



# SED-VTI

January 2019, V023

## Virtual Telephone Interface Installation & User Manual

**WARNING: PLEASE READ  
INSTALLATION INSTRUCTIONS  
FIRST**

### **PRODUCT WARRANTY**

This product is covered by a 12 month, back to base warranty from date of purchase and proof of purchase should be supplied. The warranty does not cover damage that has resulted from the improper installation or improper use of this product. The warranty does not cover lightning damage, product misuse, electrical surges or acts of God.

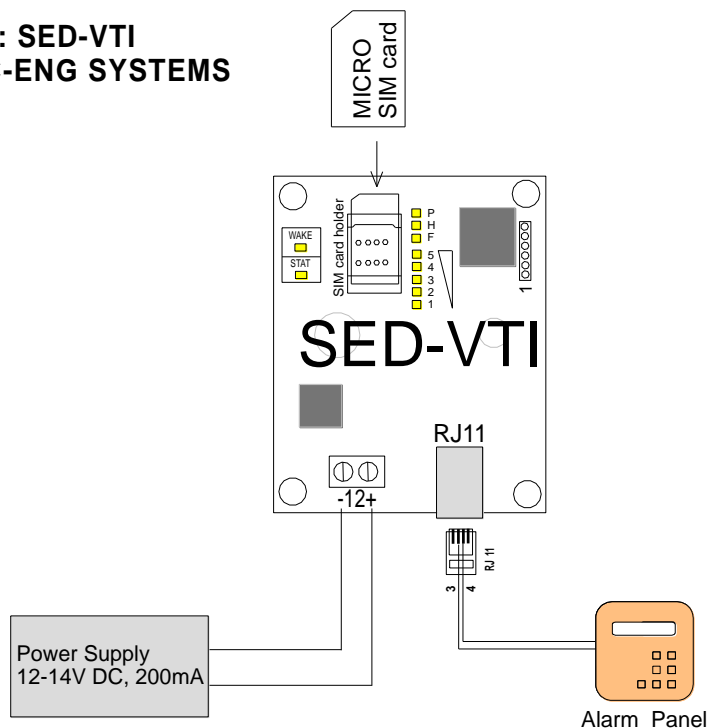
### **LIMITATION OF LIABILITY**

Sec-Eng Systems Pty Ltd does not accept any liability for the loss or damage to property or persons in relation to goods supplied. This disclaimer is only limited to the warranty of the goods supplied and the intended use.

**NOTE: THIS MANUAL IS SUBJECT TO COPYRIGHT**

## Overview Diagram

MODEL: SED-VTI  
BY SEC-ENG SYSTEMS



## Wiring and Termination

- +12- Power in (12V DC, 200mA)
- RJ11 Line out (Connect to alarm panel)

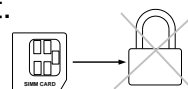
## Checking SIM Card Operation

The unit requires a MICRO size SIM card to operate.

Before fitting into the SED-VTI ensure that the SIM is active and not pin locked.

This may require the SIM to be tested in a mobile phone first.

If the SIM PIN request is set, it must be disabled (using a mobile phone) before it can be used in the SED-VTI.



**Warning:** Ensure you have the correct PIN number. Entering the wrong PIN will PUK lock the SIM which will then need to be returned to the vendor for reprogramming.

## **WARNING**

- The SED-VTI is only to be installed by an authorised service person.
- The unit requires a power supply, 12-14V DC, 200mA.
- Ensure the unit is mounted in a safe & secure location, with the antenna in an **UPRIGHT** position.
- When installing in exposed areas, ensure that the antenna is covered in 20mm conduit to prevent tampering.

**The above points should be taken seriously. Failing to abide by these may result in the product not performing as designed.**

## **Installation**

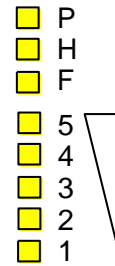
1. Install the unit at least 1 meter away from the alarm panel.
2. Fit the Sec-Eng Systems supplied antenna.
3. Fit SIM card. See page 2 for instruction on SIM type and checks.
4. Power up the unit with 12-14V DC from alarm panel.
5. Once the system is ready, the P LED should be on constant (not flashing) and LEDs 1-5 indicating the signal strength (minimum of 2 bars is required).
6. Connect the phone lead from the panel to the RJ connector on the SED-VTI.
7. Check the alarm panel is programmed with the phone number to dial (SED-VTI only provides the phone line and doesn't require any programming).

## **Testing**

1. Plug a test telephone into the RJ connector of the SED-VTI and ensure you can make a phone call (dial the receiver number).
2. Remove the test phone and connect the panel to the RJ port.
3. Trigger the panel to dial out. The H LED should turn on when the line is being used.
4. When phone call is completed the H LED should turn off.

### LED Indication

1-5	Signal strength
F	System fault
H	Hook indicator
P	Power status
WAKE	Modem status
STAT	Network connection



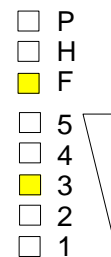
### Fault Guide

F	ON = System fault (see below)
H	ON = Line off hook
P	ON (steady) = System ready Flashing (fast) = Powering up / Resetting
WAKE	ON = Modem on
STAT	Flashing (slow) = Network registered ON / OFF (steady) = No network registration

All LEDs flashing = Low voltage

The F LED will indicate a system fault with LEDs 1-5 providing information on the type of fault being reported.

F + 2	No SIM card
F + 3	No Network connection
F + 5	Network connection issue



**Please Note: If the SED-VTI cannot connect to the network after a number of attempts it will reboot and reset the LEDs.**

When system is not connecting to network (F+3) check the following:

- SIM card is active, not PIN locked
- SIM card is fitted correctly (Chip side facing down, notched end toward outside of board)
- Antenna is fitted correctly
- Good 3G mobile signal is available at location

For further assistance contact Sec-Eng Systems technical support.

## Programming (Optional)

The SED-VTI is designed as a plug and play system and does not require any programming to operate, however there are some addition features which can be set up.

To view or change any of the fields above SMS commands can be sent from a mobile phone to the number of the SIM card fitted in the SED-VTI.



Function Number	Function Description	Default
<b>Communications setup</b>		
01	Client code (For SED-VTI self test only)	0000
02	Primary Receiver (For SED-VTI self test only)	nil
03	Secondary Receiver (For SED-VTI self test only)	nil
<b>System Timers</b>		
04	GSM on-board dialer test time	24hrs
<b>PIN Code Setup</b>		
19	Master Code used for locking device via SMS	nil
<b>System Features</b>		
20	GPRS CID RX convertor	0
21	GPRS CID TX convertor	0
32	Internal CID RX kiss off time 1-9 (sec)	2
33	Digital volume RX adjustment 1-9	5
34	Digital volume TX adjustment 1-9	5
42	Voice call duration limit	4min

## SMS Report Commands

By sending the following ? commands the SED-VTI will respond via SMS with the information requested.

?S = Request current system status

?P = Request program setup

?T = Force a test call to the receiver number (Functions 01, 02, 03 and 04 must be set)

## SMS Programming Commands

Set or change any of the programmable functions by sending a SMS in the following format.

**\*Function (new value)#**

Example: To set function 01 to 4321, the SMS command is **\*014321#**

## Self Test Setup

The SED-VTI has a built in self test dialer which can send periodic Contact ID reports to a receiver. This is an optional feature that does not need to be set up as the alarm panel will normally do this as well.

When set, the SED-VTI will send a general alarm (E140 sector 253) on a timed basis set by function 4.

To enable this feature, the following functions need to be set up.

01 = Client code

02 = Primary number

03 = Secondary number

04 = Test time in hours

**TO DEFAULT THE SED-VTI SEND 991234**

## Technical Specifications

Dimensions:	100 x 80 x 20mm (Housing)
SIM Required:	MICRO size, Voice and SMS
Power input:	12-14V DC, 150mA
Line voltage:	48V
POTS interface:	RJ11
Antenna connector:	SMA Female
Antenna supplied:	3dBi Omni directional
Modem:	UBLOX Lisa-U200
Network Connectivity:	Penta-Band GSM & 3G 800/850/900/1700/1900/2100MHz

## Certification

PTCRB, GCF, R&TTE & CE (Europe), FCC (US), IC (Canada), Giteki (Japan), A-tick & RCM (Australia), IDA (Singapore), Anatel (Brazil), NCC (Taiwan), CCC (China), KCC (S. Korea), AT&T (USA), DoCoMo, Softbank (Japan), Telstra (Australia), Vodafone (All Vodafone networks), Telecom NZ, Rogers, Bell Mobility, Telus (Canada), SKT (S. Korea), ICASA (S. Africa), AT&T (US).

## ACMA - RCM Certified



## TECHNICAL SUPPORT

Contact Sec-Eng Systems for technical support

Phone 02-9524 9952

Mon – Fri 9.00AM to 5.00PM AEST

[WWW.SECENG.COM.AU](http://WWW.SECENG.COM.AU)