DL TCL-NET™

User's Manual

DATALOGIC

DL TCL-NET™

USER'S MANUAL

DATALOGIC

DATALOGIC S.p.A.
Via Candini 2
40012 - Lippo di Calderara di Reno
Bologna - Italy

DL TCL-NET™

Ed.: 05/2006

This manual refers to DL TCL-NET™ software version 1.2.1.0 or later.

ALL RIGHTS RESERVED
Datalogic reserves the right to make modifications or improvements without prior notification.

Datalogic shall not be liable for technical or editorial errors or omissions contained herein, nor for incidental or consequential damages resulting from the use of this material.

Product names mentioned herein are for identification purposes only and may be trademarks and or registered trademarks of their respective companies.

© Datalogic S.p.A. 2003 - 2006

17/05/2006

CONTENTS

1 GENERAL INFORMATION 1
1.1 DL TCL-NET™ 1

2 INSTALLATION 2
2.1 System Requirements 2
2.2 Installing DL TCL-NET™ onto the Mobile Computer 2
2.3 Starting DL TCL-NET™ Client 3

3 DL TCL-NET™ CONFIGURATION FROM MOBILE COMPUTER 4
3.1 Main Setup Menu 12
3.1.1 Connection Menu 14
3.1.2 Emulation Menu 18
3.1.3 Advanced Menu 20
3.1.4 Device Menu 22
3.1.5 Display Menu 24
3.1.6 Scanner 27
3.1.7 About 33

4 MOBILE COMPUTER ERROR MESSAGES 34

5 DL TCL-NET™ EXTENDED COMMANDS 35
5.1 Proprietary Commands 35

A TERMINAL EMULATION KEYBOARD OVERLAYS 37
Viper-NET™ Mobile Computer 37
Rhino-NET™ Mobile computer 40
Kyman-NET™ Mobile Computer 41
Datalogic Skorpio™ Mobile Computer 47

1 GENERAL INFORMATION

1.1 DL TCL-NET™

Datalogic Terminal Emulation Client (DL TCL) for Windows CE .NET is a software providing VT100, VT220, IBM3270 and IBM5250 Telnet terminal emulation on Datalogic RF portable mobile computers having a hardware architecture for Windows CE .NET operating system (Viper-NET™, Rhino-NET™, Datalogic Jet™, Kyman-NET™ and Datalogic Skorpio™).

If some parameters of the DL TCL-NET™ configuration, defined and downloaded through the DL Mobile Director™ Local Configurator (see DL Mobile Director™ Local Configurator Help on Line for details) should be modified, it is possible to define their new values directly from the mobile computer.

DL TCL-NET™ provides enhanced features for managing the application based on the Telnet protocol terminal emulation, in particular:

- Managing the configuration of scanner parameters;
- Managing multiple host lists;
- Running up to 4 sessions with different hosts and different emulation protocols simultaneously;
- Managing “Out of range” detection;
- Advanced barcode filtering, formatting, stripping and replacing functionality;
- Selecting several fonts, different font sizes, foreground and background colors;
- Mapping the keyboard for all the mobile computers;
- Assigning macro function to mobile computer keys;
- Managing beeper and backlight;
- Logging events;
- Automatic login;
- Relocating lines to different positions;
- Managing different display scrolling modes;
- Managing the printer through electrical, IrDA or Bluetooth® interface;
- FTP Server embedded.

DL TCL-NET™ satisfies all the connection modes required by your application, providing both direct connections to the host and through DL Keep Connecting™ gateway software.

2 INSTALLATION

2.1 SYSTEM REQUIREMENTS

In order to run the DL TCL-NET™, it is necessary to have at least the following:

- Datalogic Windows CE .NET device;
- a network interface card (NIC) connected to a local network using the TCP/IP protocol.

2.2 INSTALLING DL TCL-NET™ ONTO THE MOBILE COMPUTER

The DL TCL-NET™ can be installed or upgraded through a PC installation process. This method is available only for Windows CE .NET devices connected to a PC.
The installation program has to be run on the PC, in order to download the necessary files onto the Windows CE .NET device.

To install the DL TCL-NET™ through the PC installation method follow the given procedure:

1. ensure that the Windows CE .NET device is connected to the PC and synchronized with it;
2. double-click the setup.exe icon on your PC and follow the instructions appearing in the dialog box below:

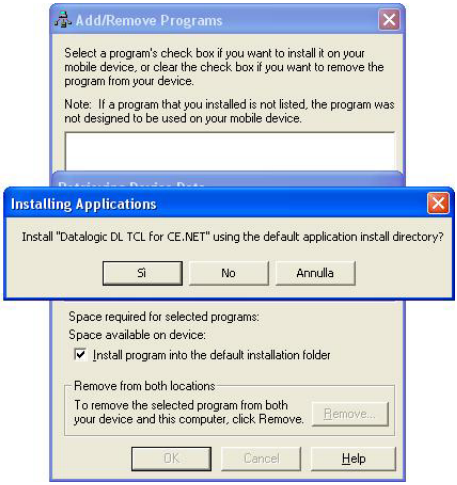


Figure 1 – Installing DL TCL-NET

3. once the installation has been completed, the following message appears:

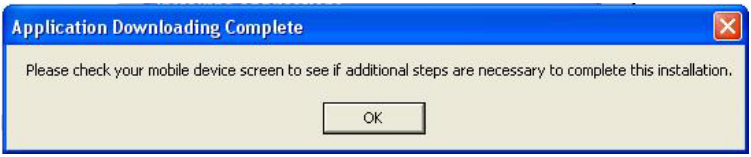


Figure 2 – Checking your Device Screen

Now, all necessary files are downloaded onto the Windows CE .NET device.

2.3 STARTING DL TCL-NET™ CLIENT

To start DL TCL-NET™ tap the Start button on the screen and select the DL TCL-NET™ option from the Programs list **OR** double tap the DL TCL-NET™ icon available in the Connections folder on the desktop.

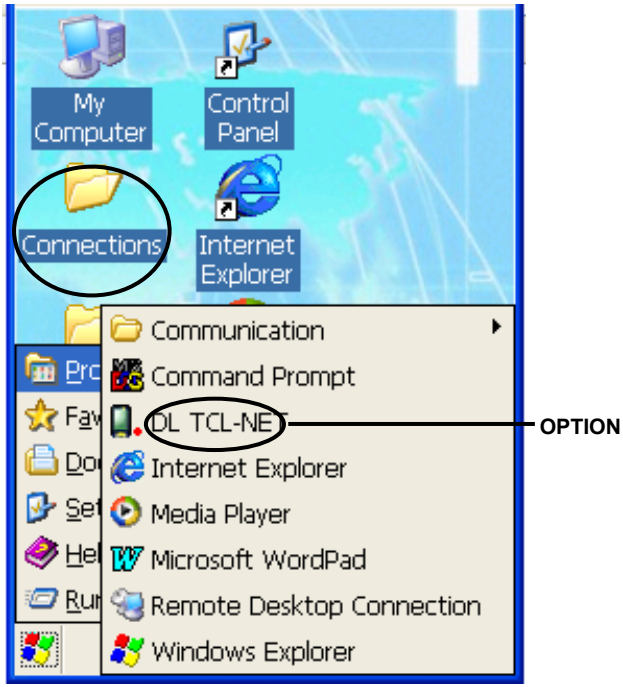


Figure 3 – Starting DL TCL-NET

3 DL TCL-NET™ CONFIGURATION FROM MOBILE COMPUTER

Once the DL TCL-NET™ application and configuration files have been downloaded onto the mobile computer, it is possible to change the value for most of the defined parameters directly from the device by using the DL TCL-NET™ control panel.

When launching the DL TCL-NET™ program for the first time, the opening mask appears:

Figure 4 – Opening Mask

To enter the control panel, press the [ESC] key on the mobile computer display to open the dialog box where you are asked to type your password:

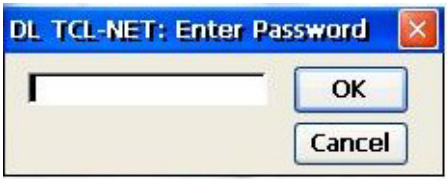


Figure 5 –Password Dialog Box

Once the correct password has been inserted (the default password is ls), it is possible to enter the DL TCL-NET™ control panel (see par. 3.1).
The password can be modified after entering the main setup menu for the first time.

By pressing the [Enter] key from the opening mask you try the connection with a Host or Keep Connecting gateway. If no a Host or Keep Connecting gateway is available for radio communication, the program sends an error message.

Figure 6 - Error Message

Press the [Enter] key or tap OK in the message box to return to the opening mask.

If the connection is successful the user is connected to the Host or Keep Connecting gateway.

During the connection the following special function keys are available:

- **Exit emulation**: by pressing the “Exit Emulation Key” the following dialog box is displayed allowing to quit the terminal emulation at any time and display the opening mask:

Mobile Computer	Key Sequence
Rhino-NET™	[F10]
Viper-NET™	[F10]
Datalogic Skorpio™	[F10]
Datalogic Jet™	[F3]
Kyman-NET™	[F10]

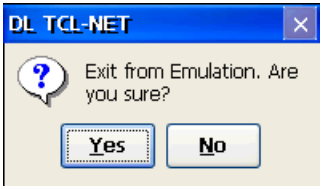


Figure 7 - Exit Emulation Dialog Box

This procedure requires exiting all sessions (see par. 3.1.1 for details);

- **Input panel**: it allows enabling/disabling the Windows CE .NET input panel.

Mobile Computer	Key Sequence
Rhino-NET™	[ALT]+[K]
Viper-NET™	[ALT]+[K]
Datalogic Skorpio™	[ALT]+[K]
Datalogic Jet™	[FUNC]+[UP]
Kyman-NET™	[ALT]+[K]
Kyman-NET™ num. model	[YELLOW]+[UP]

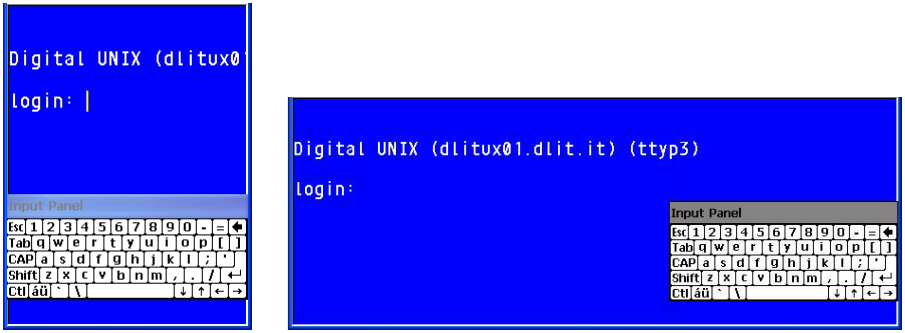


Figure 8 - Input Panel

- **Enable scroll bar**: it allows enabling/disabling the horizontal and vertical scroll bars.

Mobile Computer	Key Sequence
Rhino-NET™	[ALT] + [S]
Viper-NET™	[ALT] + [S]
Datalogic Skorpio™	[ALT] + [S]
Datalogic Jet™	[FUNC]+[DOWN]
Kyman-NET™	[ALT] + [S]
Kyman-NET™ num. model	[YELLOW]+[DOWN]

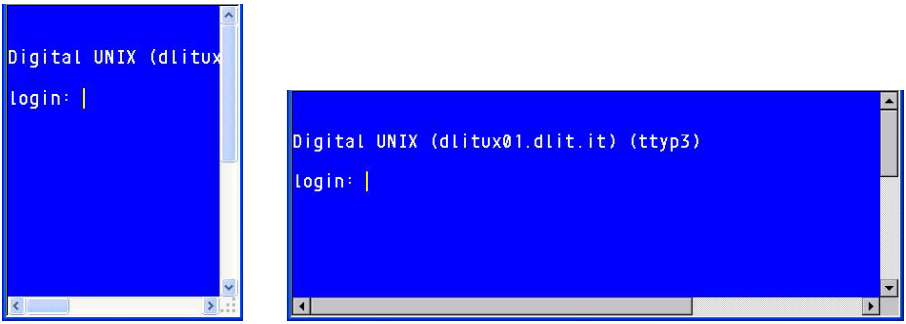


Figure 9 - Horizontal and Vertical Scroll Bars

- **Emulation keypad**: it allows enabling/disabling the special keypad, which permits the user to send the emulated function keys.

Mobile Computer	Key Sequence
Rhino-NET™	[ALT] + [F]
Viper-NET™	[ALT] + [F]
Datalogic Skorpio™	[ALT] + [F]
Datalogic Jet™	Folder key ( )
Kyman-NET™	[ALT] + [F]
Kyman-NET™ num- model	Folder key ( )

- **Switch to Application Manager**: it allows switching to the Application Manager desktop when DL TCL-NET™ is launched from it (see DL Application Manager manual for details).

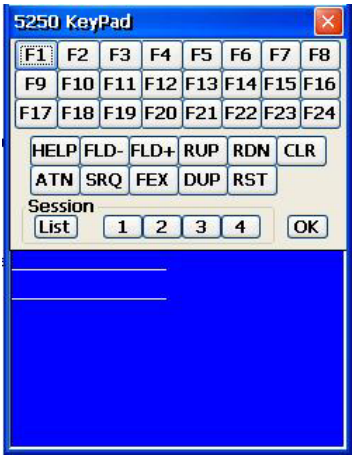
Mobile Computer	Key Sequence
Rhino-NET™	[ALT] + [M]
Viper-NET™	[ALT] + [M]
Datalogic Skorpio™	[ALT] + [M]
Datalogic Jet™	Remapping through DL Mobile Director™ Local Configurator – DL Application Manager
Kyman-NET™	[ALT] + [M]
Kyman-NET™ num. model	Remapping through DL Mobile Director™ Local Configurator – DL Application Manager

- **Switch to Locked Web Browser**: it allows switching to the Locked Web Browser if both DL TCL-NET™ and Locked Web Browser are launched from the DL Application Manager (see DL Application Manager manual for details).

Mobile Computer	Key Sequence
Rhino-NET™	[ALT] + [L]
Viper-NET™	[ALT] + [L]
Datalogic Skorpio™	[ALT] + [L]
Datalogic Jet™	Remapping through DL Mobile Director™ Local Configurator – DL Locked Web Browser
Kyman-NET™	[ALT] + [L]
Kyman-NET™ num. model	Remapping through DL Mobile Director™ Local Configurator – DL Locked Web Browser

- **YELLOW key modality (only for Datalogic Skorpio™)**: by pressing the [BLUE] + [YELLOW] key sequence, it is possible to alternately change the modality of use of the YELLOW key.
  Toggle = press the YELLOW key to enable/disable yellow mode
  Modifier = press the YELLOW key each time it is necessary to use yellow mode
  (see Datalogic Skorpio™ manual for details).

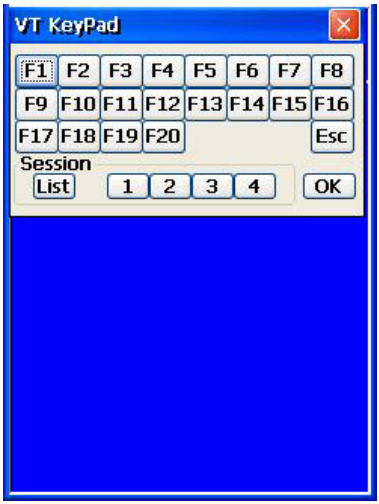
5250 KEYPAD

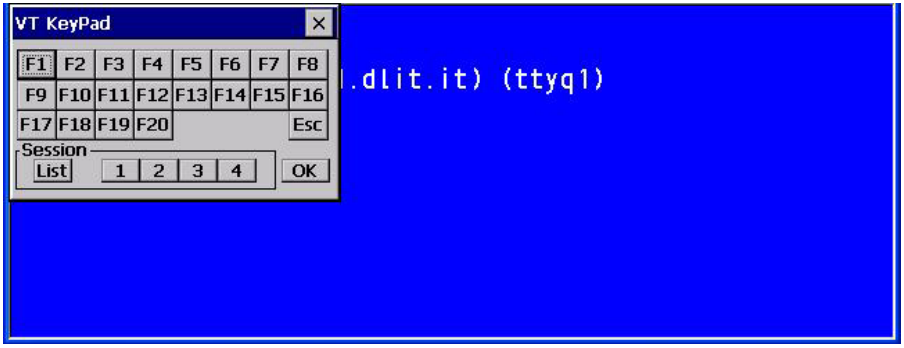


KEYS

F1..F24	Ibm 5250 Function Keys	**SRQ**	System Request
HELP	Help	**FEX**	Field Exit
FLD-	Field Minus	**DUP**	Duplicate
FLD+	Field Plus	**RST**	Reset
RUP	Roll-up	**List**	Session List
RDN	Roll-down	**1…4**	Session Number
CLR	Clear	**OK**	Close 5250 Keypad
ATN	Attention		

VT 100/220 KEYPAD

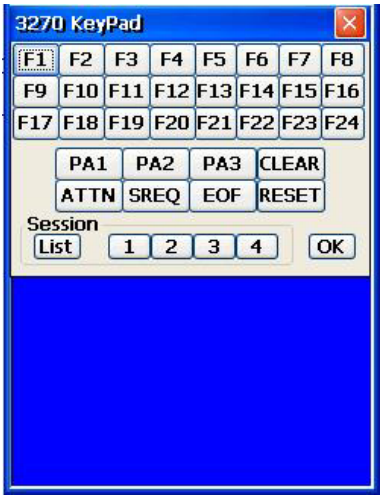


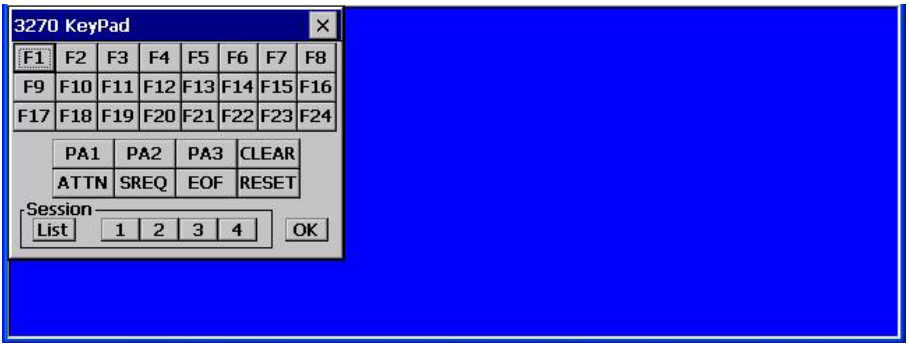


KEYS

F1..F20	VT Function Keys
ESC	Escape
List	Session List
1…4	Session Number
OK	Close VT Keypad

3270 KEYPAD



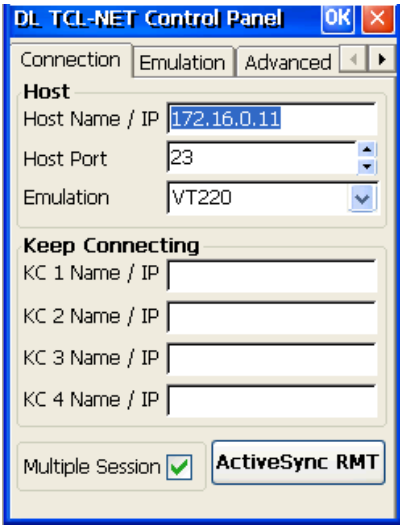


KEYS

F1..F24	IBM 3270 Function Keys	**EOF**	End of Field
PA1..PA3	Program Attention	**RESET**	Reset
CLEAR	Clear	**List**	Session List
ATTN	Attention	**1…4**	Session Number
SREQ	System Request	**OK**	Close 3270 Keypad

3.1 MAIN SETUP MENU

The DL TCL-NET™ control panel opening mask appears as follows:



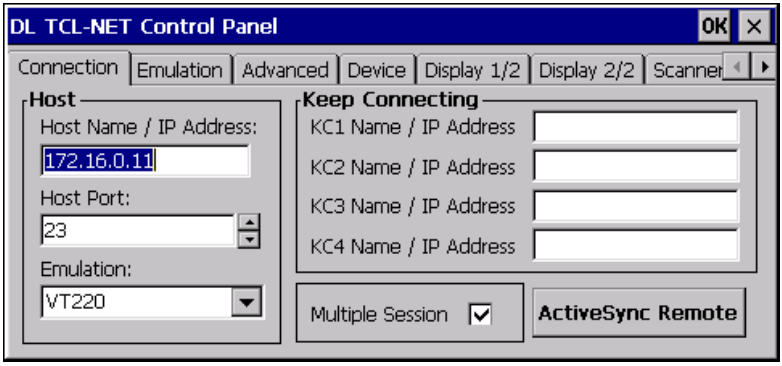


Figure 10 – Control Panel Opening Mask

All parameters and folders can be selected by using either the stylus or the following keyboard keys:

- **[Enter]**: if pressed, it validates the selection and allows saving the configuration when exiting the control panel.
- **Arrow Keys**: if pressed, they allow scrolling all pages horizontally when the folder is selected.
- **[Tab]**: If pressed, it allows scrolling each parameter of the selected folder.
- **[ESC]:** if pressed, it exits the Control Panel without saving the configuration. By exiting the DL TCL-NET™ Control Panel, the following dialog box appears allowing to exit to Windows CE NET:

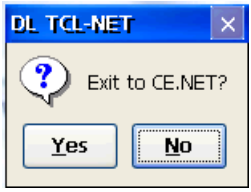


Figure 11 – Exiting DL TCL-NET™

The main setup menu is shared by all Datalogic RF mobile computers. Different parameters will be signaled.

Text Mode Menu

By pressing the [SHIFT] and [ESC] keys simultaneously ([FUNC] and [0] for Datalogic Jet™ mobile computer), it is possible to enter the device configuration menu in text mode.

This menu allows setting DL TCL-NET™ in order to manage extended color commands for VT emulation. Use options:
2) Emulation -> 2) VT100/200 -> 7) Color
Default value is ON.

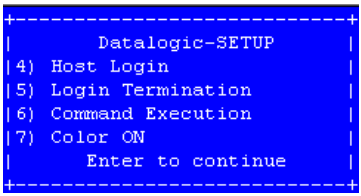


Figure 12 – VT Color Option

If entering the text mode menu through the *ftp* password, it is possible to start the internal TCL FTP Server. Thus, an FTP client can be connected to the TCL FTP Server through the IP address displayed on the device, as shown in the figure below:

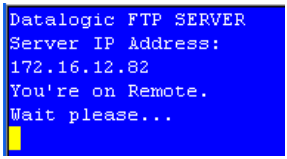


Figure 13 – FTP Server

3.1.1 Connection Menu

It allows configuring the connection between the application and the remote host:

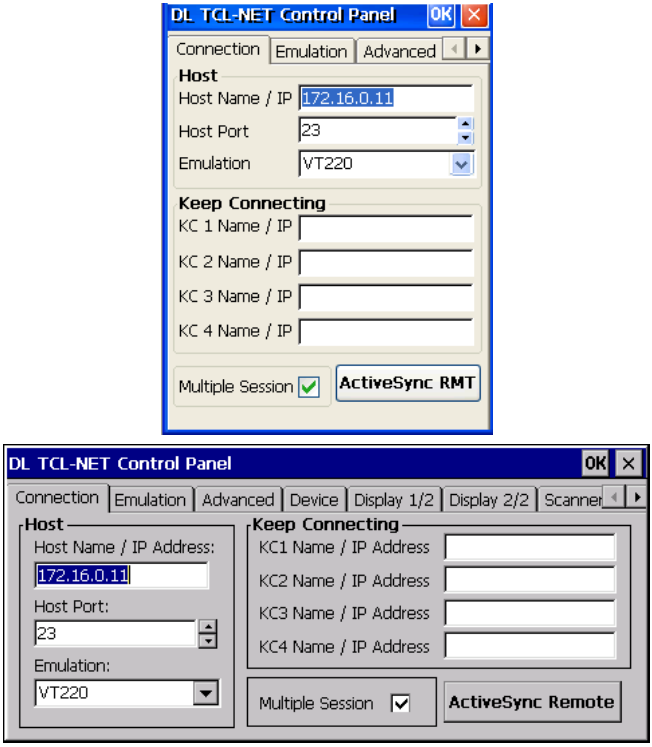


Figure 14 - Connection Menu

Host Name/IP

It defines the Network name or IP address to be used by the mobile computer for the first host list.

Host Port

It defines the Telnet TCP/IP port to be used by the mobile computer to connect to the first host list.

Emulation

It defines the type of Telnet emulation to be run on the mobile computer. The following selections are available:

- VT100/220 - IBM 5250 - IBM3270

KCn Name/IP

It defines the Network name or IP address for the n Keep Connecting (KC) gateways.

Multiple Session

It defines the type of connection to be used by the mobile computer to interact with applications running both with direct connection on the remote Host and with the Keep Connecting gateway. If unchecked, the mobile computer works in Single Session Mode trying to connect to the first Keep Connecting gateway or remote Host available. If checked, the device works in Multiple Session Mode but in this case it can manage up to 4 different sessions simultaneously, both with direct connection and with the Keep Connecting gateway.

DIRECT HOST CONNECTION

- Single Session Mode: The Multiple Session parameter is set to off. When the user connects by clicking on ENTER from the opening mask the “HOST List” is displayed and the user can choose to which host he wants to connect. If only one host is configured, the direct connection to it is made automatically.
  Only one applications/session at the same time is available to the user. To open a different application/session the user must before close the current one. By pressing the [ALT][0] keys in sequence (or the button “LIST” in emulation keypads) the program returns to the “Host List” allowing to change the application/session the mobile computer is connected to. The current application/session is signaled in reverse video within the list. Once a new application/session is set, the current one is automatically disabled and the mobile computer starts emulating a new application/session.

- Multiple Session Mode: The Multiple Session parameter is set to on. The mobile computer works as in Single Session mode but in this case it can manage up to 4 different applications/sessions (Session 1, Session 2, Session 3 and Session 4) at the same time. It is possible to switch from one applications/session to another by pressing the following keys in sequence or by pressing the proper button of VT or IBM keypads:
  [ALT][1] = Session 1
  [ALT][2] = Session 2
  [ALT][3] = Session 3
  [ALT][4] = Session 4
  [ALT][0] = Returns to the “Host list”. In this case, the selection of a new application/session causes the closure of the current one while the other applications/sessions remain active.

KC CONNECTION

- Single Session Mode: The Multiple Session parameter is set to off and the mobile computer tries to connect to first Keep Connecting gateway available. First, it tries to connect to Keep Connecting gateway 1 and, if not available, to Keep Connecting gateway 2..4. In case of failure, the mobile computer will display the “Host List” entering automatically the Direct Host connection Mode. If only one host is configured, the direct connection to it is made automatically.
  Once a Keep Connecting gateway is found, the mobile computer enters Mode 1 (only one session is allowed), and the “Application mask” is displayed. Then the user can choose the application running on the remote Host the Keep Connecting gateway is connected to and start working within it. By pressing the [ALT][0] keys in sequence (or the button “LIST” in emulation keypads) the program returns to the Applications mask allowing to change the application/session the mobile computer is connected to. The current application/session is signaled in reverse video within the list. Once a new application/session is set, the current one is automatically disabled and the mobile computer starts emulating a new application/session. If no change has been made, press [Enter] to return to the current session.

- Multiple Session Mode: The Multiple Session parameter is set to on. The mobile computer works as in Single Session Mode but in this case it can manage up to 4 different session modes (Mode 1, Mode 2, Mode 3 and Mode 4) at the same time. It is possible to switch from one application to another by pressing the following keys in sequence or by pressing the proper button of VT or IBM keypads:
  [ALT][1] = Mode 1
  [ALT][2] = Mode 2
  [ALT][3] = Mode 3
  [ALT][4] = Mode 4
  [ALT][0] = Returns to the “Applications mask”. In this case, the selection of a new application/session causes the closure of the current one while the other applications/sessions remain active.

NOTE

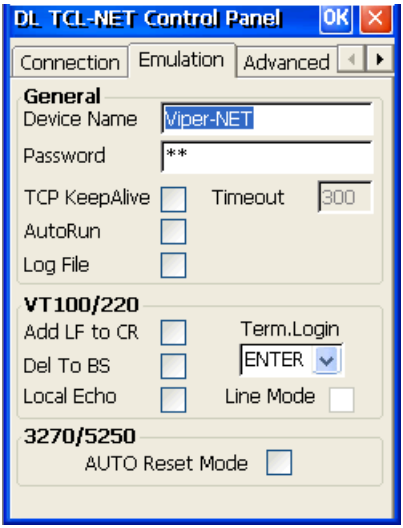
If [ALT] key sequences are to be used with Datalogic Jet™, it is necessary to remap them properly by using the DL Mobile Director™ Local Configurator (List Session, Session 1, Session 2, Session 3, Session4).

ActiveSync RMT/ActiveSync Remote

Click on this button to run the ActiveSync Remote application allowing the connection to the mobile computer through the DL Mobile Director™ Local Configurator.

3.1.2 Emulation Menu

It allows defining the emulation parameters:



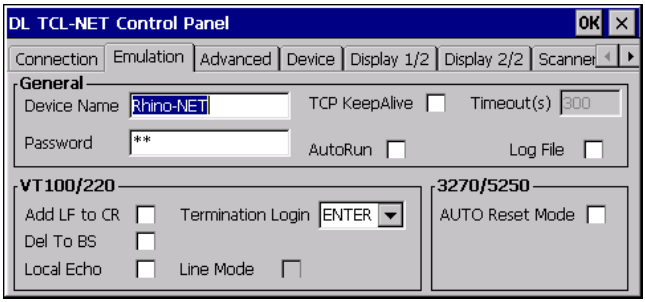


Figure 15 – Emulation Menu

Device Name

This parameter allows assigning a name to the mobile computer performing the connection. By inserting an (*) before the name (i.e.: "*Name"), the device name will indicate the device name in the AS400 protocol (variable: Device Name).

Password

It allows creating or changing the password for entering the setup.

TCP Keep Alive

It enables/disables the TCP Keep Alive functionality. This function allows the mobile computer to send a NOP (no operation) packet to the Host at regular intervals in order to maintain the radio connection. Even if the device goes into suspend mode, it automatically wakes up and sends the NOP packet after the timeout interval.

Timeout (s)

It defines the time interval in seconds between the transmissions of two NOP packets (active only if the TCP Keep Alive option is selected).

Auto Run

It enables/disables the mobile computer automatic connection at program startup or on closure/connection failure. If enabled, the program enters the opening mask and after 3 seconds tries to connect automatically. From the Opening Mask, it is possible to enter the main setup menu by pressing the [ESC] key before a 3 sec. timeout expires.

Log File

It enables/disables the event log to track the events. All data received and sent from the Host are saved to the DLLOG.TXT file positioned in root.

Add LF to CR

If checked, it adds to [CR] the [LF] character to the data format when pressing the [Enter] key in the keyboard.

Del to BS

It enables/disables the delete command when pressing the Backspace (BS) key on the mobile computer keyboard.

Local Echo

It enables/disables the mobile computer Local Echo.

Line Mode

It enables/disables the VT line mode (active only if the Local Echo option is selected).

Termination Login

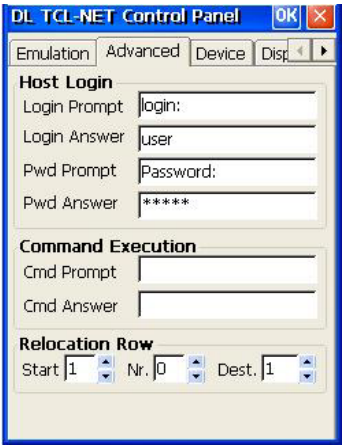
It defines the character sent as terminator of the login field.

AUTO Reset Mode

It enables/disables the activation of the Reset button when the data transmission from Host is blocked. If unchecked, the Reset button has to be manually pressed, if checked, the program will automatically activate the Reset.

3.1.3 Advanced Menu

It allows configuring the advanced configuration features:



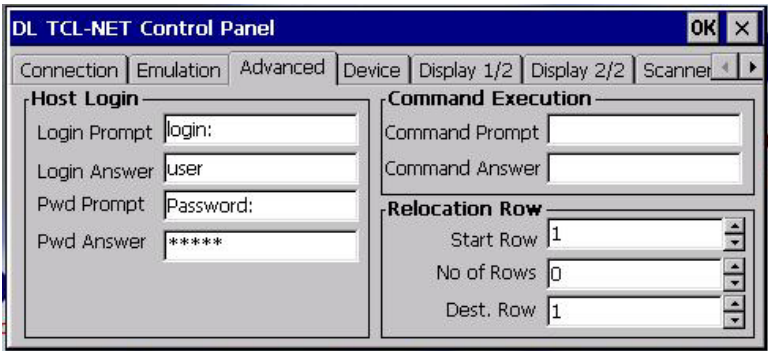


Figure 16 – Advanced Menu

Host Login

To enable/disable the automatic login feature it is necessary to specify the Login and Password parameters.
In VT emulation, for the login and the password requests, the user must specify the prompt received from the host and enter the value of the login and password answers in the corresponding fields. It is also required to specify the character sent as terminator of the Login field.

Login Prompt

It defines the login prompt received from the host.

Login Answer

It defines the value of the login.

Pwd Prompt

It defines the password prompt received from the host.

Pwd Answer

It defines the value of the password.

Command Execution

To enable/disable the automatic execution of a command, it is necessary to specify Command parameters. In VT emulation, for the command request the user must specify the prompt received from the host and enter the value of the command answer in the corresponding fields.

Cmd Prompt

It defines the command prompt received from the Host.

Cmd Answer

It defines the value of the command.

Relocation Row

It enables/disables the relocation of one or more rows. The user can relocate one or more lines from the physical screen of the host application to the logical screen of the mobile computer. The parameters requested to activate this feature are:

Start

It defines the line number (from 1 to 25) of the physical screen to be relocated on the logical screen of the mobile computer.

Nr.

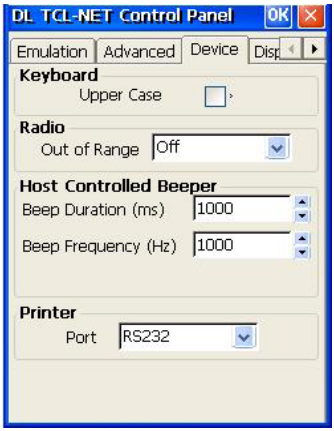
It defines the total number of rows to be relocated.

Dest.

It defines the line number (from 1 to 25) of the mobile computer logical screen where the relocated line(s) will be placed to.

3.1.4 Device Menu

This menu allows defining the main parameters of the mobile computer:



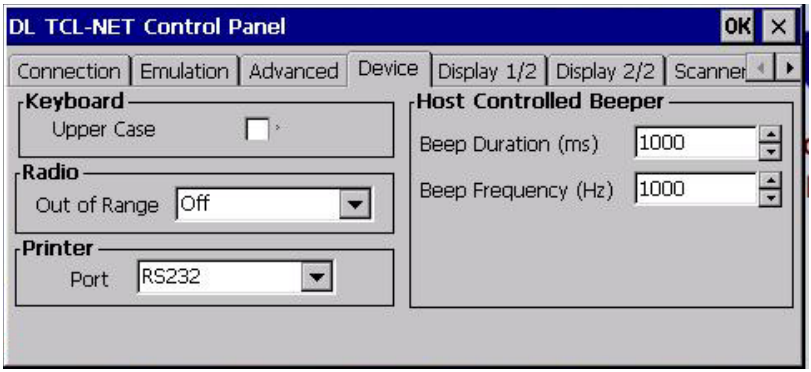


Figure 17 – Device Menu

Upper Case

It enables/disables the conversion of all barcode data and keyboard digits to upper case characters.

Out of Range

When configuring the radio, the "Out of Range" option (set [AUTO]) allows DL TCL-NET™ to automatically signal if during data transmission a mobile computer is out of the area covered by the Access Point. For all devices this condition will be signaled by the LED activation, while for Rhino-NET™ the signal is emitted by the beeper. If set to [ON], it is possible to verify this condition only if trying to transmit from the mobile computer. In all these cases, the following message is displayed:

Figure 18 - Out of Range Warning

When returning within the covered area, the following message is displayed if the mobile computer cannot get the IP address immediately:

Figure 19 – Getting Mobile Computer IP Address

Host Controlled Beeper

It defines the beeper parameters activated by a host command.

Beep Duration (ms)

It defines the alarm beep duration in milliseconds.

Beep Frequency (Hz)

It defines the beep frequency in hertz.

Port

It defines the port to be used to send data from the mobile computer to the printer. The RS232 port indicates the electrical port, IrDA indicates the optical port, while Bluetooth indicates the radio communication port.

3.1.5 Display Menu

It allows configuring the main display parameters for the mobile computer:

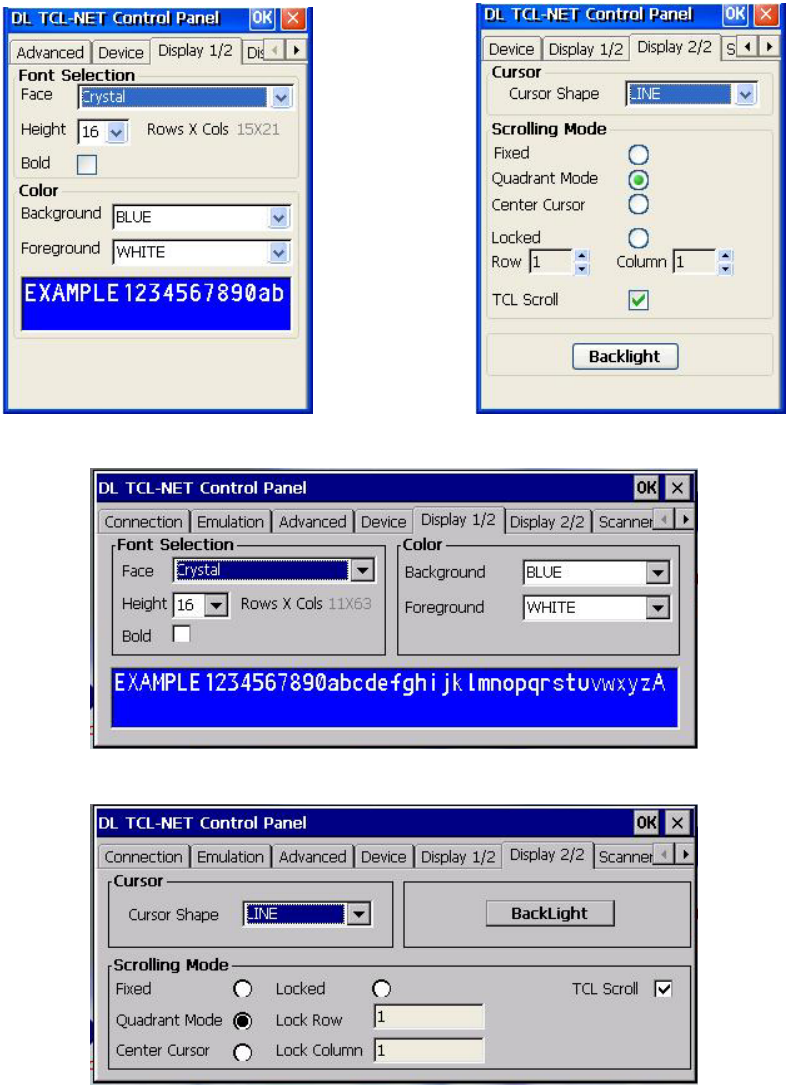


Figure 20 – Display Menu

Face

It defines the font type to be used. All Windows CE .NET fixed space font styles are available. The defined font will be adopted as soon as the terminal emulation is started. Once the emulation session is closed, the font selection is restored to the default value. Available fonts are:

- Courier New
- Crystal
- Bitstream Vera Sans Mono
- Everson Mono Latin 6
- MM2000LC
- Monofonto
- Monofur

Height

It defines the height of the font to be used.

Bold

It enables/disables the bold attribute.

Rows X Cols

It displays the emulation screen resolution accordingly with font parameters settings.

Background

It defines the background color of the mobile computer screen. The selected color is displayed in the preview dialog box.

Foreground

It defines the foreground color of the text. The selected color is displayed in the preview dialog box.

Cursor Shape

It defines the shape of the cursor.

Scrolling Modes

The screen may be scrolled by choosing one of the following modes:

- **Fixed**: The mobile computer display is always locked at column 0 and row 0.
- **Quadrant mode**: The entire host screen (80x25) is divided in different quadrants, where each of them defines the maximum number of characters (columns X lines) available for the defined font set. In AS400 emulation, if the active input field is completely inside a quadrant, the display will be placed to this quadrant. While the input fields that cross quadrant boundaries will result in a shift to the left or right of the quadrant to include completely the field. For the VT emulation, where the field concept is not included in the standard, the display will be placed in the same quadrant where the cursor resides.

- **Center Cursor**: The cursor will be maintained in the screen center.
- **Locked**: The display is locked at the position specified by the Row and Column parameters.

Row

It defines the row locking the display.

Column

It defines the column locking the display.

TCL Scroll

If checked, it enables the keyboard scrolling through the CTRL+arrow key sequence; while, if unchecked, the keyboard scrolling is disabled and the CTRL+arrow key sequence turns to its normal function (for example, in Viper-NET™ 48-key model: CTRL + C corresponds to "break").

Backlight

This button opens a further dialog box where setting the related parameters:

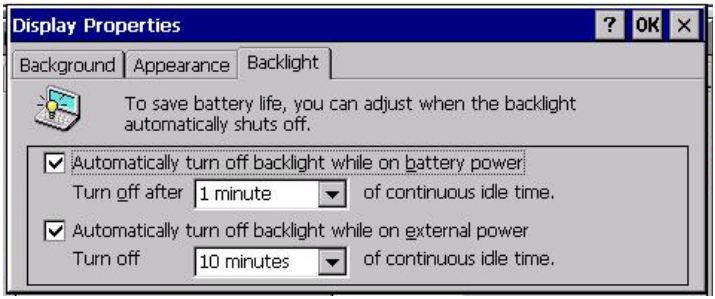
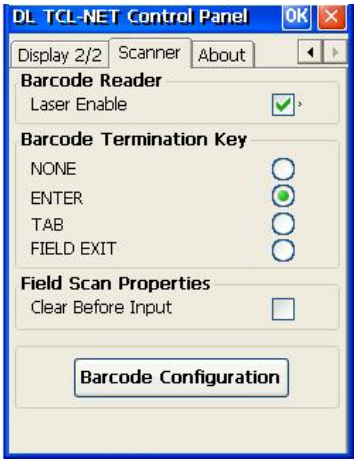


Figure 21 – Backlight Dialog Box

3.1.6 Scanner

It enables/disables the mobile computer laser reader and allows configuring other parameters dealing with the device reading features. These parameters may be also configured by means of the proprietary commands described in par. 5.1.

The available parameters are:



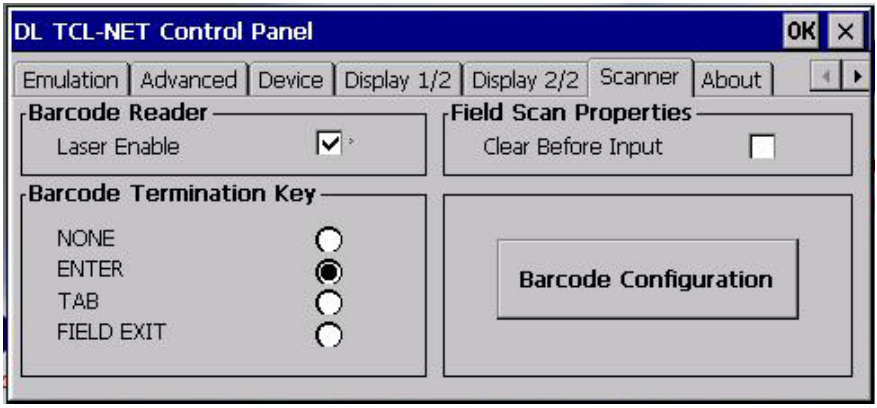


Figure 22 – Barcode Data Entry

Laser Enable

It enables/disables the mobile computer reader.

Barcode Termination Key

It defines the key to be pressed to include a terminator character in the output data format. The following selections are available:

- **None**: no terminator will be added to the output data format
- **Enter**: if pressed, the terminator ASCII value 13 will be added to the output data format
- **Tab**: if pressed, the terminator ASCII value 09 will be added to the output data format
- **Field Exit**: special key available in the AS400 emulation (only for IBM5250/3270 terminal emulation)

Clear Before Input

If checked, it clears the input field before sending the barcode read or before typing data.

Barcode Configuration

This button automatically opens the Barcode Setup application present in the Windows Control Panel. This application allows configuring all scanner and code type parameters.

The available barcode parameters are divided into two groups: Reader Parameters and Scan Parameters.

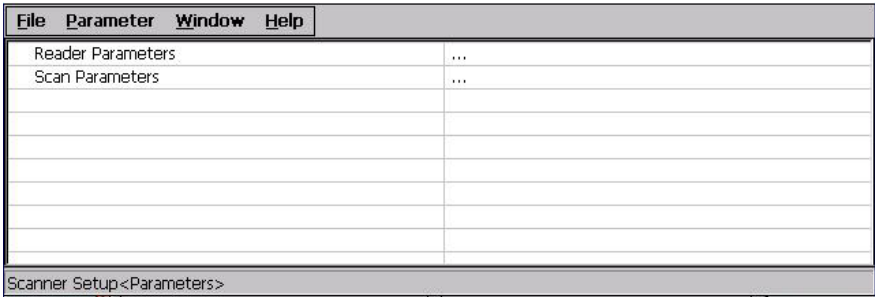
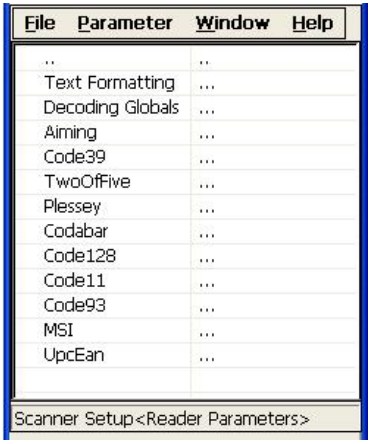


Figure 23 – Barcode Setup

Reader Parameters

The barcode reading parameters and values are dependent upon the type of laser module mounted in your mobile computer.



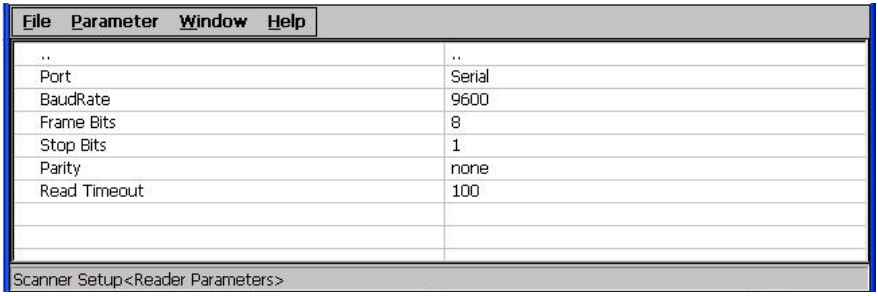
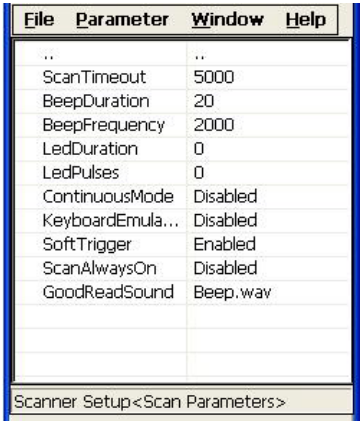


Figure 24 – Reader Parameters

Scan Parameters

The Scan Parameters are common to all laser modules and allow controlling the scanning device.



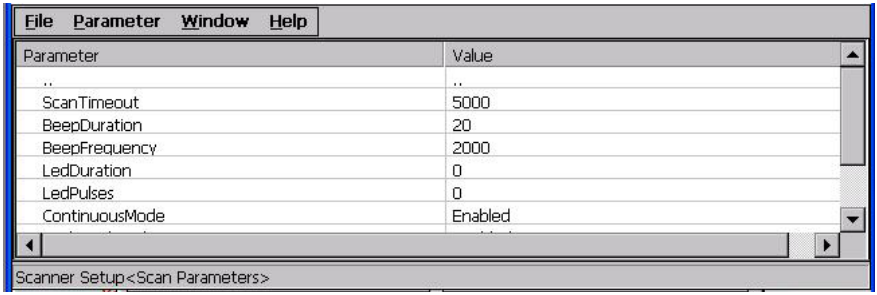


Figure 25 – Scan Parameters

The Scan parameters are:

Scan Timeout: the maximum time, in milliseconds, during which the laser remains on without decoding any barcode.

Beep Duration: the time interval, in milliseconds, during which the beeper will sound when the scanner reads a code. To disable the beeper, set this value to 0.

Beep Frequency: the frequency in Hertz of the beeper.

LED Duration: the duration in milliseconds of each 'Good Read LED' pulse.

LED Pulses: the number of pulses the 'Good Read LED' will blink when the scanner reads a code.

Continuous Mode: if enabled, the laser can only be turned off by releasing the hardware trigger or, if Soft Trigger is enabled, by the application program.
Continuous Mode overrides Scan Timeout.

Keyboard Emulation: if enabled, all scanned data are transformed into keyboard events and can therefore be displayed and saved into a file as if input from the mobile computer keyboard.

Soft Trigger: if enabled, the laser can be turned on/off by the application software.

Scan Always On: it enables the scanner for barcode reading independently from the application software.

NOTE

All mobile computers equipped with a COMBO module (laser/RFID) can switch directly from laser reader to RFID reader and vice versa through the dedicated key purposely remapped by using the DL Mobile Director™ Local Configurator (Switch Barcode/RFID). In this case, it is fundamental to configure the module with the type of RFID tag to be read in order to execute properly the switching operation. If the laser barcode is selected by default, the switching operation will use the Infineon RFID tag. All other parameters of the reader module have to be configured through the TCL Panel or Control Panel.

3.1.7 About

This menu shows information about DL TCL-NET™ version, Machine Name and IP Address:

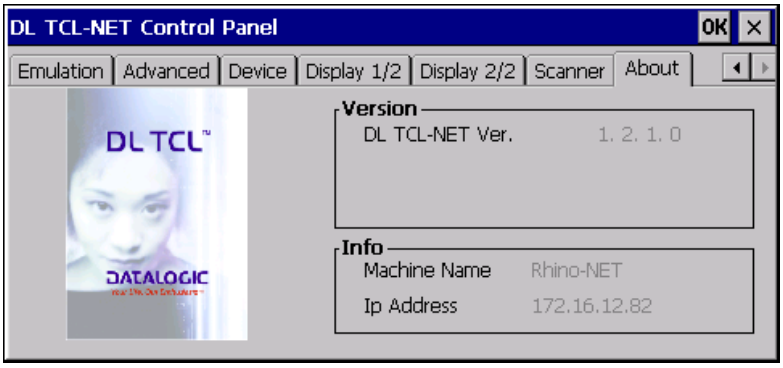


Figure 26 – About Menu

4 MOBILE COMPUTER ERROR MESSAGES

During the mobile computer normal functioning some error messages may appear on the display.

The following table lists and explains all error messages:

Error Message	Description
Password not Valid	A wrong password has been inserted.
Connecting KC1…	The mobile computer is trying to connect to KC HOST 1. A similar message is also displayed when trying connection to other KC Hosts.
Memory Full! **Reset and free memory**	An error has occurred during memory allocation. It is advised to reset the mobile computer.
Connection to host has been lost.	The connection has been terminated by the remote host.
CONNECTION NOT AVAILABLE	No host or Keep Connecting gateway is available for radio communication.
File *.INI not found!	At startup the program did not find the required configuration files.

5 DL TCL-NET™ EXTENDED COMMANDS

5.1 PROPRIETARY COMMANDS

The proprietary commands allow exploiting standard features performed by the Datalogic mobile computers for VT emulation only.

The following table lists all commands managing the barcode reading by enabling/disabling the device laser reader or by selecting the barcode symbology to be read:

Symbology	Command
Codabar	ESC$<0/1>a&
Code 11	ESC$<0/1>b&
Code 128	ESC$<0/1>c&
Code 39	ESC$<0/1>d&
Code 39 CIP	ESC$<0/1>e&
Code 39 Full ASCII	ESC$<0/1>q&
Code 93	ESC$<0/1>f&
Industrial 2/5	ESC$<0/1>r&
Interleaved 2/5	ESC$<0/1>g&
Italian pharmaceutical	ESC$<0/1>h&
EAN-13	ESC$<0/1>i&
EAN-8	ESC$<0/1>l&
EAN-128	ESC$<0/1>m&
Matrix 2/5	ESC$<0/1>s&
MSI	ESC$<0/1>n&
UPC-A	ESC$<0/1>o&
UPC-E	ESC$<0/1>p&
Enable All	ESC$1x&
Disable All	ESC$1y&

The <0/1> string indicates the two possible values, where 0 disables the option and 1 enables it.

Other commands are provided in the following table for the scanner and keyboard management:

Function	Command
Enable keyboard only	ESC[d1$
Enable scanner only	ESC[d2$
Enable scanner and keyboard	ESC[d0$
Enable alphabetic digit	ESC[d1&
Enable numeric digit	ESC[d2&
Enable alphanumeric digit	ESC[d3&
Enable keyboard default	ESC[d0&

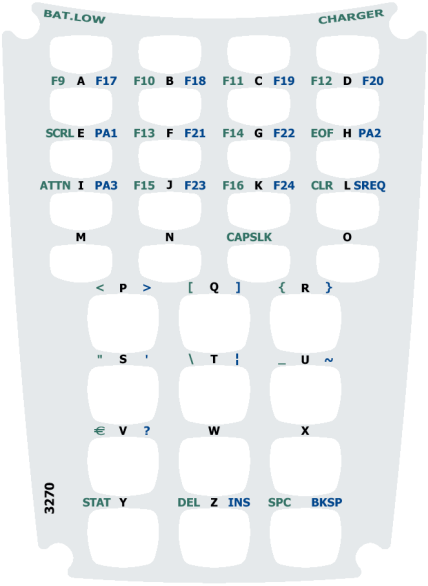
The following table lists four commands to set the font type:

Font type	Command
Bitstream Vera Sans Mono	ESC # e
Courier New	ESC # a
Crystal	ESC # b
Everson Mono Latin 6	ESC # h
MM2000LC	ESC # c
Monofont	ESC # d
Monofur	ESC # f

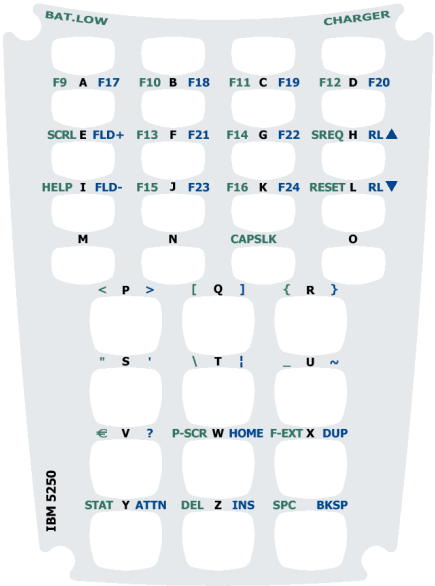
A TERMINAL EMULATION KEYBOARD OVERLAYS

VIPER-NET™ MOBILE COMPUTER

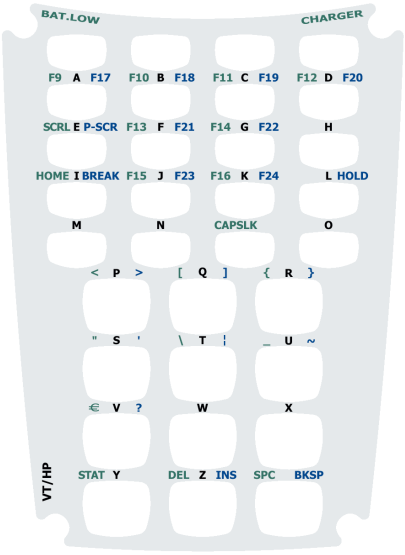
The following images show the keyboard overlay of the Viper-NET™ 32-key model for 3270, 5250 and VT/HP terminal emulation:



3270 Terminal Emulation

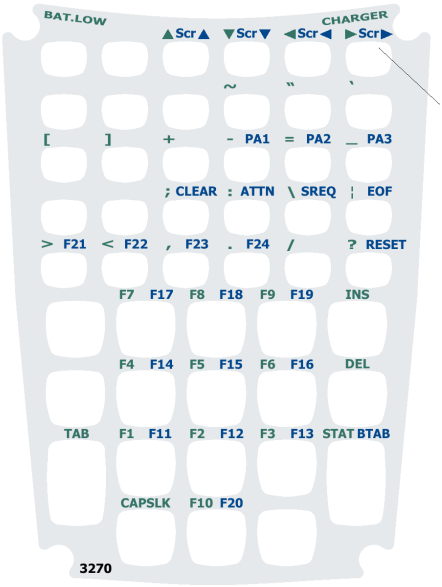


5250 Terminal Emulation

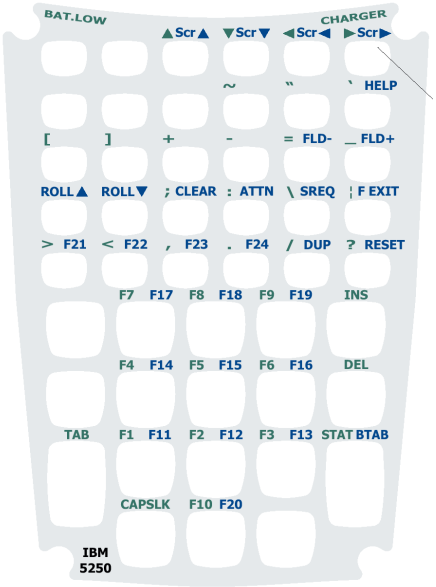


VT/HP Terminal Emulation

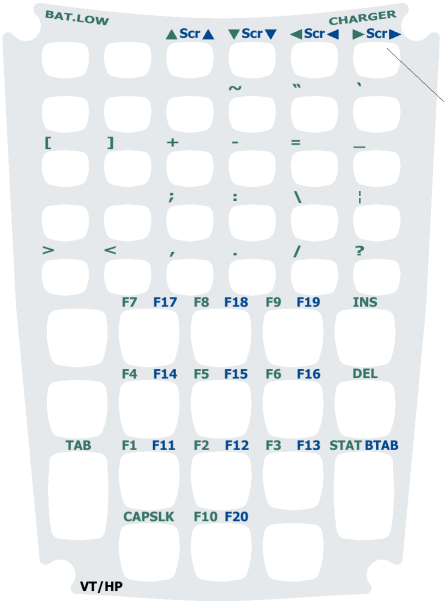
The following images show the keyboard overlay of the Viper-NET™ 48-key model for 3270, 5250 and VT/HP terminal emulation:



3270 Terminal Emulation



5250 Terminal Emulation



VT/HP Terminal Emulation

RHINO-NET™ MOBILE COMPUTER

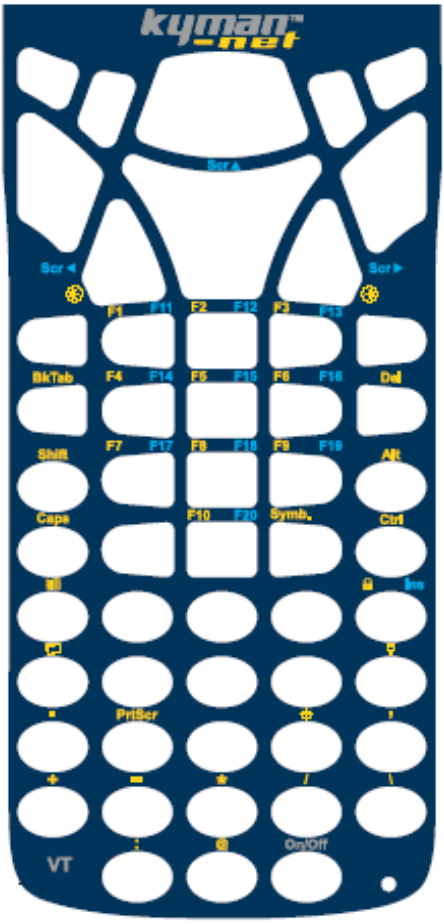
The following image shows the keyboard overlay of the Rhino-NET™ mobile computer:

KYMAN-NET™ MOBILE COMPUTER

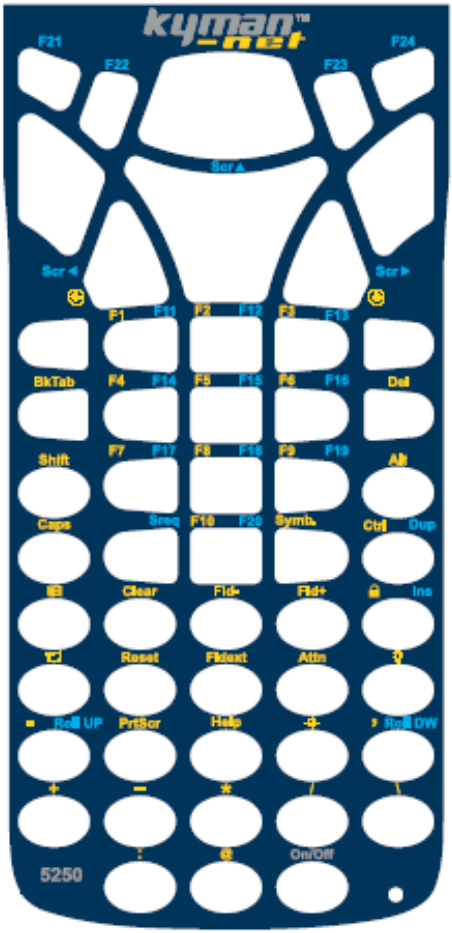
The given key sequence activates the specific function when using the following mobile computer overlays:

[BLUE] + [Arrow] Display scrolling.

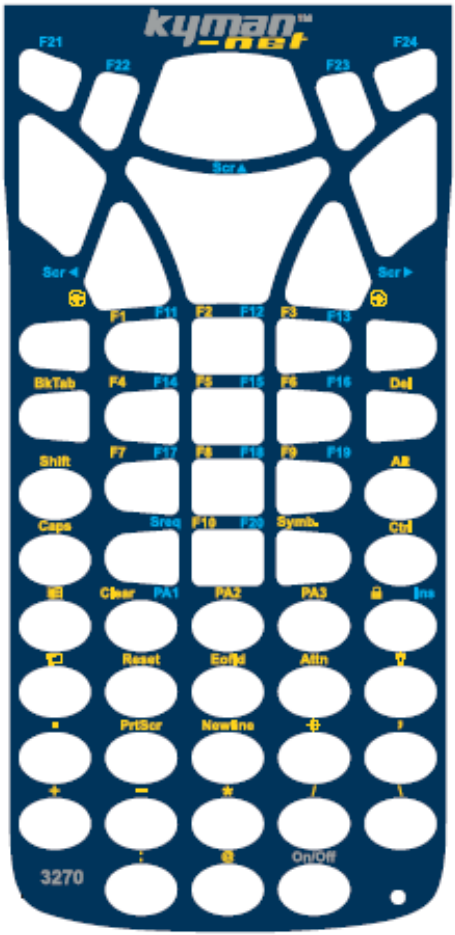
The following images show the keyboard overlay of the Kyman-NET™ alphanumeric model for VT, 5250 and 3270 terminal emulation:



VT Terminal Emulation

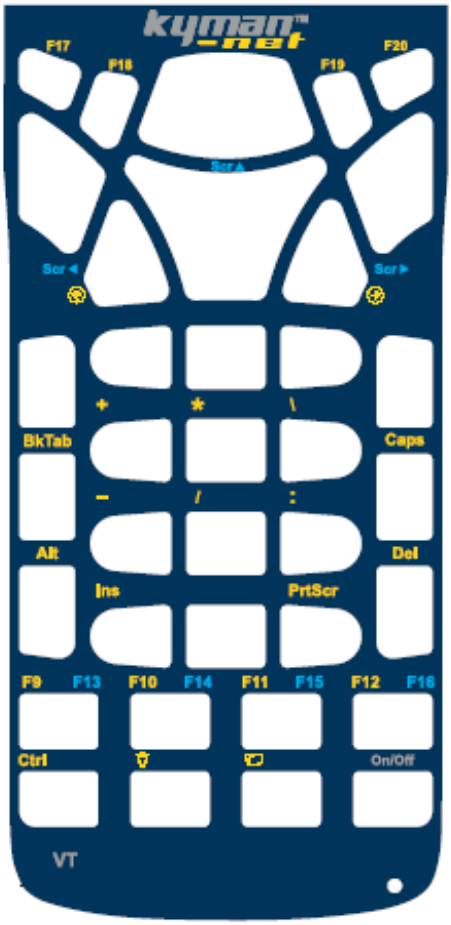


5250 Terminal Emulation

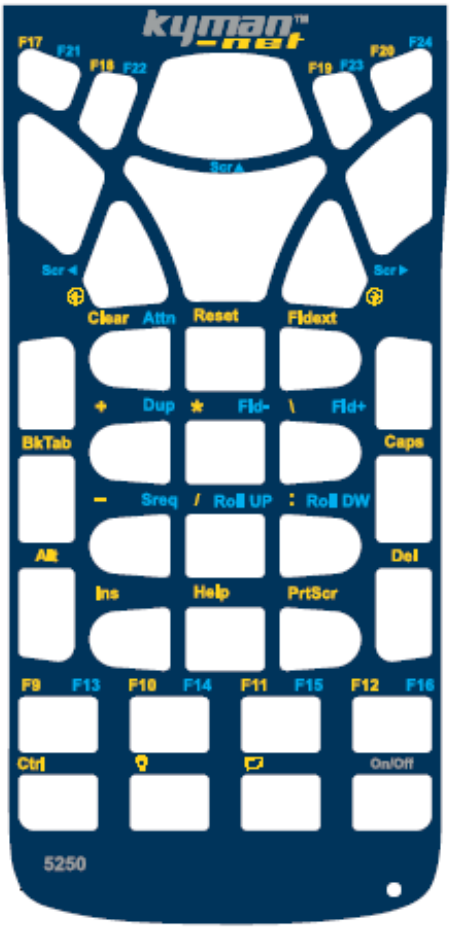


3270 Terminal Emulation

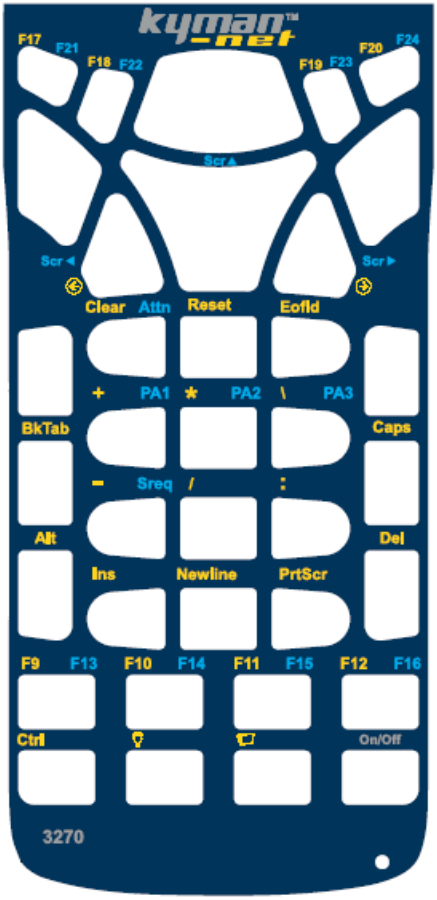
The following images show the keyboard overlay of the Kyman-NET™ numeric model for VT, 5250 and 3270 terminal emulation:



VT Terminal Emulation



5250 Terminal Emulation



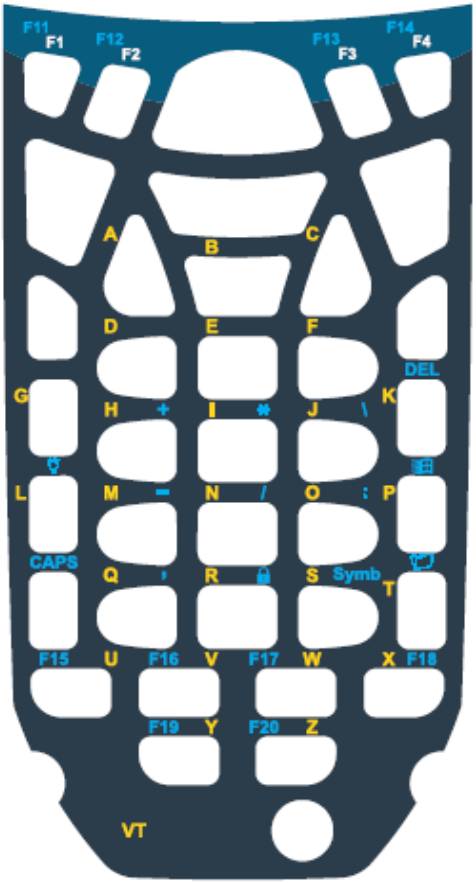
3270 Terminal Emulation

DATALOGIC SKORPIO™ MOBILE COMPUTER

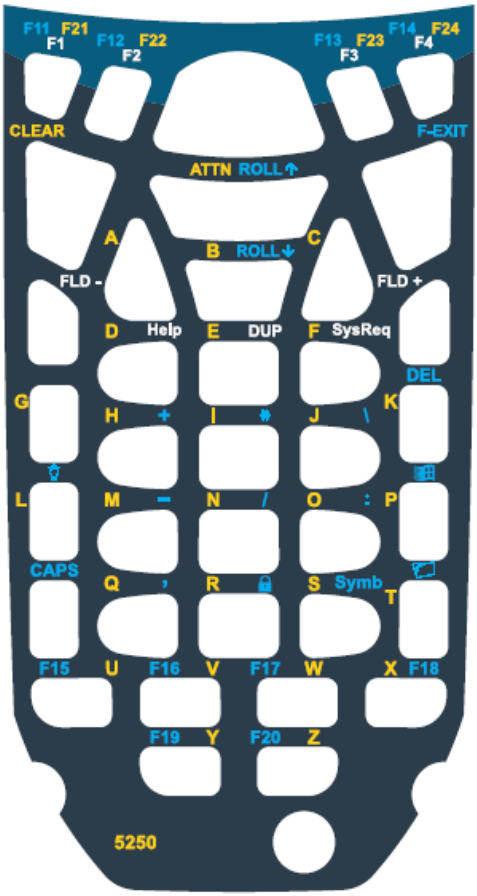
The given key sequences activate specific functions when using the following mobile computer overlays:

[ALT] + [Arrow]	Display scrolling;
[CTRL] + key	Enabling the function printed in white above the selected key except for F1, F2, F3 and F4 which are directly selectable by pressing the corresponding key.

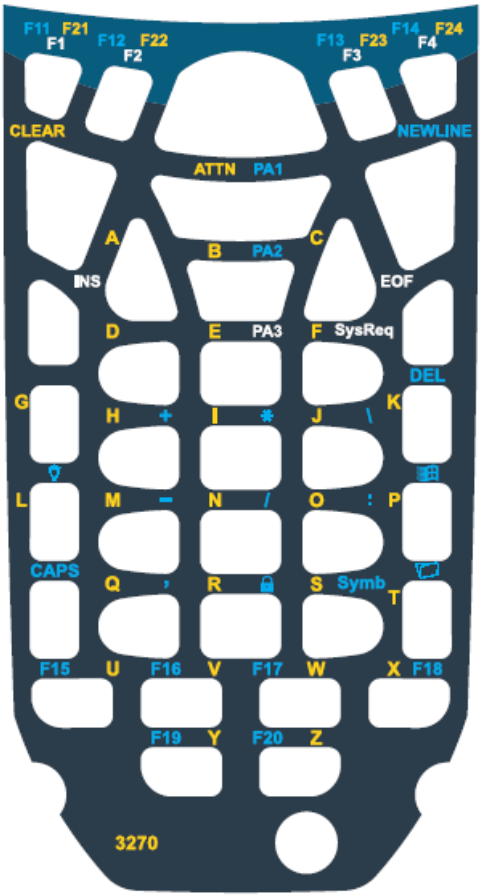
The following images show the keyboard overlay of the Datalogic Skorpio™ for VT, 5250 and 3270 terminal emulation:



VT Terminal Emulation



5250 Terminal Emulation



3270 Terminal Emulation