FCC submission

Product Manual

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Medic4All
TELEMEDICINE SOLUTIONS

MiniGate™ - VMG03

Operation Manual

MiniGate™ is an IP-based USB gateway. Plugging MiniGate™ into a standard USB port activates its software and displays data generated by Medic4All's wireless vital signs monitors on the computer screen. With an Internet connection, measurement data can be sent directly and securely to a monitoring center and/or to a web medical file.

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$\boldsymbol{C}\boldsymbol{\epsilon}$ 0483	Manufacturer: **Medic4All® Ltd.** Hamefalsim 10, P.O.B 4222, Petach Tikva, 49000, Israel. Tel: +972-3-9226610 Fax: +972-3-9226615
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Introduction

Scope

Medic4All® Telemedicine system is designed for interactive remote medical monitoring. The system installed at the user home includes the MiniGW™ device, which serves as a gateway between the peripheral units (i.e., sensors, medical measuring devices) and the MiniGate™ application. The MiniGate™ is responsible for accepting the measured data, and for sending it to the Medic4All call center medical file. On the local PC, the application provides the user with the ability to view the medical measurements and configure system parameters. Using the Internet, the user or his delegate (e.g., a physician) may view the measurements based on the Medical File viewer. The MiniGW™ device is the mediator between the peripheral units - measuring devices - and the MiniGate™ application. The MiniGW™ device communicates with the MiniGate™ application using a standard USB port, and with a number of Medic4All peripheral units (WristClinic™, MiniClinic™, blood pressure monitor, weight scale, and others), via RF communication.

About this Manual

This manual describes and explains the installation and working environment of the MiniGate application. It provides detailed instructions on how to handle, setup, configure and operate the MiniGate system.

Installation

Scope

The **Installation** section describes how to install the Medic4All MiniGate application.

The MiniGate installation is performed by a setup wizard, which provides step-by-step instructions on how to install the MiniGate application.

Hardware and software requirements

Before the installation starts make sure your system supports the following requirements:

Hardware Requirements:

- Pentium 3 500MHz Or Similar
- 64MB RAM
- 100MB free and available space
- Available USB port

Software Requirements:

- Windows XP home
- Windows XP pro
- Windows 2000
- Windows ME
- Win 98 SE
- Microsoft Explorer 5 or higher – with SSL 128bit supports

Preparing to install

In order to install the MiniGate application, you need to have Administrator privileges on your Operating System. Make sure there are no old Medic4All programs installed on your PC.

To start the installation, verify that you have the following parts:

Medic4All MiniGate installation CD
MiniGW device

<u>Installation process</u>

To install the Medic4All MiniGate application:

➢ **Insert the Medic4All CD into the CD ROM and run the file: Medic4All MiniGate Setup.exe.**

The MiniGate setup screen opens; on top of this screen, the "Choose language" window appears.

1.
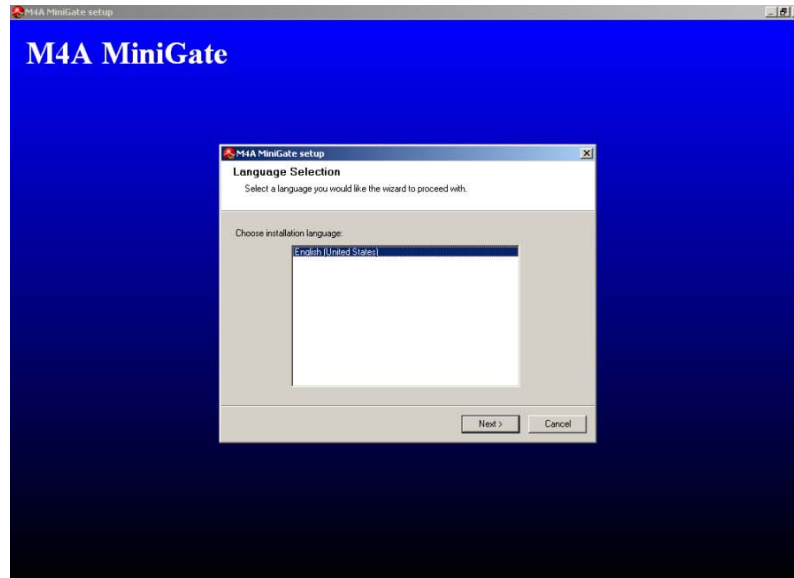
Figure 1- "Choose language" window

➢ **In the language selection window, select a language and click Next.**

Note: The language chosen determines both the language used in the installation screens and the language used in the MiniGate graphical user interface.

The MiniGate "Welcome to the installation wizard" window appears.

2.

Figure 2- "welcome to the installation" window

➢ **Follow the instructions that appear in the "Welcome to the installation wizard" window and click Next.**

The "License agreement" window appears.

3.

Figure 3- License agreement window

> **Read the license agreement. If you wish to exit the installation, click Cancel. If you wish to continue with the installation of the MiniGate, mark √ in the   and click Next.**

The "Destination folder" window appears.
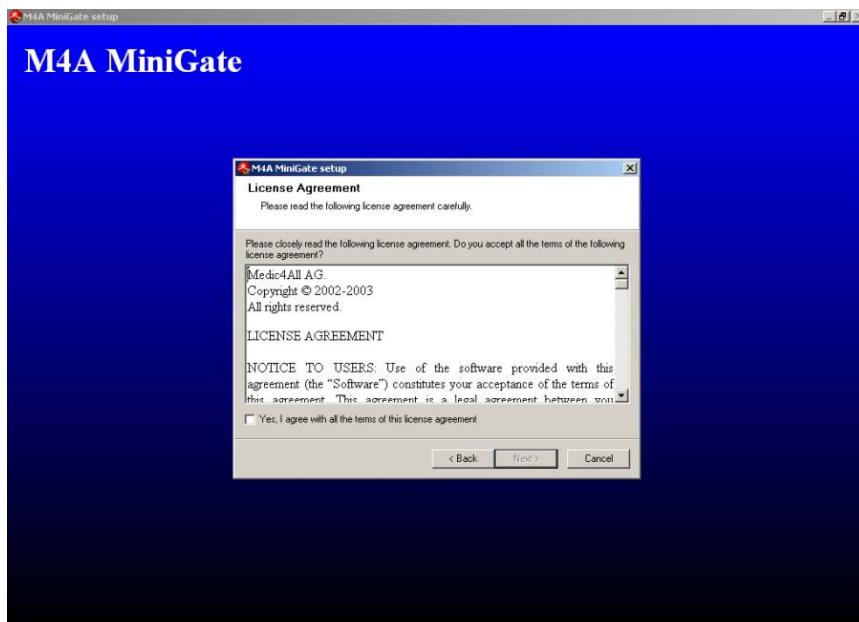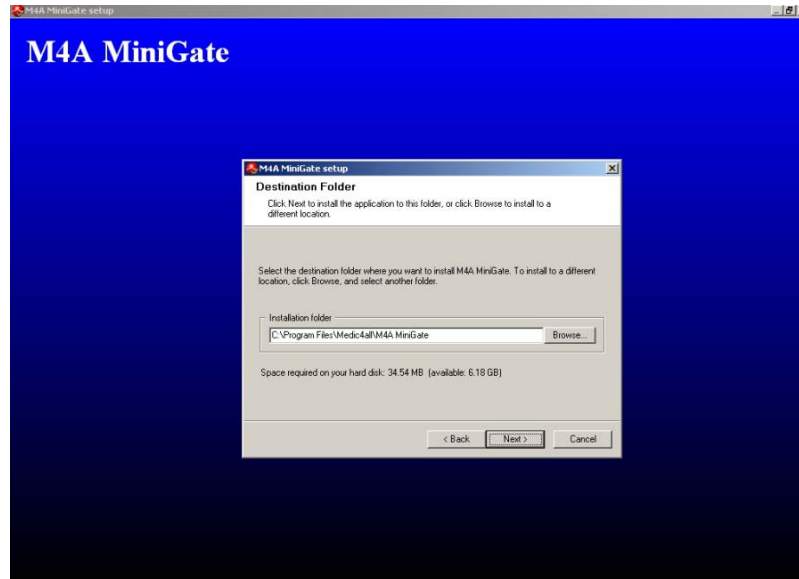

4.

Figure 4– Destination folder window

> **You can change the default destination folder that is presented in the window or you can use the default folder. To change the destination folder, select the folder in which you wish to install the MiniGate application and click Next.**

Note: It is recommended to install the MiniGate in the default destination folder that appears in the destination field.

The "Ready to install program" window appears.

➢ **In the "Ready to install program" window, click Next.**

5.

Figure 5 – Ready to Install window

The system installs the application components.

Important: During installation, the system might encounter files with version conflicts. As a result, the system will open the "File vers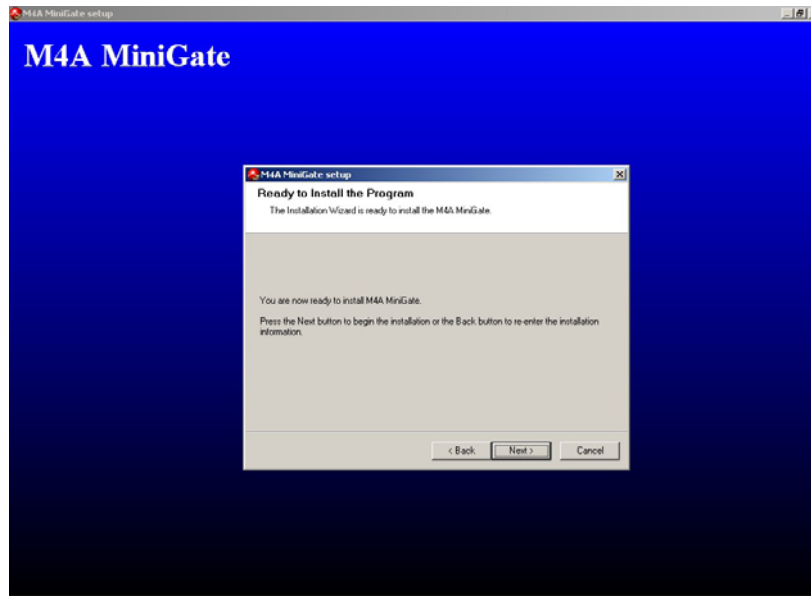ion conflict" window and will consult the user whether to keep the old components. In this case, click Yes to keep the old components and continue with the installation *(see Figure 1).*
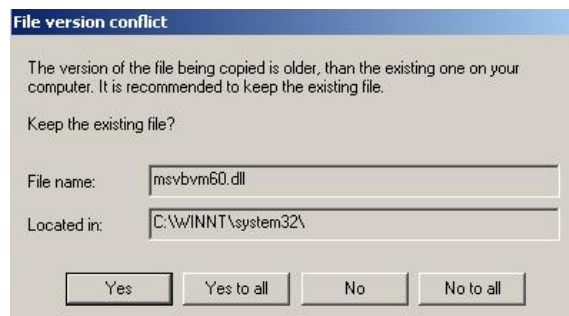
6.

Figure 6 - File version conflict window

The system finishes installing the MiniGate and opens the " Installation complete" window. The " Installation complete" window contains a "start Medic4All MiniGate" check box that is checked by default.

In order to continue and configure the MiniGate, check the "Start Medic4All MiniGate" checkbox and click Finish. The MiniGate application will start running *(see* MiniGate initial activation and setup*)*. In order to terminate the installation without starting the MiniGate application, uncheck the "Start Medic4All MiniGate" checkbox and click Finish.

Note: If you choose to continue and open the MiniGate application, refer to the activating the MiniGate application section.

Important: In case the installation did not succeed, contact your Medic4all representative for further instructions.

Activating the MiniGate application

Scope

The MiniGW device operates as a necessary identification key for the MiniGate system.

Important: In order to work with the MiniGate application the MiniGW must be plugged into the computer.

Important: Make sure that only one MiniGW is plugged into the computer at any given time, otherwise the system might malfunction

The MiniGate system supports multiple measuring devices and communicates with the user's call center medical file using the Web. These advanced features require setting and configuration.

The MiniGate can be manually configured. The user may add, update, or delete measuring device IDs. The user may change the MiniGate local password and define or update medical file settings.

Every Medic4all MiniGate is initially set at the factory to work with its dedicated measuring device and is set with a default password. Therefore, at initialization, the user has to configure only user-specific WEB parameters for establishing the link to the patient medical file.

In this section all the features and manual functions shall be described.

Connecting the MiniGW to the computer

In order to start working with the system, the MiniGW must be plugged in and recognized by the operating system. To do so, restart the computer (if it wasn't

restarted since the installation), close all working applications, plug the MiniGW into an empty USB port, and wait for the system to recognize it. After a few seconds the system recognizes the MiniGW as an HID device.

> **Note**: In case the PC does not recognize the MiniGW, try reentering the MiniGW. In case the problem is not solved, start the Windows Add New Hardware wizard or contact your Medic4all representative for further instructions.

MiniGate initial activation and setup

When first activating MiniGate, the user is required to associate, through he Internet, the MiniGate system to his call center medical file.

> **Important:** In case the MiniGate is not configured with a measurement device, on activation the "Minigate setup wizard -hardware information" window will pop up.
> If this happens please refer to the Configuring measuring devices section.

> **Note**: Perform this configuration only if you already have an appropriate web viewer account connected to your personal medical file at the call center.

To associate the MiniGate system to your call center medical file:

If the MiniGate application is not yet running, open it now by selecting **Start => Programs => M4A MiniGate => MiniGate**.

When the MiniGate is activated and a new MiniGW is plugged into the computer, the MiniGate system recognizes the MiniGW entry as first entry to this MiniGate system and displays the following message: "Your M4A MiniGate is configured correctly. Click OK to associate your MiniGate to your M4A Medical File".

➢ **Click OK in the information message window.**

The MiniGate system opens the "Web Registration" window *(see Figure 2).*
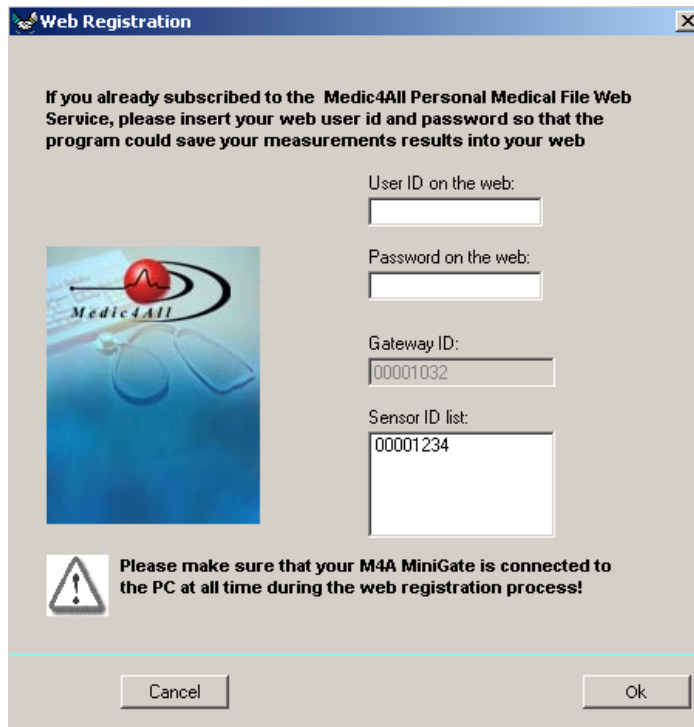
7.

Figure 7 - Web registration window

> **In the web registration window, fill in your Web user ID and WEB password in the designated fields and click OK. If you do not have a web medical file, click Cancel.**

Note: Remember, the Web user password is not the same as the MiniGate password and it is case sensitive.

The system associates the MiniGate to the user's medical file and displays the following message: "Your equipment information has been saved successfully to the Personal Medical File Web Service".

> **Click OK.**

The MiniGate system starts working and is ready to receive measurements.

Note: When the system is working and ready to receive measurements, the following icon appears in the system

tray: .

When the MiniGW is disconnected or deactivated the

following icon appears in the system tray: .

MiniGate Daily usage

When activated, the MiniGate system application runs in the background without interfering with other PC programs. Usually you do not have to activate the system, except after installation, since it is automatically started when the computer is turned on. However, if the MiniGate application was not activated or was stopped, the MiniGate system will not work. The MiniGate symbol in the system's tray indicates if the MiniGate is operational or not; if the MiniGate icon is missing, you have to start the application.

To start the MiniGate system:

> **Click the M4A MiniGate station shortcut on your desktop or select Start => Programs => M4A MiniGate => MiniGate.**

The MiniGate system is ready to receive measurements.

 Note: When the system is working and ready to receive measurements, the following icon appears in the system tray: .

When the MiniGW is disconnected or deactivated, the following icon appears in the system tray: .

View measurements

In order to enter the View measurements screens:

> **Click the Measurements view shortcut on your desktop or select Start => Programs => M4A MiniGate => Measurement View.**

The MiniGate application opens the Authorization window *(see Figure 3).*
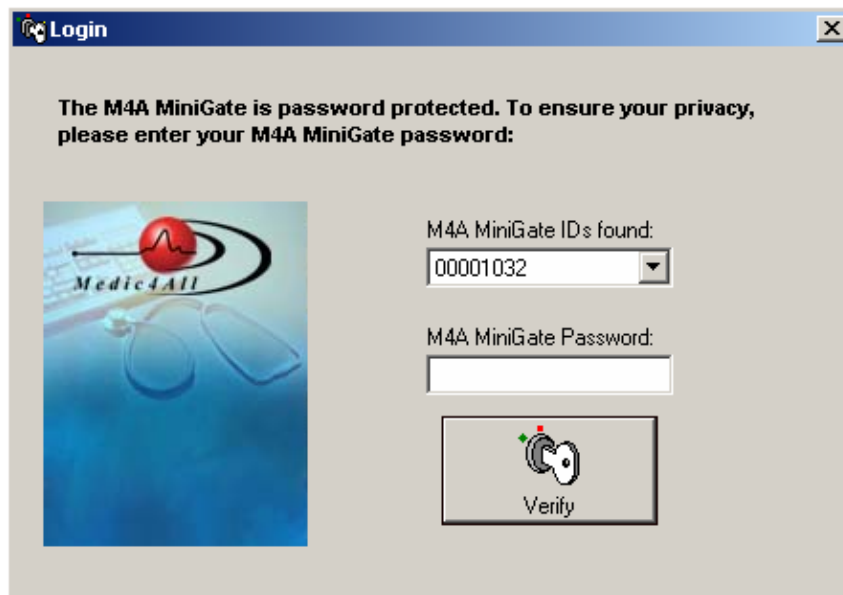
8.

Figure 8 - MiniGate authorization window

➢ **Enter the MiniGate password and Click Next.**

Important: The MiniGW initial password is: m4a123

Note: Remember the MiniGate password is case sensitive.

The MiniGate measurement viewer appears *(see Figure 4).*

9.

Figure 9 - Offline measurement View

Updating the Web measurements

While there is an active Internet connection, the measurements received by the MiniGate are transmitted automatically, once every 30 seconds, to the user's medical file. If the Internet connection is down, the system stores the measurement in the local repository (see also View measurement) and waits for Internet connection to be established. When the Internet connection is reestablished, the MiniGate automatically sends all the new measurements (the measurements which were not yet sent to the Internet) to the user's medical file.

In order to accelerate the arrival of new measurements to the patient medical file (without waiting for the automatic update), open the MiniGate menu and select "Web Medical File Measurements Update". All the measurements not yet sent will be transmitted immediately to the Web medical file.

MiniGate Configuration

Configuring measuring devices

To configure new sensors to the MiniGate:

➢ **Verify the MiniGate is working (view the MiniGate icon in the system tray -** *see Activating the* MiniGate *application***).**

➢ **Open the MiniGate menu by right-clicking the MiniGate icon in the system tray.**

➢ **Select the M4A MiniGate configuration option.**

The system opens the "MiniGate Setup Wizard– Hardware Information" window *(see Figure 5).*

10.

Figure 10 - MiniGate setup wizard - Hardware information window

➢ **Click Add.**

The system opens the Add sensor window.

➢ **In the Add sensor window, enter the ID number of the sensor you wish configure and Click Add.**

Note: The sensor ID is an 8 character ID and usually appears on a sticker on the back of the sensor. The sensor ID identifies the sensor to the MiniGW and enables the MiniGW to communicate with the sensor.

The sensor ID entered appears in the configured sensors field.

Important: Verify that the sensor ID that appears in the configured sensors field is the same ID as appears on your sensor.

➢ **Continue inserting as many sensors as you like. When finished, Click Next.**

The system generates a configuration-succeeded message.

➢ **Click Finish to end the configuration process.**

The configuration process is complete and the new sensors are now configured to the system.

Changing MiniGate password

As mentioned in the *View measurement* section, in order to open the *Measurement view* screen, the user must enter the MiniGate password. The MiniGate password is a unique password per MiniGW device and it is stored, in a secure way, on the MiniGW device. The MiniGate password is a case sensitive password consisting of 6-8 characters (digits and letters).

To change the MiniGate password:

> **Verify the MiniGate is working (view the MiniGate icon in the system tray -** *see Activating the* MiniGate *application***).**

> **Open the MiniGate menu by right-clicking the MiniGate icon in the system tray.**

> **Select the M4A MiniGate configuration option.**

The system opens the "MiniGate Setup Wizard– Hardware Information" window *(see Figure 5).*

> **Fill in the Gateway password field with the new password.**

Note: The MiniGate password must be at least 6 characters and contain both digits and letters.

> **Re-enter the new password in the confirm password field and click Next.**

The system opens the following confirmation window: "Your M4A MiniGate password has changed. To accept the new password, please enter your old M4A MiniGate password as confirmation:"

> **Enter the old MiniGate password and Click Next.**

The password is changed and the system generates change password confirmation.

Associating the MiniGate to Medic4all Web Medical File

To associate your MiniGate to your medical file, so measurements from your MiniGate will show on your Medical File:

➢ **Verify that the MiniGate is working (view the MiniGate icon in the system tray -** *see Activating the* MiniGate *application***)**

➢ **Open the MiniGate menu by right-clicking the MiniGate icon in the system tray** *(see Figure 6).*
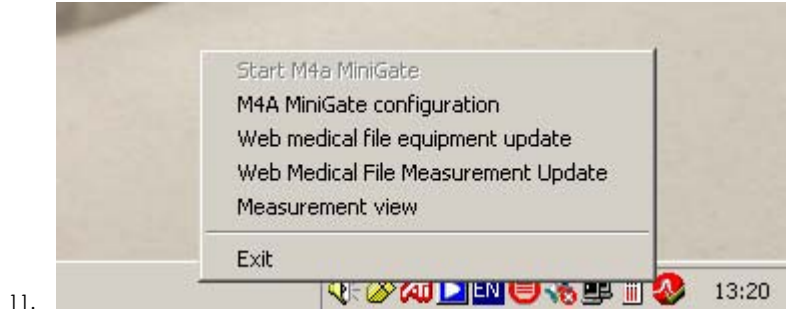

Figure 11 - MiniGate system tray Menu

➢ **Select the Web Medical File Equipment Update option.**

The system opens the Web Registration window *(see Figure 7).*

Figure 12 - Web registration window

➢ **In the web registration window, enter your Web user ID and Web password ID in the designated fields and click OK.**

Note: Remember that the Web user password is case sensitive.

➢ **Click Next.**

The system updates the Web server and generates a confirmation message.

Specifications

Environment

Operating condition	+10˚C to +40˚C / 30% RH to 85% RH
Storage condition	-10˚C to +55˚C / 30% RH to 85% RH
Dimensions	Approx. 95[W] x 15[H] x 25 [D] mm
Weight	Approx. 7g

Power Supply/bat

Power	5V up to 100mA powered from the USB interface

Radio Frequency communication

Frequency	433.92 MHz (EU) 866.3 MHz (EU) 915 MHz (USA)
Max transmission power	10 dbm (EIRP) at 433.92 MHz and 866.3 MHz. -1 dbm (EIRP) at 915 MHz
Bandwidth	60 kHz max.
Transmission range	200 m (free space)
Data transfer rate	12Mbps
Protocol	USB 2.0 / HID

Contents:

1. Operation Manual
2. MiniGate™

Warranty
This product is warranted against defects in material and workmanship beginning from the date of shipment for a period of one year (the "Term").

Under the Term, the obligation of Telcomed Advanced Industries Ltd (the "Company") will be limited to repair or replacement of the product (not including batteries, cables and spendable parts), according to the Company's discretion. Such repair or replacement will be made only after the Company's examination determines that said product is defective in material and/or workmanship.

This product warranty is void if the product has been repaired or altered in any way as to affect its use and operation as determined by the Company. This warranty is also void if the product has been subjected to abuse, misuse, negligence or accident.

No warranties, whether expressed or implied, shall exist beyond the Term.

Under no circumstances shall the Company be responsible for any loss of data or income or any special, incidental, consequential or indirect damages, arising from the product or its operation, howsoever caused.

Under no circumstances the Company will be liable for any claim arising from the product or its operation in excess of the total price paid for this product.

The Company reserves the right to make changes and improvements to the product without prior notice.