

GENERAL DESCRIPTION OF MODEL HRC-24-7R

Version 1.0

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1.0 PURPOSE

Model HRC-24-7R is a DB9-to-DB25 cable assembly designed to work with any of the NAL Research A3LA-R modem series. The HRC-24-7R allows serial connection between a DTE (DB9) and an A3LA-R (DB25). Tables 1 and 2 show the pin assignments. Power to the modem is applied through two bare wires.

DB-9 Connector	DB-25 Connector
1	10
2	13
3	9
4	19
5	23
6	21
7	8
8	22
9	7

Table 1. Connections between DB-9 and DB-25 connectors.

PIN #	SIGNAL	DESCRIPTION	INTERFACE
1	EXT_ON_OFF	Power on/off control input	DC Power
2	+12VDC	Output Voltage to Power the DPL Handset	DC Power
3	EXT_GND	External GND input	DC Power
4	EXT_B+	External 4.0V – 5.5V or 5.0V – 32.0V	DC Power
5	SPKR_AUD	Speaker audio output	Analog Audio
6	DA_TX	PCM digital audio output	Digital Audio
7	RI	RS232 Ring Indicate	RS232 Data
8	RTS	RS232 Request To Send	RS232 Data
9	TX	RS232 Transmit Data (Input)	RS232 Data
10	DCD	RS232 Data Carrier Detect	RS232 Data
11	DA_FS	PCM digital audio frame sync output	Digital Audio
12	DA_CLK	PCM digital 2.048MHz audio clock output	Digital Audio
13	RX	RS232 Receive Data (Output)	RS232 Data
14	SIGNAL GND	Signal ground, 0V signal reference and return	GND
15	MIC_AUD	Microphone audio input	Analog Audio
16	EXT_B+	External 4.0V – 5.5V or 5.0V – 32.0V	DC Power
17	EXT_GND	External GND input	DC Power
18	DPL_TX	Digital Peripheral Link (DPL) data output	DPL UART
19	DTR	RS232 Data Terminal Ready	RS232 Data
20	DPL_RX	Digital Peripheral Link (DPL) data input	DPL UART
21	DSR	RS232 Data Set Ready	RS232 Data
22	CTS	RS232 Clear To Send	RS232 Data
23	SIGNAL GND	Signal ground, 0V signal reference and return	GND
24	DA_RX	PCM digital audio input	Digital Audio
25	SIGNAL GND	Signal ground, 0V signal reference and return	GND

Table 2. Pin assignments of the DB25 connector.

2.0 SPECIFICATIONS

General Specifications

Dimensions of backshell: 2.20" L x 1.11" W x 0.62" D

Weight of backshell/DB25: 0.10 pound

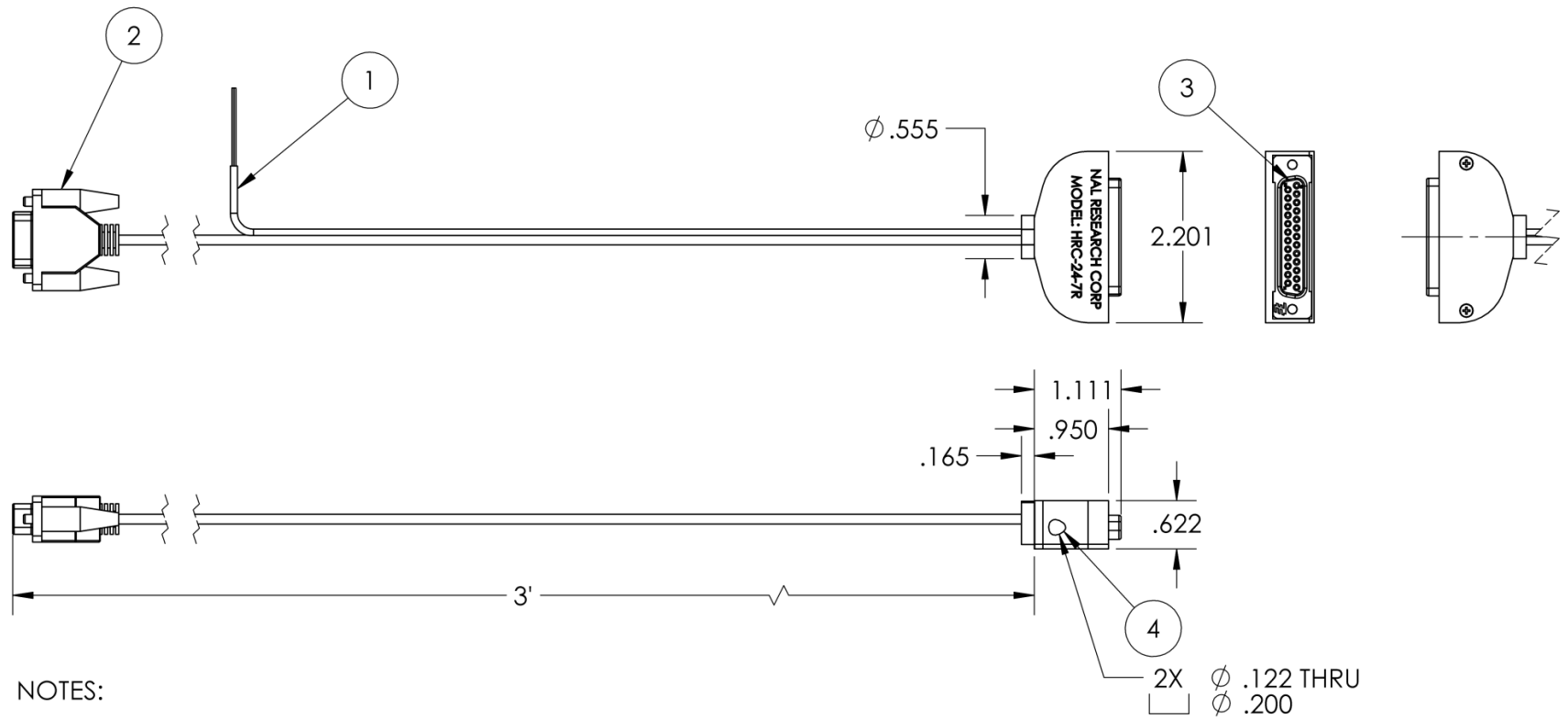
Physical Connectors

Connectors: DB-25 for modem attachment

DB-9 for data terminal equipment (DTE) attachment

Two bared wires for 4.0V–5.5V or 5.0V–32.0V (A3LA-R must set to the proper voltage setting)

REVISIONS				
ZONE	REV.	DESCRIPTION	DATE	APPROVED
	1.0	INITIAL RELEASE	11/15/2012	DG



NOTES:

1. 5-32 VDC INPUT (+) RED (GND) BLACK
2. SERIAL DATA CONNECTOR (FEMALE DB-9)
3. DATA/POWER CONNECTION TO MODEM (FEMALE DB-25)
4. MOUNTING HOLES TO MODEM. 2X 4-40 SOCKETHEAD SCREWS PROVIDED

DWG. NO. 92337
 SHEET 1
 REV. 1.0

DRAWING FILE NAME: HRC-24-7R
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