

Netgenium ABR2501-IP

Installation Guide

Firmware Version 1.9.3



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PREFACE

This preface describes the purpose, audience, organization, and conventions of this guide

The preface covers these topics:

Purpose, page 1

Audience, page 1

Conventions, page 2

Purpose

The *Netgenium ABR2501-IP Manual* provides information about installing and configuring the Netgenium ABR2501-IP biometric reader.

Audience

The *Netgenium ABR2501-IP Manual* is written for network administrators and installers responsible for installing and configuring the Netgenium ABR2501-IP. This guide requires knowledge of IP networking technology.

Conventions

This document uses the following conventions:

BOLD ORANGE font is used to show Navigation steps to
configure a feature

BOLD RED font is used to indicate a button or hyperlink

BLUE font is used to indicate a label on the web page

CHAPTER 1

HARDWARE OVERVIEW

The ABR2501-IP is a biometric reader designed to work on the LAN. The unit is powered from IEEE802.3af Power over Ethernet (PoE).

When a finger is placed on the sensor, an ISO template of the finger print is produced and sent over the LAN to PolicyServer for authentication. The LED indicators on the front of the unit can be customised to indicate the status and result of the process.

Powering The Unit

The ABR2501-IP can be powered from any IEEE 802.3af power source via the LAN interface

Resetting the Unit

The ABR2501-IP can be reset by removing power to the unit or pressing the Reset button visible on the back of the unit or via the software options.

The Restore Factory Default Configuration

ABR2501-IP configuration can be restored to factory defaults by holding down the Default button, the bottom most button on the reader of the unit, whilst the unit is reset by pressing the Reset button, the topmost button on the rear of the unit.

Front Panel Indications

The front panel LED's indicate the status of the reader by colour. The settings for this feature can be customised in the configuration process.

CHAPTER 2

HARDWARE INSTALLATION

The unit is designed to be mounted vertically on a wall or suitable smooth surface. Each reader is supplied with a mounting bracket and two allen bolts for securing the reader to the bracket.

The mounting bracket should be fixed to the vertical surface.

The reader is then lowered onto the bracket, the top surface of the reader fits behind the top lip of the bracket.

The reader is then secured in place with the two allen bolts on the underside.

CHAPTER 3

CONFIGURATION

This chapter describes how to set up the ABR2501-IP for connectivity to the LAN.

Initial Network Setup

Connect the ABR2501-IP to a POE capable network switch or via a mid span device.

To logon for the first time, open a web browser and type the IP address of the panel in the address bar. Each unit is pre-configured with a default IP address of *10.100.1.171* when it leaves the factory. The default username and password are as follows:

- Username: netgenium
- Password: netgenium

The home page is shown in figure 4.1. This provides basic information on the reader such as software version serial number etc. Navigation around the menu structure is via the tabs shown at the top of the home page. Each tab redirects the browser to the master page for the configuration section selected. In each section a sub menu is accessible via the links on the left of the page.

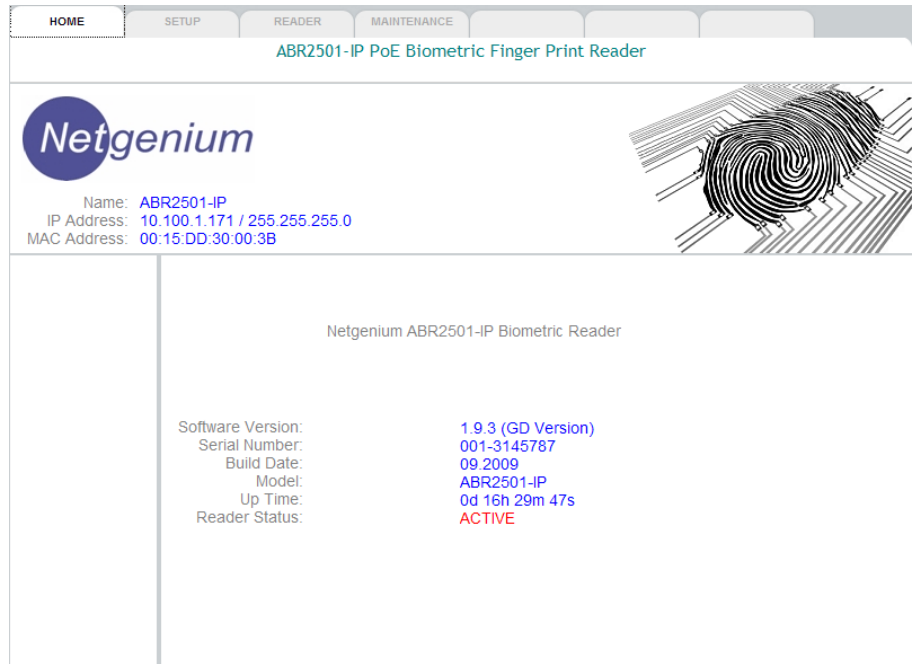


Figure 3.1 Home Page

To set the readers IP address:

Navigate to: Setup

Configure the options as described below then click the **Apply** button.

General

- Device Name: The name for the device (usually a description of the location)

Network

- IP Address: IP address of the device
- Network Mask: Subnet Mask of the device
- Default Gateway: Default Gateway for the device
- Netgenium Primary PolicyServer: The IP Address of the primary PolicyServer
- Netgenium Secondary PolicyServer: *for future use.*
- Registration Mode: Autonomous or registered with PolicyServer
- Registration Status: Current registration status.

DNS Settings

- Domain Name:
- Primary DNS:
- Secondary DNS:

Network Port

- Link Configuration: Set the speed and duplex settings of the network interface.

NETWORK

TIME & DATE

USERS

SYSTEM

Network

General

Device Name :

Network Settings

IP Address :

Network Mask :

Default Gateway :

Netgenium Primary PolicyServer :

Netgenium Secondary PolicyServer :

Registration Mode : Autonomous Registered

Registration Status : NOT REGISTERED

DNS Settings

Domain Name :

Primary DNS :

Secondary DNS :

Network Port

Link Configuration :

Figure 2.2 Network Setup

If you have changed the IP address of the controller you will loose the connection to it. Open another browser session and reconnect the new IP address.

Time & Date

Navigate to: Setup>Time&Date

The screenshot displays the 'Time & Date' configuration interface. On the left, a sidebar lists 'NETWORK', 'TIME & DATE', 'USERS', and 'SYSTEM', with 'TIME & DATE' highlighted. The main panel is titled 'Time & Date' and contains the following sections:

- Current ABR2501-IP Time:** Time: 30/11/1999 Date: 02:00:53 Time
- Time Settings:**
 - Time Zone: GMT (Dublin, Lisbon, London, Reykjavik) [dropdown]
 - Enable Daylight Saving adjustment:
 - Set to Computer Time: 09/02/2010 Date: 15:07:36 Time
 - Set Manually: DD/MM/YYYY Date: HH:MM Time
 - Use NTP: Server IP Address

An 'APPLY' button is located at the bottom of the settings area.

Figure 4.3 Time & Date

This page enables you to set the system time and date. The options are:

Set to Computer Time

This option sets the time and date to that of your computer when the **Apply** button is clicked.

Set Manually

Enter the time and date in the textboxes provided and click the **Apply** button.

Use NTP

With this option enabled the reader will synchronise its time and date with an NTP server every 5 minutes. Enter the IP Address of the NTP server and click the **Apply** button.

If the controller is configured to register with PolicyServer the unit will automatically be synchronised with PolicyServers date and time.

Users

Navigate to: Setup>Users

Use this page to manage the user accounts used to administer the unit. The default settings are:

- Username *netgenium*
- Password *netgenium*

To add a new user account, enter the username and password and click the **Update** button.

To remove an account, highlight the name to delete and click the **Delete** button.

System

Navigate to: Setup>System

The system password is used to authenticate requests between PolicyServer and the end devices. The default setting is *netgenium*.

Reader

Selecting the Reader tab allows you to configure the colour of the front panel LED's, depending upon the status of the reader.

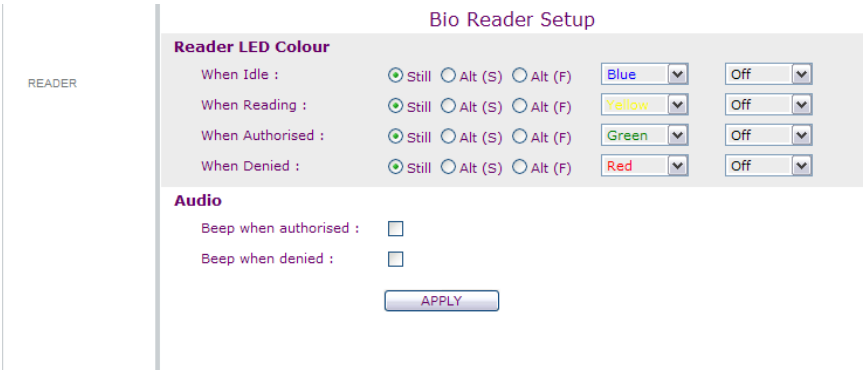


Figure 4.4 Lock Hardware

Click the **Apply** button to enable the changes.

CHAPTER 4

MAINTENANCE & DIAGNOSTICS

Selecting the Maintenance in the configuration window provides data on the current status of the ABR2501-IP's features, the ability to test each function of the reader remotely and the ability to upgrade the firmware of the reader.

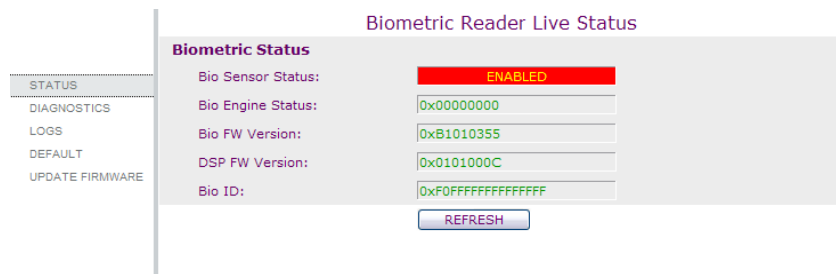


Figure 5.1 Status

Diagnostics

Navigate to: Maintenance>Diagnostics

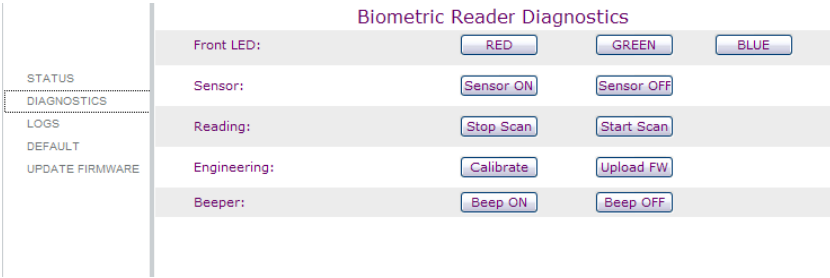


Figure 5.2 Diagnostics

The diagnostics page allows you to test the front panel LED's and the beeper of the unit. You also have the ability to turn off the sensor, start and stop the sensor scanning for finger prints, calibrate the sensor and upload firmware to the sensor.

Calibrating The Sensor.

Stop the sensor scanning and turn off the sensor by pressing the [Stop Scanning](#) and [Sensor Off](#) buttons.

Press the [Calibrate](#) button. Wait 15 secs and reboot the reader.

Upload Sensors Firmware

The firmware for the sensor is stored in the file system of the ABR2501-IP. This procedure should only be necessary when the software of the unit has been upgraded.

Click the [Upload FW](#) button. Wait 3 minutes and reboot the unit

Logs

Navigate to: Maintenance>Logs

The readers logs events in a temporary buffer for diagnostic purposes. This buffer is stored in volatile memory and is lost when the unit is powered off.

To clear the buffer manually, click the **Clear Logs** button.

Default

Navigate to: Maintenance>Default



Figure 5.3 Default

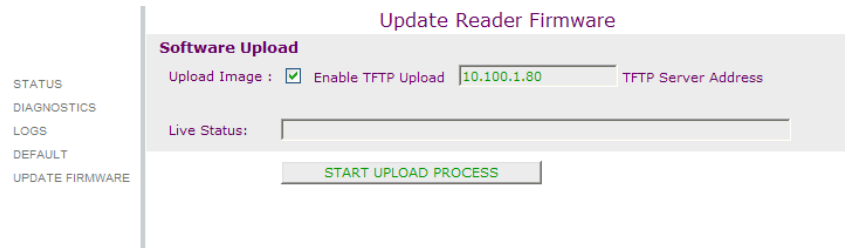
Clicking the **DEFAULT** button will return the reader to factory default settings.

The **CLEAN** button will reset the reader to factory default settings except for the IP address.

Clicking the **REBOOT** button will reboot the controller.

Update Firmware

Navigate to: Maintenance>Update Firmware



The screenshot shows the 'Update Reader Firmware' page in the Netgenium web interface. On the left is a navigation menu with the following items: STATUS, DIAGNOSTICS, LOGS, DEFAULT, and UPDATE FIRMWARE (which is highlighted). The main content area is titled 'Update Reader Firmware' and contains a 'Software Upload' section. This section includes a 'Live Status' field, a 'START UPLOAD PROCESS' button, and a 'TFTP Server Address' field with the value '10.100.1.80'. There is also a checkbox for 'Enable TFTP Upload' which is checked.

Figure 5.4 Update Firmware

The firmware can be updated via the web browser interface. To update the firmware:

1. Click the **Browse** button and select the file containing the new image.
2. Click the **Update Now** button. The image will now be uploaded to the unit. Once this process is underway **DO NOT** interrupt or disconnect the pc hosting the image or the reader from the network. This will result in failure of the unit. In this instance the unit is only recoverable by returning to the manufacturer.

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