



identicom



Technical Reference Manual

February 2007

Revision 1.17

This manual applies to Identicom software versions V3.07 and later.

About Identicom

Identicom is a communication device disguised as an ID card holder. It enables vulnerable solitary workers to communicate discreetly with their back-up services in potentially hazardous situations.

About this manual

This Technical Reference Manual provides all of the information you need to select and modify the configuration of your Identicom for your specific application. It is intended for those people who deploy and manage the system and run the back-up services. It should be read in conjunction with the User Guide supplied with your Identicom.

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Printed in England January 2007

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1 Configuration options

There is great flexibility in the degree to which your Identicom can be configured to match your specific application. A summary of the configurable options is given in this section. The codes, in brackets, indicate the commands used to configure each feature. These commands are described in detail in the later sections of this manual. You can configure:

Telephone numbers

- Four telephone numbers to which a text message or a voice connection will be made, as appropriate:
 - Voice number, for Red Alert voice calls ([SVN](#))
 - Amber number, for voice call at start of Amber Alert ([SAN](#))
 - Primary number, for text messages ([SPN](#))
 - Secondary number, for text messages ([SSN](#))
- The number of times Identicom will retry connecting to the telephone numbers:
 - Voice call retries ([SVN](#))
 - Amber call retries ([SAN](#))
 - Primary text retries ([SPN](#))
 - Secondary text retries ([SSN](#))
- Additional DTMF tones, if required ([DTM](#))

Text messages

- User defined text messages, to replace the default messages (see [SDF](#) on page 14):
 - Message to primary text number at start of Red Alert ([PA](#))
 - Message to primary text number on cancellation of Red Alert ([PC](#))
 - Message to secondary text number at start of Red Alert ([RA](#))
 - Message to secondary text number on cancellation of Red Alert ([RC](#))
 - Message at start of Amber Alert ([AA](#))
 - Message on cancellation of Amber Alert ([AC](#))
 - Message on extension of Amber Alert Timer period ([AE](#))
 - Message when low battery condition is detected ([BA](#))
 - Message on connection to charger ([CO](#))
 - Message on disconnection from charger ([CD](#))
- Whether each message will be sent and to which destination (primary and/or secondary text number):
 - Message at start of Red Alert ([RRE](#))
 - Message on cancellation of Red Alert ([RRE](#))
 - Message at start of Amber Alert ([ARE](#))
 - Message on cancellation of Amber Alert ([ARE](#))
 - Message on extension of Amber Alert timer ([ARE](#))
 - Enable/disable Amber Alert extended text ([AXE/AXD](#))
 - [Command included for backwards compatibility; now superseded by [ARE](#) command]
 - Message when low battery condition is detected ([BRE](#))
 - Messages on connection and disconnection of charger ([BRE](#))
 - Enable/disable charger connection texts ([CTE/CTD](#))
 - [Command included for backwards compatibility; now superseded by [BRE](#) command]
 - Message containing Status information ([SRE](#))

Red Alert

- The length of time required to press and hold the Red Alert button to initiate a Red Alert ([SNR](#))
- Whether a Red Alert will be triggered by ripping out the lanyard ([CME / CMD](#))
- Duration of Red Alert voice call ([SRC](#))
- Whether the called party can terminate a red alert as well as the user ([CRE / CRD](#))
- Whether a 'heartbeat' vibration will be generated during a Red Alert call ([SHB](#))

Amber Alert

- Whether the Amber Alert call takes place or it goes straight to the Amber Alert Timer ([AME / AMD](#))
- Duration of the voice call at the start of an Amber Alert ([SCT](#))
- Whether the Amber Alert timer is enabled ([ATE / ATD](#)).
- Duration of the Amber Alert timer ([CAT](#))
- Duration of an extension to Amber Alert timer ([CRT](#))
- The vibration pattern that indicates the end of the Amber Alert timer period ([SNE](#))

Dial-in

- Whether anyone can dial into the Identicom and the authorised phone numbers ([SDN](#))

Assistance for the visually impaired

- Whether vibrations are used to indicate status and start of the Amber Alert call ([ASE / ASD](#))

Signal status indication

- Signal levels for the amber and red signal strength indications ([SNL](#))

Position reporting

- When and how GSM location data should be sent from the Identicom ([SPR](#))

2 The configuration process

To configure the Identicom, you send it a text message containing all the commands needed for the new configuration. The Identicom receives the information and updates the configuration on the SIM card. Though the unit configuration is stored on the SIM, moving a card between different Identicom units is not to be recommended as different versions of the Identicom software will interpret the configuration differently, so it may not function correctly.

Note that the maximum length of a configuration message is 160 characters, and these text message commands cannot be concatenated. If you are configuring all the text messages, the phone numbers and the time periods, you will need to break the configuration into a number of strings of commands, each within the 160 character limit.

The Identicom being configured must be connected to its charger to receive the configuration message.

Command structure

All commands must start and end with a full stop (.), but the termination character from one command can act as the start character for the next, when you are including several commands in a single configuration message.

An example of a single command:

```
.SPN3,01234567890.
```

and two commands in the same configuration message:

```
.SPN3,01234567890.SSN3,01234560987.
```

Note that there is a limit of 160 characters on any configuration message. When setting up the entire set of parameters, you will need to break the configuration into a number of strings of commands, each within the 160 character limit.

If there is an error in a command, that command will be ignored, but any following commands will be actioned.

Later commands will overwrite earlier ones, even in the same configuration message. Therefore, if you accidentally include two different SPN commands in the same message, the phone number designated in the second message will be the one that is used.

If a command allows for multiple parameters and you don't need to use them all then the necessary commas must be included and the parameters left out, for example:

```
.SDN01234567890,,.
```

3 Telephone numbers

Telephone numbers and retries

.SVN – Set Red Alert server number

Syntax: **.SVN<retry>,<number>**.

Where <retry> is the number of times (0-9) to retry the number if the connection is not made, and <number> is the telephone number of the Voice server. Set <retry> to # to disable the Voice server number, or to 'C' to continually retry the call until the Red Alert is cancelled by the user. If the call is dropped by the receiving end, the unit will attempt to reconnect the call, if configured (see [CRD/CRE](#)).

Function: This command sets or changes the telephone number for voice call messages at the start of a Red Alert. The phone number can be in either local or international format (i.e. +[country code]) and must be less than 20 digits. The number is checked for valid digits, but cannot be checked as a valid telephone number. If the number you specify is not a valid telephone number, the connection will not be made. If the connection is not made successfully, the Identicom will retry connecting the specified number of times.

Example: **.SVN7,01237896054.** or **.SVN#.**

Default: Disabled

.SAN – Set Amber Alert server number

Syntax: **.SAN<retry>,<number>**.

Where <retry> is the number of times (0-9) to retry the number if the connection is not made, and <number> is the telephone number of the Amber server. Set <retry> to # to disable the Amber server number.

Function: This command sets or changes the telephone number for voice call messages at the start of an Amber Alert. The phone number can be in either local or international format (i.e. +[country code]) and must be less than 20 digits. The number is checked for valid digits, but cannot be checked as a valid telephone number. If the number you specify is not a valid telephone number, the connection will not be made. If the connection is not made successfully, the Identicom will retry connecting the specified number of times.

Example: **.SAN4,01234568709.** or **.SAN#.**

Default: Disabled

.SPN – Set primary SMS number

Syntax: **.SPN<retry>,<number>**.

Where <retry> is the number of times (0-9) to retry the number if the message is not sent, and <number> is the telephone number of the Primary server. Set <retry> to # to disable the Primary server number.

Function: This command sets or changes the primary telephone number for SMS text messages. The phone number can be in either local or international format (i.e. +[country code]) and must be less than 20 digits. The number is checked for valid digits, but cannot be checked as a valid telephone number. If the number you specify is not a valid telephone number, the message will not be sent. If the message is not sent successfully, the Identicom will retry transmission the specified number of times.

Example: **.SPN3,01234567890**. or **.SPN#**.,

Default: Disabled

.SSN – Set secondary SMS number

Syntax: **.SSN<retry>,<number>**.

Where <retry> is the number of times (0-9) to retry the number if the message is not sent, and <number> is the telephone number of the Secondary server. Set <retry> to # to disable the Secondary server number.

Function: This command sets or changes the secondary telephone number for SMS text messages. The phone number can be in either local or international format (i.e. +[country code]) and must be less than 20 digits. The number is checked for valid digits, but cannot be checked as a valid telephone number. If the number you specify is not a valid telephone number, the message will not be sent. If the message is not sent successfully, the Identicom will retry transmission the specified number of times.

Example: **.SSN5,01432765089**. or **.SSN#**.,

Default: Disabled

DTMF tones

.DTM – Enable DTMF tones

Syntax: **.DTM<enable>,<number>**.

Where <enable> sets the unit to send a DTMF tone <number> when an outgoing voice call is connected. <enable> must be set to 1 to enable outgoing DTMF. <number> can be up to a 20 digit tone value. Allowable digits are '0'-'9', '*', and '#'. To disable the DTMF tone, set both Enable and Number to 0.

Function: Set DTMF tones to be sent when an outgoing voice call is connected. The tone sequence is transmitted as soon as the call is answered. Tone duration is fixed at 100ms for each digit. The DTMF tone is appended with a * tone for Red Alert calls and a # tone for Amber Alert calls even if a zero length sequence.

Example: **.DTM1,123456**.

Default: Disabled

4 Text messages

Message text

All the text message commands have a limit of 157 characters of text following the characters of the command itself. Note that the text commands do not have to have a terminating full stop if the last command in the string. A full stop will be taken to indicate the end of the message and allows for concatenation of commands.

.PA – Red Alert primary text message

Syntax: **.PA<text>**

Where <text> is up to 157 characters of text to be sent to the primary server at the start of a Red Alert. The text must consist only of ASCII characters.

Function: This command sets or changes the text message sent only to the primary server telephone number at the start of a Red Alert.

Example: .PAEmergency: Nurse P Hoskin needs assistance

Default: 'Red Alert'

.PC – Red Alert Cancelled primary text message

Syntax: **.PC<text>**

Where <text> is up to 157 characters of text to be sent to the primary server on cancelling a Red Alert. The text must consist only of ASCII characters.

Function: This command sets or changes the text message sent only to the primary server telephone number when a Red Alert is cancelled.

Example: .PCNurse P Hoskin – emergency over

Default: 'Red Alert Cancelled'

.RA – Red Alert secondary text message

Syntax: **.RA<text>**

Where <text> is up to 157 characters of text to be sent to the secondary server at the start of a Red Alert. The text must consist only of ASCII characters.

Function: This command sets or changes the text message sent only to the secondary server telephone number at the start of a Red Alert.

Example: .RANurse P Hoskin has logged a Red Alert

Default: 'Red Alert'

.RC – Red Alert Cancelled secondary text message

Syntax: **.RC<text>**

Where <text> is up to 157 characters of text to be sent to the secondary server when cancelling a Red Alert. The text must consist only of ASCII characters.

Function: This command sets or changes the text message sent only to the secondary server telephone number when cancelling a Red Alert.

Example: .RCNurse P Hoskin – Red Alert Cancelled

Default: 'Red Alert Cancelled'

.AA – Amber Alert text message

Syntax: **.AA<text>**

Where <text> is up to 157 characters of text to be sent to the primary and/or secondary server at the start of an Amber Alert. The text must consist only of ASCII characters.

Function: This command sets or changes the text message sent to the primary and/or secondary server telephone numbers at the start of an Amber Alert.

Example: .AAHealth visitor J Wilson starting visit

Default: 'Amber Alert'

.AC – Amber Alert Cancelled text message

Syntax: **.AC<text>**

Where <text> is up to 157 characters of text to be sent to the primary and/or secondary server when cancelling an Amber Alert. The text must consist only of ASCII characters.

Function: This command sets or changes the text message sent to the primary and/or secondary server telephone numbers when cancelling an Amber Alert.

Example: .ACHealth visitor J Wilson ending visit OK

Default: 'Amber Alert Cancelled'

.AE – Amber Alert Timer Extension message

Syntax: **.AE<text>**

Where <text> is the text associated with the message sent when sending the Amber Alert Timer period is extended. The text must consist only of ASCII characters and be between 1 and 157 characters long.

Function: This command sets or changes the text message sent when the Amber Alert Timer period is extended, providing the [AXE](#) and/or [ARE](#) command has been set.

Example: .AEDr M Jenkins amber alert extended

Default: 'Amber Alert Extended'

.BA – Low Battery text message

Syntax: **.BA<text>**

Where <text> is up to 157 characters of text to be sent to the primary and/or secondary server when a low battery condition occurs. The text must consist only of ASCII characters.

Function: This command sets or changes the text message sent to the primary and/or secondary server telephone numbers when the battery is low.

Example: .BADr A Knight's unit battery needs recharging

Default: 'Low Battery'

.CO – Charger On text message

Syntax: **.CO<text>**

Where <text> is up to 157 characters of text to be sent to the primary and/or secondary server when the battery charger is connected. The text must consist only of ASCII characters.

Function: This command sets or changes the text message sent to the primary server telephone number when the battery charger is connected.

Example: .CODr M Jenkins charger connected

Default: 'Charger Connected'

.CD – Charger Off text message

Syntax: **.CD<text>**

Where <text> is up to 157 characters of text to be sent to the primary and/or secondary server when the battery charger is disconnected. The text must consist only of ASCII characters.

Function: This command sets or changes the text message sent to the primary server telephone number when the battery charger is disconnected.

Example: .CDDr M Jenkins charger disconnected

Default: 'Charger Disconnected'

Message enabling and destinations

The following commands determine whether individual text messages will be sent and which text servers they will be sent to. Note that the AXE/AXD, AME/AMD, and CTE/CTD commands will work as before, either to switch on/off the sending of texts to the destinations selected, or, if no ARE or BRE commands have been used, to default to sending to both primary and secondary numbers as before. The AXE/AXD and CTE/CTD commands do not need to be used as the ARE and BRE commands, if used, will result in sending being switched on/off as appropriate.

.RRE – Define Red Alert text destinations

Syntax: **.RRE<alert>,<cancel>**.

Where <alert> is the destination for the red alert message and <cancel> is the destination for the red alert cancelled message.

Each value is in the range 0-3 as follows:

- 0 No message is sent.
- 1 Message is sent to Primary server only.
- 2 Message is sent to Secondary server only.
- 3 Message is sent to Primary and Secondary servers.

Function: This command defines the destination for the red alert messages.

Example: **.RRE3,3**.

Default: Alert and cancel to both primary and secondary servers.

.ARE – Define Amber Alert text destinations

Syntax: **.ARE<alert>,<cancel>,<extend>**.

Where <alert> is the destination for the amber alert message, <cancel> is the destination for the amber alert cancelled message, and <extend> is the destination for the amber alert extended message.

Each value is in the range 0-3 as follows:

- 0 No message is sent.
- 1 Message is sent to Primary server only.
- 2 Message is sent to Secondary server only.
- 3 Message is sent to Primary and Secondary servers.

Function: This command defines the destination for the amber alert messages.

Example: **.ARE3,3,0**.

Default: Alert and cancel to both primary and secondary servers; extend disabled.

.AXE – Enable Amber Alert Extension text message

Syntax: **.AXE**.

Function: This command enables a text message to be sent to the primary and/or secondary server telephone numbers when the user extends an Amber Alert period by pressing the Amber Alert button. The destination can be set with the [ARE](#) command, if no destination has been set then this command will set the text message to go to both the primary and secondary servers.

Default: Extend text messages disabled.

.AXD – Disable Amber Alert Extension text message

Syntax: **.AXD**.

Function: This command disables the sending of a text message to the primary and secondary server telephone numbers when the user extends an Amber Alert period. The destination for these messages will be remembered and reinstated if a later [AXE](#) command is issued.

Default: Extend text messages disabled.

.BRE – Define battery and charger text destinations

Syntax: **.BRE<battery>,<charger>**.

Where <battery> is the destination for the low battery message and <charger> is the destination for the charger connected and charger disconnected messages.

Each value is in the range 0-3 as follows:

- 0 No message is sent.
- 1 Message is sent to Primary server only.
- 2 Message is sent to Secondary server only.
- 3 Message is sent to Primary and Secondary servers.

Function: This command defines the destination for the low battery and charger connection messages.

Example: **.BRE3,0**.

Default: Low battery text to primary and secondary servers; charger messages disabled.

.CTE – Enable charger text messages

Syntax: **.CTE**.

Function: This command enables a text message to be sent to the primary and/or secondary server telephone numbers when the battery charger is connected or disconnected. When the charger is connected, the message defined by the [CO](#) command is sent. When the charger is disconnected, the message defined by the [CD](#) command is sent. The messages will be sent to the destination set by the [BRE](#) command. If no destination has been set then these messages will be sent to both the primary and secondary server.

Default: Charger messages disabled.

.CTD – Disable charger text messages

Syntax: **.CTD**.

Function: This command disables the sending of a text message to the primary and server telephone numbers when the battery charger is connected or disconnected. The destination for the messages will be remembered and reinstated if a future [CTE](#) command is issued.

Default: Charger messages disabled.

.SRE – Set status reporting text destination

Syntax: **.SRE<n>**.

Where <n> is in the range 0-3 as follows:

- 0 No status report is sent.
- 1 Status report is sent to Primary server only.
- 2 Status report is sent to Secondary server only.
- 3 Status report is sent to Primary and Secondary servers.

Function: This command sets the status reporting mode. If used, text message status reports will be sent in addition to the LED indication on the device, that take the form:

Status: Signal xx Voltage y.yy

Where xx is the signal strength in the range 0 (no signal) to 31 (very strong); y.yy is the actual battery voltage in the range 3.5 to 4.2V.

Example: .SRE3.

Default: Status text message disabled.

5 Red Alert

Red Alert button switch delay

.SNR – Set Red Alert switch delay

Syntax: **.SNR<time>**.

Where time is the Red Alert switch delay time in 0.1 second increments. Values can range from 2-30 representing 0.2s-3s for the button press.

Function: Sets the qualification time for pressing and holding the Red Alert button before activation and cancellation of the Red Alert.

Example: .SNR15.

Default: 1.5 seconds

Rip Alarm commands

.CME – Enable Rip Alarm

Syntax: **.CME**.

Function: This command enables Rip Alarm Alerts, so that if the lanyard plug is forcibly removed from its socket, a Red Alert is initiated.

Default: Rip alarm disabled

.CMD – Disable Rip Alarm

Syntax: **.CMD**.

Function: This command disables Rip Alarm Alerts, so that Red Alerts are not initiated if the lanyard plug is forcibly removed from its socket.

Default: Rip alarm disabled

Length of Red Alert call

.SRC – Set Red Alert call time

Syntax: **.SRC<time>**.

Where <time> is the duration of an outgoing Red voice call in minutes (1-120).

Function: This command sets or changes the duration of the outgoing voice call made to the Voice server during a Red Alert. When a Red Alert voice connection is made, the line is held open for the period to allow monitoring and recording or an incoming call to be established. If an incoming call is received, the outgoing call is dropped and the voice call can continue under the remote caller's control until it is terminated by the caller.

Example: .SRC90.

Default: 1 minute

Red Alert termination

.CRE – Enable Red Alert termination

Syntax: **.CRE**.

Function: This command configures the Identicom so that a Red Alert can only be cleared by the device user. If the called party drops the call then the unit will remain in its red alert state but with the call disconnected. If the red alert voice call retries are set to 'C' then the unit will redial, otherwise the call will not be automatically reconnected. The heartbeat, if configured, will cease if the call has been dropped.

Default: Red alert can be cleared by the user or the monitoring centre.

.CRD – Disable Red Alert termination

Syntax: **.CRD**.

Function: This command configures the Identicom so that a Red Alert state can be cleared either by the device user, or remotely by the monitoring centre terminating the call. If the red alert voice call retries are set to 'C' for continuous then the monitoring centre cannot terminate the call as the Identicom will redial.

Default: Red alert can be cleared by the user or the monitoring centre.

Red Alert 'heartbeat'

.SHB – Set Red Alert heartbeat

Syntax: **.SHB<time>**.

Where <time> is the Red alert heartbeat interval in tens of seconds (0-9).

Function: This command sets the time interval between the 'heartbeat' vibration pulses which confirm that a Red Alert is in progress and the call is connected. Set <time> to 0 to disable the heartbeat function.

Example: **.SHB3**.

Default: Disabled

6 Amber Alert settings

Enable Amber Alert call and text

.AME - Enable Amber Alert call and text

Syntax: **.AME**.

Function: Enables Amber Alert calls and texts to be sent when an Amber Alert is activated. The destination of the text messages will be as set by the [ARE](#) command. If a destination has not been set the messages will go to both the primary and secondary servers.

Default: Amber Alert call and texts enabled.

.AMD – Disable Amber Alert call and text

Syntax: **.AMD**.

Function: Disables Amber Alert calls and texts when an Amber Alert is activated. The Amber Alert Timer period is immediately activated and must be set up as a function using the [ATE](#) command. The Amber Alert Timer will still function, if enabled with the [ATE](#) command. The destination of the text messages will be remembered and reinstated if a later [AME](#) command is issued.

Default: Amber Alert call and texts enabled.

Length of amber call

.SCT – Set Amber Alert call length

Syntax: **.SCT<time>**.

Where <time> is the duration of an outgoing Amber voice call in seconds (1-60).

Function: This command sets or changes the duration of the outgoing voice call made to the Amber server at the start of an Amber Alert. When an Amber Alert voice call is made, the line is held open for the period to allow recording or an incoming call to be established. If an incoming call is received, the outgoing call is dropped and the voice call can continue under the remote caller's control until it is terminated by the caller.

Example: **.SCT30**.

Default: 30 seconds

Amber Alert timer enabling

.ATE – Enable Amber Alert timer

Syntax: **.ATE**.

Function: This command enables the use of a timed period for Amber Alerts. When the unit signals the end of the timed period, the user can extend or cancel the alert, or else it will automatically escalate to a Red Alert.

Default: Amber Alert timer enabled.

.ATD – Disable Amber Alert timer

Syntax: **.ATD**.

Function: This command disables the use of a timed period for Amber Alerts. There is therefore no automatic escalation to a Red Alert after a set time.

Default: Amber Alert timer enabled.

Length of Amber Alert timer

.CAT – Set Amber Alert timer length

Syntax: **.CAT<time>**.

Where <time> is the duration of an Amber Alert in minutes (1-60).

Function: This command sets or changes the duration of the initial Amber Alert Timer period. The Amber Alert Timer period can be extended by the device user, if required, by the period defined in the [CRT](#) command.

Example: **.CAT45**.

Default: 30 minutes

Length of extension to amber timer

.CRT – Set Amber Alert timer extension length

Syntax: **.CRT<time>**.

Where <time> is the duration of an Amber Alert Timer extension in minutes (1-60).

Function: This command sets or changes the duration of the Amber Alert Timer extension period. At any time up to the end of the initial Amber Alert Timer period, the alert can be extended by the device user, if required, by the period defined in this command.

Example: .CRT15.

Default: 10 minutes

Amber Alert timer end vibration pattern

.SNE – Set Amber Alert timer end vibration pattern

Syntax: **.SNE<count>,<period>**.

Where <count> is the number of vibrations at the end of the Amber Alert period with a value between 1 and 9. <Period> is the duration of each vibration with a value of between 1 and 30 in multiples of 0.1s (corresponding to 0.1 – 3s accordingly).

Function: Set the number of vibrations and duration per vibration to indicate the end of the Amber Alert Timer period.

Example: .SNE5,10.

Default: Five, one second vibrations.

7 Dial-in

External dial-in capability

If the Identicom's number is dialled the unit will read the incoming number and check against a list of up to 3 configured numbers. If the incoming number matches any of these numbers the call will be answered. The call will then normally remain open until terminated at the calling end.

If an alert condition is triggered during an incoming call the unit will hang up the call and continue with the configured alert sequence.

.SDN – Authorised dial-in numbers

Syntax: **.SDN<number1>,<number2>,<number3>**.

Where the numbers <number1- 3> are authorised telephone numbers in international or local format, max 20 digits. Omitting one of these numbers will remove the authorised number stored in the corresponding location.

Example: .SDN+4477175175632,07717163426,. or .SDN,,.

Default: Disabled

8 Assistance for the visually impaired

Status check and Amber Alert prompt vibration

.ASE – Enable vibration prompts for status check and Amber Alert voice message

Syntax: **.ASE**.

Function: Enables vibration patterns when performing Status Checks. The device will vibrate 3 times upon activating the Status Check and will vibrate once at the end of the Status Check providing that neither the battery or network coverage is indicated red. This command also enables a single vibration prompt during the Amber Alert to prompt the user to leave the voice message (when the amber LEDs change from constant to flashing, indicating that the call is connected).

Default: Vibration prompts disabled.

.ASD – Disable vibration prompts for status check and Amber Alert voice message

Syntax: **.ASD**.

Function: Disables the vibration prompts for both the Status Check and Amber Alert Voice Message. No vibration pattern is activated when a Status Check is initiated nor when the battery strength and network coverage strength checks are complete. Also no vibration is initiated when the Amber Alert call is connected and the LEDs switch from amber constant to amber flashing.

Default: Vibration prompts disabled.

9 Signal status indication

Signal strength indication levels

.SNL – Set signal strength indication levels

Syntax: **.SNL<low>,<high>**.

Where <low> is the Red and <high> is the Amber trigger level.

Function: This command sets the signal level for network connection indication. The trigger level values must be between 0 and 30. The <low> value specifies the signal level below which a Red LED will indicate poor signal strength. The <high> value specifies the signal level below which an Amber LED will indicate average signal strength. If the low level is higher than the high level, the Amber condition will not operate.

Example: **.SNL8,12**.

Default: Low level 7 and high level 11.

10 Position reporting

Obtaining position data from Identicom

Format of returned GSM location data

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.

The SMS sent will have the following format:

.CPR<MCC>,<MNC1>,<LAC1>,<CELL1>,<RXLEVEL1>,<MNC2>,<LAC2>,<CELL2>,<RXLEVEL2>,...<MNC7>,<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 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
<RXLEVEL1>	Receive signal level in dBm of registered cell
<MNC2 – 7>	Network code of neighbouring cells
<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
<REPORT>	1 = Regular report, 0 = Red/Amber Alert report

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 and <RXLEVELn> will be reported as 0.

.SPR – Position reporting command

Syntax: **.SPR<red>,<redperiod>,<amber>,<regularperiod>,<phone>**.

This command is used to set up the way position reporting is carried out. Where:

<red>	1 = Send when Red Alert started, 0 = Do not send with Red Alert
<redperiod>	1 – 999, Reporting interval (in minutes) during Red Alert, 0 disables regular reporting in Red Alert
<amber>	1 = Send when Amber Alert started, 0 = Do not send with Amber Alert
<regularperiod>	1– 999, Regular reporting interval (in minutes) outside of an alert, 0 disables regular reporting
<phone>	destination number, international or local format, max 20 digits, leaving this field blank will cause the unit to use primary and/or secondary servers as configured.

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

Default: Disabled

11 Configuration commands

Reset to default configuration

.SDF – Set Default values

Syntax: **.SDF**.

Function: This command resets all the configuration settings to the following default values.

Command / parameter	Default
SVN – Voice server number	Disabled
SVN – Voice retry count	Disabled
SAN – Amber server number	Disabled
SAN – Amber retry count	Disabled
SPN – Primary server number	Disabled
SPN – Primary retry count	Disabled
SSN – Secondary server number	Disabled
SSN – Secondary retry count	Disabled
DTM – Set DTMF tones	Disabled
PA – Red Alert primary message	"Red Alert"
PC – Cancel Red Alert primary message	"Red Alert Cancelled"
RA – Red Alert secondary message	"Red Alert"
RC – Cancel Red Alert secondary message	"Red Alert Cancelled"
AA – Amber Alert message	"Amber Alert"
AC – Cancel Amber Alert message	"Amber Alert Cancelled"
AE – Amber Alert extended message	"Amber Alert Extended"
BA – Low Battery Alert message	"Low Battery"

Command / parameter	Default
CO – Charger On message	“Charger Connected”
CD – Charger Off message	“Charger Disconnected”
RRE – Red alert reporting destination	Primary & Secondary
RRE – Red alert cancelled reporting destination	Primary & Secondary
ARE – Amber alert reporting destination	Primary & Secondary
ARE – Amber alert cancelled reporting destination	Primary & Secondary
ARE – Amber alert extended reporting destination	Disabled
AXE/AXD – Amber extension messages	Disabled
BRE – Low battery reporting destination	Primary & Secondary
BRE – Charger connection reporting destination	Disabled
CTE/CTD – Charger text messages	Disabled
SRE – Status reporting	Disabled
SNR – Red Alert switch delay	1.5 secs
CME/CMD – Rip Alarm Alerts	Disabled
SRC – Red call time	1 minute
CRE/CRD – Red Alert termination	Disabled
SHB – Set heartbeat interval	Disabled
AME/AMD – Amber Alert call and text	Enabled
SCT – Amber call time	30 seconds
ATE/ATD – Amber timeout	Enabled
CAT – Amber Alert time	30 minutes
CRT – Amber Alert extension time	10 minutes
SNE – Amber Alert Timer timeout vibrations	5x1s vibrations
SDN – Authorised dial-in numbers	Disabled
ASE/ASD – Status Check & Amber Alert voice vibration prompts	Disabled
SNL – Set signal level	7,11
SPR – Position reporting	Disabled

Read configuration

.DCC – Download current configuration

Syntax: **.DCC<number>**.

Where <number> is optional and defines a telephone number where the current configuration message is to be sent. If <number> is omitted, the current configuration message is sent to both the Primary and Secondary server numbers as defined.

Function: This command sends a text message containing details of the Identicom’s current configuration to the telephone number defined by <number>, or to the Primary and Secondary server numbers. The details include the four telephone numbers preceded by their respective retry counts, the four time period parameters, indication of which configuration parameters have been enabled, the signal level values, and the Version number of the current Identicom software.

The configuration parameter indications have the following meanings, if present:

- P primary server number for receipt of SMS texts. P is then followed by the number of retries and the actual primary server number. Example: P3,07904692018
- S secondary server number for receipt of SMS texts. S is then followed by the number of retries and the actual primary server number. Example: S3,07904692018

V	voice server number for the Red Alert calls. V is then followed by the number of retries and the actual voice server number. Example: V3,07904692018
A	amber server number for receipt of the Amber Alert calls. A is then followed by the number of retries and the actual primary server number. Example: A3,07904692018
D	DTMF tone facility enabled, followed by the DTMF tones requested. Example: D123456
AT	Time in minutes of the initial Amber Alert timer.
RT	Time in minutes of the Amber Alert extended timer.
AC	Time in seconds for the initial Amber Alert call.
RC	Duration of the Red Alert call in minutes.
HB	Red Alert heartbeat facility and time between 'beats' in seconds; 0 if disabled.
S	Time required to press and hold the Red Alert button in multiples of 0.1s.
V	Number of vibrations and duration of each vibration, in multiples of 0.1s, at the end of the Amber Alert timer period.
A	Rip alarm function enabled
B	Amber Alert Timer extend enabled
C	Red Alert termination state enabled
D	Charger on/off text messages enabled
E	Amber Alert Timer period enabled
F	Amber messages disabled
G	Status Check & Amber Alert voice message prompt buzzer enabled
S	Threshold values for triggering red to amber and amber to green for signal strength LED readings.
T	Text message destinations (0=disabled, 1=primary server, 2=secondary server and 3=both primary and secondary servers). The message destinations are given in the following sequence:
<are1>	Amber alert message
<are2>	Amber alert cancelled message
<are2>	Amber alert extended message
<rre1>	Red alert message
<rre2>	Red alert cancelled message
<bre1>	Low battery message
<bre2>	Charger connected and disconnected messages
<sre1>	Status report
V	Identicom software version number.

If an option condition is not as listed above then that letter is omitted.

Note: If confirmation of configuration is required, place the DCC command at the end of the configuration string and the unit will return the set-up information.

.DEC – Download extended configuration

Syntax: **.DEC[#]<number>**.

This command initiates a configuration message to be sent from the Identicom, to the number defined by <number>, detailing the location data reporting settings. If .DEC is followed by a '#' character then the report will also include the authorised dial-in numbers.

The reply is given in the following format:

RP<1/0>,<redperiod>,AP<1/0>,<regperiod>,<number>,<dial-in1>,<dial-in2>,<dial-in3>,V<software version>

Where:

RP1	Report position when a Red Alert is started.
RP0	Red Alert position reporting disabled.
<redperiod>	1 – 999, reporting interval (in minutes) during a Red Alert; 0 if disabled.
AP1	Report position when an Amber Alert is started.
AP0	Amber alert position reporting disabled.
<regperiod>	1 -999, regular reporting interval (in minutes) outside of an alert; 0 if disabled.
<number>	Dedicated reporting number, # if no number set
<dial-in(n)>	Authorised dial-in numbers, # if no number set
V	Identicom software version number.

Example: **.DEC#01234568709**.