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CROW does not represent that this product can not be compromised or circumvented; that this product will prevent any person injury or property loss or damage by burglary, robbery, fire or otherwise; or that this product will in all cases provide adequate warning or protection. Purchaser understands that a properly installed and maintained product can only reduce the risk of burglary, robbery or other events occurring without providing an alarm, but it is not insurance or a guarantee that such will not occur or that there will be no personal injury or property loss or damage as a result. Consequently, CROW shall have no liability for any personal injury; property damage or any other loss based on claim that product failed to give any warning. However, if CROW is held liable, whether directly or indirectly, for any loss or damage arising under this limited warranty or otherwise, regardless of cause or origin, CROW's maximum liability shall not in any case exceed the purchase price of this product, which shall be the complete and exclusive remedy against CROW.

CM-18 GSM PHONE LINE BACKUP

The CM-18 is a cellular backup to PSTN phone line system. When connected to a an alarm control panel, the CM-18 operates as a GSM backup unit to a PSTN line, enabling to re-direct incoming and outgoing calls to the GSM network in case of regular phone line failure.

General Specification

- Built-in Tri-Band GSM transceiver
- Continuous PSTN line supervision
- GSM backup at PSTN line failure
- SMS support for alarm system events
- 4 inputs for status indication and activation
- Battery backup support including charger



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V2.02op

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Installation Instructions

The CM-18 is designed to be wall mounted in the supplied polycarbonate case. The unit should be securely mounted using the 4 mounting screw holes in the rear of the housing. Once the unit has been securely mounted on the wall and all of the low voltage power and telephone connections made, the lid must be fitted using the supplied screws.

NOTE: New Zealand Telepermit approval has been given on the basis that the unit is correctly wall mounted.

Battery Replacement

“CAUTION”

A Sealed Rechargeable 12V 1.3AH battery is incorporated within the housing to provide standby power in the event of a mains power failure. Please ensure that if replacing this battery it is replaced with the same type otherwise there is a risk of explosion.

Always dispose of batteries according to the manufacturers instructions “must be recycled or disposed of properly”.

Power Supply Disconnect

A 14VDC plug pack is supplied with the CM-18. This plug pack is intended to be plugged into a 230VAC outlet socket which must have a readily accessible disconnect switch.

SMS Support

The CM-18 supports SMS for control panels events such as zone alarm, low battery and provides outputs related to the same events as the SMS messages.

Operation

The system is powered by 14VDC with a 12V/1.3A backup battery. Standby Current draw is 150mA, Operation Current draw is 250mA. The battery is recharged by the system.

Inputs

The CM-18 offers 4 digital inputs. Every input trigger generates an SMS message to a programmed number and an output. Inputs are activated by pulling them to low (0Volts).

Telepermit Conditions

The grant of a Telepermit for any item of terminal equipment indicates only that telecom has accepted that the item complies with the minimum conditions for connection to the network. It indicates no endorsement of the product by Telecom, nor does it provide any sort of warranty. Above all, it provides no assurance that any item will work correctly in all respects with another item of Telepermitted equipment of a different make or model, nor does it imply that any product is compatible with all of Telecom’s network service.

Telepermitted equipment only may be connected to the TEL-OUT port. The TEL-OUT port is not specifically designed for 3-wire-connected equipment.

3-wire-connected equipment might not respond to incoming ringing when attached to this port.

Devices designed to respond to particular ringing cadences may not respond when used with this equipment.

Outputs

The CM-18 has 7 outputs: 2 outputs for status indication (1 for phone line failure and 1 for GSM error), and 4 outputs Activated according to control panel's events. Outputs 1-6 are all open collector outputs capable of switching a 100mA current. Beside those outputs the CM-18 has a dry relay contact output. The relay contacts are switched on phone line failure.

Output Operations

- Output **1** : indicates GSM error. (such as bad reception quality, no SIM card present, Antenna disconnected etc..)
- Output **2** : indicates phone line failure.
- Output **3** : will go 'on' when input **1** is activated and will go 'off' when input **1** is deactivated.
- Output **4** : will go 'on' when input **2** is activated and will go 'off' when input **2** is deactivated.
- Output **5** : will go 'on' when input **3** is activated and will go 'off' when input **3** is deactivated.
- Output **6** : will go 'on' when input **4** is activated and will go 'off' when input **4** is deactivated.
- Relay Output : changes over on line fail.

Outputs 1-6 are all open collector outputs capable of switching 100mA current.

SIM Card

The CM-18 supports 3V / 5V SIM Card, you can cancel the pin code using any kind of mobile phone. The CM-18 dose not use the SIM Card to Store phone numbers, instead they are all kept in it's own onboard memory, so if the SIM Card is changed the numbers needed will remain saved.

Deleting Phone Numbers

3.1 Deleting First phone number

- Press "0000" to enter program mode.
- Wait for beep acknowledging program mode is accessed.
- Press " 2 "
- Press " # " to acknowledge.
- Hear the acknowledge beeps.
- Hang up the Phone.

Example: press " 0000 2 # "

3.2 Deleting Second phone number

- Press "0000" to enter program mode.
- Wait for beep acknowledging program mode is accessed.
- Press " 3 "
- Press " # " to acknowledge.
- Hear the acknowledge beeps.
- Hang up the Phone.

Example: press " 0000 3 # "

3.3 Deleting Third phone number

- Press "0000" to enter program mode.
- Wait for beep acknowledging program mode is accessed.
- Press " 4 "
- Press " # " to acknowledge.
- Hear the acknowledge beeps.
- Hang up the Phone.

Example: press " 0000 4 # "

3.4 Deleting Fourth phone number

- Press "0000" to enter program mode.
- Wait for beep acknowledging program mode is accessed.
- Press " 5 "
- Press " # " to acknowledge.
- Hear the acknowledge beeps.
- Hang up the Phone.

Example: press " 0000 5 # "

SETUP

Programming Phone Numbers

2.1 Programming the First phone number

- Press "0000" to enter program mode.
- Wait for beep acknowledging program mode is accessed.
- Press " 2 "
- Type in your desired Phone number.
- Press " # " to acknowledge.
- Hear the acknowledge beeps.
- Hang up the Phone.

Example: if the number is 021 123 123 - press " 0000 2 021123123 # "

2.2 Programming Second phone number

- Press "0000" to enter program mode.
- Wait for beep acknowledging program mode is accessed.
- Press " 3 "
- Type in your desired Phone number.
- Press " # " to acknowledge.
- Hear the acknowledge beeps.
- Hang up the Phone.

Example: if the number is 027 321 321 - press " 0000 3 027321321 # "

2.3 Programming third phone number

- Press "0000" to enter program mode.
- Wait for beep acknowledging program mode is accessed.
- Press " 4 "
- Type in your desired Phone number.
- Press " # " to acknowledge.
- Hear the acknowledge beeps.
- Hang up the Phone.

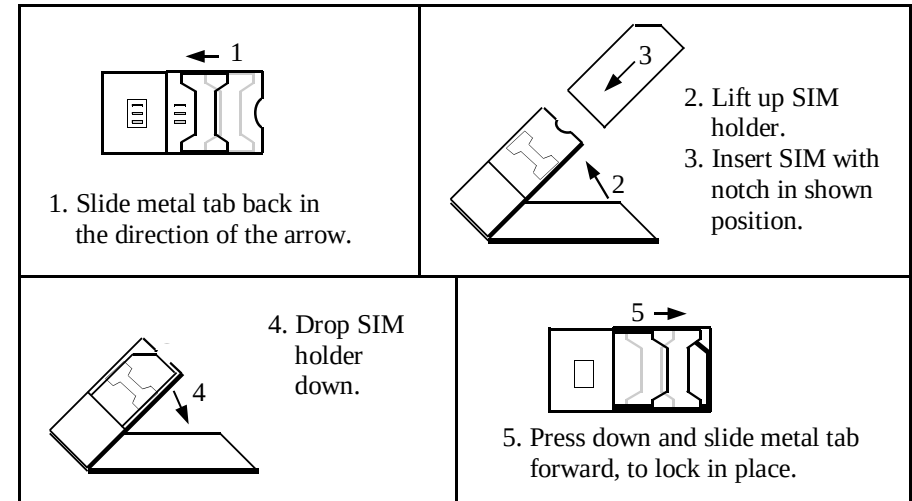
Example: if the number is 09 414 5555 - press " 0000 4 094145555 # "

2.4 Programming fourth phone number

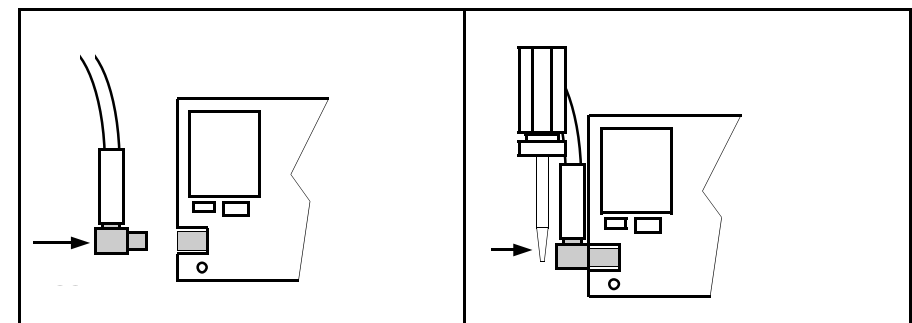
- Press "0000" to enter program mode.
- Wait for beep acknowledging program mode is accessed.
- Press " 5 "
- Type in your desired Phone number.
- Press " # " to acknowledge.
- Hear the acknowledge beeps.
- Hang up the Phone.

Example: if the number is 021 555 555 - press " 0000 5 021555555 # "

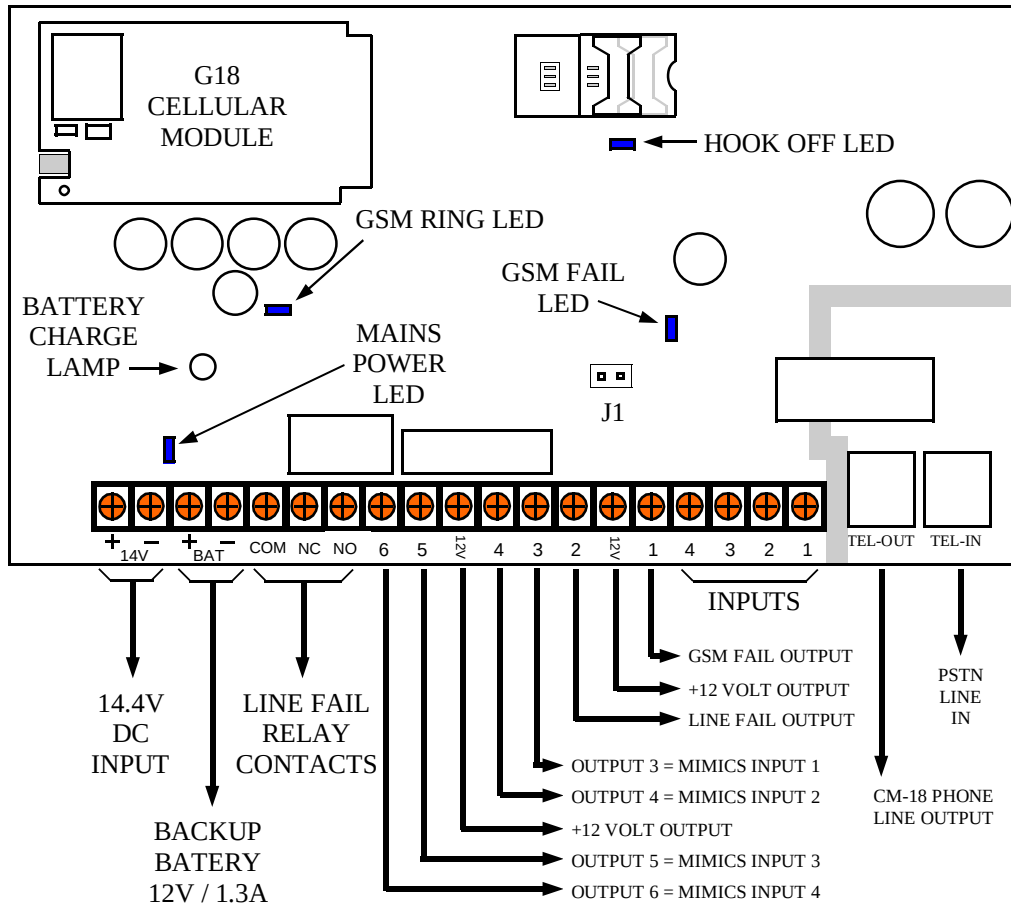
SIM CARD INSTALLATION



AERIAL INSTALLATION



CONNECTIONS



- TEL-OUTPUT : phone line output supplied to an external system.
- TEL-IN : PSTN phone line input (main phone line).
- DC power supply : 14.1 VDC Supplied by provided plug pack, Required to sustain Battery Backup (advised for remote installation from alarm panel). Or Between 12 –15 VDC from an alarm panel (DON'T USE BACKUP BATTERY IN THIS MODE).
- Battery : 12 Volt 1.3 Ah
- J1 : Reset jumper, should be always closed. In order to reset the internal micro controller, jumper should be open and then closed again to activate a power on reset simulation.
- Antenna : dual band GSM antenna.
- Current consumption @standby=150mA, @operation=250mA.

CM-18 Programming

To program the CM-18 system

- Remove incoming phone line from “TEL-IN” connector
- Connect the phone to the “TEL-OUT” connector
- Lift handset
- Wait for dial tone
- Then proceed as follows:

1.1 Programming prefix number:

In normal applications a prefix number is not necessary.

- Press “0000” to enter program mode.
- Wait for beep acknowledging program mode is accessed.
- Type the your desired Prefix number.
- Press “ # ” to acknowledge.
- Hear the acknowledge beeps.
- Hang up the Phone.

Example: if the prefix number is “03” -Press “ 0000 03 # ”

1.2 Deleting Prefix number

- Press “0000” to enter program mode.
- Wait for beep acknowledging program mode is accessed.
- Press “ # ” to acknowledge.
- Hear the acknowledge beeps.
- Hang up the Phone.

Example: press “ 0000 # ”

1.3 Program Prefix to Ignore

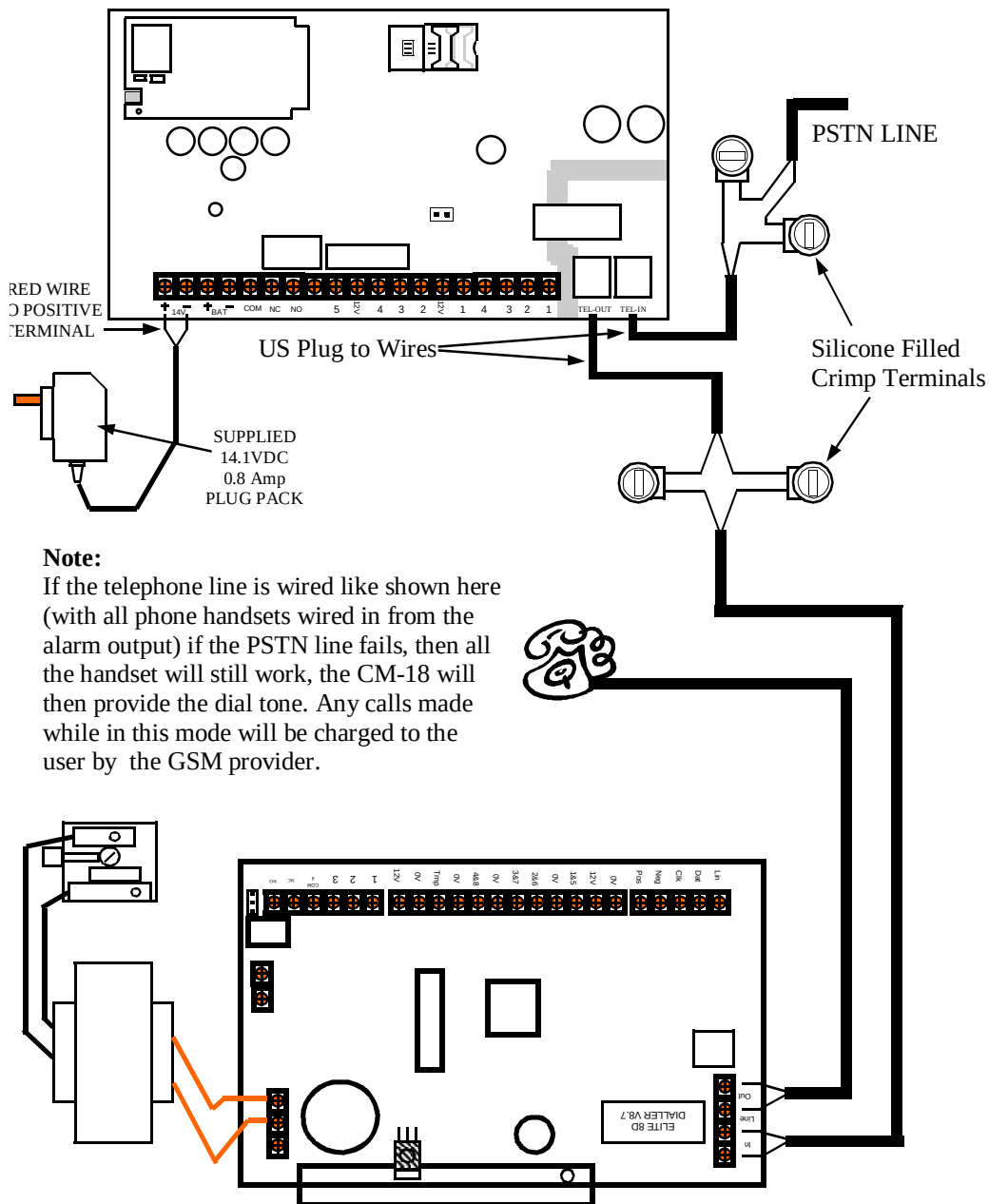
- Press “0000” to enter program mode.
- Wait for beep acknowledging program mode is accessed.
- Press “ 6 ”
- Type the prefix to be ignored.
- Press “ # ” to acknowledge.
- Hear the acknowledge beeps.
- Hang up the Phone.

Example of ignoring 805: - press “ 0000 6 805 # ”

1.4 Program New Installer Code

- Press “0000” to enter program mode.
- Wait for beep acknowledging program mode is accessed.
- Press “ 7 ”
- Type in the new installer code.
- Press “ # ” to acknowledge.
- Hear the acknowledge beeps.
- Hang up the Phone.

GSM BACKUP MODE 2



Indication LED's

- Main power LED : 14.4 VDC indication.
- Ring LED : indicates ringing from the GSM network.
- DTMF LED : the LED is "on" at every DTMF dial via the GSM line.
- GSM fail LED : indicates a problem with the GSM network such as bad reception quality, no SIM Card present or antenna disconnected etc.
- Hook off LED : the LED is "no" when the external system picks up the phone (goes off hook).

SMS Messages

The CM-18 supports several fixed SMS messages which will be sent to a pre-programmed phone number. The system can store up to 4 phone numbers and the message will be sent to phone numbers that were pre-programmed into the system memory. An SMS message will be sent every time one of the inputs is activated or deactivated as follows:

- When input 1 is activated the message is : "ALARM"
- When input 1 is deactivated the message is : "ALARM CLEAR"
- When input 2 is activated the message is : "BATTERY LOW"
- When input 2 is deactivated the message is : "BATTERY OK"
- When input 3 is activated the message is : "PANIC ALARM"
- When input 3 is deactivated the message is : "PANIC RESTORED"
- When input 4 is activated the message is : "TAMPER"
- When input 4 is deactivated the message that is : "TAMPER RESTORED"

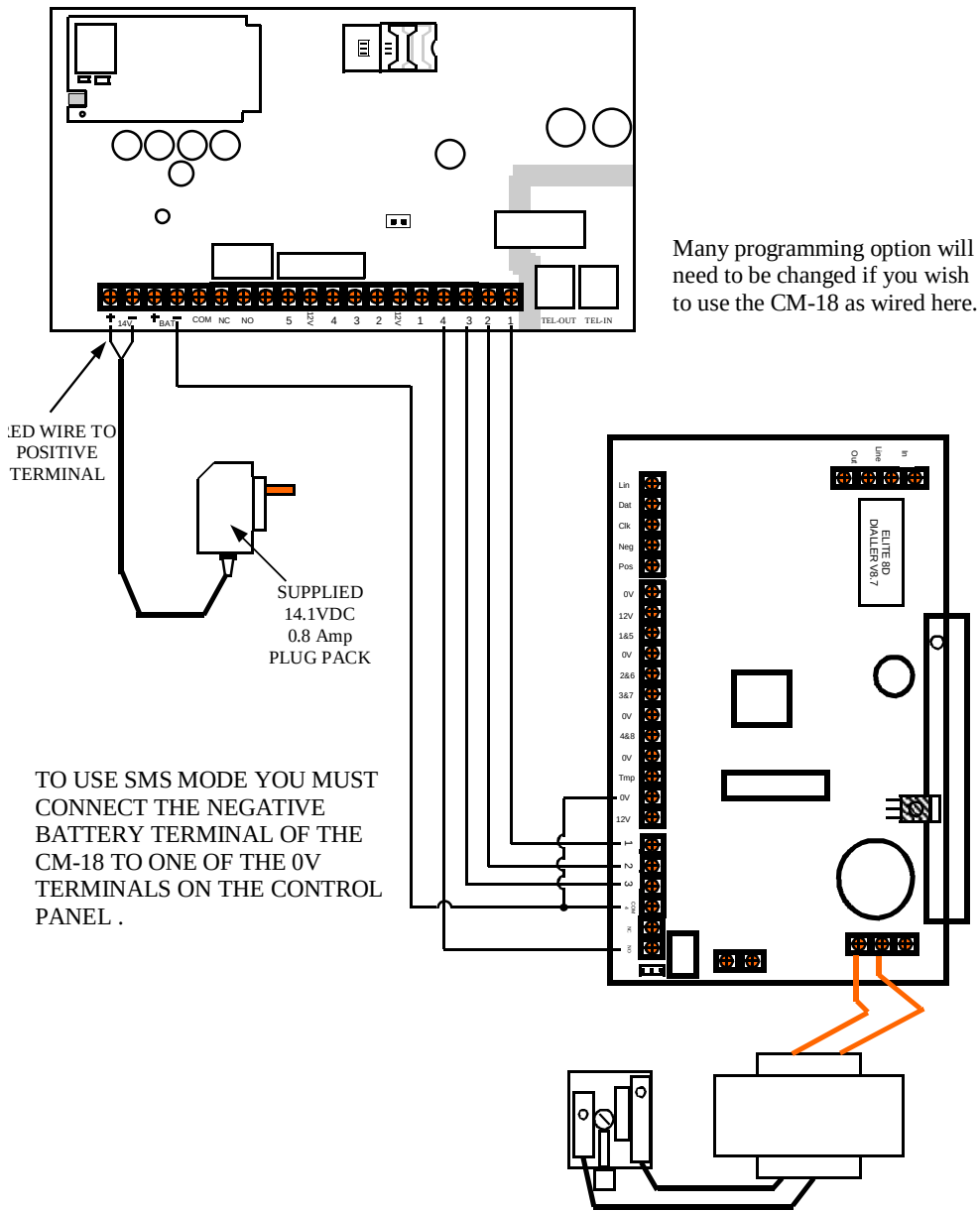
An SMS message "PHONE LINE FAIL" will be sent when the PSTN line fails, and another SMS message "PHONE LINE OK" will be sent when the PSTN line is restored.

In parallel to SMS messages, the system also activates the relevant output. If no phone number was programmed, then no message will be sent when an input is "on" and the relevant output will still be activated.

Line Fail

The Line detection works by measuring the DC voltage on the incoming line. If the voltage level drops a Line Fail will occur. (line fail outputs will only activate if the GSM connection is established).

SMS MODE



GSM BACKUP MODE 1

