



## IDENTICOM

### Product Update Bulletin

#### SUBJECT: RoHS Compliance



#### Introduction

From 1<sup>st</sup> July 2006 The Restriction of the use of certain Hazardous Substances in Electrical & Electronic Equipment Regulations 2004 (RoHS) comes into force in the European Union. In short, this directive bans the placing on the EU market of new electrical and electronic equipment containing more than authorised levels of substances such as lead, cadmium and mercury. All manufacturers of electrical & electronic equipment need to ensure that all new product manufactured by July 1<sup>st</sup> 2006 meets the RoHS directive.

#### Identicom & RoHS Compliance

Connexion2 is pleased to announce that all Identicom product manufactured from May 2006 will adhere to the RoHS directive and has had those components containing non-RoHS compliant materials designed out.

#### How does this affect me?

The directive only applies to manufacturers of electrical & electronic equipment and not to a reseller or distributor of such products. Therefore there is no direct impact on your business nor on any existing Identicom stock you may have. However, it is good practice to ensure that all new products purchased meet the RoHS directive. Any manufacturer or importer (into the EU) of electronic equipment that does not meet the RoHS directive's requirements may be subject to investigation.

#### Does it affect Identicom's in the field?

No. There is no impact on product already sold or its warranty. The directive allows for any existing non-RoHS compliant product to be maintained and/or repaired ensuring its operation. All new RoHS compliant product supplied must be maintained/repaired using RoHS compliant components. This is covered in the warranty of all Identicom product manufactured from May 2006.

#### How will I be able to identify if an Identicom is RoHS compliant?

New product built from May 2006 will carry the following part numbers:

Connexion2 Part Number	Description
S10606	Identicom (UK Version) (RoHS Compliant)
S10607	Identicom (French Version) (RoHS Compliant)
S10608	Identicom (German Version) (RoHS Compliant)

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In addition, all product packaging will display the RoHS logo (as above).

### **Are there any other changes to Identicom?**

In achieving RoHS compliance a number of components have had to be changed including the GSM modem used. Identicom will now use the Siemens MC55 modem rather than the MC45. One benefit this brings is a weight saving of approx 5 grams compared to the MC45. The unit is now a quoted weight of 68g (excluding lanyard).

We have also taken the opportunity to further improve the GSM antenna performance in Identicom to maximise the signal quality achieved on 900MHz, 1800MHz & 1900MHz GSM networks.

In terms of software, all existing Identicom commands operate in exactly the same way as before. We have taken the opportunity to add one new command feature which is detailed below and to improve a few existing commands. It is hoped that our channel partners will look to find ways innovative ways of using this new GSM Location Data Command in order to improve the accuracy view on the device location.

### **I. GSM Location Data Command**

If configured, an additional SMS message will be sent when a Red or Amber Alert condition is activated.

This message will consist of the Cell ID and signal level of the current registered (camped) cell as well as up to 6 neighbouring cells.

The Identicom can also be configured to send this message at regular intervals irrespective of Alert condition.

The destination of the message can be configured to a specific number or the red and /or amber message servers can be used.

#### **Output Message Format**

The SMS sent will have the following format

**.CPR<MCC>,<MNC>,<LAC1>,<CELL1>,<RXLEVI>,<LAC2>,<CELL2>,<RXLEV2>.....  
<LAC7>,<CELL7>,<RXLEV7>,<TA>,<REPORT>**

Where

- <MCC>** - Country code of camped/registered cell 3 digits, e.g. 232
- <MNC>** - Network code of registered cell 2 digits or 3 digits, e.g. 07 or 003
- <LAC1>** - Location area code of registered cell 4 hexadecimal digits, e.g. 4EED
- <CELL1>** - Cell ID of registered cell 4 hexadecimal digits, e.g. 4EAF
- <RXLEVI>** - Receive signal level in dBm of registered cell
- <LAC2 – 7>** - Location area codes of neighbouring cells
- <CELL2 – 7>** - Cell IDs of neighbouring cells
- <RXLEVEL2 – 7>** - Receive signal level of neighbouring cells
- <TA>** - Timing Advance of registered cell in bits
- <REPORT>** - 1 = Regular report, 0 = Red/Amber Alert report

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The number of neighbouring cells will vary depending on location. The message format will remain the same independent of number of cells. No data will be inserted between the comma separators for missing neighbour cells - **<RXLEVELn>** will be reported as 0.

Example

**.CPR234,15,0046,23D3,67,0046,23D4,91,0046,02AA,107,,,0,,,0,,,0,,,0,0,1**

2 neighbouring cells with **<TA>** = 0 and **<REPORT>** = 1, regular report.

### Configuration Command

The reporting mode can be set using the standard SMS configuration process using the following command

**.SPR<Red>,<RedPeriod>,<Amber>,<ReportPeriod>,<Number>.**

Where

- <Red>** - 1 = Send with Red Alert, 0 = Do not send with Red
- <RedPeriod>** - 0 – 999, Regular report mode when in red Alert, 0 disables regular reporting in red alert
- <Amber>** - 1 = Send with Amber Alert, 0 = Do not send with Amber
- <ReportPeriod>** - 0 – 999, Regular report period in minutes, 0 disables regular reporting
- <Number>** - destination number, international or local format, max 16 digits, leaving this field blank will cause the unit to use primary / secondary servers as configured.

Examples

**.SPRI,10,0,60,.**

Report position on red alert, not amber alert. Report every 10 minutes in red alert mode and every 60 minutes when not in red alert. Use primary / secondary servers.

**.SPR0,0,0,120,+447717543126.**

Report every 2 hours to specific number.

## 2. Change to user definable text message configuration

Previously it wasn't possible to add or concatenate any of the user definable text messages. This has been altered so that it is now possible using a separating full stop (.) between commands and defined messages. Care should be taken to ensure that the maximum 160 character limit of a text message is not breached. Equally, it should be noted that a full stop cannot be used as part of a user definable message as the Identicom will see it as a command separator.

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### **3. Change to status message format**

Identicom is able to report information on battery voltage and network signal by SMS whenever a status check is carried out. Currently this showed a battery value and a voltage value which occasionally contradicted each other.

The format of the status message has now been changed so that it is easier to understand. An example of the new format is:

Status: Signal 19

Voltage: 3.94

The signal value is as before, i.e. a value between 1-32 which indicates the strength of GSM network. The voltage value is now the actual voltage level of the battery.

### **4. Change to 'heartbeat' vibration pattern**

The format of the 'heartbeat' vibration pattern felt by the user during a red alert has been changed. Previously the unit vibrated once every X seconds (as defined in the configuration). This has now been changed to two very brief vibrations in order to better represent an actual heartbeat in order to make it easier for a user to understand what the vibration is.

### **Summary of changes**

The following is a brief summary of the changes to Identicom from May 2006:

- Fully RoHS compliant
- Incorporates Siemens MC55 instead of MC45
- Unit weight reduced, now 68g
- Antenna performance improved
- GSM Location Data Command added
- User definable text messages can now be concatenated
- Status messaging improved
- 'Heartbeat' vibration pattern improved

Should you have any questions regarding any of these changes or other aspects of this product bulletin then please email [support@connexion2.com](mailto:support@connexion2.com) or contact Connexion2 at +44 (0) 1909 550368.