European manufacturer

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BS-464 GSM TELEPHONE DIALER CARD FOR BS-468 PANELS

CE

TECHNICAL CHARACTERISTICS	
OPERATION VOLTAGE	Powered by the BS-468 panel
CONSUMPTION	30mA (quiescent). 120mA (during a call)
PRODUCED IN ACCORDANCE WITH	EN 50130-4, EN 55022, ETSI EN 301 489-7, ETSI EN 301 511, EN 60950-1, ETSI EN 301 419-1
OPEPATION TEMPERATURE RANGE	0 to 60 °C
RELATIVE HUMIDITY	Up to 95%
EXTERNAL DIMENSIONS	101 x 61 x 25 mm
WEIGHT	45gr.
GUARANTEE	2 years

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DESCRIPTION

The BS-464 (figure1) is a module that can be fitted only on the main board of the BS-468 burglar alarm panel from Olympia Electronics. It can receive and send SMS messages to and from selected telephone numbers. These telephone numbers are stored in the BS-468 panel's memory and do not erase in the event of a power failure but can be changed by the user for as many times as required. The BS-464 can also accept commands from unknown telephone numbers if the user requires.

INSTALLATION

The user must install the antenna (figure 4) and the SIM card(figures 2 & 3) on the board for it to become operational. Next, the card is installed on the BS-468 panel (figure 5) .

GENERAL INSTRUCTIONS

Verify that the GSM unit is placed in an area were the signal is adequate. This can be checked via the BS-466 keyboard. The scale shows 0 to 4 bars. Signals lower that 2 bars can cause bad sound quality and calls that cannot be sent and received. In this case it is advised to test the system using a SIM card from another provider. Please note that if a call is not feasible due to a low signal, when the signal is obtained the GSM will send a verbal message containing the alarm status during the time of the unfeasible call. This is valid only if this service is activated by the provider.

If the GSM unit is installed near a boarder line then there might be increased charges due to the roaming service. To avoid this, deactivate the roaming service.

Some telephone units might exhibit sensitivity due to being near the GSM unit. If something like this is observed it is advised to reorient or to relocate the affected telephone device.

Each and every remote command to the GSM unit must be accompanied with a valid access code.

Warning!! It is not advised to use a high gain or directional antenna in order to improve the signal strength. Using such antennas will lead to unstable communications because only one cellular base will be used by the GSM unit. Be advised that GSM systems do not operate correctly when the cellular base station is more that 30km away because of communication delays. This is true even if the signal is strong.

Warning!! The use of pre-paid SIM cards in the GSM unit is not advised because some providers block these card when they do not have enough credit or when they are not get credited often. If this is the case with your provider then use tariffed SIM cards.

SIM CARD

It is suggested to install a SIM card, on the BS-464, that will not require a PIN number during the startup of the device.
To disable the PIN requirement, insert the SIM card into a cell phone and disable the PIN requirement. Next remove the SIM card from the cell phone and insert it into the SIM card holder of the BS-464.

WARNING: Never insert or remove a SIM card from the BS-464 when the BS-464 is powered. There is a chance that the SIM card might be damaged. To insert/remove

the SIM card we must either remove the GSM module from the panel or we can leave it on the panel and disconnect the panel's power supply and battery.

CAPABILITIES

It has pre-recorded messages that are stored in a memory area that cannot be erased when the power is removed. These messages are used to inform the user of the present state of the system (alarm, fault, arming or disarming).

It can be set to do calls or to send an SMS to all events or to selected events (i.e alarm, fault e.t.c) or in combination of events (i.e. During an alarm and fault).

In order for someone to be able to send a command to the GSM module via SMS or by calling, the number must be stored in the memory and remote access must be enable for that number. Alternately you can activate the selection so the unit will accept commands from all the telephone numbers. Please note that the telephone number must be stored without the country code in the beginning. If the monitored area is in another country then the number must be stored including the country code in the beginning. Finally the GSM will respond to an incoming call after 15 seconds, if this option is selected. If it is not selected then the GSM will permit the line to ring for a few seconds and then terminate that call without answering.

OUTGOING SMS

In case of an outgoing SMS, it will contain the type of event, the source, the description of the event and the date and time of the event occurrence. For example "FAULT, BATTERY, UNCONNECTED BATTERY, 07/05/12, 14:58.".

OUTGOING CALLS

During an outgoing call, when the call is answered first the welcome message is reproduced, then there is a beep sound and finally the message concerning the state of the system is played for 3 times. If, for example the system is disarmed and there is a fault then the message "*FAULT, DISARMED"* will be heard for 4 times whereas if there is an alarm and the system is armed the message "*ALARM, ARMED"* will be heard for 3 times. At the end of the message a beep will be heard and after 5 seconds the line will be closed. If during the message period any key apart from the "#" key is pressed, on the receiving telephone, then 3 beeps are heard and the line is closed without any other action. If the "#" key is pressed then 2 beeps are heard, the line is closed and the GSM dialer does not dial any other numbers since one number has already been informed. This is done to prevent spending credit from the SIM card and to prevent disturbing the other numbers.

It is stressed that if the call is dismissed by the user or the user does not pick up the phone the call might still be answered by the automatic telephone answering service, if it is enabled by the service provider. In this case the call will still be credited. For this not to happen, the telephone forwarding to the telephone answering service must be disabled. This is the main reason why it is suggested to use SMS instead of calling. Also the use of SMS is more simple than using calls.

INCOMING CALLS

Regarding calls toward the GSM module it is require to enter one of the 2 codes (user or technician) in order to retrieve the status of the system. If an action is required (system arming) e.t.c) then an additional code is also required. When a call is placed to the GSM and the GSM module picks up the line is will issue one beep. After the beep is heard we must enter the user or technician code using our handset keyboard. If the code is wrong then 3 beeps are heard and the line is terminated. If the code is correct then the system status message is replayed 3 times. When the messages finish a beep is heard and the GSM waits for another code entry. Now we can enter the user code, the technician code or one of the 50 general purpose codes. If the code is wrong then 3 beeps are heard and the line is terminated. If the code is correct then the action(depending on the code) is executed, 2 beeps are heard and the new system status message will be replayed 3 times after which the line will be terminated.

INCOMING SMS

A command can also be sent by using SMS. Each command must have a specific format to be accepted by the GSM system. In any case, the command must also contain a valid code. SMS commands can be used to do specific tasks (arming, disarming of the system, activation/diactivation of specific outputs of the BS-468 panel) or used to get retrieve status information of the system. For the above it is essential that the SMS command also contains the main user code.

Also an SMS can be used to request the status of the system. In this case just send the code of the main user and nothing else. Finally, the SMS can also contain one of the 50 general purpose codes. In this case no other code is required. If the sent SMS is valid then the GSM module send an SMS with the status of the system to the phone number that it received the command SMS from. If no return SMS is received then this means the sent SMS was not valid. Probable causes are wrong format, wrong code or the phone number that sent the command has not been set to send commands. A command can either contain upper or lower case English characters.

Each sms contains only one valid command. For a command to be considered valid it must contain a space between the keyword (codes, commands, e.t.c). A valid command is always acknowledged by a return sms containing the current status of the system.

Below we can see the SMS commands. Lets presume the main user code is 1234. The format is always the same and consists of the code, a space and then the command.

1234 ON	*ARM*
1234 OFF	*DISARM*
1234	*SEND STATUS*
1234 P1 ON	*ACTIVATE OUTPUT*
1234 P1 OFF	*DEACTIVATE OUTPUT*
1234 P2 ON	*ACTIVATE OUTPUT*
1234 P2 OFF	*DEACTIVATE OUTPUT*
1234 P3 ON	*ACTIVATE OUTPUT*
1234 P3 OFF	*DEACTIVATE OUTPUT*
1234 RELAY ON	*ACTIVATE OUTPUT*
1234 RELAY OFF	*DEACTIVATE OUTPUT*

REMAINING CREDITS ON PREPAID SIM CARDS

We can verify the remaining credits of a prepaid SIM card installed in the GSM module by using the CREDIT command(if this service is enabled by the provider). The format of this command depends on the service provider of the SIM card. If for example the service provider requires that you send the word “CR” to the number 1314 so it can report the remaining credits that the SIM card has and your master code is 1234, then the format of the commands is the following:

1234 CREDIT CR#1314

Which means the first we send the master code followed by the word “CREDIT”, then the SMS content (CR), then the (#) and finally the number of the service provider (1314). If the master code and the format are correct then the GSM will send the message “CR” to the number 1314. When it receives an answer by the service provider it will report this to the cell phone that sent the credit command. The word “CR” and the number “1314” must be replaced by suitable data obtained from your SIM card service provider.

If an empty SMS is required , then after the word CREDIT leave a space and the write “#” and the provider number.

Please note that 5 minutes after the CREDIT command has been sent the GSM module, each SMS that does not contain any of the commands in the list (ON, OFF..e.t.c) that arrives to the GSM module will be forwarded to the cell phone that issued the CREDIT command.

SENDING CODES

We can also send any of the 50 general purpose codes to the GSM module. If for example the code 0101 is a panic alarm it can be sent using the following 2 methods.

0101 CODE

0101 *

Using the word “CODE” or the symbol “*” after the code has the same function. If the code 0101 is used to arm the system then by sending this SMS the system will be armed.

RECORDING WELCOME MESSAGE

When GSM is calling someone and before the system status is reproduced, a welcome message is heard. This could be changed by the user via a call to the GSM. Someone could record for example the address of the installed alarm system, in order to understand each time which alarm system made the call.

After the call to the GSM, proper master code entry and system status reproduction, if ***1*1** will be dialed, then a beep is issued and the recording starts. The recording lasts about seven seconds. After the recording is finished a beep is issued and the recorded message is then reproduced. Finally another beep is issued and the line is terminated.

The recorded message will replace the factory installed message.

INSTALLING THE BS-464 GSM MODULE IN THE BS-468 PANEL

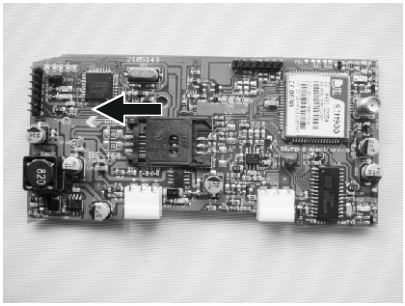

Figure 1 : A BS-464 GSM module without a SIM card and antenna. Slide and lift the SIM holder.

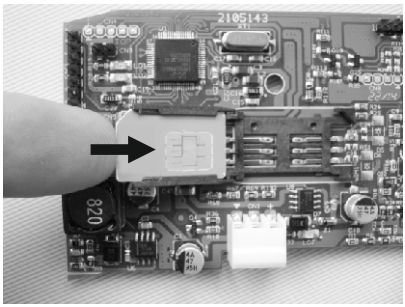

Figure 2 : Insert the SIM card into the SIM holder as shown.

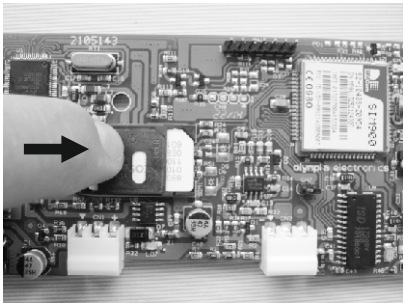

Figure 3 : Slide and lock the SIM card holder into place.

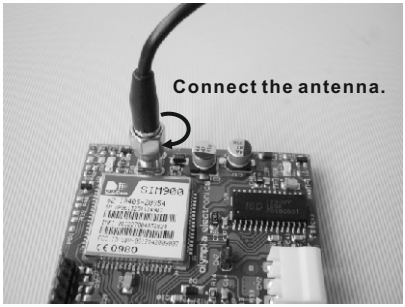

Figure 4 : Antenna connection onto BS-464 pcb.
Note!! The antenna is recommended to be installed out of the panel box for maximum performance.
The antenna cable may follow the path of the rest connected cables through the respective holes of the panel's base.

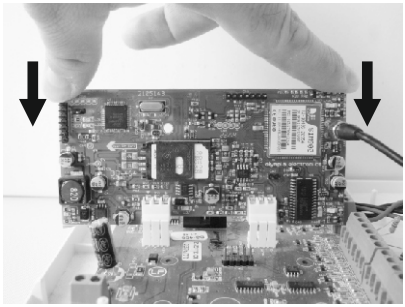

Figure 5 : Installing the BS-464 GSM module on the BS-468 panel.

WARRANTY

Olympia Electronics guarantees the quality, condition and operation of the goods. The period of warranty is specified in the official catalogue of Olympia Electronics and also in the technical leaflet, which accompanies each product. This warranty ceases to exist if the buyer does not follow the technical instructions included in official documents given by Olympia Electronics or if the buyer modifies the goods provided or has any repairs or re-setting done by a third party, unless Olympia Electronics has fully agreed to them in writing. Products that have been damaged can be returned to the premises of our company for repair or replacement, as long as the warranty period is valid. Olympia Electronics reserves the right to repair or to replace the returned goods and to or not charge the buyer depending on the reason of defection. Olympia Electronics reserves the right to charge or not the buyer the transportation cost.

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