned}$ | $\begin{aligned} & 8(1 \times 6) \\ & \text { 4-wire } \end{aligned}$ | $\begin{aligned} & \text { 8(1×12) } \\ & \text { 2-wire } \end{aligned}$ | $\begin{aligned} & \text { 4(1×12) } \\ & \text { 4-wire } \end{aligned}$ | $\begin{aligned} & \text { 4(1x24) } \\ & \text { 2-wire } \end{aligned}$ | $\begin{aligned} & 2(1 \times 24) \\ & \text { 4-wire } \end{aligned}$ | $\begin{aligned} & \text { 2(1x48) } \\ & \text { 2-wire } \end{aligned}$ | $\begin{aligned} & 1(1 \times 48) \\ & \text { 4-wire } \end{aligned}$ | $\begin{aligned} & \text { 1(1×96) } \\ & \text { 2-wire } \end{aligned}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| W2A, B |  |  |  |  |  | (X) | (X) | (X) |
| W3A, B |  | X | X | X | X | X | X | X |
| W4A, B |  |  |  | X | X | X | X | X |
| W5A, B |  | X | X | X | X | X | X | X |
| W6A, B |  |  |  |  |  | X | X | X |
| W7A, B |  |  |  |  |  |  |  | X |
| W8A, B |  | X | X | X | X | X | X | X |
| W9A, B |  |  |  | X | X | X | X | X |
| W10A, B |  | X | X | X | X | X | X | X |
| W11A, B |  |  |  |  | 1(1×192) | 1-WIRE | ONLY---> | X |
| W12A, B |  | X | X | X | X | X | X | $x$ |
| W13A, B |  |  |  | X | X | X | X | X |
| W14A, B |  | X | X | X | X | X | X | X |
| W15A, B |  |  |  |  |  |  |  | $x$ |
| W16A, B |  |  |  |  |  | X | X | X |
| W17A, B |  | X | X | X | X | X | X | X |
| W18A, B |  |  |  | X | X | X | X | X |
| W19A, B |  | X | X | X | X | X | X | X |
| W20A, B |  |  |  |  |  | (X) | (X) | (X) |

## Analog Bus

In most of the above configurations, the 1260-35 may be user configured to access an analog bus (refer to Figure 3-1). The analog bus allows internal expansion for the configuration of larger scanner/multiplexers than the module may achieve alone, by providing access to a common bus channel which may be daisy chained to other modules via the front panel.

To connect the module to the analog bus, install jumpers W2A, W2B, W20A, and W20B.

## Chapter 3

## MODULE SPECIFIC SYNTAX

# 1260-35 Module Specific Syntax 

## Syntax

The Module Specific Syntax for the 1260-35 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.

The Module Specific Syntax for the 1260-35 Signal Multiplexer/Scanner module is as follows:

OPEN <module address>.<channel>[;<module address>.
<channel>]
where <module address> is the switch card address.
<channel> is the relay to be closed to connect an input to the output.

Note that Channels remain closed until opened by an OPEN command, RESET command, VXI hard or soft reset, or power-off.

## NOTE

The <module address> used here is NOT the VXIbus defined logical address of the $\mathbf{1 2 6 0}$ Series 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 range of values for <channel> is:
One-wire 00-96
Two-wire 00-95
Four-wire 00-47
The actual mapping of number to connector pins is given in Table $3-1$. Figure 3-1 shows the physical location of the various connector pins.

## Example:

OPEN 3.02
This open command will open channel 2 on the module at switch card address 3

## CLOSE Command

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

## 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 address.

The responses to the PSETUP command for the 1260-35 Multiplexer/Scanner is as follows:

1260-35: Two-wire
<module address>. 1260-35B, Two-wire Scanner/Multiplexer Module
<module address>. BBM
<module address>.END
1260-35: Four-wire
<module address>. 1260-35A, Four-wire Scanner/Multiplexer 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" characters denotes no more information to report.

## PDATAOUT Command

## Operation In Single-Wire Mode

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:
1260-35: Two-wire
<module address>. 1260-3 SB Two-wire Scanner/Multiplexer Module
<module address>. <channel>[,<channel>] [,<channel>]
<module address>.END
1260-35 Four-wire
<module address>. 1 260-35A Four-wire Scanner/Multiplexer 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.

The 1260-35 is delivered with all jumpers installed (refer to Table 2-1). In this configuration, the module is a $1 \times 96$ two-wire multiplexer (refer to Figure 3-1).

Channel 97 is a single pole, double throw (SPDT) relay with its common channel connected to J202, pin B2. The normally closed (NC) contact is connected to the "LO" side of the two-wire common bus, and the normally open (NO) contact is connected to the "HI" side of the common bus.

The common output of channel 96 is the single channel of the 192 x 1 multiplexer, and the 96 HI and 96 LO connections make up the 192 channels. By closing the appropriate channel (0-95) and opening or closing channel 96. a $192 \times 1$ multiplexer is achieved.

## Example:

This would correct J202 pin B2 to J202 pin A4
Table 3-1, 1260-35 Channel Closure
channel interconnect for 1,2 and 4 -wire modes.

## 1-wire mode:

<channel> (channel 96 open) 0 thru 95 (channel 96 closed)
0 thru 95
<channel> output
always J202- B2
always J202- B2
<channel> input
(see 2-wire mode channels 0-95 input pins $b$-side of channel)
(see 2-wire mode channels 0-95 input pins a-side of channel)

Thus, a one $1 \times 191$ 1-wire mode is acheived.
2-wire mode:

| channel> | <channel> output pins | to | <channel> input pins |
| :---: | :---: | :---: | :---: |
|  | a / b |  | a / b |
|  | (HI) (Lo) |  | (HI) (LO) |
| 0 | J200- A30 / B30 |  | J200- A29 / B29 |
| 1 | J200- A30 / B30 |  | J200- A28 / B28 |
| 2 | J200- A30 / B30 |  | J200- A27 / B27 |
| 3 | J200- A30 / B30 |  | J200- A26 / B26 |
| 4 | J200- A30 / B30 |  | J200- A25 / B25 |
| 5 | J200- A30 / B30 |  | J200- A24 / B24 |
| 6 | J200- A23 / B23 |  | J200- A22 / B22 |
| 7 | J200- A23 / B23 |  | J200- A21 / B21 |
| 8 | J200- A23 / B23 |  | J200- A20 / B20 |
| 9 | J200- A23 / B23 |  | J200- A19 / B19 |
| 10 | J200- A23 / B23 |  | J200- A18 / B18 |
| 11 | J200- A23 / B23 |  | J200- A17 / B17 |
| 12 | J200- A16 / B16 |  | J200- A15 / B15 |
| 13 | J200- A16 / B16 |  | J200- A14 / B14 |
| 14 | J200- A16 / B16 |  | J200- A13 / B13 |
| 15 | J200- A16 / B16 |  | J200- A12 / B12 |
| 16 | J200- A16 / B16 |  | J200- A11 / B11 |
| 17 | J200- A16 / B16 |  | J200- A10 / B10 |
| 18 | J200- A9 / B9 |  | J200- A8 / B8 |
| 19 | J200- A9 / B9 |  | J200-A7 / B7 |
| 20 | J200- A9 / B9 |  | J200- A6 / B6 |
| 21 | J200- A9 / B9 |  | J200-A5 / B5 |
| 22 | J200- A9 / B9 |  | J200- A4 / B4 |
| 23 | J200- A9 / B9 |  | J200- A3 / B3 |
| 24 | J202- A30 / B30 |  | J202- A29 / B29 |
| 25 | J202- A30 / B30 |  | J202- A28 / B28 |
| 26 | J202- A30 / B30 |  | J202- A27 / B27 |
| 27 | J202- A30 / B30 |  | J202- A26 / B26 |
| 28 | J202- A30 / B30 |  | J202- A25 / B25 |
| 29 | J202- A30 / B30 |  | J202- A24 / B24 |

Table 3-1, 1260-35 Channel Closure (continued)

| 30 | J202 A23 / B23 | J202 A22 / B22 |
| :---: | :---: | :---: |
| 31 | J202 A23 / B23 | J202 A21 / B21 |
| 32 | J202 A23 / B23 | J202 A20 / B20 |
| 33 | J202 A23 / B23 | J202 A19 / B19 |
| 34 | J202 A23 / B23 | J202 A18 / B18 |
| 35 | J202 A23 / B23 | J202 A17 / B17 |
| 36 | J202 A16 / B16 | J202 A15 / B15 |
| 37 | J202 A16 / B16 | J202 A14 / B14 |
| 38 | J202 A16 / B16 | J202 A13 / B13 |
| 39 | J202 A16 / B16 | J202 A12 / B12 |
| 40 | J202 A16 / B16 | J202 A11 / B11 |
| 41 | J202 A16 / B16 | J202 A10 / B10 |
| 42 | J202 A9 / B9 | J202 A8 / B8 |
| 43 | J202 A9 / B9 | J202 A7 / B7 |
| 44 | J202 A9 / B9 | J202 A6 / B6 |
| 45 | J202 A9 / B9 | J202 AS / B5 |
| 46 | J202 A9 / B9 | J202 A4 / B4 |
| 47 | J202 A9 / B9 | J202 A3 / B3 |
| 48 | J201 A30 / B30 | J201 A29 / B29 |
| 49 | J201 A30 / B30 | J201 A28 / B28 |
| 50 | J201 A30 / B30 | J201 A27 / B27 |
| 51 | J201 A30 / B30 | J201 A26 / B26 |
| 52 | J201 A30 / B30 | J201 A25 / B25 |
| 53 | J201 A30 / B30 | J201 A24 / B24 |
| 54 | J201 A23 / B23 | J201 A22 / B22 |
| 55 | J201 A23 / B23 | J201 A21 / B21 |
| 56 | J201 A23 / B23 | J201 A20 / B20 |
| 57 | J201 A23 / B23 | J201 A19 / B19 |
| 58 | J201 A23 / B23 | J201 A18 / B18 |
| 59 | J201 A23 / B23 | J201 A17 / B17 |
| 60 | J201 A16 / B16 | J201 A15 / B15 |
| 61 | J201 A16 / B16 | J201 A14 / B14 |
| 62 | J201 A16 / B16 | J201 A13 / B13 |
| 63 | J201 A16 / B16 | J201 A12 / B12 |
| 64 | J201 A16 / B16 | J201 A11 / B11 |
| 65 | J201 A16 / B16 | J201 A10 / B10 |
| 66 | J201 A9 / B9 | J201 A8 / B8 |
| 67 | J201 A9 / B9 | J201 A7 / B7 |
| 68 | J201 A9 / B9 | J201 A6 / B6 |
| 69 | J201 A9 / B9 | J201 AS / B5 |
| 70 | J201 A9 / B9 | J201 A4 / B4 |
| 71 | J201 A9 / B9 | J201 A3 / B3 |
| 72 | J203 A30 / B30 | J203 A29 / B29 |
| 73 | J203 A30 / B30 | J203 A28 / B28 |
| 74 | J203 A30 / B30 | J203 A27 / B27 |
| 75 | J203 A30 / B30 | J203 A26 / B26 |
| 76 | J203 A30 / B30 | J203 A25 / B25 |
| 77 | J203 A30 / B30 | J203 A24 / B324 |

Table 3-1, 1260-35 Channel Closure (continued)

| 78 | J203 A23 / B23 | J203 A22 / B22 |
| :---: | :---: | :---: |
| 79 | J203 A23 / B23 | J203 A21 / B21 |
| 80 | J203 A23 / B23 | J203 A20 / B20 |
| 81 | J203 A23 / B23 | J203 A19 / B19 |
| 82 | J203 A23 / B23 | J203 A18 / B18 |
| 83 | J203 A23 / B23 | J203 A17 / B17 |
| 84 | J203 A16 / B16 | J203 A15 / B15 |
| 85 | J203 A16 / B16 | J203 A14 / B14 |
| 86 | J203 A16 / B16 | J203 A13 / B13 |
| 87 | J203 A16 / B16 | J203 A12 / B12 |
| 88 | J203 A16 / B16 | J203 A11 / B11 |
| 89 | J203 A16 / B16 | J203 A10 / B10 |
| 90 | J203 A9 / B9 | J203 A8 / B8 |
| 91 | J203 A9 / B9 | J203 A7 / B7 |
| 92 | J203 A9 / B9 | J203 A6 / B6 |
| 93 | J203 A9 / B9 | J203 A5 / B5 |
| 94 | J203 A9 / B9 | J203 A4 / B4 |
| 95 | J203 A9 / B9 | J203 A3 / B3 |

96 (not used in 2-wire mode)

## 4-wire mode:

| <channel> | refer to the following 2-wire <br> channels for the input/output <br> pins | <channel> | refer to the following 2-wire <br> channels for the <br> input/output pins |
| :--- | :--- | :--- | :--- |
| 0 | 0,48 | 24 | 24,72 |
| 1 | 1,49 | 25 | 25,73 |
| 2 | 2,50 | 26 | 26,74 |
| 3 | 3,51 | 27 | 27,75 |
| 4 | 4,52 | 28 | 28,76 |
| 5 | 5,53 | 29 | 29,77 |
| 6 | 6,54 | 30 | 30,78 |
| 7 | 7,55 | 31 | 31,79 |
| 8 | 8,56 | 32 | 32,80 |
| 9 | 9,57 | 33 | 33,81 |
| 10 | 10,58 | 34 | 34,82 |
| 11 | 11,59 | 35 | 35,83 |
| 12 | 12,60 | 36 | 36,84 |
| 13 | 13,61 | 37 | 37,85 |
| 14 | 14,62 | 38 | 38,86 |
| 15 | 15,63 | 39 | 39,87 |
| 16 | 16,64 | 40 | 40,88 |
| 17 | 17,65 | 41 | 41,89 |
| 18 | 18,66 | 42 | 42,90 |
| 19 | 19,67 | 43 | 43,91 |
| 20 | 20,68 | 44 | 44,92 |
| 21 | 21,69 | 45 | 45,93 |
| 22 | 22,70 | 46 | 47,95 |
| 23 | 23,71 | 47 |  |

96 (not used in 4-wire mode)


Figure 3-1, 1260-35 Block Diagram


Figure 3-2, 1260-35 Pin Connections, Front View

## Chapter 4

## OPTIONAL HARNESS ASSEMBLIES

The following harness assemblies are used to connect 1260-35 to Freedom Series Test Receiver Interfaces.

Each harness documentation consists of an assembly drawing, parts list, system wire list and wire list.
$407280 \quad$ Virginia Panel, Inc. Series VP90 Interface Harness
407281 TTI Testron, Inc. Interface Harness
For more information on Racal Instruments ${ }^{\text {TM }}$ complete line of Test Receivers Interface solution, contact your Sales Representative.

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Assembly 407280 HARNESS ASSY, 1260-35, VP90 Date 3/18/99 Revision D

| $\#$ | Component | Description | U/N | Qty Reqd | Ref |
| :--- | :--- | :--- | :--- | :--- | :--- |
| 1 | 405084 | PCB ASSY, VP90 INTFC, 64CONTCT | EA | 1.00000 |  |
| 2 | 405085 | PCB ASSY, VP90 INTFC, 96CONTCT | EA | 2.00000 |  |
| 3 | 407259 | CABLE ASSY, IDC, 64COND,VP90 | EA | 3.00000 |  |
| 4 | 407258 | CABLE ASSY, IDC, 64SPLT,VP90 | EA | 1.00000 |  |
| 5 | 910541 | POLYURETHANE CONFORMAL COAT | EA | .00001 |  |
| 6 | GRP-I10-I/2 | TBGWOV- POY. 250ID-BLACK | FT | .00001 |  |
| 7 | 500005 | TIE CORD NYLON | FT | .00001 |  |
| 8 | 500017 | TBGSRK- POF. 500ID-BLACK | FT | .00001 |  |
| 9 | M23053/5-109-4 | TBGSRK- POF. 750ID-YELLOW | FT | .00001 |  |
| 10 | 500104 | TBGSRK- POF .750 ID-CLEAR | FT | .00001 |  |

ENGINEERING WIRE LIST


ENGINEERING WIRE LIST


## ENGINEERING WIRE LIST



ENGINEERING WIRE LIST


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ENGINEERING WIRE LIST



ENGINEERING PARTS LIST

| ITEM | BIN | PART NO. | DESCRIPTION |  |  | QTY | REF |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 1 |  | 407260 | CABLE ASSY, TDC, 64-COND, TTI |  |  | 4 |  |  |
| 2 |  | 610777 | TIE-CA-LGK-.065-.075 |  |  | A/R |  |  |
| 3 |  | 910541 | POLYURETHANE CONF COAT |  |  | A/R |  |  |
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|  |  |  | Goodyear St., Irvine, CA 92718 |  |  |  |  |  |
| RACAL Instruments, Inc., 4 Goodyear St., Irvine, CA 92718 , |  |  |  |  |  |  |  |  |
| - DOCUMENT TITLE |  |  |  |  |  | DOCUMENT NO. | REV |
| HARNESS ASSEMBLY, 1260-35, TTI |  |  |  | A 21793 <br> DRN  |  |  | 407281 | C |
|  |  |  |  |  | SHEE |  |

ENGINEERING WIRE LIST


## ENGINEERING WIRE LIST



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## ENGINEERING WIRE LIST



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## ENGINEERING WIRE LIST

| WIRE | FROM | TO | TYPE | PART \# | WIRE <br> LEN | REFERENCE |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| $\begin{aligned} & 191 \\ & 192 \end{aligned}$ | $\begin{aligned} & \mathrm{J} 114-4 \\ & \mathrm{~J} 114-2 \end{aligned}$ | $\begin{aligned} & \text { J202-B31 } \\ & \text { J202-B32 } \end{aligned}$ | $\begin{aligned} & \text { TAN } \\ & \text { TAN } \\ & \hline \end{aligned}$ | $\begin{aligned} & 407260 \\ & 407260 \\ & \hline \end{aligned}$ | $\begin{aligned} & 41.5^{\prime \prime} \\ & 41.5^{\prime \prime} \\ & \hline \end{aligned}$ | $\begin{aligned} & \text { GND } \\ & \text { GND } \end{aligned}$ |  |
| $\begin{aligned} & 193 \\ & 194 \end{aligned}$ | $\begin{aligned} & \mathrm{J} 127-3 \\ & \mathrm{~J} 127-1 \end{aligned}$ | $\begin{aligned} & \mathrm{J} 203-\mathrm{Al} \\ & \mathrm{~J} 203-\mathrm{A} 2 \\ & \hline \end{aligned}$ | $\begin{aligned} & \mathrm{RED} \\ & \mathrm{BRN} \\ & \hline \end{aligned}$ | $\begin{array}{r} 407260 \\ 407260 \\ \hline \end{array}$ | $\begin{aligned} & 41.5^{\prime \prime} \\ & 41.5^{\prime \prime} \end{aligned}$ | $\begin{aligned} & \text { GND } \\ & \text { GND } \end{aligned}$ |  |
| $195$ | J126-2 J126-4 | $\begin{aligned} & \text { J203-A3 } \\ & \text { J203-A4 } \end{aligned}$ | BLK WHT | $\begin{aligned} & 407260 \\ & 407260 \end{aligned}$ | $\begin{aligned} & 41.5^{\circ} \\ & 41.5^{\prime \prime} \end{aligned}$ | CHANNEL 95, A <br> CHANNEL 94, A |  |
| 197 | J126-6 J126-8 | $\begin{aligned} & \mathrm{J} 203-\mathrm{A} 5 \\ & \mathrm{~J} 203-\mathrm{A} 6 \end{aligned}$ | $\begin{aligned} & \hline \text { GRY } \\ & \text { VIO } \end{aligned}$ | $\begin{aligned} & 407260 \\ & 407260 \end{aligned}$ | $\begin{aligned} & 41.5^{\prime \prime} \\ & 41.5^{\prime \prime} \end{aligned}$ | CHANNEL 93, A CHANNEL 92, A |  |
| 198 | J126-8 | $\mathrm{J} 203-\mathrm{A} 6$ | VIO | $407260$ | $\frac{41.5{ }^{\prime \prime}}{415^{\prime \prime}}$ |  |  |
| 199 200 | J126-10 J125-9 | $\begin{aligned} & \text { J203-A7 } \\ & \text { J203-A8 } \end{aligned}$ | $\begin{aligned} & \hline \text { BLU } \\ & \text { GRN } \end{aligned}$ | $\begin{aligned} & 407260 \\ & 407260 \end{aligned}$ | $\begin{aligned} & 41.5^{\prime \prime} \\ & 41.5^{\prime \prime} \end{aligned}$ | CHANNEL 9I, A |  |
| 201 202 | J125-7 J125-5 | $\begin{aligned} & \text { J203-A9 } \\ & \text { J203-A10 } \end{aligned}$ | YEL <br> ORN | $\begin{aligned} & 407260 \\ & 407260 \end{aligned}$ | $\begin{aligned} & \hline 41.5^{\prime \prime} \\ & 41.5 " \end{aligned}$ | CHANNEL 89, A |  |
| $\begin{aligned} & 205 \\ & 206 \end{aligned}$ | J124-2 J124-4 | $\begin{aligned} & \text { J203-A13 } \\ & \text { J203-Al4 } \end{aligned}$ | BLK WHT | $\begin{aligned} & 407260 \\ & 407260 \\ & \hline \end{aligned}$ | $\begin{aligned} & 41.5 \\ & 41.5^{\prime \prime} \end{aligned}$ | CHANNEL 86, A CHANNEL 85, A |  |
| $\begin{aligned} & 207 \\ & 208 \\ & 208 \end{aligned}$ | J124-6 J124-8 | $\begin{array}{r} \text { J203-A15 } \\ \text { J203-A } 16 \\ \hline \end{array}$ | $\begin{aligned} & \text { GRY } \\ & \text { VIO } \end{aligned}$ | $\begin{aligned} & 407260 \\ & 407260 \\ & \hline \end{aligned}$ | $\begin{aligned} & \hline 41.5^{\prime \prime} \\ & 41.5^{\prime \prime} \end{aligned}$ | CHANNEL 84, A COMM I5, A |  |
| $\begin{array}{r} 209 \\ 210 \\ \hline \end{array}$ | $\begin{aligned} & \mathrm{J} 124-10 \\ & \mathrm{~J} 123-9 \end{aligned}$ | $\begin{aligned} & \text { J203-A17 } \\ & \text { J203-A18 } \\ & \hline \end{aligned}$ | $\begin{aligned} & \hline \text { BLU } \\ & \text { GRN } \\ & \hline \end{aligned}$ | $\begin{aligned} & 407260 \\ & 407260 \end{aligned}$ | $\begin{array}{r} 41.5^{\circ} \\ 41.5^{\circ} \\ \hline \end{array}$ | CHANNEL 83, A CHANNEL 82, A |  |
| $\begin{aligned} & 211 \\ & 212 \end{aligned}$ | $\begin{aligned} & \mathrm{J} 123-7 \\ & \mathrm{~J} 123-5 \end{aligned}$ | $\begin{aligned} & \text { J203-A19 } \\ & \text { J203-A20 } \end{aligned}$ | YEL ORN | $\begin{aligned} & 407260 \\ & 407260 \\ & \hline \end{aligned}$ | $\begin{array}{r} 41.5^{\prime \prime} \\ 4!.5^{\prime \prime} \end{array}$ | CHANNEL 81, A |  |
| $\begin{aligned} & 213 \\ & 214 \end{aligned}$ | $\begin{aligned} & \mathrm{J} 123-3 \\ & \mathrm{~J} 123-1 \\ & \hline \end{aligned}$ | $\begin{aligned} & \text { J203-A21 } \\ & \text { J203-A22 } \end{aligned}$ | $\begin{aligned} & \text { RED } \\ & \text { BRN } \end{aligned}$ | $\begin{array}{r} 407260 \\ 407260 \\ \hline \end{array}$ | $\begin{array}{r} 41.5^{\prime \prime} \\ 41.5^{\prime \prime} \\ \hline \end{array}$ | CHANNEL 79. A <br> CHANNEL 78. A |  |
| $\begin{aligned} & 215 \\ & 216 \\ & \hline \end{aligned}$ | J122-2 J122-4 | $\begin{aligned} & \text { J203-A23 } \\ & \text { J203-A24 } \end{aligned}$ | $\begin{aligned} & \text { BLK } \\ & \text { WHT } \end{aligned}$ | $\begin{aligned} & 407260 \\ & 407260 \\ & \hline \end{aligned}$ | $\begin{aligned} & \hline 41.5^{\prime \prime} \\ & 41.5^{\prime \prime} \end{aligned}$ | COMM 14, A CHANNEL 77, A |  |
| 217 218 | J122-6 Jt22-8 | $\begin{aligned} & \mathrm{J} 203-\mathrm{A} 25 \\ & \text { I203-A26 } \\ & \hline \end{aligned}$ | $\begin{aligned} & \text { GRY } \\ & \text { VIO } \end{aligned}$ | $\begin{array}{r} 407260 \\ 407260 \\ \hline \end{array}$ | $\begin{aligned} & 41.5^{\prime \prime} \\ & 41.5^{\prime \prime} \end{aligned}$ | CHANNEL 76, A |  |
| 219 | $\begin{aligned} & \mathrm{J} 122-10 \\ & \mathrm{~J} 121-9 \end{aligned}$ | $\begin{aligned} & \text { J203-A } 27 \\ & \text { J203-A } 28 \\ & \hline \end{aligned}$ | $\begin{aligned} & \text { BLU } \\ & \text { GRN } \end{aligned}$ | $\begin{array}{r} 407260 \\ 407260 \\ \hline \end{array}$ | $\begin{aligned} & 41.5^{\prime \prime} \\ & 41.5^{\prime} \\ & \hline \end{aligned}$ | CHANNEL 74, A CHANNEL 73, A |  |
| $\begin{aligned} & 221 \\ & 222 \end{aligned}$ | $\begin{aligned} & \mathrm{J} 121-7 \\ & \mathrm{~J} 121-5 \end{aligned}$ | $\begin{aligned} & \text { J203-A29 } \\ & \text { J203-A30 } \end{aligned}$ | $\begin{aligned} & \text { YEL } \\ & \text { ORN } \\ & \hline \end{aligned}$ | $\begin{aligned} & 407260 \\ & 407260 \\ & \hline \end{aligned}$ | $\begin{aligned} & 41.5^{\prime \prime} \\ & 41.5^{\prime \prime} \end{aligned}$ | CHANNEL 72, A COMM 13, A |  |
| $\begin{aligned} & 223 \\ & 224 \\ & \hline \end{aligned}$ | $\begin{aligned} & \mathrm{J} 121-3 \\ & \mathrm{~J} 121-\mathrm{t} \end{aligned}$ | $\begin{aligned} & \mathrm{J} 203-\mathrm{A} 31 \\ & \text { J203-A32 } \end{aligned}$ | $\begin{aligned} & \text { RED } \\ & \text { BRN } \\ & \hline \end{aligned}$ | $\begin{aligned} & 407260 \\ & 407260 \\ & \hline \end{aligned}$ | $\begin{aligned} & \hline 41.5^{\prime \prime} \\ & 41.5^{\prime \prime} \\ & \hline \end{aligned}$ | $\begin{aligned} & \text { GND } \\ & \text { GND } \end{aligned}$ |  |
| 225 226 | $\begin{aligned} & \mathrm{J} 127-4 \\ & \mathrm{~J} 127-2 \end{aligned}$ | $\begin{aligned} & \hline \text { J203-B1 } \\ & \text { J203-B2 } \\ & \hline \end{aligned}$ | $\begin{aligned} & \text { TAN } \\ & \text { TAN } \\ & \hline \end{aligned}$ | $\begin{aligned} & 407260 \\ & 407260 \\ & \hline \end{aligned}$ | $\begin{aligned} & 41.5^{\prime \prime \prime} \\ & 41.5^{\prime \prime} \\ & \hline \end{aligned}$ | $\begin{aligned} & \text { GND } \\ & \text { GND } \\ & \hline \end{aligned}$ |  |
| $\begin{aligned} & 227 \\ & 228 \end{aligned}$ | $\begin{aligned} & \mathrm{J} 126-1 \\ & \mathrm{~J} 126-3 \\ & \hline \end{aligned}$ | $\begin{array}{r} \mathrm{J} 203-\mathrm{B} 3 \\ \mathrm{~J} 203-\mathrm{B} 4 \\ \hline \end{array}$ | $\begin{aligned} & \text { TAN } \\ & \text { TAN } \end{aligned}$ | $\begin{array}{r} 407260 \\ 407260 \\ \hline \end{array}$ | $\begin{aligned} & 41.5^{\prime \prime} \\ & 41.5^{\prime \prime} \\ & \hline \end{aligned}$ | CHANNE CHANNE |  |
| 229 230 | $\begin{aligned} & \mathrm{J} 126-5 \\ & \mathrm{~J} 126-7 \end{aligned}$ | $\begin{aligned} & \mathrm{J} 203-\mathrm{B5} \\ & \mathrm{n} 203-\mathrm{B6} \\ & \hline \end{aligned}$ | $\begin{aligned} & \text { TAN } \\ & \text { TAN } \end{aligned}$ | $\begin{array}{r} 407260 \\ 407260 \\ \hline \end{array}$ | $\begin{array}{r} 41.5^{\prime \prime} \\ 41.5^{\prime \prime} \\ \hline \end{array}$ | CHANNE CHANNE |  |
| $231$ | $\begin{aligned} & J 126-9 \\ & J 125-16 \end{aligned}$ | $\begin{aligned} & \mathrm{J} 203-\mathrm{B} 7 \\ & \text { 2203-B8 } \end{aligned}$ | $\begin{aligned} & \text { TAN } \\ & \text { TAN } \end{aligned}$ | $\begin{aligned} & 407260 \\ & 407260 \end{aligned}$ | $\begin{aligned} & 41.5^{\prime \prime} \\ & 41.5^{\prime \prime} \end{aligned}$ | CHANNE CHANNE |  |
| $\begin{aligned} & 233 \\ & 234 \end{aligned}$ | $\begin{aligned} & \mathrm{J} 125-8 \\ & \mathrm{~J} 125-6 \\ & \hline \end{aligned}$ | $\begin{aligned} & \text { J203-B9 } \\ & \text { J203-B10 } \\ & \hline \end{aligned}$ | $\begin{aligned} & \text { TAN } \\ & \text { TAN } \\ & \hline \end{aligned}$ | $\begin{aligned} & 407260 \\ & 407260 \\ & \hline \end{aligned}$ | $\begin{aligned} & 41.5^{\prime \prime} \\ & 41.5^{\prime \prime} \\ & \hline \end{aligned}$ | COMM 16 <br> CHANNE |  |
| $\begin{aligned} & 235 \\ & 236 \end{aligned}$ | $\begin{aligned} & \mathrm{J} 125-4 \\ & \mathrm{~J} 125-2 \end{aligned}$ | $\begin{aligned} & \mathrm{J} 203-\mathrm{B} 11 \\ & \mathrm{~J} 203-\mathrm{B} 12 \\ & \hline \end{aligned}$ | $\begin{aligned} & \text { TAN } \\ & \text { TAN } \\ & \hline \end{aligned}$ | $\begin{aligned} & 407260 \\ & 407260 \\ & \hline \end{aligned}$ | $\begin{aligned} & 41.5^{\prime \prime} \\ & 41.5^{\prime \prime} \end{aligned}$ | CHANNE CHANNE |  |
| RACAL Instruments, Inc., 4 Goodyear St., Irvine, CA 92718 |  |  |  |  |  |  |  |
| DOCUMENT TITLE |  |  | SIZE | CODE NO. | DOCUMENT NO. |  | REV |
|  |  |  | A | 21793 | 407281 |  | C |
| HARNESS ASSEMBLY, 1260-35, TTI |  |  |  |  | - ${ }^{\text {SHEET } 9 \text { of } 11}$ |  |  |

ENGINEERING WIRE LIST


ENGINEERING WIRE LIST


## Chapter 5 PRODUCT SUPPORT

## Product Support

## Warranty

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.eadsnadefense.com.

Use the original packing material when returning the 1260-35 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.

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
Ship instruments to nearest support office.
Note: We do not accept "collect" shipments.

