Wand Port

The Wand port is located on the left side of the terminal. It is a 6-pin DIN port that accepts a circular DIN connector.



The Wand, when connected, uses only 3 of the 6 pins available on the DIN connection. If a Barcode Gun (non-contact reader) is used, the center pin supplies additional power. The terminal uses 2 of the remaining pins as logic lines for external controls. See pin-out and function table below:

Pin	Function	6
1	+5 Volts	5
2	Signal Control Logic Line	
	(Digital IO #0 - Output Only)	
3	Barcode Wand Receive Data	4 3
4	Ground	END VIEW
5	Access Logic Line	o-pin Din jack
	(Digital IO #1 - Output Only)	
6	12 Volt Unregulated	
	(Maximum current draw 220 mA with	3A Transformer Only)



Wand and Y-Cable

Disconnect power to the terminal before connecting the Barcode Wand. The wand is capable of reading bar code stripes by passing it directly over the label. Check the software manual to identify the codes your terminal will read.



The Y-cable shown below allows for connection of both a wand and other external devices. The single end of the cable is plugged into the terminal. A wand can be connected to one split and another device to the other. See appendix for External Relay Box part number.



Parallel Port

The parallel port is located on the right back of the DC7000 Terminal. It is a 25 pin female port, which will accept a 25-pin male connector.



This type of parallel port is typically used on IBM[®] PC or IBM-PC compatible computers. The DC7000 Terminal provides strain relief if the connector is locked in by the securing screws. Securing the parallel cable to the wall or mounting surface can obtain additional strain relief.

Parallel Cable

The parallel port is used for additional digital I/O or for printing. A standard parallel print cable is used with a simple ASCII parallel printer. Shown below is a parallel interface cable. Since this is the same cable that is used to connect an IBM-PC or compatible to a printer, it will likely be available from most computer dealers off-the-shelf. One end is a male DB-25 connector; the other end is a 36-pin Centronics-type connector to match the parallel port on the printer.



Note: Schematic connections are shown from END VIEW. (As viewed from the outside of the connectors.)

5. CompanionProducts

Readers

Description / Illustration			Part Number	
Barcode Wand and Holder			74-0106-002	
External Barcode Slot Reader		Visible Infrared	74-0111-000 74-0111-002	

Power Supplies

Description/Illustration	Part Number
Lighter Power	72-0160-000
120VAC to 9VAC, 1A Power Supply	56-0113-000
120/240VAC to 12VAC, 3A Power Supply	56-0128-000
(Required for Terminals with Fingerprint Reader, Modem or Wireless Communication)	
Note: Comes with Std. 2-Blade US Plug Optional Available Adaptors	75-0166-000
Continental Europe U.K. / Ireland Australia / New Zealand S.Africa / India	75-0167-000 75-0168-000 75-0169-000 75-0170-000

External Relay Box, External Buzzer

External Relay Box	120 V 240 V	01-0121-000 01-0121-002
External Buzzer	1	01-0122-000

Description/Illustration		Part Number
"Standard" Modular Cable		
	length - 7 feet	72-0146-000
	- 50 feet	72-0146-004
Y-Cable (splitter)		72-0159-000
DB-25 RS-232 Host Cable	Assembly	
Includes DB-25 Female (RS-23 Female adaptor and "Standard"		
the second se	length - 7 feet - 50 feet	25-0116-000 25-0116-007
DB-9 RS-232 Host Cable A	ssembly	
Includes DB-9 (RS-232/host) to RJ-11 female	
adaptor and "Standard" Modular Cable. length - 7 feet - 50 feet		25-0116-004 25-0116-008
9 Pin RS-232 to USB Adaptor		63-0181-000

Cables, Converter, Badge Racks

Description / Illustration	
Modem Adaptor Cable Assembly Includes DB-25 Male (modem) to RJ-11 male adaptor and "Standard" Modular Cable.	
length - 7 feet	25-0123-000
Teflon Cable (available by the foot)	55-0124-000
Junction Box	63-0169-000
RS-232 to RS-485 Converter Assembly Includes RS-232 to RS-485 converter with DB-9 / RJ-11 Connectors and "Standard" Modular Cable. length - 7 feet	25-0134-001
40 Pocket Badge Rack (Plastic) (8 ¹ / ₄ " wide x 22 ⁵ / ₈ " high)	81-0117-000
(2) 12 Pocket Badge Racks (Plastic) (3 ⁷ / ₈ " wide x 14" high)	81-0116-003
40 Pocket Badge Rack (Metal) (4 ¹ / ₂ " wide x 32" high)	81-0113-000

6. Appendix

Units with Acroprint Data Collection Firmware

Acroprint Data Collection Terminal Setup Instructions

Configuring procedure for entering the DATE & TIME:

Swipe the Configuration Badge 00000000 (This badge is provided with each terminal)

Select option 1 for DATE <Press ENTER>

Select the Day, Month, Year DDMMYYYY <Press ENTER>

Select the Time HH:MM <Press ENTER> (Time is entered in military time, 2:00 pm = 14:00)

Configuring procedure for selecting PORTS:

Swipe the Configuration Badge 00000000 (This badge is provided with each terminal.)

Select option 2 for Ports <press ENTER>

Select option 0 for RS232 <press ENTER>

Select the baud rate 0 for 1200, 1 for 2400, 2 for 4800, 3 for 9600 and 4 for 19,200 baud. <press ENTER>

(For modem terminal only)

Select option 1 for Modem <press ENTER>

Select the Modem baud. <press ENTER>

Select the Answer Window HHMMHHMM for starting and ending times < press ENTER> (time is in military format, Example: Clock will not answer during business hours and only answer between the hours of 8:00 pm and 6:00 am, then select 20000600.)

(For RS485 terminals only)

Select option 1 for RS485 <press ENTER>

Select the baud rate 0 for 1200, 1 for 2400, 2 for 4800, 3 for 9600 and 4 for 19,200 baud. senter>

(For Ethernet terminals only)

Select option 2 for Ethernet <press ENTER>

Select the baud rate option 3 for 9600 baud <press ENTER> (Leave this as the default for Ethernet.)

Select the TCPIP address <press ENTER> (Your network administrator will have this information.)

Select the GATEWAY address <press ENTER> (Your network administrator will have this information.)

Select the PORT VALUE <press ENTER> (Default number 10001. Select the save value in the ATR9800 software.)

Select the NETMASK PART BITS NUMBER <press ENTER>

(Your network administrator will obtain this information. The Default Subnet Mask TCPIP number contains four groups of numbers separated by".". To determine the NETMASK VALUE obtain your default Subnet IP number from the Network administrator XXX.125.125.125 for your server Default Subnet, convert **each 125** (your numbers will be different) to binary and count the number of zero's in the binary number and enter this number. 125 = 01111101 in binary. Each 125 has two zeros, therefore the Netmask bits number is set to 6.

Select the TERMINAL TRANSACTION PRINTER TYPE <press ENTER> (default is parallel port)

Select TRANSACTION TIME OUT <press ENTER>

(This controls how long the terminal will restrict between badge swipes. Example: You want to keep your employees off the terminal for at least 30 minutes for lunch, then set Transaction Time out to 30.)

Select TERMINAL ID <press ENTER>

(default is 1, select the ID for terminal, each terminal MUST have a unique ID)

The terminal MUST be powered down and back up to accept the new TCPIP information.



Configuring procedure for selecting the READERS:

Swipe the Configuration Badge 000000000 (This badge is provided with each terminal.)

(Select any combination 1234 to activate the readers. 1 for Internal Barcode, 2 for External Barcode, 3 for Internal Magnetic Stripe and 4 for Internal Proximity Reader) Note, if 4 is selected then the External Barcode Reader will be disabled.

Note, if you turned OFF all readers you will be unable to read the configuration badge. The following procedure will allow you to re-enable the readers. Press the IN, then the OUT and then the ENTER key within 1 second. The terminal will go into a testing mode. Press the Clear key followed by Press the IN, then the OUT and then the ENTER key within 1 second or before the time is displayed.

Electrical Connections



Parallel Port Connector on DC7000

Digital IO Mode

1	Digital IO #7
2	Digital IO #8
3	Digital IO #9
4	Digital IO #10
5	Digital IO #11
6	Digital IO #12
7	Digital IO #13
8	Digital IO #14
9	Digital IO #15
10	N/A
11	Digital IO #2
12	Digital IO #3
13	Digital IO #4
14	N/A
15	Digital IO #5
16	Digital IO #6
17-25	Ground

F	Printer Mode
1	Strobe
2	Printer Data 0
3	Printer Data 1
4	Printer Data 2
5	Printer Data 3
6	Printer Data 4
7	Printer Data 5
8	Printer Data 6
9	Printer Data 7
10	/ACK
11	Busy
12	PE
13	Slct
14	/Auto Feed
15	/Error
16	/Init
17	/SIct
18-25	Ground



DC7000 Wand Connector Socket

- +5 Volts
- 2 Signal Control Logic Line
- (Digital IO #0 Output Only) Barcode Wand Receive Date 3
- 4 Ground

1

- 5 Access Logic Line (Digital IO #1 - Output Only)
- 6 +12 Volts Unregulated (Max Current Draw 220mA with 3A Transformer Only)



DC7000 RS232 Connector

- Not Used 1
- 2 CTS
- 3 Transmit Data (from DC7000)
- Receive Data (to DC7000) 4
- 5 Ground
- 6 Not Used





DC7000 RS485 / Modem Connector



DC7000 Ethernet Connector

1 Data (TX +) 2 Data (TX -) 3 Data (RX +) 4 Ground (-) 5 Ground (-) 6 Data (RX -) 7 Power (+) 8 Power (+)



Specifications

IO Points 0-1

```
Output
High: 4.0 milliamps out of MAX, V out = 4.2 Volts MIN
Low: 4.0 milliamps in MAX, V out = 0.4 Volts MAX
Input:
Not Applicable
```

IO Points 2–15

Output			
High:	1.6 milliamps out of MAX,	V out = 2.4 Volts MIN	
Low:	2.0 milliamps in MAX,	V out = 0.4 Volts MAX	
Input:	-		
Input Voltage Range: 0–5 Volts			
High:	2.2 Volts MIN		
Low:	0.8 volts MAX		

NOTE: If a barcode wand is used, the wand's current must be included in your total current calculation.

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