The Packs Infotel

GSM Converter V2

Installation Manual V6

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Connecting the M30 to GSM converter

Aerial Connection: Screw either a fixed 'flex' aerial or an external aerial onto the aerial connection on top of the GSM converter. (Note: if the unit is to be installed inside a metal enclosure then the aerial must be placed outside the enclosure).

Incoming Land Line (if applicable): Connect your PSTN telephone line to the lead marked PSTN or the RG11 Socket marked <POST2>.

M30 Connection:

The M30 Autodialer uses the GSM network full time.

- Connect the M30's telephone A & B terminals to the Lead marked M30 or the RG11 Socket marked <POST1>.

Automatically switch to GSM network in the case of a land line failure

- Connect the M30's telephone A & B terminals to the Lead marked M30 or the RG11 Socket marked <POST1>.

240 VAC Power Connection: The GSM Converter comes with its own 240 VAC to 12VDC plug in power supply and internal battery back up facility. Plug the transformer into your wall socket and the output plug into the rear of the unit.

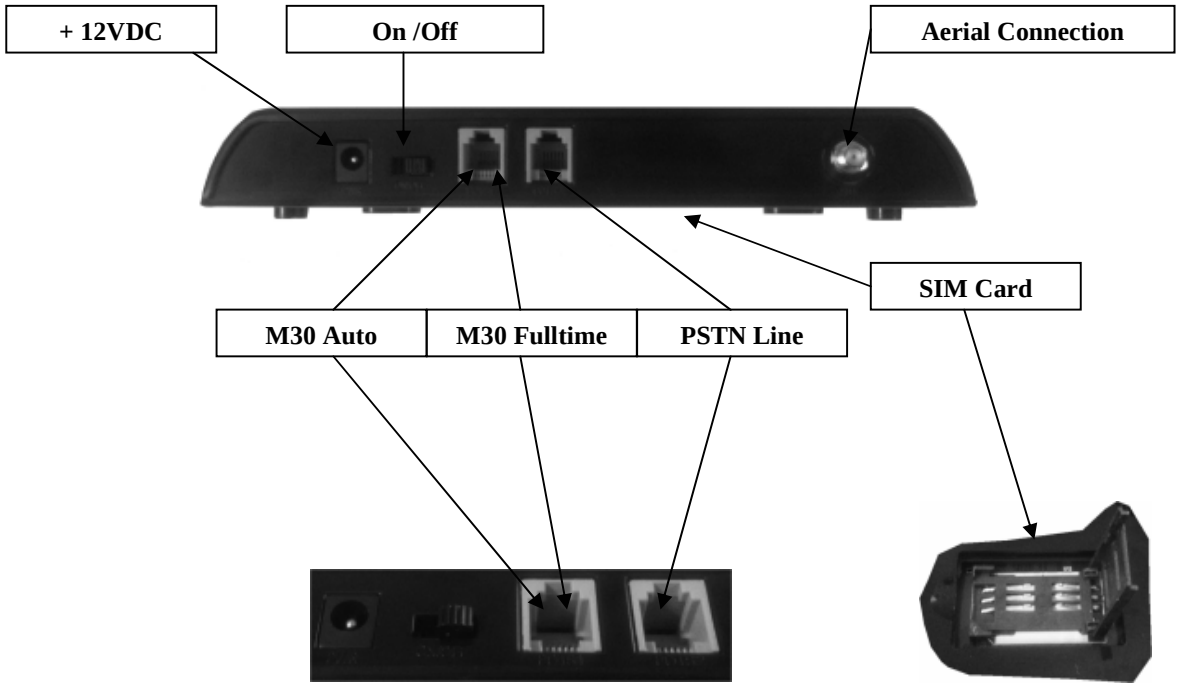
Other Power options are available.

12 VDC Power Connection: If you do not wish to use the supplied 240vac power supply then you need to connect a supply of 12 VDC to the power socket on the rear of the unit. Polarity: Positive = internal pin - Negative = external shield.

SIM Card: Fit either a contract or 'pay as you go' SIM into the SIM card holder on the rear of the unit as indicated on the diagram below.

Notes:

- The GSM converter accepts SIMs from any network.
- **Before** fitting the SIM make sure any pin's are disabled and the voice mail service is turned off.
- We recommend a contract SIM as this eliminates the possibility of running out of credit.



1. GSM Converter Description.

The GSM converter provides a noiseless 48v telephone line, similar to a conventional line (PSTN), in case there are any problems or it has been sabotaged.

In case the PSTN telephone line does not exist, any device connected to the GSM converter will be able to establish a connection using the generated GSM phone line.

2. Equipment Installation.

***Note**: The power supply must never be connected and switched on before the SIM card is inserted and you have connected the Ariel.*

GSM converter inputs and outputs

- **Input PSTN <POST2>**: Connect your main incoming PSTN line here – do not connect any equipment to this connection.
- **M30 Connection <POST1>**: Connect equipment here - the equipment will use the PSTN line as the default connection and swap to the GSM network in the case of a failure.
- **+ 12v Connection**: 12vdc at 1AMP
- **Internal Backup Battery**: Already fitted should be changed every 3 Years.
- **240VAC**: Please use the supplied transformer or ask us for other options.

3. LED Functions.

The GSM converter indicates its status through seven LEDS; all the LEDs are mounted on the front of the unit.

- **PWR:** It indicates the power supply status. It switches on with a correct status, and it switches off when it is below 10.5v.
- **USE:**
  - **Flashing: I**ncoming call.
  - **Solid:** Phone call being used.
- **Talk:**
  - **Solid:** Incoming GSM Call in progress.
- **BATT:**
  - **Flashing:** Charging / in use.
  - **Solid:** Fully Charged.
- **Signal Strength 1:** Poor signal strength.
- **Signal Strength 2:** Medium signal strength.
- **Signal Strength 3:** Max signal strength.

4. GSM Converter Start up.

The correct sequence for setting up the GSM converter is as follows:

1. Disable the pin code in the SIM card before inserting it into the SIM card slot on the rear of the unit.
2. Connect your aerial.
3. Connect your PSTN line to the provided cable or the RG11 socket Post 2 (If applicable).
4. Connect your M30 to the provided cable or the RG11 socket Post 1.
5. Connect the **12vdc** supply and switch the on/off switch to on.

On initial start-up a general equipment reset will be made.

If the connections were correctly made and there are not any telephone line problems, variations in the system should not be noticed (except for signal strength).

5. Telephone Line Functioning.

5.1. Telephone line input PSTN.

If the GSM converter is going to work with a conventional PSTN telephone line, this must be connected to the socket 'POST 2'.

No device should be connected to this socket. Any device that uses the telephone line (M30, MD20 etc) must be connected to the output terminals. **All calls should be made via DTMF tones.**

If you do connect equipment to this terminal and the equipment tries to use the line, the GSM converter will detect this as a fault on the line.

Note: This must be a outside PSTN line e.g. BT and not an internal exchange line as the low voltage provided will be detected as a fault.

5.2. Telephone line outputs.

The GSM converter has one output socket for connecting your equipment.

- ***POST 1***: Equipment connected to this terminal will use the PSTN line connected to 'Post 2' while it exists, and swap to the GSM network in the event of a failure.

5.3. Telephone line monitoring.

5.3.1. Line voltage verification.

The GSM converter continually checks the line voltage level to detect if the PSTN telephone line is ok. If the GSM converter detects a power cut, the line will wait and then it will check the voltage again. If after that time the failure continues the unit will move any outgoing calls to the GSM network.

5.3.2. Tone voltage verification.

If the GSM converter checks the tones frequency and the result was not correct, it will move any outgoing calls to the GSM network.

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5.4. Incoming calls.

The GSM converter will put incoming calls though to the POST 1 socket from both the GSM and PSTN line at all times. E.g. Even if the PSTN line is active and your outgoing calls are going over the PSTN line, and then the unit detects an incoming GSM call it will still accept the call and put it though to the connected equipment.

6. Working Without A Telephone Line.

6.1 Telephone line outputs.

- ***POST 1***: Equipment connected to this terminal will use the PSTN line connected to 'POST 2' while it exists, and swap to the GSM network in the event of a failure.

6.2. GSM converter line characteristics.

The GSM line that substitutes the conventional PSTN line is almost identically to a normal telephone line.

The GSM line complies with the tbr-21 requirements.

6.3. Outgoing GSM telephone operation.

The GSM converter will wait until a call comes through 'POST1'.

Once a call is detected, the GSM converter will call the number dialed through its GSM module. **Call Tones must be DTMF**.

Once the communication has started the GSM converter will link the audio between the equipment and the receiver.

Any call through the GSM line will finish when the equipment that started the call hangs up. The GSM converter will then wait for another call.

6.4. Restoring of PSTN line.

The GSM converter will continually check the PSTN line status to detect if it is restored or not. If the correct voltage is detected on the telephone line, it will wait a short period and then try the line again, checking the voltage and the tones frequency.

If the line is tested as ok continually for 60 seconds, outgoing calls will be routed back over the PSTN line again.

7. Function Programming

Note: any programming must be done directly into the unit via a phone hand set and not via the M30 or any other equipment.

7.1. Programming.

Before you do the following programming; Lift the phone handset or press hands free key of the telephone, now press the buttons according to the following instructions. When finished you will hear 2 beeps this will signal the programming has been successfully.

7.1.1. Restore to default settings.

*#99#99# restore to factory default setting.

7.1.2. Bar incoming call settings.

*#14#00# 14--command,00--value,00--no barring, 01--set barring default setting --00

7.1.3. Pin code

1. Start PIN code check and automatic PIN lock function
   *#07#*1234# 07--command, 1234 = your current SIM card PIN code.
   If set successfully, the device will start the PIN code check, and automatically change the current
   SIM Card into "PIN on" from "PIN off".
2. Close PIN code check and automatic PIN lock function.
   *#08#*1234# 08--command, 1234 = your current SIM card PIN code.
   If set successfully, the device will close the PIN code check and automatic PIN lock function.
3. Change PIN code, open automatic PIN lock function
   *#09#1234*56785678# 09-command, 1234 = your current sim card PIN code, 5678 = new PIN code.
   (5678 can be any other 4 digits number, e.g. 2012).
   If change was successful, the device will change the current sim card PIN code as you selected.

8. Specification

- Dimension 170mm×118mm×30mm - excluding antenna.
- GSM 850/900/1800/1900 Mhz Quad band.
- Power Supply Required 12VDC 1A.
- Backup Battery
    - Standby 24 Hrs.
    - Talk time 2 Hrs.
- Operating temperature -10c to 60 C.
- Storage Temp -20C to 70 C.