AG1000-03
Version: 4.3
IO Email/SMS Alert Gateway (8 DI)

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1. Introduction

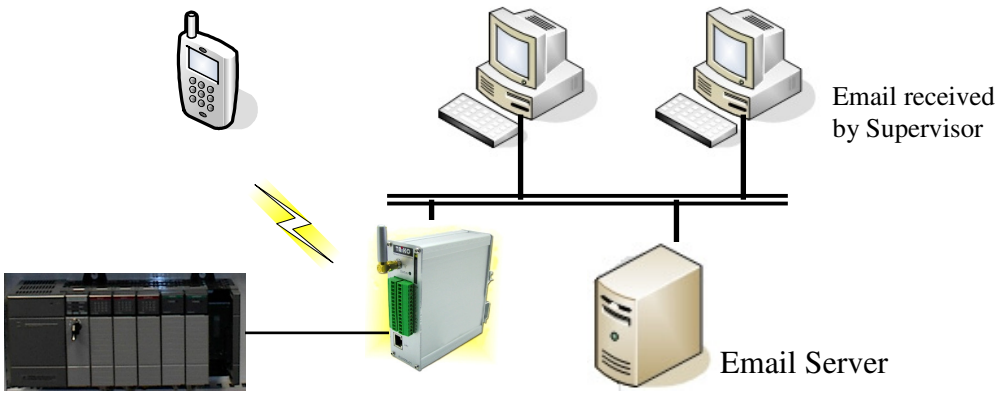
The IO Alert Email/SMS (AG1000-03) is a cost effective System Alert Device. It allows user to alert operators or technicians by sending Email that based on discrete contact input. The contact input could be wired from any device that generates relay contact upon alarm or fault. In this manner, operators or technicians can be alerted immediately.

IO Alert Email/SMS functions as a transparent device for alert via email. It has a built-in microprocessor chip running on a real-time operating system. This helps to eliminate the system from overloading with extraneous requests. This component will also enable the system to be more stable and reliable during data transmission as well as data conversion.

The IO Alert Email/SMS does not require a Data Communication Expert to configure it. Its user-friendly interface software makes configuring very easy and convenient. It comes with an enclosure that can be mounted on Din-rail.

Features

- Low Cost
- Easy to Use
- Customize message
- Assigned alarm to any internal email accounts
- Two escalating levels
- Up to 240 characters can be defined in per message
- Up to 140 characters can be defined per SMS message
- 2 different message for every input
- Receive message on Logic '0', '1' or change in state



Specification

Physical Dimension

Dimension	130mm x 40mm x 120mm
Weight	460g
Installation Method	35mm Din-Rail, desk mount.

Environmental

Operating Temperature	10°C – 50°C
Operating Humidity	5 – 90 % non-condensing

Power

Supply Voltage	7V to 30VDC
Current	180mA (max)
Power Consumption	1.2Wdc at 12VDC
Connection	Screw terminal

Ethernet Connectivity

Speed	10Base-T (RJ45 port)

GSM Standard

Antenna gain: 2.15dBi (JW-X-003) / 3dBi (JW-X-010)
Bandwidth: Tri-band GSM900/DCS1800/PCS1900 MHz

2. Hardware Reference

The following figure shows the front view of IO Alert Email/SMS. All the items are marked with a unique number followed by further description as below.

(1) IO Connector

The connector consists of voltage supply terminals, relay outputs and digital inputs connection. The wording besides connector indicates corresponding connection:

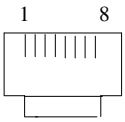
STATUS	Light-up once power supply is connected.
LINK	Will light-up if device is connected to a network.
V+	24VDC
V-	GND
NC1, NC2, … , NC4	**Not in used.**
C1, C2, …, C4	**Not in used.**
NO1, NO2, … , NO4	**Not in used.**
SG	Common point for all digital inputs
DI1, DI2, …, DI8	Digital input 1 to 8
D+, D-, Rtn, RX. TX	**Not in used.**

(2) DIN-rail

A DIN-rail click behind the gateway allows user to mount it on 35mm din-rail.

(3) Ethernet Port (RJ45), "ETH"

This is for Ethernet connection. The pin layout is shown as follow:



1: E_TX+
2: E_TX-
3: E_RX+
6: E_RX

To connect with any LAN switch or hub, a UTP straight cable is required. A UTP cross cable is used to connect with a computer Ethernet port directly.

3. Function Description

The IO Alert Email/SMS monitors up to 8 digital alarm statuses. Under any one of the digital contacts, there are three levels of email accounts offered for alarm assignment. Once any pre-defined alarm condition happens, the first group of email accounts user will receive a pre-defined message. The second group of email accounts will receive the alarm message only when the alarm condition has not vanished after certain escalation delay. Such situation applies for the third group also.

There are two escalation delay time as mentioned above. User may not require alarm alert being escalated into second group or even further, thus he just have to leave blank in unused level of email accounts. Besides, user can just select zero escalation delay if he prefers alarm message being broadcasted to more than five email account under alarm conditions.

The IO Alert Email/SMS can be configured in anytime when the alert gateway has been switched on. The configuration approach will be covered in the following sections. ***The user has to reset the IO Alert Email/SMS after changing new IP setting of the gateway.***

5. Configuration

This section describes the installation procedures and configuration details of the IO Alert Email/SMS.

System requirements:

To install and run the configuration program from the PC, the following requirement is needed.

Minimum PC requirement
Pentium processor PC
Microsoft Windows 2000, Windows XP
64MB of RAM for Windows 2000
128MB of RAM for Windows XP
CD-ROM drive
8MB of hard disk space
Serial connection

Installation
Insert the configuration tool CD-ROM into the CD-ROM drive

Double click on the "setup.exe" under such directory within the CD-ROM: Config/setup.exe. Follow the instructions and guidance given during the setup process.

Run Configuration
To start the configuration tool, click the 'Config' under such directory: *Start/Programs/IOAlertEmail-8/Config*.

After the configuration tool has been successfully open, the program will prompt the user to select the serial communication port that is connected to the IO Alert Email/SMS gateway.

Once the IO Alert Email/SMS gateway is detected, user can proceed to set or change configuration for:

- Sender email address
- Recipient email address
- Subject of the email
- Message of the email

The user can configure the alert gateway at any time when it is running.

Communication Port Settings

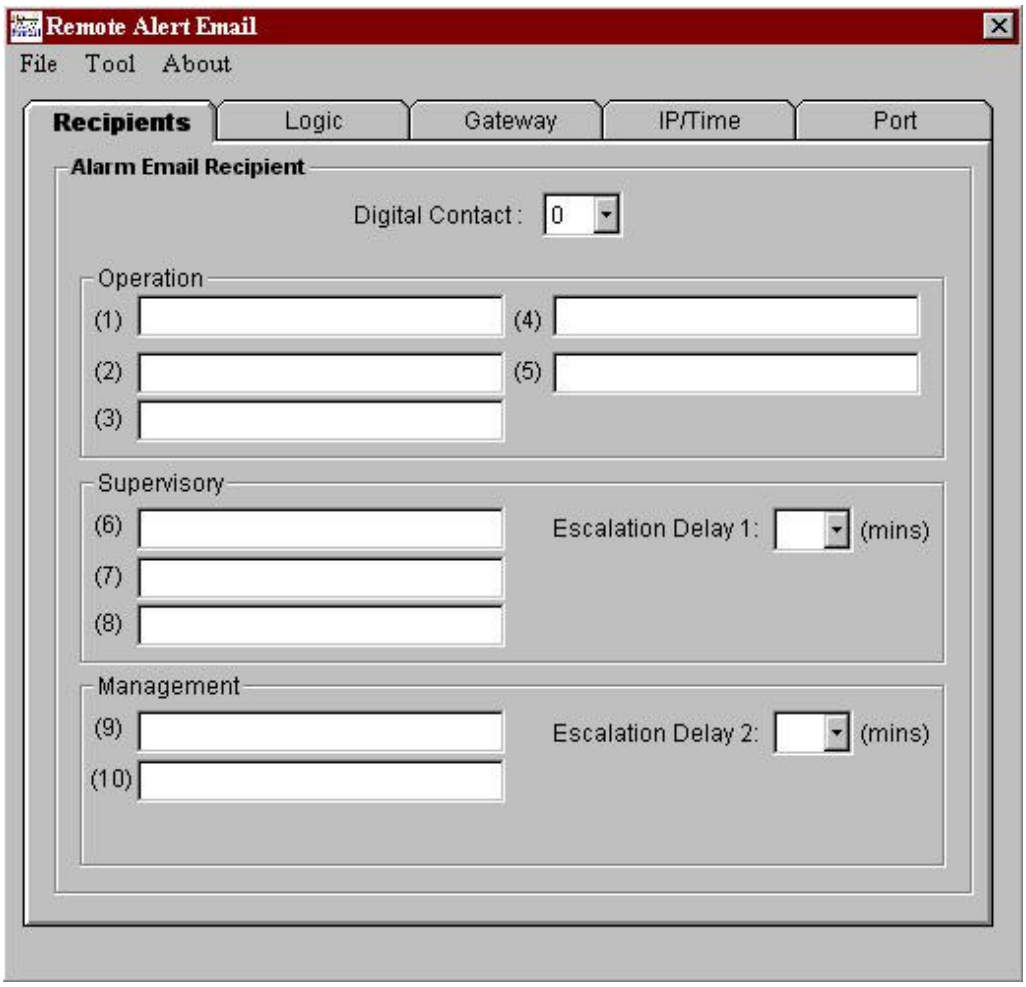
Communication Port: The serial port that is used for the IO Alert Email/SMS

This message will prompt out if the COM port is set wrongly or the IO Alert Email/SMS is not connected properly.

IO Email/SMS Settings

RECIPIENTS

Fill up email account to receive alarm email.



Digital Contact: The digital input channel that the user wants to configure

Operation, Supervisory and Management level:

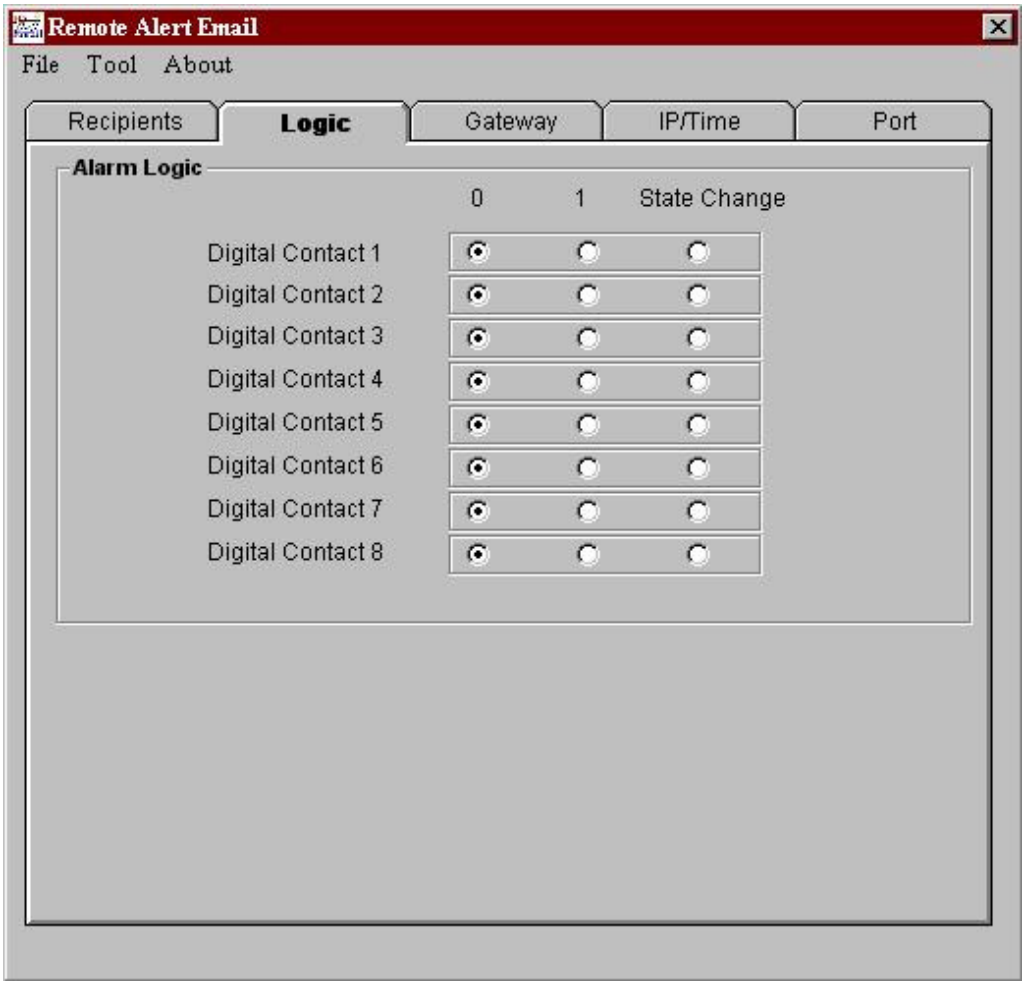
Each alerting level provided a limited number of email accounts. User can just leave blank on the rest of the alerting level if only one or two levels are enough.

Delay 1 & 2: Set the time interval between each alerting group

If "0" escalation delay is chosen, user can only fill up more than five email accounts in series. These configured accounts will be treated as one alerting group, so alarm email will be received by them without significant delay. This is kind of broadcasting approach.

LOGIC

Select the logic for alarm activation.



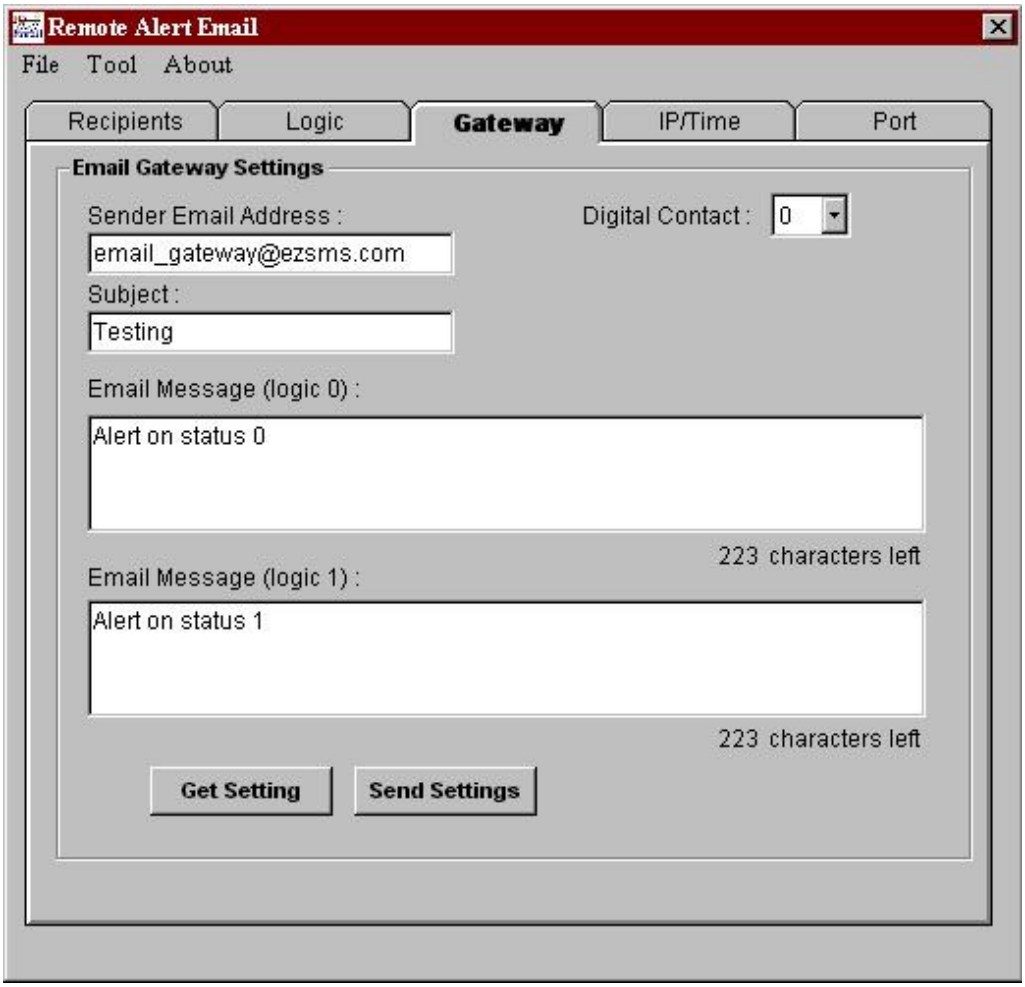
Alarm Logic:

'0' means alarm is activated once the contact is shorted.

'1' means alarm is activated once the contact is opened.

"State Change" means alarm is activated once the contact switching from opened into shorted, or the reverse.

GATEWAY



Sender Email Address: **The email address of the sender. Only one address is assigned to the product**

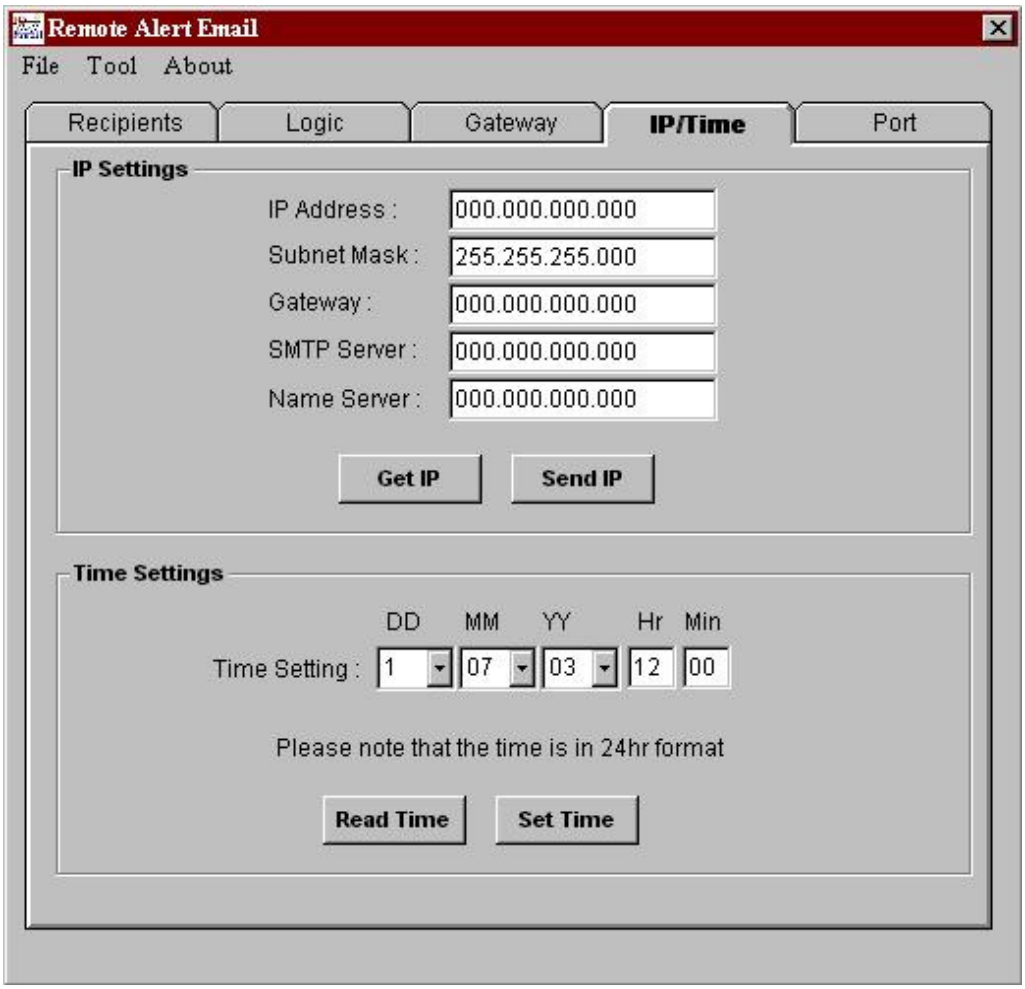
Digital Contact: **Select the Digital Input for message to be configured.**

Subject: **The subject of the alarm email**

Configure alarm email for logic 0 or logic 1 such that the respective message will be sent when the Alarm State is at the particular logic. Up to 240 characters can be configured for each logic state.

Email Message (logic 0): Set the Alarm Message when the Digital Input is at logic '0'
Email Message (logic 1): Set the Alarm Message when the Digital Input is at logic '1'

IP/TIME



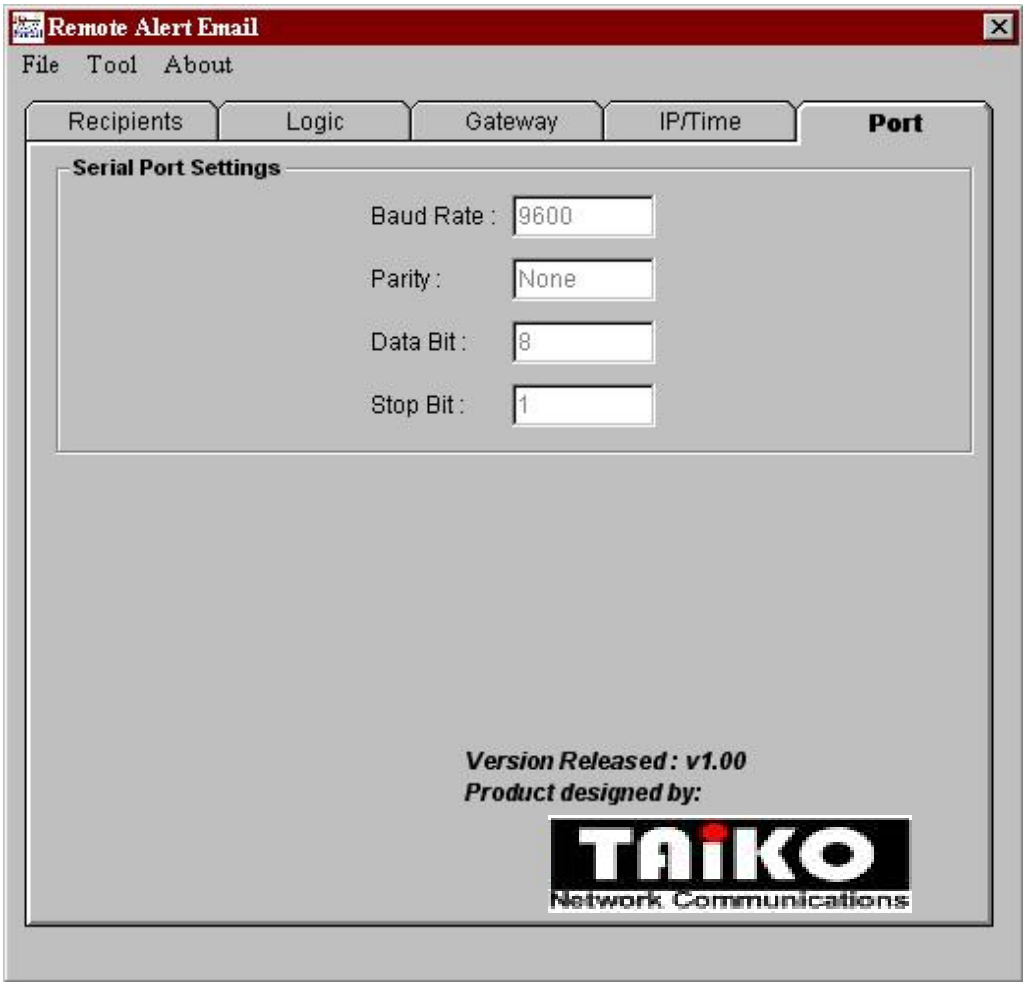
IP, Subnet Mask: There must be a unique IP assigned for the alert gateway.

Gateway, SMTP_SERVER, NAME_SERVER: Follow the configuration for local network.

Time Setting: This provides user to set the real time clock of the gateway, and read the current timing of the clock as well.

PORT

Display the serial communication parameter for connecting a PC to the alert gateway.



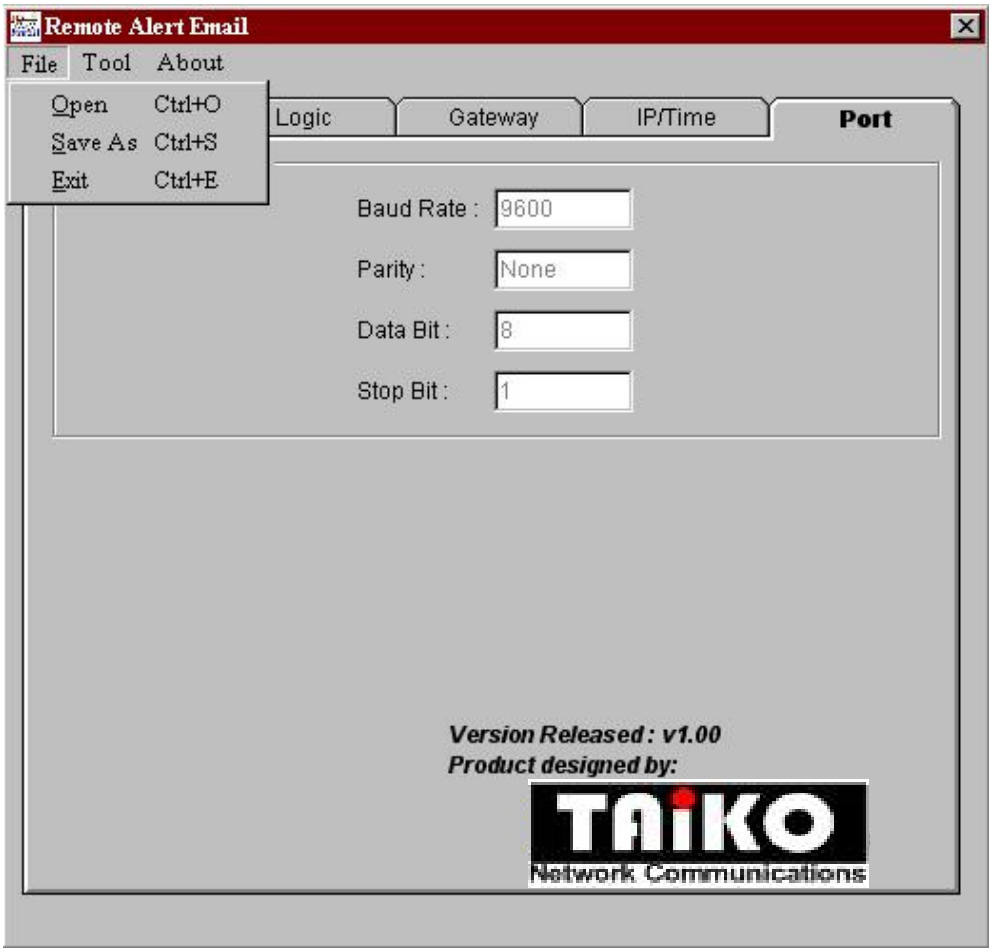
These parameters were provided as default value, which are not configurable by user.

MENU

Save As: After setting the above configuration, user can save a copy of it. User can just press "CTRL+S" to implement the similar job.

Open file: User can just press "CTRL+O" to retrieve any configuration being saved previously.

Exit: User can simply close the configuration by pressing "CTRL+E".



6. Instruction for first time users

Step 1: Connect up the gateway with the Serial port to the computer communications port.

Step 2: Run the GUI interface and select the communication port accordingly.

Step 3: Input all the required fields and then "Send" to the gateway. The "Send Settings" should be done only after configuring for the "Recipients", "Logic" and "Gateway" tabs. User may select "Save" option under "File" to save the settings for future usage.

Step 4: After the configuration is done, user may choose to unplug the gateway from the computer and attach it to anywhere as long as there is a LAN point connected to the gateway.

Step 5: To test the unit, user may short-circuit the points labeled "Rtn" and with any other points with a DI number on it. The number signifies the contact point that is connected to.

FEEDBACKS

IF YOU HAVE ANY DOUBTS, PLEASE DO NOT HESITATE TO CONTACT YOUR LOCAL RESELLERS OR TAIKO NETWORK COMMUNICATIONS PTE LTD FOR ANSWERS OR SOLUTIONS. YOUR QUERY WILL BE ATTENDED IMMEDIATELY.

FOR MORE INFORMATION ON OTHER PRODUCTS:
VISIT US AT *http://www. taikonetwork.com*