#### 1. CONNECTING TERMINAL

This chapter describes how to setup connection with an Newland NQuire terminal.

First the correct IP-addresses have to be set in the NQuire.

For correct operation the NQuire has to be set on a fixed IP-address and the IP-address of the server controlling the Nquire has to be set.

#### 1.1. SET NQUIRE ON DHCP

First we will set the NQuire to get an automatic IP- address by DHCP. This allows us to connect with the buildin website to do further settings.

We will use the build-in scanner to switch to using DHCP.

Scan the barcodes below from top to bottom:



Programming ON





/network/dhcp = true



Programming OFF

Now the Nquire will get an IP-addres via DHCP.

## 1.2. SHOW SETTINGS OF NQUIRE

To connect to the NQuire to do further settings we first have to know the current IP-address.

We can display the current configuration on the screen of the NQuire.

Scan the barcodes below from top to bottom to show configuration:



Programming ON



On screen configuration overview

The configuration of the terminal is shown on screen. This configuration contains the IP-address of the ethernet connection.



Remember this IP-address.

## 1.3. CONNECT WITH CONFIGURATION WEBSITE

Now start an web browser (Chrome, Ms Internet Explorer, Firefox, etc) and type in the address bar the IPaddress of the NQuire terminal.

The configuration website of the NQuire terminal is shown.

| ← → C 🗋 10.20.1.55 |                          |                                                   | Ę               |
|--------------------|--------------------------|---------------------------------------------------|-----------------|
| Newlo              | od Configurat            | ion tool                                          | 1000            |
|                    |                          |                                                   | 52 <del>2</del> |
|                    |                          |                                                   |                 |
| Home               | Welcome                  |                                                   | 7               |
| Notwork            | Device name              | Newland NQuire 200                                |                 |
| Network            | Serial number            | I35G00121RW                                       |                 |
| Messages           | Hardware version         | V2.0                                              |                 |
| Scanner            | Firmware version         | 2.0.2                                             |                 |
| Missellenseus      | Application version      | 2.2                                               |                 |
| wiscellaneous      | Application build nr     | 23M.beta                                          |                 |
| Log                | Application build date   | Nov 11 2014                                       |                 |
| Reboot             | Root file system version | 1.5.4                                             |                 |
|                    | MAC ethernet             | c4:82:3f:0c:09:86                                 |                 |
|                    | MAC wlan                 | 00:00:00:00:00:00                                 |                 |
|                    | Scanner module firmware  | Firmware v2.04.32;Decoder<br>v5.00.006.C9         |                 |
|                    | Rfid device modeltype    | 3                                                 |                 |
|                    | Touch-pad                | AT42QT2160 Touch Sense Keyboard<br>CIT200 version |                 |
|                    | Current IP address       | 10 20 1 55                                        |                 |

#### 1.4. CONFIGURING NETWORK

In the configuration website we can now set the settings for network and the address of the server controlling the NQuire.

| ome         | Network interface            |  |
|-------------|------------------------------|--|
| etwork      | Network interface ethernet • |  |
| essages     |                              |  |
| anner       |                              |  |
| scellaneous | IP Settings                  |  |
| a           | Use DHCP   No  Yes           |  |
| 9           | IP address 192.168.1.200     |  |
| boot        | Netmask 255.255.255.0        |  |
|             | Gateway 192.168.1.1          |  |
|             | Nameserver 1 192.168.1.1     |  |
|             | Nameserver 2 192.168.1.1     |  |
|             |                              |  |
|             | Nouize protocol actings      |  |
|             | Noulie protocol setungs      |  |
|             |                              |  |

For correct operation the NQuire has to be set on a fixed IP-address. This address has to be a free address within the nework the NQuire will be connected to.

- 1. Click on **Network** in the menu
- 2. Turn off DHCP
- 3. Specify the IP address
- 4. Set the other network settings line Gateway and DNS

|               | IP Settings                                                                                 |                                                                               |
|---------------|---------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------|
| Home          | Use DHCP    No                                                                              | Yes                                                                           |
| Network       | IP address 192                                                                              | 2.168.1.200                                                                   |
| senesseM      | Netmask 255                                                                                 | 5.255.255.0                                                                   |
| 1000ugeo      | Gateway 192                                                                                 | 2.168.1.1                                                                     |
| Scanner       | Nameserver 2 192                                                                            | 2 168 1 1                                                                     |
| Miscellaneous | Numeserver 2                                                                                |                                                                               |
| Log           |                                                                                             |                                                                               |
| Debeet        |                                                                                             |                                                                               |
| Repool        | NQuire protocol setti                                                                       | ngs                                                                           |
| Redoot        | NQuire protocol setti<br>Mode                                                               | server T                                                                      |
| Kedoot        | MQuire protocol setti<br>Mode<br>UDP port                                                   | ngs<br>server v<br>9000                                                       |
| Redoot        | Mode<br>UDP port<br>TCP port                                                                | ngs<br>server v<br>9000<br>9101                                               |
| Redoot        | Nettire protocol setti<br>Mode<br>UDP port<br>TCP port<br>Remote IP address                 | ngs<br>server ▼<br>9000<br>9101<br>192.168.1.10                               |
| (CEDOOL       | Nettine protocol setti<br>Mode<br>UDP port<br>TCP port<br>Remote IP address<br>Http address | Server           9000           9101           192.168.1.10           http:// |
| KEDOOT        | Nettine protocol setti<br>Mode<br>UDP port<br>TCP port<br>Remote IP address<br>Http address | server           9000           9101           192.168.1.10           http:// |

The IP-address of the server controlling the Nquire has to be set. This the IP-address of the pc where the *TimeTracking Server Software* is installed and running.

- 1. Scroll down to the section NQuire protocol settings
- 2. Specify the IP-address in the field Remote IP addres
- 3. Leave all other setting unchanged
- 4. Click on Apply Settings to apply the settings and restart the NQuire terminal.

## 2. SETUP HR100 SCANNER

A Newland HR100 scanner can be attached to the external USB port.

Scan the barcodes below from top to bottom to program the HR100 scanner for use on the NQuire:



\*Load All Factory Default





Enable Stop Suffix



Allow Code ID Prefix



For a correct working of the external scanner the setting "Raw data" for the external scanner has to be set to "No".

| Newland       | Configuration tool             |
|---------------|--------------------------------|
| ·//           | 2/5 INCUSTRIAI VIO VES         |
| Home          |                                |
| Network       | Scanning modes                 |
| Messages      | Default illumination LEDs On V |
| Scanner       | Scanning mode Sensor mode      |
| Miscellaneous |                                |
| Log           | External scanner               |
| Reboot        | Raw data 💿 No 🔍 Yes            |
|               |                                |
|               |                                |

Matrix Setup Newland NQuire terminal

## 3. MISC PROGRAMMING SEQUENCES

In this chapter you find programming sequences to program settings for the NQuire.

## 3.1. ENABLE ETHERNET

Scan the below sequence to turn off WIFI and enable the Ethernet interface again.



Programming ON



Program network settings





Now the Nquire will connect again via the Ethernet cable.

#### ENABLE WIFI 3.2.

Scan the below sequence to turn off Ethernet and enable the WIFI interface again.





Program network settings





**Programming OFF** 

Now the Nquire will connect again via WIFI.

# 4. DEFAULT SETTINGS NQUIRE TERMINAL

For correct operation the following defaults settings have to be set.

4.1. MESSAGES

| >> Newlo                                                | and Configu                                           | uratio                     | on to                        | ol                                    |                                             |                                       |
|---------------------------------------------------------|-------------------------------------------------------|----------------------------|------------------------------|---------------------------------------|---------------------------------------------|---------------------------------------|
| Home<br>Network<br>Messages<br>Scanner<br>Miscellaneous | Idle message<br>Text<br>Picture                       | X Pos<br>0<br>0<br>0<br>0  | Y Pos<br>20<br>55<br>80<br>0 | Vert Align<br>top v<br>top v<br>top v | Hor Align<br>left •<br>center •<br>center • | Size<br>large ▼<br>small ▼<br>small ▼ |
| Log<br>Reboot                                           | Error message<br>Text<br>Please ask<br>for assistance | X Pos<br>0<br>0            | <b>Y Pos</b><br>30<br>60     | Vert Align<br>top v<br>top v          | Hor Align<br>center ▼<br>center ▼           | Size<br>small ▼<br>small ▼            |
|                                                         | Font sizes<br>Font size small<br>Font size large      | 18 <b>v</b><br>28 <b>v</b> |                              |                                       |                                             |                                       |
|                                                         |                                                       | _                          | Apply setting                | S                                     |                                             |                                       |

## 4.2. MISCELLANEOUS

Both Idle message timeout and Touch keyboard timeout should have higher values then the value set for **PoolingInterval** (default = 10) in the settings of the MatrixProject TerminalTracking.

Important is to set the Idle message timeout to 15.

| » Newland                                | Configurat                                                                  | ion tool                                       | R. |
|------------------------------------------|-----------------------------------------------------------------------------|------------------------------------------------|----|
|                                          | Device                                                                      |                                                | *  |
| Home                                     | Device name Newland NO                                                      | uire 200                                       |    |
| Home                                     |                                                                             |                                                |    |
| Network                                  |                                                                             |                                                |    |
| Messages                                 | Authentication                                                              |                                                |    |
| Scanner                                  |                                                                             |                                                |    |
| Miscellaneous                            | Enable authentication                                                       | No      Yes                                    |    |
| Log                                      | Password                                                                    |                                                |    |
| Paboat                                   |                                                                             | ***                                            |    |
| Rebool                                   |                                                                             |                                                |    |
| ניין                                     | Programming mode timeou<br>Enable security code<br>Barcode programming secu | t <u>15 •</u><br>• No • Yes<br>urity code 0000 |    |
| le                                       | dle message timeout                                                         | 15                                             |    |
| E                                        | rror message timeout                                                        | 1                                              |    |
| F                                        | ont codepage                                                                | ibm852 V                                       |    |
| S                                        | can event separator                                                         | LF 🔻                                           |    |
| N. N | lessage encryption                                                          |                                                |    |
|                                          | ustom NOuire identifier                                                     |                                                |    |
| 5                                        |                                                                             | elsenary.                                      |    |
| 15                                       | _                                                                           |                                                | *  |

For correct working of the Touch Keyboard set the following setting:

| » Newland                                               | Configuration tool                                                                                                                                                        |
|---------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Home<br>Network<br>Messages<br>Scanner<br>Miscellaneous | Interaction         Display contrast       1 ▼         Beeper volume       1 ▼         Beeper type       2 ▼         Disable beep after scan                              |
| Reboot                                                  | GPIO         Server message prefix       I         Append event counter       ● No ● Yes         Method       On read GPIO ▼         Poll speed (seconds)       15 ▼      |
|                                                         | Touch screen         Server message prefix       K         Touch keyboard timeout [seconds]       40         Touch key click       beep2 ▼         Invert button on click |