

# WINNER

# GSM

# **Dual Channel**

# Fixed Cellular Terminal

USER'S MANUAL



WINNER, GSM 900/1800 MHz, 800/1900 MHz SIM cards and Wavecom Module embedded Single/ Double Fixed Cellular Gateway Units

<u>VERSION V 5.1</u> Last updated: 07/11/04



#### **Dear Customer:**

Thank you for purchasing one of our WINNER GSM single/dual channel fixed cellular terminals.

The information in this manual does not constitute a warranty of performance, although the information has been compiled and checked for accuracy by Eurotech Communication Ltd. All our products are developed and produced by an experienced staff, who aspire to achieve customer satisfaction, utility value, quality and reliability of products.

Eurotech Communication Ltd. reserves the right to update this publication without notice.

Trademarks:

EUROTECH is a registered trademark.

#### Warranty policy:

The WINNER GSM Fixed Cellular Terminal you have purchased is under warranty for a year from the date of purchase by original purchaser. In case of defects in materials or workmanship Eurotech Communication Ltd. will replace free of charge. This warranty applies to hardware/ software and does not include SIM cards.

This warranty will not be honored if the device has been mishandled in any way.

#### **Approvals:**

The WINNER GSM gateway products are approved for connection to all telecommunications services via a PBX, telephone line or even a personal extension.

ISO 9001: 2000 approved, they also feature a modern user-friendly design, provide maximum control and economy of operation and aid in radiation prevention.

This unit should only be serviced by authorized service persons. For any assisstance (technical assitance or repair) call: +972-4-6801080.

# **TABLE OF CONTENTS**

General Overview	4	
Packing List	5	
Safety Guidelines	5	
General Information Interference with Medical and Personal Electronic Devices		
Installation Steps and Procedures	6	
STAGE 1: Identifying potential sources of interference	6	
STAGE 2: Assessing the subscriber site	7	
STAGE 3: Testing the location for signal strength	7	
STAGE 4: Installing the system	4	
STAGE 5: Programming of SIM cards	8	
STAGE 6: Testing prior to departing site	10	
STAGE 7: PC Management Programming	13	
General Technical Information	17	
Telephone Characteristics		

# Instructor's note:

The following instructions will introduce you to the Winner GSM fixed cellular terminal you have purchased and to the installation and management software. To understand these instructions you need to have basic familiarity with Microsoft Windows (any version).

### <u>Overview</u>

This user's manual will help you best install your WINNER GSM gateway unit, and provide you with the basic guidelines for handling any problems that might arise.

In general, the WINNER GSM single/dual gateways provide a flexible and cost efficient connection between your telephone system and the GSM mobile networks. In essence the device acts as a router that is programmed to choose the Least Cost Route when you make a call from your PSTN line to a cellular phone. The GSM gateway connects to a trunk line and bypasses the telephone company thus significantly reducing overhead costs of telephone calls.

Connect to your PBX or landline phone or even to a specific phone extension (special order), and you will save money on all calls by bypassing the telephone network and obtaining direct access to the GSM networks.

The embedded 'Wismo Quik' Wavecom Module and SIM cards which act as 'Smart' user ID cards that encrypt voice and data transmissions and store data concerning the specific user and personal phone settings, together make the GSM gateway a cell phone in itself. The WINNER gateways are therefore an essential tool for cutting overhead costs of telephone bills as they allow direct access to the GSM networks and cut costs of airtime and interconnections.

The WINNER GSM gateways are intended for medium to large enterprises but can be installed on regular phone lines in your home or home office.

### There are certain features that may be relevant to the product you have selected and some that are not. However, all are discussed in the following manual.

The WINNER GSM single/ dual channel units, when used with the appropriate telephone equipment (antenna, adapter, SIM cards, telephone PSTN line or PBX) will function as an ordinary landline and support the following features:

- Cost-saving routing of incoming calls
- GSM and PSTN interconnection via internal LCR
- Caller ID, LCD, RTC
- Fax, Data, SMS Transmission Optional
- Internal Battery Backup Optional
- ✤ FXS interface
- Polarity Reverse
- Outstanding voice performance and echo cancellation

The WINNER - GSM Dual Channel Gateway unit: main features and benefits:

• Is able to use up to 8 SIMs (up to four SIM cards per GSM channel enabling two outgoing simultaneous calls to any four operators).

# **Packing List:**

On receiving your WINNER device, please inspect the package to verify that you have the following:

- 1. One WINNER GSM single/ dual channel gateway unit
- 2. Adapter
- 3. Antenna
- 4. RJ-11 cable
- 5. RJ-45 cable
- 6. User's manual
- 7. Guarantee
- 8. S/W Disc

# **Safety Guidelines:**

For the safe and efficient operation of your WINNER gateway unit, please observe the following guidelines:

- Before installing the unit, please read the installation instructions and safety guidelines in this User's Manual carefully.
- Do not handle the equipment before disconnecting it from the electrical outlet.
- Do not use any cleaning agents or detergents on the exterior or interior surfaces. If you intend to clean the device, disconnect from electrical outlet and use only a damp cloth.
- Do not position device in a damp place; do not expose to water.
- Do not expose to extreme temperatures: optimal operating temperatures  $-5^{\circ}$  C to  $+50^{\circ}$ C.
- Position equipment in a stable environment; any sudden fall or sharp movement may damage the device.
- Do not cover or stick any foreign objects in devices' openings or ventilation holes
- Do not operate your WINNER device while any person is within 0.02m of the antenna. A person or object within 0.02 m of the antenna could impair call quality and may cause the phone to operate at a higher power level than necessary.
- **Warning: Potential Explosive Atmospheres:**
- Do not operate your WINNER near blasting caps, or in a blasting area, to avoid the possibility of triggering an explosion.
- Do not operate a WINNER transmitter in a hazardous atmosphere: an explosion or fire may result.
- The telephone interface is not designed for outdoor application:
   RJ-11 cable must not be run to an outdoor telephone; this minimizes equipment exposure to coupling and direct lightning surges.

# General user information:

**Placement of the device:** the WINNER GSM gateway unit is designed for installation on a vertical surface but may also be mounted on a wall.

#### If you wish to mount the device on a wall follow these steps:

- 1. Remove the black metallic strip used for hanging the unit on the wall by sliding it out from the back of the WINNER unit and place the metallic strip on the wall to indicate the location of the screws.
- 2. Hold the strip on the wall and drill holes for the screws to go into the wall through the metallic strip.
- 3. Place the unit onto the wall by sliding the metallic strip back into place.

# **Interference to Medical and Personal Electronic Devices**

Most electronic equipment is shielded from RF energy. Nevertheless, RF energy from the WINNER transmitter may affect inadequately shielded electronic equipment. We therefore advise to consult the manufacturer(s) of your medical and personal electronic device(s), (for example a pacemaker or hearing aid) to determine if they are adequately shielded from external RF energy.

Do not install a WINNER gateway unit in a health care facility, if regulations posted in the area restrict the use of cellular phones. Hospitals and health care facilities may be using equipment that is sensitive to external RF energy.

### Antenna Considerations:

Use only the supplied or approved antenna. Unauthorized antennas, modifications or attachments could affect call quality.

### **Installation STAGES and Procedures**

The installation procedure consists of the following steps:

**STAGE** 1: Identifying potential sources of interference.

**STAGE** 2: Assessing the subscriber site.

**STAGE** 3: Installing the system – please note differences in single/ dual channel units. **STAGE** 4:

4.1 Programming of SIM cards manually by telephone handset.

4.2 Programming of SIM cards by software.

### **STAGE** 5: Testing prior to departing site.

### **STAGE 1- Identifying Potential Sources of Interference**

The electronic circuitry of some telephones may be insufficiently shielded to operate properly with the WINNER gateway units. When making or receiving a phone call, if you hear a "humming" sound or noise in the earpiece of the telephone connected to the WINNER, or if any other party hears the hum or noise, move the telephone away from the WINNER. If moving it farther away has no effect, try using a different telephone. The WINNER is a two-way radio and as such, some occasional interference is unavoidable. For best results, choose an electrical outlet away from obstructions. Do not place the WINNER near items, which may increase, static, such as:

- Electrical appliances
- Lamps
- Microwaves
- TVs
- Fax Machines 4 Feet (1.2 meters)
- Computers 4 Feet (1.2 meters)
- Refrigerator
- Vacuum cleaner
- Light dimmers
- Fluorescent bulbs
- Motors
- Fans

# **STAGE 2: Assessing the Subscriber Site**

- The WINNER GSM gateway must be installed indoors:
- Basement installation is not recommended, to install in basement use external antenna.
- Installation in a place where the temperatures may not exceed the specified operating temperature range (see safety guidelines above).
- You should make sure that there is sufficient air movement.
- Installation in higher locations is preferred i.e. near windows and outer walls.

# **STAGE 3: Installing the System:**

- 1) Inspect the package, you should see: a unit gateway, an antenna, an adapter, a user's manual. Please note: the WINNER unit comes without the SIM card(s)!
- 2) Connect the antenna at a distance greater than 1 meter from the unit. Location of the antenna is important in order to obtain best performance, thus once you turn the power on, make sure you have good reception and clear conversation with the unit.
- 3) Insert SIM card into the unit:
- A) In case of a single channel unit, insert the SIM card in the designated slot (on the right side panel) adjacent to the antenna connection you will see a thin mettalic black colored drawer. Use a small pointed object such as the point of a ballpoint pen and insert it into the little hole on the right side of that drawer/slot to open the drawer, then insert the SIM into that drawer (SIM face up) and close the drawer firmly.

# In case of dual channel unit, there are up to four SIM card slots on the bottom side of the unit for each module. The SIM card slots are numbered from the top down as #1, #2, #3 and #4.

Insert SIM #1 for the first Provider, this is the default provider, the main provider. Insert SIM #2 for the Second Provider. Insert SIM #3 for the Third Provider Insert SIM #4 for the Forth provider For 'Up to 8' SIM cards 1- 4 for each module place each according to provider (no.1 to 4) as described above.

- 4) Connect the gateway unit to a PBX telephone network or telephone line with the RJ-11 cable (provided with unit) on the left side panel.
- 5) On the left side panel you will find the POWER socket. Connect the adapter (provided with unit) to the electrical outlet and then to the electrical socket.

Note: The power input is 90 –260 VAC and the output is 12 VDC 1.2 Amp

- 6) Wait 30 seconds for the unit to startup.
- 7) Connect a landline ordinary telephone to the RJ-11 connector (pin 3 and 4 are used for Tip and Ring)
- 8) In case of WINNER GSM single channel unit: place an outgoing call to test the system. If the LCD shows the number you have dialed; the device is in correct operation mode OK. If you see the operator/ provider name on the LCD try to make an outgoing call. You should notice the number dialed on the LCD, then make a call into the unit from another telephone, cellular or landline, you should see the ID caller on the LCD.

# Instructor's Note:

In case of dual channel unit (2 to 4 SIMs) the following information and programming steps are relevant:

Once you connect the power adaptor to the connector (next to the RJ-11 connector) the unit should power up and the LCD should display the first #1 Operator/ Provider name after initialization.

Note: please wait for about 30 seconds to power up!

# Stage 4:

### **Programming of SIM Cards WINNER GSM Dual Channel up to 8 SIMs:**

For cases where you use more than 1 SIM only!

Otherwise skip the following; you are finished and can now use your WINNER GSM single channel unit.

Now the unit is working, we need to verify that each prefix is setup according to the correct SIM.

**4.1 Programming of SIM cards for Version V5.1 (through telephone handset)** 

First, connect a landline phone to the RJ-11 cable of the particular channel you want to test the device.

On the V-8002 / D1 or D2, each channel has it own RJ-11.

# To start programming the WINNER, you need to pick up the handset of the landline phone and press the star key 3 times "\*\*\*".

LCD should indicate "Programming Mode" ( it is now in programming mode). In order to scroll through "Programming Mode" menu press "#". To enter the sub menu press "\*".

### **1. Adding or editing the SIM Prefixes:**

**Step 1:** Pick up the handset of the landline phone and press "\*\*\*", LCD should indicate "Programming Mode".

**Step 2:** After 1 second LCD should display "1. SIM Prefixes", press "\*" to get into the sub menu, LCD will indicate "Select SIM#1".

To scroll between the SIM's press "#". For choosing the SIM you wish to add prefixes press "\*".

Step 3: If there are not any prefixes the LCD will indicate "SIM#3 is empty" and after 1

second the LCD will indicate:

"ADD? \*-yes, #-no".

If there are prefixes programmed, (for example: SIM number 3) the LCD will indicate "SIM#3: *Prefix*", you can view all the prefixes by pressing the pound key "#".

**Step 4:** At the end of the prefixes LCD will indicate "ADD? \*-yes, #-no". To add new prefix press "\*" the LCD will indicate "Add SIM#3:", enter your prefix and "\*" to input. LCD will indicate (again) "Add SIM#3:"s if you wish to insert another prefix press your prefix, if you do not wish to insert press "\*" again.

To return to the main menu press "#" until LCD indicates "1. SIM Prefixes".

# 2. Sim Timing: Enable to decide which Sim will be working according to day of week.

Step 1: Pick up the handset of the landline phone and press "\*\*\*".
LCD will indicate "Programming Mode". After 1 second LCD will display "1. SIM Prefixes", press "#" until LCD will indicate "2. SIM Timing".
Step 2: Press "\*" to roll into the sub menu

**3. LCR Mode :** <u>SIM by Prefix or by Timing</u>.

**Step 1:** Pick up the handset of the landline phone and press "\*\*\*". LCD will indicate "Programming Mode". After 1 second LCD will display "1. SIM Prefixes", press "#" until LCD will indicate "3. LCR Mode. Available Options: a. Disable

b. By Prefixes.

c. By Day of week.

To scroll between options press "#", to choose press "\*".

### 4. AnsSuperVision: To change the voltage on line:

**Step 1:** Pick up the handset of the landline phone and press "\*\*\*".

LCD will indicate "Programming Mode". After 1 second LCD will display

"1. SIM Prefixes", press "#" until LCD will indicate "3. AnsSuperVision". **Step 2:** Press "\*" to roll into the sub menu, the LCD will indicate "# - Choose / \* - Save". After 1 second LCD displays "Disable", To scroll between options in the sub menu press "#", to choose press "\*".

# 5. AnsSprVisTimer: <u>To change the Timer:</u>

**Step 1:** Pick up the handset of the landline phone and press "\*\*\*",

LCD will indicate "Programming Mode". After 1 second LCD will display "1. SIM Prefixes", press "#" until LCD will indicate "4. AnsSprVisTimer"

**Step 2:** press "\*" to scroll into the sub menu, the LCD will indicate

"# - Change / \* - Exit". After 1 second the LCD will display "100msX01", to change the value press "#", LCD displays "0-9 –Edit / \* - Exit".

If you want to edit press 0-9 (digits on phone need to consist of 2 digits), if you don't want to edit, press "\*" to exit.

**6. Min Digits:** <u>Allows you to control the form in which the call will be transmited</u> (<u>Minimum COUNTER</u>):

**Step 1:** Pick up the handset of the landline phone and press "\*\*\*", LCD will indicate "Programming Mode". After 1 second LCD displays "1. SIM Prefixes ", press "#" until LCD will indicate "5. Min Digits"

Step 2: press "\*" to roll into the sub menu, the LCD will indicate "# - Change / \* - Exit".

After 1 second LCD displays "Min: 07", to choose press "#",

LCD will display "Min: (02-08) ".

**Step 3:** Choose digit between 02 to 08 (digit on phone have to be 2 digits), if you don't choose a digit, press "\*" to exit.

# **7. Max Digits:** <u>Allows you to control in which form the call will be transmitted</u> (Maximum COUNTER):

**Step 1:** Pick up the handset of the landline phone and press "\*\*\*", LCD will indicate "Programming Mode".

After 1 second LCD will display "1. SIM Prefixes", press "#" until LCD will indicate "6. Max Digits"

**Step 2:** Press "\*" to roll into the sub menu, the LCD will indicate "# - Change / \* - Exit". After 1 second LCD will display "Max: 09 ". To choose press "#".

**Step 3:** LCD will indicate "Max: (05-20)", you have to choose digit between 05 to 20 (digit on phone have to be 2 digits), if you don't choose a digit, press, "\*" to exit.

# **8. InterDigit tmr:** <u>Allows you to control in which form the call will be transmited (By TIMER):</u>

**Step 1:** Pick up the handset of the landline phone and press "\*\*\*". LCD will indicate "Programming Mode".

After 1 second LCD will indicate "1. SIM Prefixes", press "#" until LCD indicates "7. InterDigit tmr"

**Step 2:** Press "\*" to scroll into the sub menu, the LCD will indicate:

"# - Change / \* - Exit". After 1 second LCD will display "50msX200", to choose press "#", LCD will display "50msX (001-200)", you have to choose digit between 001 to 200 (digit on phone have to be 3 digits), if you don't press "\*" to exit.

# 9. IgnoreFirstDig: <u>Allows you to choose first digit to ignore:</u>

**Step 1:** Pick up the handset of the landline phone and press "\*\*\*", LCD will indicate "Programming Mode". After 1 second LCD will display "1. SIM Prefixes", press "#" until LCD indicates "8. IgnoreFirstDig".

**Step 2:** Press "\*" to roll into the sub menu, the LCD will indicate "# - Change / \* - Exit". After 1 second LCD will indicate "Digit: ". To choose digit press "#" until LCD displays the digit that you need and press "\*" to choose.

# 10. Pin Number : Enter the SIM code

**Step 1:** Pick up the handset of the landline phone and press "\*\*\*", LCD will indicate "Programming Mode". After 1 second LCD will display "1. SIM Prefixes", press "#" until LCD indicates "10. Pin Number".

**Step 2:** Press "\*" to roll into the sub menu, To scroll between SIM's Press "#". **Please enter the code to the specific Sim**. Press "\*" to exit.

11. Voice Gain : <u>Voice control</u>

**Step 1:** Pick up the handset of the landline phone and press "\*\*\*",

LCD will indicate "Programming Mode". After 1 second LCD will display "1. SIM Prefixes", press "#" until LCD indicates "11. Voice gain".

Step 2: Press "\*" to roll into the sub menu .

Available options: Tx gain – Voice out, Rx – Voice in.

To choose the required volume please press ( long press ) on the "\*".

# 12. Clock : Adjust the clock and date.

Step 1: Pick up the handset of the landline phone and press "\*\*\*", LCD will indicate "Programming Mode". After 1 second LCD will display "1. SIM Prefixes", press "#" until LCD indicates "12. Clock"
Step 2: Press "\*" to roll into the sub menu .
To choose the file you wish to adjust press "#".
In order to adjust please press ( long press ) on "\*".
Enter the time and date .
To exit press "\*".

13. Comfort Tone: <u>Remove the Bips between Passing SIMS.</u>

Step 1: Pick up the handset of the landline phone and press "\*\*\*".
LCD will indicate "Programming Mode". After 1 second LCD show "1. SIM Prefixes", press "#" until LCD will indicate "13. Comfort Tone".
Press "\*" to roll into the sub menu.
Available options : Enable, Disable.
To scroll between options press "#", to choose press "\*".

14. S/W Version : Indicates the Software version.

# **15. Data Mode :** <u>Must be off when being used for 'Voice' only.</u>

16. Pre\_Dialling: <u>Allows you to write string that will be transmitted with phone number</u>: Step 1: Pick up the handset of the landline phone and press "\*\*\*".
LCD will indicate "Programming Mode". After 1 second LCD show "1. SIM Prefixes", press

"#" until LCD will indicate "16. Pre\_Dialling" **Step 2:** Press "\*" to roll into the sub menu, the LCD will indicate "# - Change / \* - Exit". After 1 second LCD displays "String: ", press "#" write your string and press long "\*", (until LCD will indicate "16. Pre Dialling".

**17. Setup CID :** The option to block the Caller I.D in your gateway (will not show the caller number on your LCD).

# **18. Tarrifing :** <u>Allows you to define the numbers of pulses per minute for billing</u> <u>information</u>.

Options available – Base Tariff for each SIM seprately.

Enter a base number which will in turn divide the chosen (defined) numbers in each SIM according to the relevant prefixes.

**Example** : Insert the number 20 into SIM 1 prefix 1. In case we have entered the number 4 into the Base Tariff , we will receive the results as follows: 20/4 = 5 Pulses per minute which means: every 60/5 sec., a pulse will appear (every 12 Sec).

Base tariff will remain as a constant and what is being changed in all the other prefixes of the same chosen SIM. In order to define the number of pulses per minute, it is done by the By Tariffing.

In order to define the number of pulses, please press the "\*" button.

To change, please long press on the "\*". Enter the number of pulses you request and then to save please press "\*" button.

To exit, please press the "#" button.

Note: In order for the unit to work according to the data parameters entered, please move to menu number 19 and define the By Tariffing option.

### 19. Call Meter: Billing Calculation options.

**Step 1:** Pick up the handset of the landline phone and press "\*\*\*".

LCD will indicate "Programming Mode". After 1 second LCD show "1. SIM Prefixes", press "#" until LCD will indicate "19. Call Meter"

Available Options : Disable (No pulses on line)

By Tarrif (Pulses According to program enetered in Menu 19).

By Answer (Counts calls, when answering a call one pulse will begin). To scroll between options press "#", to choose press "\*".

**20. Net Selection** : Unique Option which allows you to dedicate a specific SIM socket to a specific cellular operator.

In case that a SIM card of another Cellular operator will be entered in that socket, you will not be allowed to make any calls from that specific socket.

Step 1: Pick up the handset of the landline phone and press "\*\*\*".

LCD will indicate "Programming Mode". After 1 second LCD show "1. SIM Prefixes", press "#" until LCD will indicate "20. Net Selection"

Step 2: To scroll between SIM's press "#", to change press ( long press ) on the"\*".

Enter the betwork code and then press "\*" to confirm.

In case that a network code was not inserted and the "\*" button pressed, the socket will be working with all operators. (Option- Any ).

**21.** CLIR Mode: Allows outgoing calls to be identifed or not at the receiver phone screen. **Step 1:** Pick up the handset of the landline phone and press "\*\*\*".

LCD will indicate "Programming Mode". After 1 second LCD show "1. SIM Prefixes", press "#" until LCD will indicate "21. CLIR Mode"

Press "\*" to roll into the sub menu, To scroll between SIM's press "#".

To choose a specific SIM please press (long press ) on the "\*".

To scroll between the several options press "# ".

- Available options:
  - 1. By Network
  - 2. CLIR Invocation not identify
  - 3. CLIR Suppression Identify.

To confirm the chosen option press "\*".

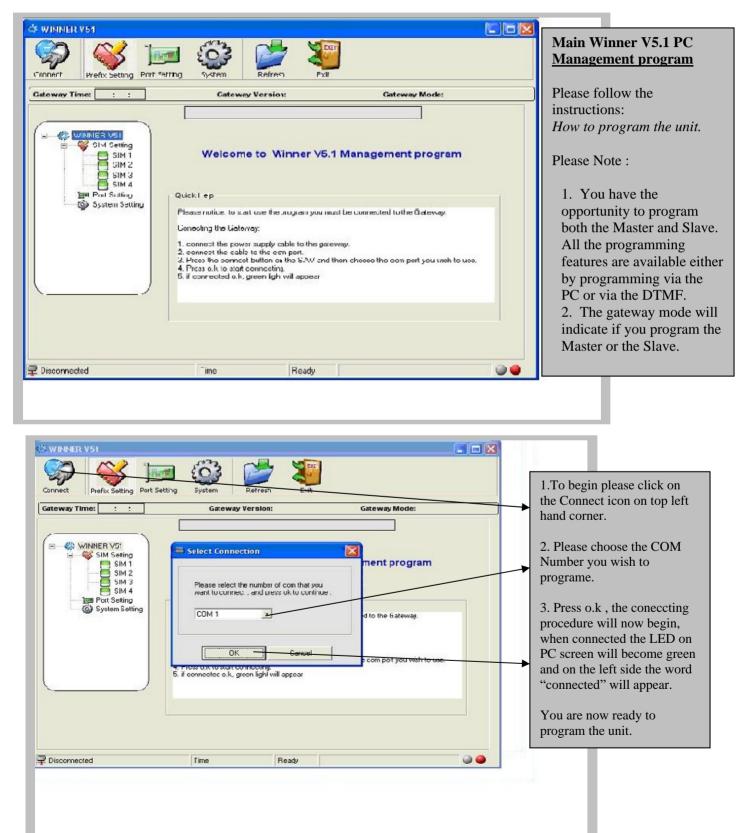
# **PC Programming Management.**

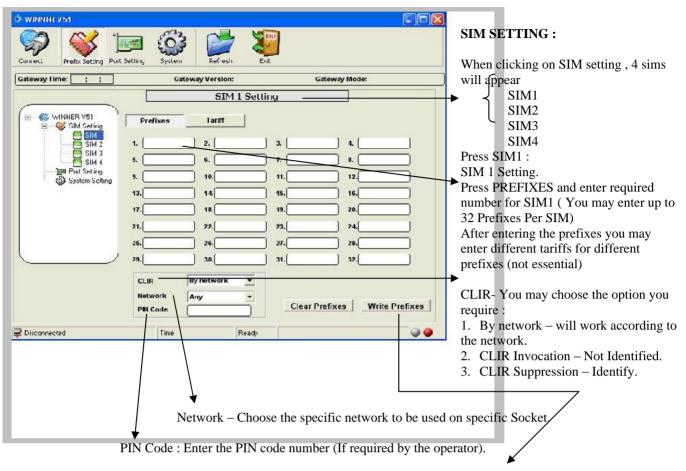
The following instructions will explain how to configure the device via the provided Software.

1. Insert the Disc.

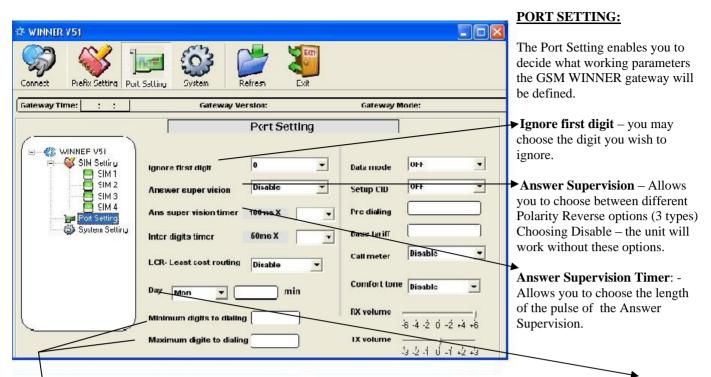
2. Follow the installation instuctions .

Before programing, please make sure that the Winner gateway is correctly connected to the PC via the Data cable (received with the gateway).





To Complete and save the Entered Data you must press WRITE Prefixes before continuing to program the next SIM's (You have to repeat this stage after each SIM setting.



LCR by Prefix/Day of week - If you decide to work according to a day of the week, you must insert day mode).

**Day** – Enter each day the exact time minutes you wish to change between the SIMs.

Min digits for dialing.

#### Max Digits for dialing.

Data Mode - When working on Voice mode, this mode MUST be OFF.

Continue on the right side of the screen - Setup CLID – OFF/ON

**PRE Dailing** – String added before the number dialed.

**Base Tarrif** – See progrming by DTMF (No 18).

Comfort Tone – Enable / Disable.

**Rx Volume** - Control Volume. **Tx Volume** - Control Volume

To complete and save all the Data entered you must press WRITE SETTING.

	Setting System Refuesh Exit 000/01/01 Gateway Version: 12.24.03 Gateway Mode: MASTER System Setting	2
WINNER V51	Time Setting Date (yy/mm/dd): 2000/01/01  Time (hh:mm:ss): 00:35:14  Day: mon  Set Time	
	Backup Data Backup Data to file Restore Data from file	

## SYSTEM SETTING

**Date** – Enter the date **Time** – Enter the time **Day** - Enter day of week

After entering the Data please press **Set Time**.

When you have completed entering all the data required, press **REFRESH**. The computer will now read all the parameters from the gateway and you will be able to see it on screen. To backup all the file information please press **Back up Data to file.** 

It's recommended to back up both the master and the slave. To restore or enter the same data to another gateway unit, please press **Restore Data from files** and choose file for Master or Slave.

# **General Technical Information**

Electrical				
-	Power supply: 12 VDC +/- 5% 1,2 A			
-	720 mA average in GSM 900 at Tx power max 2W			
-	920 mA average in GSM/GRPS 900 at Tx power max 2W			
-	100 mA in idle mode			
Physical				
-	Absolute maximum dimension: 165 x 127 x 30 mm			
-	Weight: 600 g			
-	Casing: Complete shielding-stainless steel			
-	Mounting: 4 screw holes			
-	Operating temperature range: $-5^{\circ}C$ to $+55^{\circ}C$			
<b>Optimal storage temperature:</b> -35°C to +85°C				
Analog Telephone/Analog PBX interface				
-	Tip/Ring Voltage –48V			
-	Line current 25ma			
-	Ringing Voltage 140 Vpp			
Load 3RE	EN			
Crest Factor 1.25				
Fraguency 20 Hz				

- *Frequency* 20 Hz *Cadency* 2s/4s
- Answer supervision Reverse polarity
- DTMF compliancy
- Dial Tone 400 Hz

Busy Tone 400 Hz, cadency 500ms/500ms

### GSM circuit Data Features

Data circuit asynchronous, transparent and non transparent up to 14,400 b/s Automatic fax group 3 (Class 1 & 2) Alternate speech and fax MNP2, V.42bis

# **Telephone Line Characteristics**

### **DC Characteristics**

Ringing voltage:	-70 V DC typical
On hook voltage:	-58 V DC typical
Off hook voltage:	-24 V DC typical
Off hook Loop current:	27mA @ 600 Ohm programming resistive
Input Impedance:	480 Ohms to 720 Ohms, 600 Ohm typical

### **DTMF Dialing:**

Detection level: On time: Off time:

### **Ringing Signal:**

Feeding type: Distortion: Ring drive capability -25dBm to +3dBm 50msec. 12 characters

Balanced signal Less than 5% 3 type A

Minimum ring Voltage: Frequency:	40 Vrms – crest factor 1.2 (20 Hz )
Normal Dialing Tone:	
Frequency:	400Hz
Level:	2dB
Cadence:	
Congestion / Busy Tone:	
Frequency:	400Hz
Level: 2dB	
Cadence:	500ms 20% signal
500ms 20% pause	

# Enviromental Characteristics

<u>Compliance:</u> The WINNER complies to the following requirements:

#### <u>Temperature</u>

# We claim $-5^{\circ}$ to $70^{\circ}$ (Israeli Standard Institute approval is in process).

*Humidity* **5% to 95%** 

# <u>Safety</u> (Testing at Israeli Standard Institute approval is in process)

<u>Packing</u> Per EuroTech standard

### **Transportation**

Transport conditions are according to Euortech Standards.

### Storage Conditions

Storage conditions are according to class 1.1, EST. 300 019 –1-1 (-20°C +80°C) -25°C to +65°C

#### <u>Mounting</u>

### **Wall Mounting**

In case you wish to mount on wall see instructions above in General Information. configuration the WINNER attached to the wall with one screw.

#### **Desk – Top Mount**

In desk top mounting configuration on four rubber standoffs, it should be mounted at least .5 meters from the telephone set.

#### **Packing**

Each WINNER package contains: One WINNER unit, metal box. One Omni antenna or an external antenna (optional) This booklet which includes a user manual.

# Labels

Each WINNER is labeled as following :

Product ID: located at the box side (in future units).

The label contains product model number, Serial number, Date and code identified as WWYY.

(1'st two digits identify the chronological week in the year, 2<sup>nd</sup> two digits identify the year), Hardware and Software version. For Example: Logo, Model No, Serial No, Rev. HardwareX/SoftwareY:0X/0Y, Date: Month/Year.

# **Manufacturing**

At *Eurotech Communications* we bear in mind at all times to manufacture superior quality and at cost effectiveness which are the most significant considerations taken in the research and design and manufacturing processes of the WINNER.

# <u>Shipment</u>

- All goods will be sold FOB; customer will pay for delivery from factory.
- Customer will advise of the way the products will be shipped.
- Customer will take care of shipment including all necessary payments for insurance, delivery, custom, etc. as FOB requires.

# **Reliability**

The WINNER Field Quality goal is and will be determined by reliability prediction

and actual ALT results.

Our target is: 0.5-1.0% per month, This goal is susceptible to changes.