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# SS-06
# AUTO DIAL SYSTEM


## USER MANUAL

**Revision History**

| | | |
|---|---|---|
| Revision 01 | Original document | 2004 |
| Revision 02 | Cosmetic changes | 2007-12-06 |
| Revision 03 | Update GUI | 2009-06-29 |

**CONTENTS**

## 1. INTRODUCTION

The AUTO DIAL SYSTEM connects between the Customer Premises Equipment (CPE) and a telephone line. All pre-selected destination calls made by the user will be rerouted to a Call Back or Call Thru server. The AUTO DIAL SYSTEM will control the call process and this process will be transparent to the caller. The AUTO DIAL SYSTEM can accommodate 15 digits.

## 2. FEATURES

- Transparent to the user
- LED status indicators. Call in progress and DTMF received
- External power supply
- Easy to install (Plug and play)
- Programmable without disconnecting unit from the LINE

## 3. DESCRIPTION


3.1 Power Supply connector

The unit uses an external 9V AC power supply fitted with a 2.1 mm connector.

3.2 CPE and LINE connectors

RJ-11 connectors are used for connecting LINE and CPE.

3.3 LED indicators

**LED [1]**

- (Flashing) - Indicates call in progress.
- (Solid) - Idle state.

**LED [2]**

- **(**Flashing) - Indicates DTMF received.
- (Solid) - Connected through server

3.4 Programming connector

The unit is fitted with a 4 pin SIL header. An SS-OPI OPTO-COUPLED PROGRAMMER INTERFACE (Available from SSTelecoms) connects to the unit for programming purposes.


SS-OPI OPTO-COUPLED
PROGRAMMER INTERFACE

3.5 Call Back and Call Thru dialling

The AUTO DIAL SYSTEM can be programmed for handling either Call Back or Call Thru.

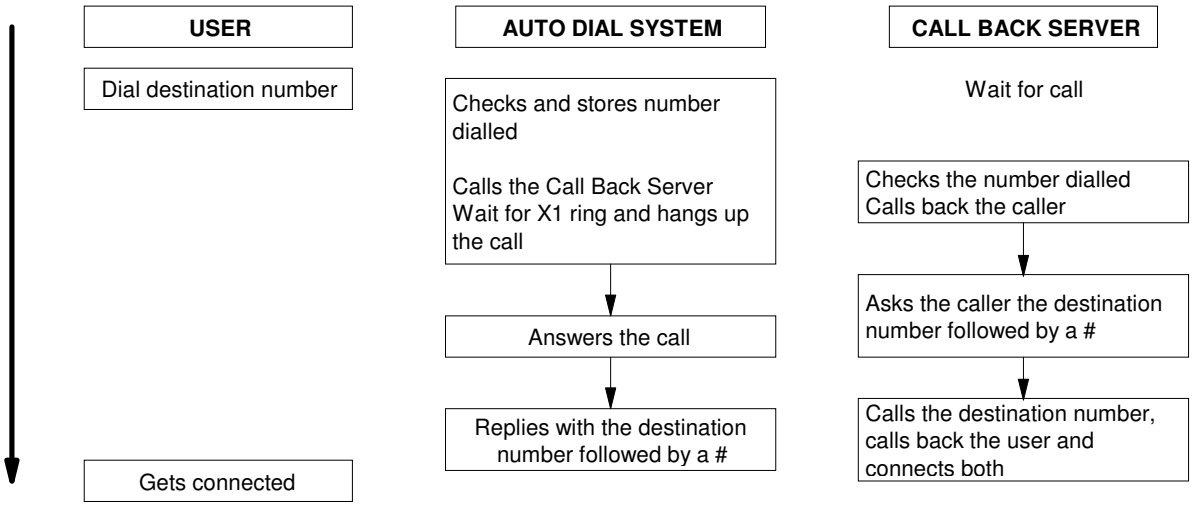
3.5.1 Call Back

3.5.1.1 The caller phones an international destination.

3.5.1.2 The AUTO DIAL SYSTEM phones the Call Back server. It waits for a ringing tone from the server and hangs up the call. The caller is therefore charged the minimum call fee from the local phone company.

3.5.1.3 The Call Back Server phones back within a few seconds. The AUTO DIAL SYSTEM answers the call and replies with the destination number.

3.5.1.4 The Call Back Server connects the user to the required destination.

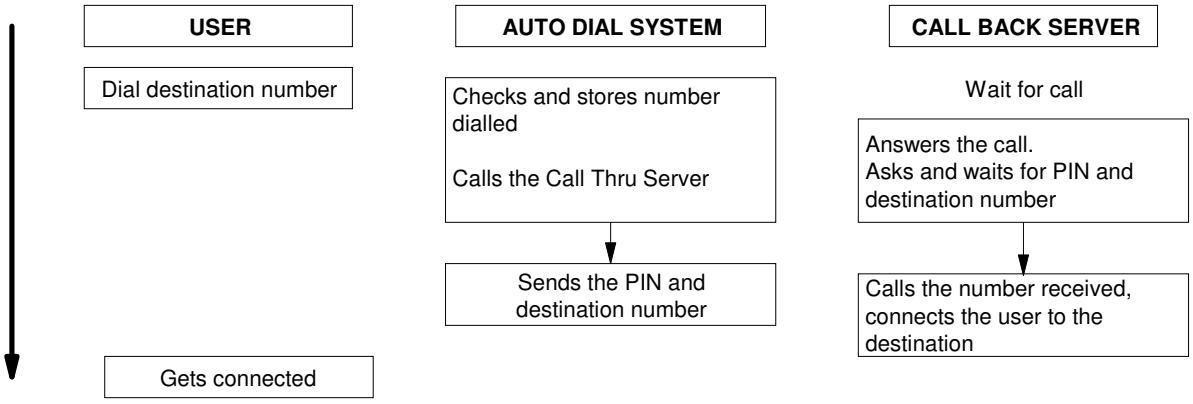


3.5.2 Call Thru

3.5.2.1 The caller phones an international number.

3.5.2.2 The AUTO DIAL SYSTEM phones the toll free Call Thru server. It sends the needed PIN code and destination number

3.5.2.3 The Server connects the user to the required destination.




## 4 PROGRAMMING

4.1 Connect power to the unit.

4.2 Connect the SS-OPI OPTO-COUPLED PROGRAMM INTERFACE to the 4 pin programming connector.

Programming connector →


Note that the REV LED will light up if the connector is connected the wrong way. When this happens, unplug the connector turn it 180 degrees and connect it again.

The PWR LED will light up if connected correctly

4.3 Connect the PC to the SS-OPI using a serial cable.

4.4 Run the AutoDialProg file

4.5 Refer to the AutoDialler Programmer notes for setting up the unit. (Section 5)

4.6 Remove the OPTO-COUPLER INTERFACE connector.

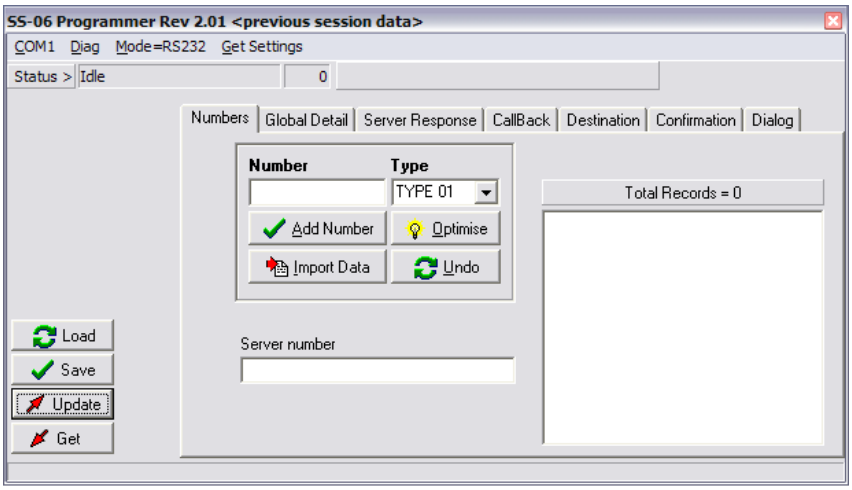
## 5 INSTALLATION

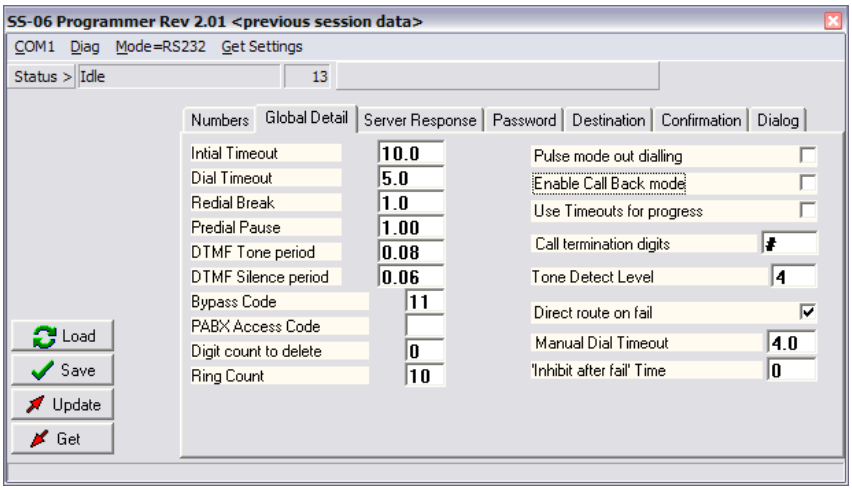
5.1 Connect the Customer Premises Equipment to the CPE socket.

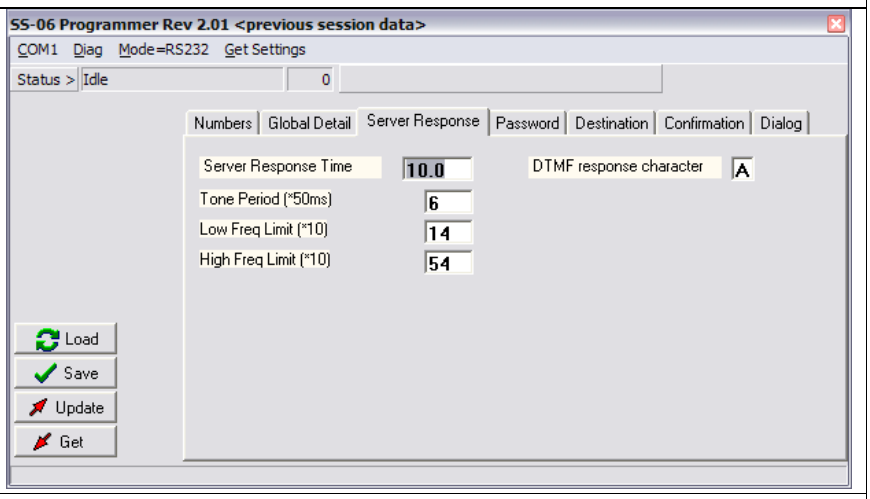
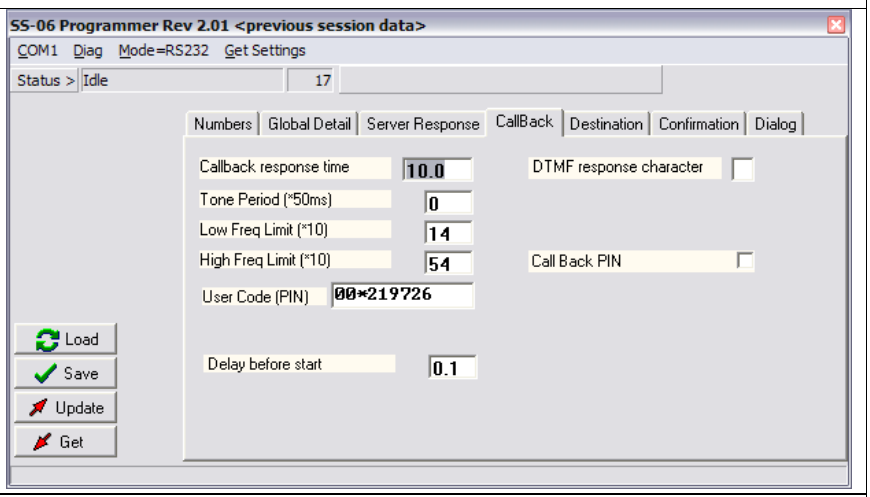
5.2 Connect the Line to the LINE socket.

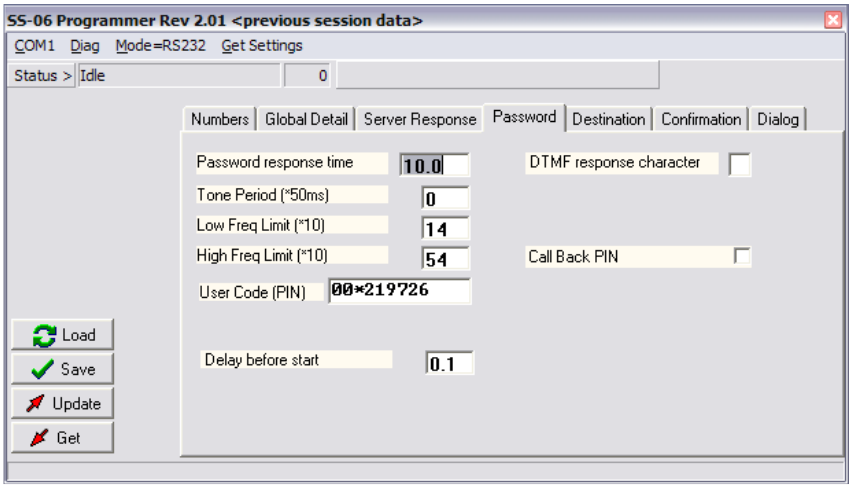
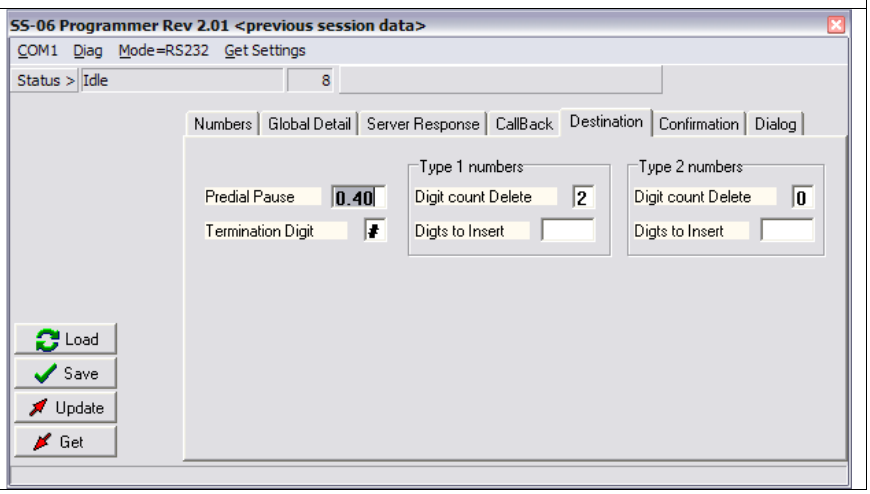
5.3 Connect power to the unit at the 9V AC.

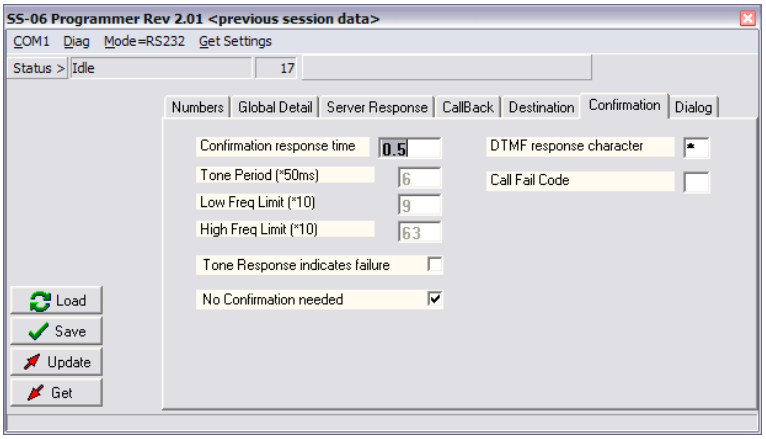
## 6 AUTODIALLER PROGRAMMER NOTES

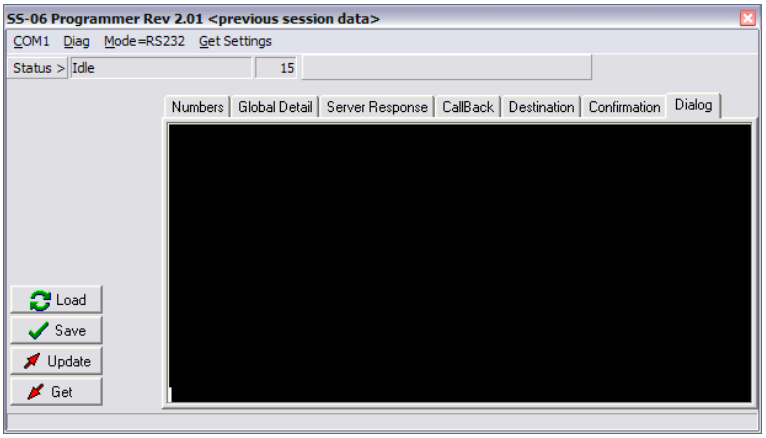
| NO. | Description | Detail |
|---|---|---|
| **6.1** | **Numbers and General Functions** |  |
| 6.1.1 | **COM** | Changes the COM port used for the OPTO INTERFACE |
| 6.1.2 | **Diag** | Selects if the data received needs to be displayed or not |
| 6.1.3 | **Mode = RS232** | Use Mode=RS232 for programming the AUTO DIALLER |
| 6.1.4 | **Load** | Loads an initialization file from the PC |
| 6.1.5 | **Save** | Saves the setup initialization data to the PC |
| 6.1.6 | **Update** | Updates the AUTO DIALER with the setup data |
| 6.1.7 | **Get** | Click on **Get Settings** to retrieve setup data from the AUTO DIALLER |
| 6.1.8 | **Server number** | Enter the number for the Call Thru / Call Back server in this text box |
| 6.1.9 | **Number** | Enter the pre-selected country code in the **Number** text box |
| 6.1.10 | **Type** | Choose a type for the pre-selected country code number or select BARRED for barring the pre-selected country code number |
| 6.1.11 | **Add/Delete** | Click on **Add** to add the number to the list or **Delete** to delete it from the list. Note: Right click on the pre-selected country code number to delete. |
| 6.1.12 | **Optimise** | Deletes all the duplicate number ranges in the number list |
| 6.1.13 | **Undo** | All the number that were deleted by optimise and be retrieved |
| 6.1.14 | **Import Data** | The number list can be imported via n text file. The format for the file must be number, type. E.g. 00FFFFFFFFFFFF,TYPE 01 |

| NO. | Description | Detail |
|---|---|---|
| 6.2 | Global Detail |  |
| 6.2.1 | Initial Timeout | The time that the auto dialler waits for the 1st digit before releasing the line |
| 6.2.2 | Dial Timeout | The timeout after dialling has commenced. This timer is reset with each digit |
| 6.2.3 | Redial Break | Duration of the Line Break used to restart dialling if a number has to be redialled |
| 6.2.4 | Predial Pause | Time after looping line before dialling |
| 6.2.5 | DTMF Tone Period | DTMF tone period, normally 0.1 second |
| 6.2.6 | DTMF Silence Period | InterDigitPeriod normally 0.1 second |
| 6.2.7 | Bypass Code | 2 digit prefix that the user may dial to bypass the auto dialler function |
| 6.2.8 | PABX Access Code | PSTN access digits if behind a PABX, up to 2 allowed recognizes '0-9' and '#'. Leave blank for a direct line |
| 6.2.9 | Digit Count to Delete | Number of access digits to delete. Use this when behind a PABX |
| 6.2.10 | Ring Count | Number of ½ cycles of ring needed to recognize an incoming call |
| 6.2.11 | Pulse Mode Dialling | Set the unit to dial out in pulse mode |
| 6.2.12 | Enable Call Back Mode | Enables call back operation |
| 6.2.13 | Call Termination Digits | One or two DTMF digits that indicate to the server that the call has been terminated – Optional |
| 6.2.14 | Tone Detect Level | An audio threshold level for tone detection. Use 4 normally and higher number if false tone detection occurs |
| 6.2.15 | Direct Route on Fail | Allows direct call if the server does not answer within the 'Server Timeout' time |
| 6.2.16 | Manual Dial Timeout | Delay after dialling a NON routing number before the dialler releases the line. This timer is reset with each digit |
| 6.2.17 | "Inhibit after Fail" Time | The dialler will be inhibited for the set number of minutes |

| NO. | Description | Detail |
|---|---|---|
| **6.3** | **Server Response** |  |
| 6.3.1 | Server Response Time | Auto dialler server response time. Time allowed for the server to respond before possible direct redial |
| 6.3.2 | Tone Period (*50ms) | Number of consecutive counts of 50 milliseconds for which the tone must be valid |
| 6.3.3 | Low Freq Limit (*10) | Low frequency limit for tone detection |
| 6.3.4 | High Freq Limit (*10) | High frequency limit for tone detection |
| 6.3.5 | DTMF Response Character | DTMF tones can used to validate that the server has answered |
| **6.4** | **Call Back** |  |
| 6.4.1 | Call back Response Time | Time that the dialler will wait for the server to Call Back |
| 6.4.2 | Tone Period (*50ms) | Number of consecutive counts of 50 milliseconds for which the tone must be valid |
| 6.4.3 | Low Freq Limit (*10) | Low frequency limit for tone detection |
| 6.4.4 | High Freq Limit (*10) | High frequency limit for tone detection |
| 6.4.5 | User Code (PIN) | Enter the User Code (PIN) |

| NO. | Description | Detail |
|---|---|---|
| 6.4.6 | Password termination character | Terminator DTMF code for password entry. Default = '#' |
| 6.4.7 | DTMF response character | DTMF codes can be used to validate that the server is ready for the destination number |
| 6.4.8 | Call back PIN | Allows dialler to submit a user Code (PIN) |
| **6.5** | **Password** |  |
| 6.5.1 | Password response time | Time that the dialler will wait for the server to acknowledge the user code (PIN). Set to 0 if the destination to be dialled is to be without any pause |
| 6.5.2 | Tone Period (*50ms) | Number of consecutive counts of 50 milliseconds for which the tone must be valid |
| 6.5.3 | Low Freq Limit (*10) | Low frequency limit for tone detection |
| 6.5.4 | High Freq Limit (*10) | High frequency limit for tone detection |
| 6.5.5 | User Code (PIN) | Enter the User Code (PIN) |
| 6.5.6 | Password termination character | Terminator DTMF code for password entry. Default = '#' |
| 6.5.7 | DTMF response character | DTMF codes can be used to validate that the server is ready for the destination number |
| 6.5.8 | Call back PIN | Only applicable in call back mode |
| **6.6** | **Destination** |  |

| NO. | Description | Detail |
|---|---|---|
| 6.6.1 | Predial Pause | Delay after PIN code acknowledged before sending the destination number |
| 6.6.2 | Termination Digit | Terminator DTMF code for destination number, default ='#' |
| 6.6.3 | Digit Count Delete | Digits to delete from Type 1 or Type 2 numbers |
| 6.6.4 | Digits to Insert | Digits to insert in front of Type 1 or Type 2 numbers |
| **6.7** | **Confirmation** |  |
| 6.7.1 | Confirmation response time | Time that the dialler waits to validate the call or release the line |
| 6.7.2 | Tone Period (*50ms) | Number of consecutive counts of 50 milliseconds for which the tone must be valid |
| 6.7.3 | Low Freq Limit (*10) | Low frequency limit for tone detection |
| 6.7.4 | High Freq Limit (*10) | High frequency limit for tone detection |
| 6.7.5 | Tone Response indicates failure | A tone response will pass or save a call depending on this setting |
| 6.7.6 | No Confirmation needed | If ticked the dialler will ignore timeouts or tones – The DTMF will always be functional |
| 6.7.7 | DTMF response character | Success code from the server - it is always active when set. |
| 6.7.8 | Call Fail Code | Failure code from the server - it is always active when set. |

| NO. | Description | Detail |
|---|---|---|
| 6.8 | **Dialog**<br>Dialler responses can be viewed here. Cut/Copy and Paste can be used |  |

## 7. TECHNICAL SPECIFICATIONS

| | |
|---|---|
| **Housing** | Black plastic 125 x 68 x 29 mm |
| LED indicators | [1] - Yellow<br>▪ (Flashing) - Indicates call in progress.<br>▪ (Solid) - Idle state.<br><br>[2] – Yellow<br>▪ **(**Flashing) - Indicates DTMF received.<br>▪ (Solid) - Connected through server |
| Connectors | LINE: RJ11 6*4<br>CPE: RJ11 6*4<br>9V AC input connector 2.1 mm power socket |
| Setup storage | Yes, Non-volatile |
| Required voltage | 9V AC |
| Current Firmware | Rev;3.1 |
| Current Tool Firmware | Rev:2.01 |

## 8. CONTACT DETAILS

**Office:**

23 Botha Avenue
Lyttelton Manor
Pretoria, Gauteng
South Africa

Tel: +27 12 664 4644
Fax: +27 86 614 5625 E-mail: info@sstelecoms.com

**Postal address:**
Postnet Suite 48
Private Bag x 1015
Lyttelton, 0140
Pretoria, Gauteng

**South Africa**

Sales Support: E-mail: sales@sstelecoms.com

**United Kingdom** **E-**mail: uksales@sstelecoms.com

**Technical Support:** E-mail: support@sstelecoms.com