



DL CORDLESS CARD™

Quick Reference

DL Cordless Card™

QUICK REFERENCE





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DL Cordless Card™

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USING DL CORDLESS CARD™

The DL Cordless Card™ is a PCMCIA card developed to provide wireless 433 MHz RF communication between a laptop or a vehicle mounted terminal (Host) and Datalogic RF devices or base stations, which are STAR-System™ compatible, such as:

-  Gryphon™ M Readers
-  Dragon™ M Laser Scanners
-  STAR★Modem™ Radio Modems
-  Formula Basic Line RF Terminals (F734-E/RF, F725-E/RF, F660-E/RF)
-  STARGATE™ Base Stations

The activity of DL Cordless Card™ (DLCC) is signaled by a red LED.

For more details about the card configuration options refer to the DLCC Reference Manual provided on the installation CD-ROM.



INSTALLATION AND INITIAL SETUP

DLCC can be installed in a vehicle mounted DOS terminal or in a laptop with two PCMCIA overlaid slots for PC cards of type II, and with Windows 98, ME, XP, or later versions.

When installing DLCC in a Rhino™ terminal make sure that:

- in NEWCFG.SYS the driver for the PCMCIA serial ports is loaded:
A:\PCMCIA\PCMSCD.EXE
- the scan engine driver is correctly configured (COM 3, interrupt 5) and loaded after PCMSCD.EXE:
A:\DRIVERS\REDIR.SYS -c3 -i5 -b3

DLCC configuration can be performed through:

- **DL Mobile Configurator™** to set the primary DLCC parameters;
- **DL Sm@rtSet™** software configuration program;
- **configuration strings** sent from the Host via COM port;
- **DLCARD.EXE** DOS Configuration Program to perform a complete configuration of DLCC.



NOTE

When using the DLCC for the first time, set the desired card address via the COM port, since its factory default address is "Undefined".

DL Mobile Configurator™

This Windows-based utility program allows setting the primary DLCC parameters from a PC. For more details about this configuration method refer to the DL Mobile Configurator™ manual.

DL Sm@rtSet™

DL Sm@rtSet™ is a Windows-based utility program providing a quick and user-friendly configuration method via the COM port. DL Sm@rtSet™ is available on the Datalogic website.

Connect to www.datalogic.com/services/support/ to download the software.

Configuration Strings

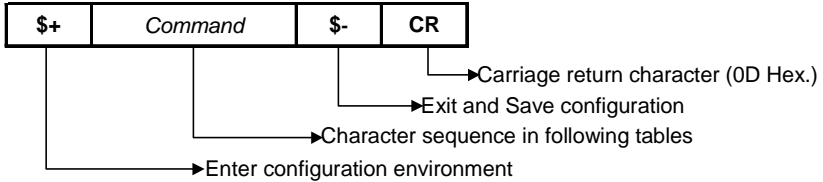
DLCC initial setup can be performed via the COM port by sending the configuration strings to the card using any terminal emulation program, for example Hyper Terminal.



NOTE

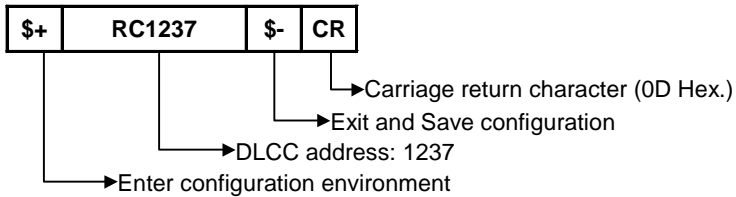
Ensure that your PC COM port is set as follows:
9600 baud, no parity, 8 data bits, 1 stop bit, handshaking disabled.

The programming sequence is the following:



Example

Command programming sequence:



Each configuration parameter setting removes the condition previously active for that parameter.

Refer to the DLCC Reference Manual for changing the default parameters.

Note: If you sent a wrong configuration string, you have to wait for a period of time equal to Rx timeout (default: 5 sec.) before sending the following configuration string.

DLCARD.EXE DOS Configuration Program

DLCC can be configured through a vehicle mounted terminal running the DOS operating system.

Upon start, the DOS DLCARD.EXE program checks communication with DLCC. If the test is successful, the program will open the file DLCARD.INI that includes a list of keywords. For more details about this configuration method see the DL Cordless Card™ Reference Manual.



DLCC SETUP

RESTORE DEFAULT

Whenever necessary, send the following string to DLCC via COM port to restore its default values:

Restore DLCC Default	\$+\$*CR
-----------------------------	-----------------

This command does not change the DLCC address nor the address of the destination devices, nor the RF Baud Rate parameters.

SET RADIO ADDRESSES

Follow the procedure below to set the DLCC radio address and prepare it to receive and transmit data to all devices included in the range from the First to the Last destination device.

1.	Enter Configuration	\$+
2.	Set DLCC Radio Address xxxx = four digits for the DLCC address (from 0000 to 1999). This address must be unique.	RCxxxx
3.	First Destination Device Address xxxx = four digits for the Destination Device address (from 0000 to 1999).	MSxxxx
4.	Last Destination Device Address xxxx = four digits for the Destination Device address (from 0000 to 1999). <u>If transmitting to one Destination device only, this selection is not required.</u>	MTxxxx
5.	Exit and Save Configuration	-\$-CR

Step 3 and 4 can be omitted when the card is used only to receive data (Server).

When a range of cable-connected destination devices (i.e. a Stargate™ RS485 network) is defined, DLCC activates roaming towards all these devices.



DLCC DEFAULT CONFIGURATION

COM PORT DEFAULT SETTINGS

9600 baud, parity disabled, 8 data bits, 1 stop bit, handshaking disabled, ACK/NACK protocol disabled, inter-character delay disabled, 5 sec. rx timeout, FIFO enabled, frame packing = frame + [CR].

DATA FORMAT

No header, terminator [CR] and [LF], header position = first frame field, code length tx not transmitted, address stamping disabled, address delimiter disabled.

RADIO PARAMETERS

Transmission mode 1 way, radio protocol timeout 2 sec., single store disabled, ACK/NACK from remote host disabled, RF baud rate 19200, beacon disabled.

WARRANTY

Datalogic warrants this product against defects in workmanship and materials, for a period of 24 months from the date of shipment, provided that the product is operated under normal and proper conditions.

Datalogic has the faculty to repair or replace the product, these provisions do not prolong the original warranty term.

The warranty does not apply to any product that has been subject to misuse, accidental damage, unauthorized repair or tampering.



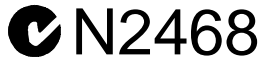
TECHNICAL FEATURES

Electrical Features	
Supply voltage	5 Vdc \pm 5%
Power consumption	400 mW
LED Indicator	One red LED
Radio Features	
Working frequency	433.92 Mhz
Bit rate	Up to 19200 baud
Effective Radiated Power	<10 mW
Range (in open air)	15 m / 49.2 ft
RF Modulation	FSK
System Configuration	
Maximum number of client RF devices supported by a DLCC server	32
Environmental Features	
Working temperature	-20° to +50 °C / -4° to +122 °F
Storage temperature	-20° to +70 °C / -4° to +158 °F
Humidity	90% non condensing
Protection class	IP30
Mechanical Features	
Weight	47 gr
Dimensions	118.25 mm x 54 mm x 9.4 mm



COMPLIANCE

Contact the competent authority responsible for the management of radio frequency devices of your country to verify the eventual necessity of a user license. Refer to the web site <http://europa.eu.int/comm/enterprise/rtte/spectr.htm> for further information.





TYPICAL LAYOUT APPLICATIONS



Figure 1 –DLCC Server

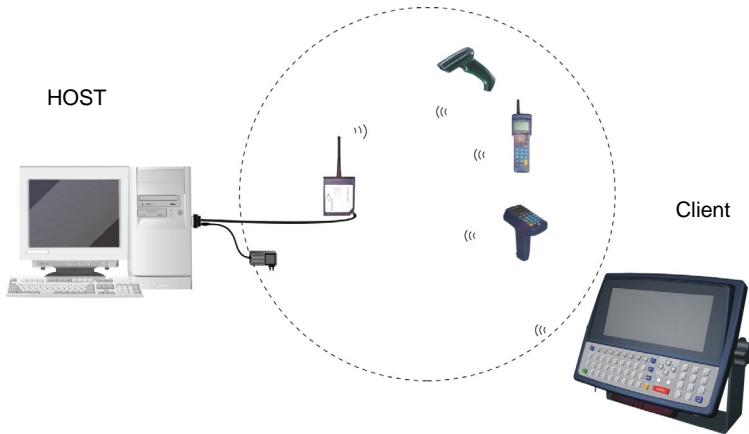


Figure 2 - DLCC Client

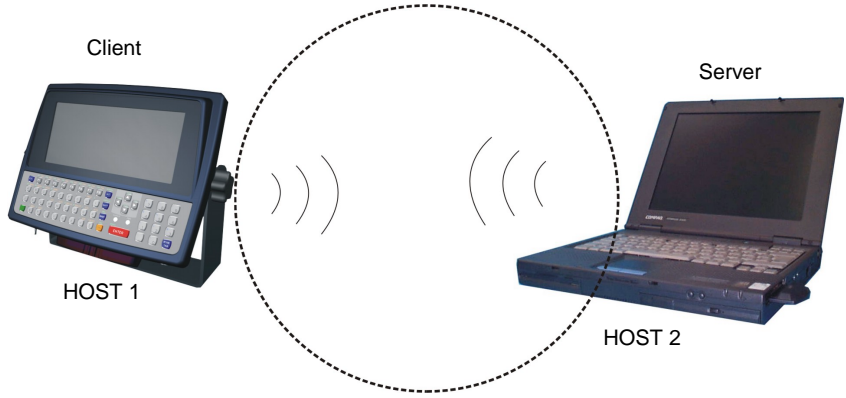


Figure 3 – DLCC as Client / Server

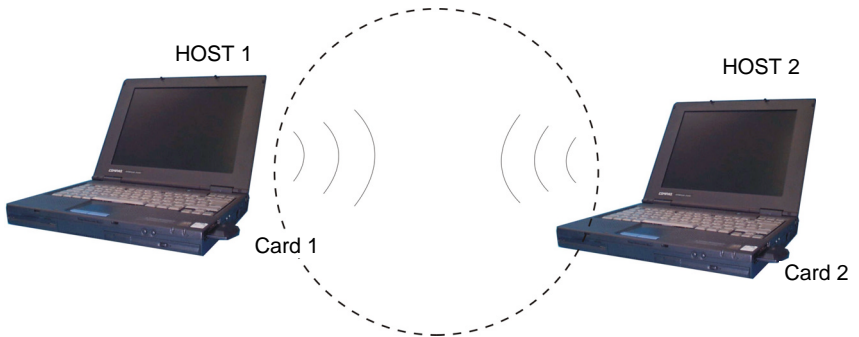


Figure 4 – Bi-directional Communication

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DL Cordless Card EU, Radio Modem with PCMCIA Interface

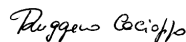
e tutti i suoi modelli
and all its models
et tous ses modèles
und seine modelle
y todos sus modelos

sono conformi alla Direttiva del Consiglio Europeo sottoelencata:
are in conformity with the requirements of the European Council Directive listed below:
sont conformes aux spécifications de la Directive de l'Union Européenne ci-dessous:
der nachstehenden angeführten Direktive des Europäischen Rats:
cumple con los requisitos de la Directiva del Consejo Europeo, según la lista siguiente:

1999/5/EEC R&TTE

Questa dichiarazione è basata sulla conformità dei prodotti alle norme seguenti:
This declaration is based upon compliance of the products to the following standards:
Cette déclaration repose sur la conformité des produits aux normes suivantes:
Diese Erklärung basiert darauf, daß das Produkt den folgenden Normen entspricht:
Esta declaración se basa en el cumplimiento de los productos con las siguientes normas:

- EN 301 489-03, NOVEMBER 2001:** ELECTROMAGNETIC COMPATIBILITY AND RADIO SPECTRUM MATTERS (ERM); ELECTROMAGNETIC COMPATIBILITY (EMC) STANDARD FOR RADIO EQUIPMENT AND SERVICES; PART 3: SPECIFIC CONDITIONS FOR SHORT-RANGE DEVICES (SRD) OPERATING ON FREQUENCIES BETWEEN 9 KHZ AND 40 GHZ.
- EN 300 220-3, SEPTEMBER 2000:** ELECTROMAGNETIC COMPATIBILITY AND RADIO SPECTRUM MATTERS (ERM); SHORT-RANGE DEVICES (SRD); RADIO EQUIPMENT TO BE USED IN THE 25 MHZ TO 1000 MHZ FREQUENCY RANGE WITH POWER LEVELS RANGING UP TO 500 MW; PART 3: HARMONIZED EN COVERING ESSENTIAL REQUIREMENTS UNDER ARTICLE 3.2 OF THE R&TTE DIRECTIVE
- EN 60950-1, December 2001:** INFORMATION TECHNOLOGY EQUIPMENT – SAFETY – PART 1: GENERAL REQUIREMENTS.



Lippo di Calderara, 01/12/2003

Ruggero Cacioppo
Quality Assurance Laboratory Manager

