

Flightcell SVS Operator Manual



Section 1: Revisions & Approvals

Manual Revision	Effective Date	Approved By	Reasons for Change
1.0	30 July 2022	James Mace	New issue for product revision 1.5 and up
1.1	30 August 2022	Brodie Hemmings-Sykes	Removed reference to obsolete document
1.2	21 September 2022	James Mace	Typographical fixes

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Contents

Section 1: Revisions & Approvals.....	2
Contents	4
Section 2: Introduction	6
Overview of SVS Functions.....	6
Iridium Safety Voice System Calling.....	6
Communications Channel Configurations.....	6
Section 3: Integrated User Interface	7
Keypad.....	7
Short and Long Keypresses	7
Key Beeps	8
Keypad Single-tap and Multi-tap Modes.....	8
SVS Keypad Table	9
SVS Screens.....	10
Common Screen Elements.....	10
Communications Channel Status	11
Base and Popup Screen Types	12
Screen Map.....	13
User Interface Lists	14
Section 4: Base Screens	16
Home Screen	16
Overview	16
Main Screen Region.....	16
Home Screen Key Functions.....	16
Dialling Screens	17
Primary and Secondary Phonebook Screens	17
Key Functions	18
Recents Screen.....	18
Manual Dial Screen.....	19
Menu Screen.....	20
Overview	20
EMCON Screen	21
Overview	21
Section 5: Popup Screens.....	23
Primary/Secondary Communications Channel Call Screens	23
Dialling Screen.....	23
In Call Screen.....	24
Incoming Call Screen	25

Errors/Warnings Screens	26
System Information Screens	29
Safety Voice Priority Select Screen	29
Contact Details Screen.....	30
Active Errors list Screen	30
Modem One and Two diagnostics Screens	32
Discrete Input diagnostics Screen	33
System Information diagnostics Screen.....	34
Section 6: Simultaneous Calls.....	36
Initiating a second call	36
Switching between channels while two calls are active	36
Reverting to first call after initiating but not completing a second call.....	36
Section 7: Safety Voice Priority and Pre-emption	37
Incoming call pre-emption	37
Safety Voice Call Camp Awareness	37
Section 8: Documentation and Information.....	38
Contact Details.....	38
Warranty	38

Section 2: Introduction

Thank you for selecting and purchasing a quality Flightcell product.

The Flightcell SVS provides dual voice communication over the Iridium satellite network, optionally using the Iridium Safety Voice System.

This manual has been prepared to guide you in the operation of your Flightcell SVS. Please read this manual carefully before using your SVS for the first time. Keep this manual in a safe place and use it as your first point of reference.

The purpose of this manual is to help users operate their SVS. Refer to the SVS Installation Manual for information on installation and configuration.

Overview of SVS Functions

The Flightcell SVS is a powerful communications system that uses the Iridium satellite network. The SVS:

- » Provides voice calling over the Iridium satellite network
 - » Air Traffic communications over the Iridium Safety Voice Service
 - » Voice calls to any phone number in the world over the standard Iridium voice service
- » Interfaces to the aircraft intercom system, connecting crew audio to the satellite phone network.

Iridium Safety Voice System Calling

The SVS provides the ability to make and receive calls over the Iridium Safety Voice service, for use with air traffic control systems, replacing high-frequency (HF) radio systems with secure satellite-based long-range communications.

Communications Channel Configurations

The SVS is fitted with either one or two Iridium communications channels, referred to as primary and secondary channels respectively, either of which can be configured as a standard Iridium satellite voice functionality or for Safety Voice Services. Refer to the SVS Installation Manual for details.

Section 3: Integrated User Interface

The SVS is operated from its integrated User Interface (UI).

Keypad

The SVS uses a multi-functional keypad which provides:

- » Entry of numerical characters plus '#' character.
- » Entry of alphabetical, punctuation and space characters.
- » User Interface navigation with up, down, top, bottom and back keys.
- » Function Keys F1 to F4 which operate as soft keys for screen specific functions.
- » Power key for powering the SVS on and off.



Short and Long Keypresses

The SVS uses two keypress types, short and a long key press:

- » Short keypress when key is pressed momentarily and released after less than one second.
- » Long keypress when key is released after more than one second.

Short key presses are mainly used but there are special cases where a long press is used. The Operator Manual assumes all key presses are short unless otherwise stated.

Key Beeps

The SVS provides key press feedback by playing the following audio tones on the release of a key:

- » Valid short press: short high tone (450Hz for 90ms)
- » Valid long press: long high tone (450Hz for 500ms)
- » Invalid short or long press: short low tone (300Hz for 90ms)

An invalid tone is used to provide feedback that a requested action cannot be performed.

















Keypad Single-tap and Multi-tap Modes

The SVS has two keypad modes, single-tap and multi-tap, which are assigned on a screen-by-screen basis.

- » Single-tap keys are used for basic functionality including call related functions, number entry and navigation around the user interface.
- » Multi-tap keys are a subset of the keypad and are used for searching the phonebook for a contact by name. Alphabetical characters are selected using successive presses of a key which iterates through the associated characters, wrapping back to the first after the last one in the table. Characters are entered when either:
 - » No keypresses are made for one second.
 - » A different key is pressed (allowing text strings to be entered at a faster rate).

Keys 0-9 support multi-tap mode.

SVS Keypad Table

Key	Single-tap functions		Multi-tap functions						
	Short Press	Long Press	Character Entry - Number of Short Press Taps					Short Press Function	Long Press Function
			1	2	3	4	5		
	Softkey function (screen specific)								
									
									
									
	'1' entry	Toggle channel selection	' , '	' . '	' @ '	' : '	' 1 '		Toggle channel selection
	'2' entry, list navigate up		' A '	' B '	' C '	' 2 '			
	'3' entry, list navigate to top		' D '	' E '	' F '	' 3 '			
	'4' entry		' G '	' H '	' I '	' 4 '			
	'5' entry		' J '	' K '	' L '	' 5 '			
	'6' entry		' M '	' N '	' O '	' 6 '			
	'7' entry		' P '	' Q '	' R '	' S '	' 7 '		
	'8' entry, list navigate down		' T '	' U '	' V '	' 8 '			
	'9' entry, list navigate to bottom		' W '	' X '	' Y '	' Z '	' 9 '		
	'0' entry, MENU		' + ' entry	' ' '	' + '	' 0 '			
	'*' entry, navigate back, delete last character		Clear text entry						Delete last character
	'#' entry, enter/execute, Power up	Power down							

SVS Screens

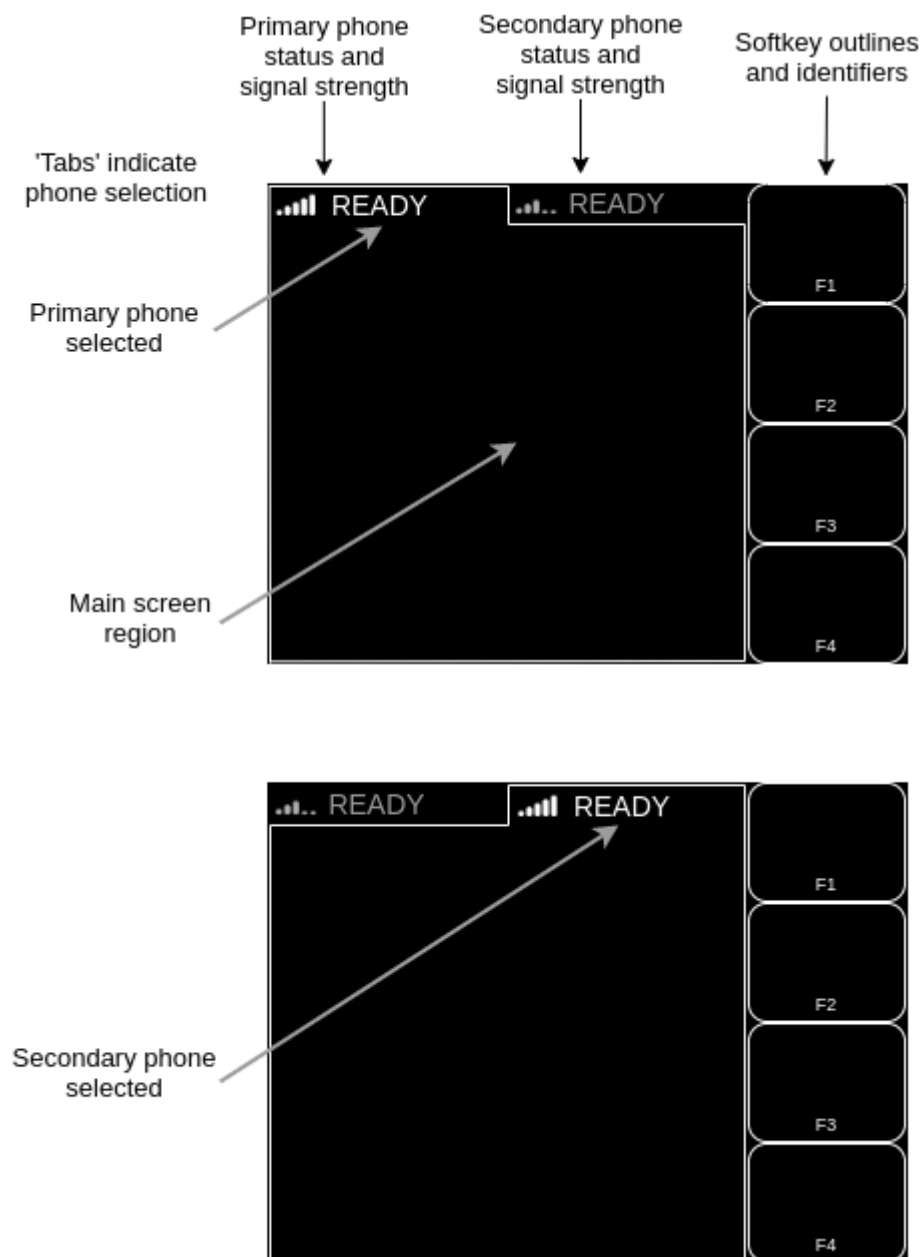
The SVS LCD has several screens to display information to users.

Common Screen Elements

Elements common to all screens are:

- » Communication Channel status.
- » Communication Channel signal strength.
- » Communication Channel selection and de-selection using tabs.
- » Softkey outlines and identifiers.
- » Error/warnings icon that displays if an error or warning is present.

The remaining Main Screen Region displays screen specific content.



Error / warnings indicator



Communications Channel Status

Status	Description
READY	The communications channel is idle or being initialised at power up
DIAL...	The communications channel is dialling, a connection has not yet been established
INC...	The communications channel has an incoming call
IN CALL	The communications channel is in a call
ERROR	The communications channel has an error and is inoperable
EMCON	The communications channel is disabled due to emission control mode being activated
NO SIG	No signal

Communications channel signal strength

Signal strength is shown between zero and five bars. When initialising at power up the signal strength is shown as zero bars.

Communications channel selection

When the SVS is configured with two communications channels the user interface shows two tabs, with the tab for the selected channel in bold and the de-selected tab greyed out.

Softkey outlines

Softkey outlines are displayed which contain screen specific icons and/or text indicating what function the associated function key will perform. A blank key indicates no function available.

Softkey Identifiers

Softkey identifiers 'F1' to 'F4' provide a label for the function key mapping.

Error/warnings icon

An Error/Warnings icon is displayed in the top left region of the display when an error or warning is present, see Errors/Warnings Screens for details.

Common screen keypress functions

Key	Function
MODE long press	Toggle communications channel selection (when SVS is configured with two channels)
POWER long press	Power on or off the SVS

Base and Popup Screen Types

The SVS has two types of screens:

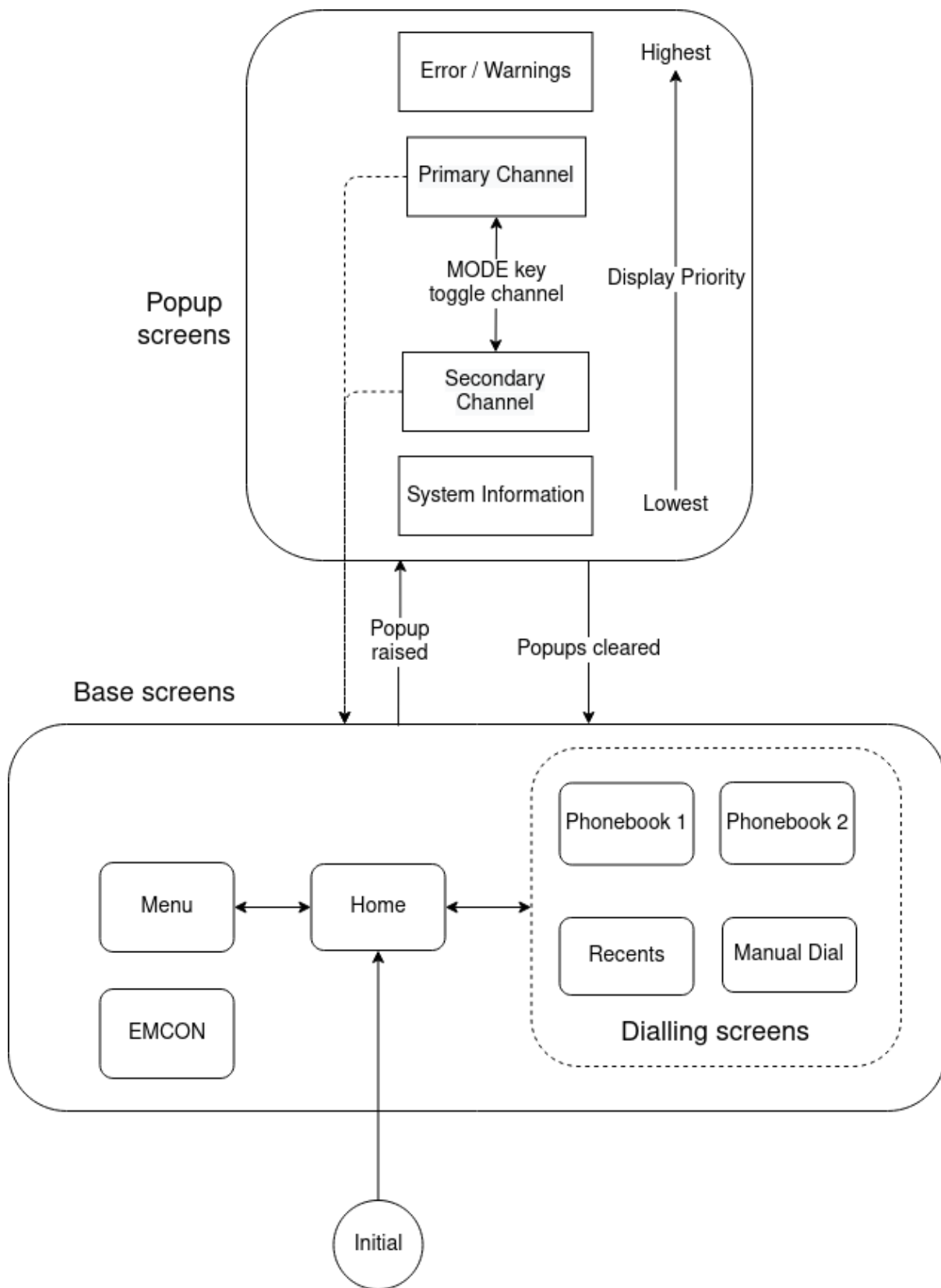
- » 'Base' screens of which only one can be active at a time, including:
 - » Home screen (a user interface 'hub')
 - » Screens to initiate calls.
 - » A menu screen to access information and diagnostics screens.
 - » An EMCON screen which is displayed when the SVS is disabled.
- » 'Popup' screens, which are non-persistent screens that pop up over the base screen and are used for:
 - » Managing calls in progress
 - » Displaying system errors and warnings
 - » Displaying general information

Multiple popup screens may be active at any one time, in which case a prioritisation scheme determines which to display on top.

Popup screens can be cleared by the operator.

The SVS starts in the home screen at power up and changes to other screens based on events (e.g. incoming calls) and user actions (e.g. key presses) as summarised in the following screen map:

Screen Map



Popup screen priorities

The popup screen priority is shown in the table below.

The call screens are specific to the currently selected communications channel and can be toggled between the primary and secondary channels to switch between call contexts.

Popup display priorities (highest to lowest)	Popup screen
Error/Warnings	Error/Warning
Selected Communications Channel Call Screens	Selected communications channel in call
	Selected communications channel incoming call
	Selected communications channel dialling
System Information	Contact details
	Safety voice priority select
	Active errors list
	Primary channel diagnostics
	Secondary channel diagnostics
	Discrete input diagnostics
	System information diagnostics

User Interface Lists

The SVS uses lists to facilitate browsing and selecting and executing items in phonebooks and menus.

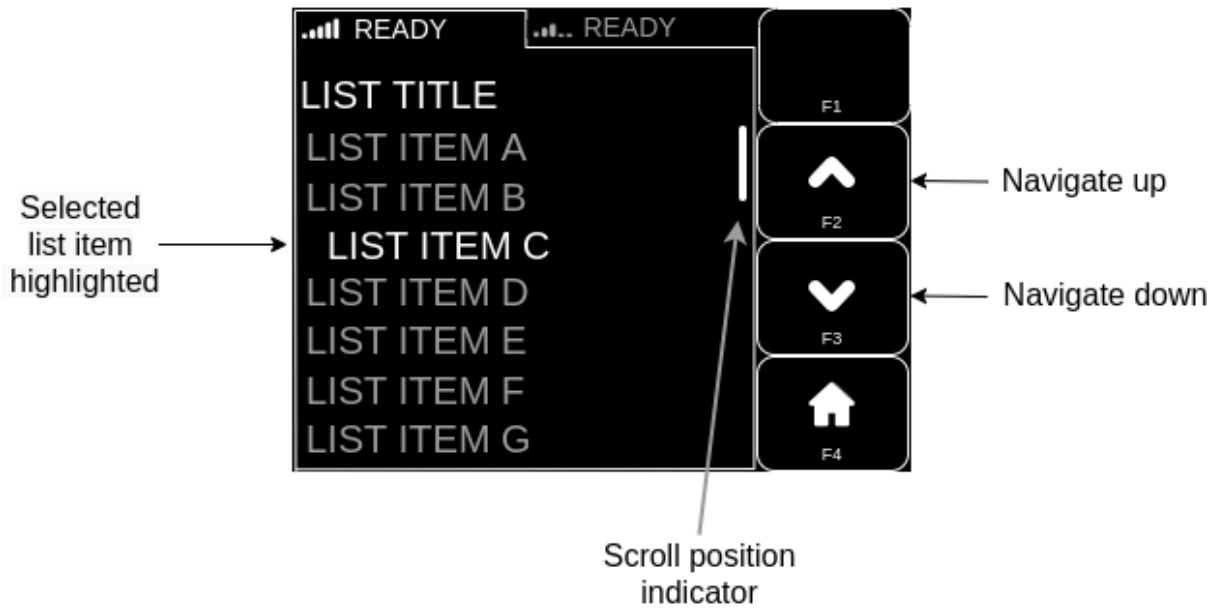
Lists are displayed in the main screen region.

Up and down keys are used to navigate through the list items with the list wrapping at the top and the bottom.

The selected list item is highlighted and indented, while non-selected list items are greyed out. The selected item can be executed with a function specific to the list.

If the list contains more items than will fit on one screen a scroll indicator is displayed showing the relative length of the list and the selected position through the list.

On exiting the list the selected item is stored, then restored on returning to the list, and cleared when the SVS is powered off.



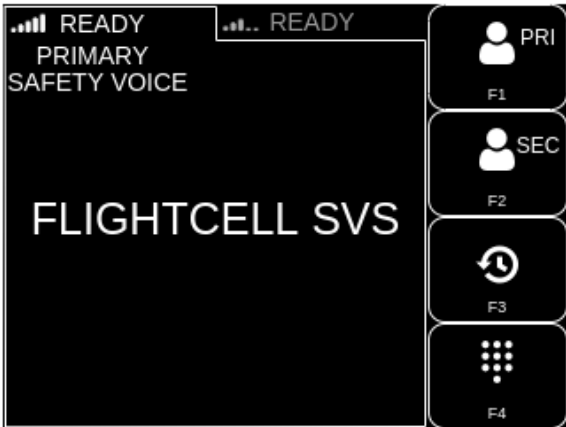
Section 4: Base Screens

Base screens use single-tap keypad mode unless otherwise stated.

Home Screen

Overview

The Home Screen is the hub of the user interface, and is the initial screen displayed when the SVS is powered up. It provides access to screens for initiating outgoing calls, and to the Menu screen.



Main Screen Region

The main screen region displays the selected communications channel tab, and the 'PRIMARY' or 'SECONDARY' and 'SAFETY VOICE' or 'SATPHONE' configurations.

Home Screen Key Functions

Key	Function
F1	Change to Primary Phonebook screen
F2	Change to Secondary Phonebook screen
F3	Change to Recents screen
F4	Change to Manual Dial screen
MODE long press	Toggle communications channel selection (channel function description changes accordingly)
MENU	Change to Menu Screen

Dialling Screens

Outgoing calls from the SVS are initiated from dialling screens, with the following methods to enter the destination number and call priority where appropriate:

- » Contact selection made from a phonebook screen, where the destination is selected from a phonebook contacts list.
- » Destination selected from a Recents screen, from a list of the ten most recent calls.
- » Manual dial, where the destination number is entered manually.

Primary and Secondary Phonebook Screens

Overview

The SVS contains primary and secondary phonebooks, which each contain up to 200 contacts, in alphabetical order.

The phonebook screens allow:

- » Navigating and searching phonebooks.
- » Viewing of contact details for the selected entry.
- » Initiating calls to contacts using any available channel.
- » A Safety Voice priority popup screen to be raised for Safety Voice enabled channels.
- » Keypad mode

The primary and secondary phonebook screens use multi-tap keypad mode to search and filter the contacts.

Once text is entered, the list is progressively filtered.



Key Functions

Key	Function
F1	Dial selected contact using selected communications channel
F1 long press	Raise Safety Voice priority popup screen if enabled
F2	Navigate up the contacts list
F3	Navigate down the contacts list
F4	Change to Home Screen
ENTER	Raise selected contact details popup screen

Recents Screen

Overview

The SVS contains a history of the last 10 calls, which are displayed in the Recents screen which:

- » Displays the contact details.
- » Allows calls to be initiated to the number using any available communications channel.
- » Provides for a popup screen to be raised for Safety Voice enabled channels.



Main Screen Region

The main screen region contains a list with up to the ten most recent calls with the following information:

- » Channel on which the call was made: Primary (P) or Secondary (S)
- » Call type:

↙	Incoming call
↗	Outgoing call
✓	Missed call

- » Contact name (if in primary or secondary phonebook), or phone number.

Note: The device will automatically select the communications channel associated with the selected recent call if available. This allows the user to quickly call back on the associated number

Key Functions

Key	Function
F1	Dial selected contact using selected communications channel
F1 long press	Raise Safety Voice priority popup screen if enabled
F2	Navigate up the Recents list
F3	Navigate down the Recents list
F4	Change to Home screen
▲ 2	Navigate up the Recents list
▼ 8	Navigate down the Recents list
3	Navigate to top of Recents list
9	Navigate to bottom of Recents list
ENTER	Raise selected contact details popup screen

Manual Dial Screen

Overview

The manual dial screen allows the operator to call any phone number by entering the number manually, allowing the numbers 0 to 9, '#', and international dialling prefix '+' characters to be entered.



Main Screen Region

The manual dial screen contains a 'MANUAL DIAL' title and a text entry line and cursor showing the number entered.

Key Functions

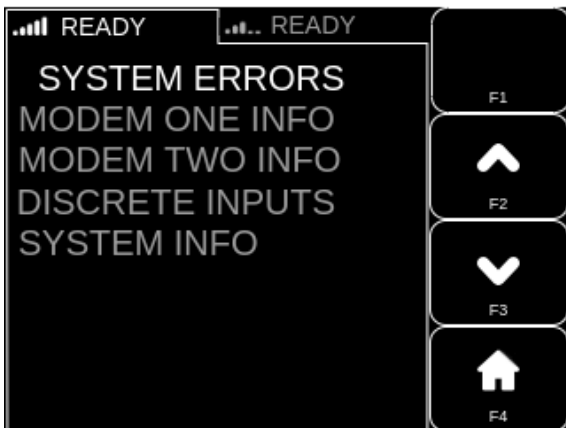
Key	Function
F1	Dial number entered using selected communications channel
F1 long press	Raise Safety Voice priority popup screen if enabled
F2	No function
F3	No function
F4	Change to Home screen
0-9, #	Character entry
+ long press	
↵	Delete last character
↵ long press	Clear text entry

On leaving the manual dial screen the entered number is stored, on re-entering the screen the number is retrieved, with the stored number being cleared when the SVS is powered off.

Menu Screen

Overview

The menu screen provides access to raise various information and diagnostics popup screens.



Main Screen Region

The main screen region contains a list of information and diagnostics screens which can be raised by pressing ENTER, and are described below:

Screen	Description
SYSTEM ERRORS	List of persistent system errors
MODEM ONE INFO	Communications channel diagnostic information.
MODEM TWO INFO	
DISCRETE INPUTS	Information to assist with discrete input diagnostics.
SYSTEM INFO	General system information including, serial number, software version, storage status and Ethernet details.

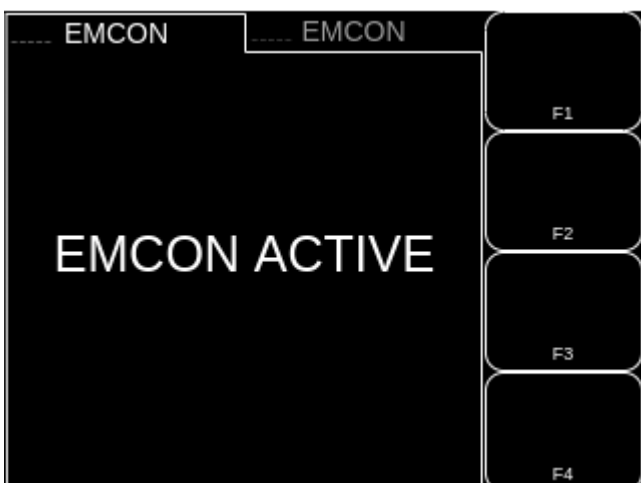
Key Functions

Key	Function
F1	No function
F2	Navigate up the menu list
F3	Navigate down the menu list
F4	Change to Home screen
▲ 2	Navigate up the menu list
▼ 8	Navigate down the menu list
3	Navigate to top of the menu list
9	Navigate to bottom of the menu list
ENTER	Raise the selected information or diagnostics popup screen

EMCON Screen

Overview

The Emissions Control (EMCON) screen informs the operator that the communications channels are disabled as the system is in EMCON mode (radio silence). This is enabled by activating the EMCON mode enable discrete input. The only function available through the user interface is turning the SVS off.



Main Screen Region

The main screen region displays “EMCON ACTIVE” to indicate that the SVS is in EMCON mode and therefore the communications channels are disabled.

Key Functions

There are no screen specific keypress functions provided on this screen.

Section 5: Popup Screens

Popup screens all use single-tap keypad mode unless otherwise stated.

Primary/Secondary Communications Channel Call Screens

Dialling Screen

Overview

The dialling screen shows the channel being used, the callee details, and allows the operator to hang up the call.



Main Screen Region

The main screen region contains:

- » “PRIMARY” or “SECONDARY” designation of the communications channel being used, plus “(SVS)” suffix if the channel is Safety Voice enabled.
- » “DIALLING...” followed by callee name if contact is in one of the phonebooks, otherwise the callee number.
- » Safety Voice priority if call has been made with a Safety Voice priority.

Key Functions

Key	Function
F1	No function
F2	No function
F3	No function
F4	Hang up the call

Audio ringtone

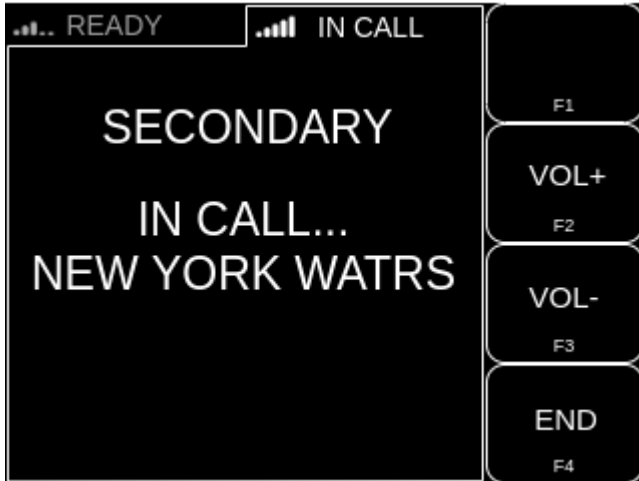
While in this screen an audible ringing tone will sound over the audio system.

In Call Screen

Overview

The IN CALL screen displays the communications channel being used, the caller/callee details, and allows the operator to increase and decrease the audio volume, hang up the call, and generate DTMF tones (touch tone dialling for use when calling through a switchboard or call centre).

Main Screen Region



The main screen region contains:

- » “PRIMARY” or “SECONDARY” designation of the communications channel being used, plus “(SVS)” suffix if the communications channel is Safety Voice enabled.
- » “IN CALL...” followed by caller/callee name if contact is in one of the phonebooks, otherwise the caller/callee number.
- » Safety Voice priority if call has been made with a Safety Voice priority.
- » Momentary volume indicator overlay when volume is changed.

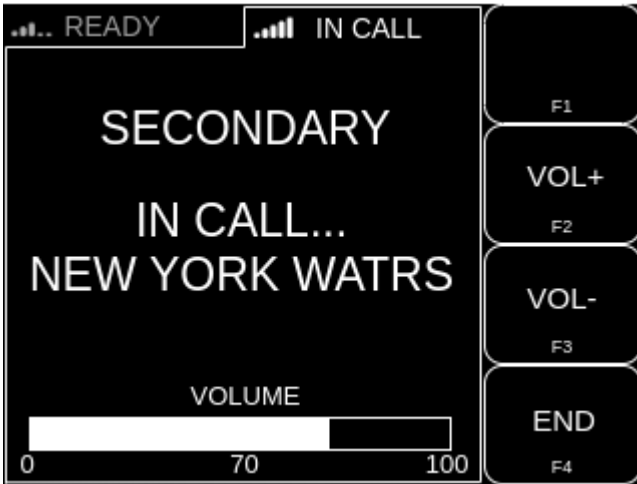
Key Functions

Key	Function
F1	No function
F2	Increase audio volume
F3	Decrease audio volume
F4	Hang up the call
0 to 9, *, #	Generates associated touch tone dialling (DTMF) tones

In Call Ear Volume Adjustment

The level of audio from the SVS to the ICS for each communications channel (ear volume) can be adjusted by the operator.

When adjusting a volume, a 'slider' indicator is overlaid at the bottom of the main screen region and removed after a period of three seconds with no change.



When a call ends the associated audio, volume is reverted to the default value.

Side tone volume

The audio side tone (mic feedback) volume can be adjusted by the installer. See Configuring Side Tone in the Installation Manual.

Incoming Call Screen

Overview

The incoming call screen shows the communications channel on which a call is being received, the caller details, and allows the operator to answer or reject the call.



Main Screen Region

The main screen region contains:

- » “PRIMARY”/“SECONDARY” designation of the communications channel being used, plus “(SVS)” suffix if the channel is Safety Voice enabled.
- » “RINGING...” followed by caller name if contact is in one of the phonebooks, otherwise the caller number.
- » Safety Voice priority if call has been made with a Safety Voice priority.

Key Functions

Key	Function
F1	Answer call
F2	No function
F3	No function
F4	Reject call

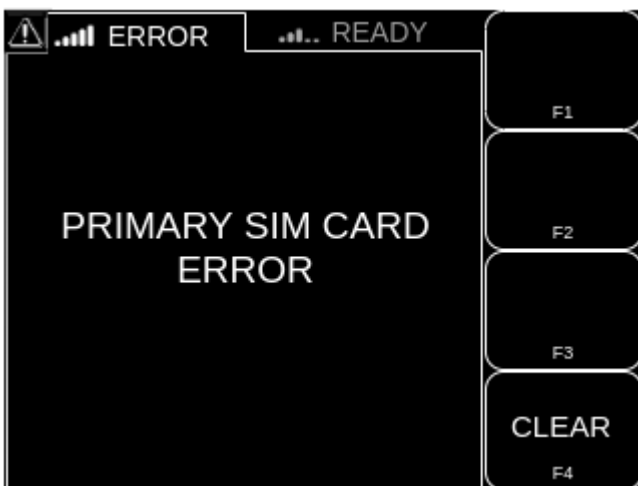
Audio ringtone

While in this screen an audible ringing tone will sound over the audio system.

Errors/Warnings Screens

Overview

The SVS has a system of reporting errors and warnings to the operator by use of an errors and warnings screen. A warning is a one-off message and disappears when the popup is cleared by the operator. An error is a message that persists when the popup is cleared by the operator and can later be retrieved, when cleared the error indicator in the top left of the display is raised as a reminder.



Main Screen Region

The main screen region contains the description of the specific error or warning as defined in the tables below.

Key Functions

Key	Function
F1	No function
F2	No function
F3	No function
F4 or ↵	Clear error/warning popup screen and go back to previous screen

List of Errors

Error Displayed	Meaning and Corrective action
FAILED TO INITIALISE DISPLAY	Power cycle SVS, if error persists replace unit.
FAILED TO INITIALISE AUDIO SYSTEM	
FAILED TO INITIALISE FILE SYSTEM	
PRIMARY SETTINGS FILE IS CORRUPT, REVERTING TO BACKUP	SVS has 'self-repaired' configuration settings and will likely operate as normal, report error to installer.
SETTINGS FILES CORRUPT, REVERTING TO FACTORY DEFAULTS	SVS configuration settings are lost and unrecoverable, SVS has reverted to defaults. Report error to installer.
FAILED TO INITILISE PRIMARY COMMS	Primary communications channel is unusable, secondary communications channel may be used if fitted. Power cycle SVS, if error persists replace unit.
FAILED TO INITILISE SECONDARY COMMS	Secondary communications channel is unusable, primary communications channel may be still used. Power cycle SVS, if error persists replace unit.
PRIMARY COMMS UNRECOVERABLE ERROR DETECTED	Primary communications channel is unusable, secondary communications channel may be used if fitted. Power cycle SVS, if error persists replace unit.
SECONDARY COMMS UNRECOVERABLE ERROR DETECTED	Secondary communications channel is unusable, primary communications channel may be still used. Power cycle SVS, if error persists replace unit.
PRIMARY SIM CARD ERROR	SIM card error on primary communications channel is detected. Secondary communications channel may be used if fitted. Power cycle SVS, if error persists refer to installer.

Error Displayed	Meaning and Corrective action
SECONDARY SIM CARD ERROR	SIM card error on secondary communications channel is detected. Primary communications channel may be used. Power cycle SVS, if error persists refer to installer.
PRIMARY COMMS LOSS OF SIGNAL	Primary or secondary communications channel has lost signal, this can be for multiple reasons, but is most commonly due to lack of line of sight to sky e.g. When aircraft is in a hangar. It can also be caused by an issue with the antenna. If the error persists and there is line of sight to sky, then report error to installer.
SECONDARY COMMS LOSS OF SIGNAL	

List of Warnings

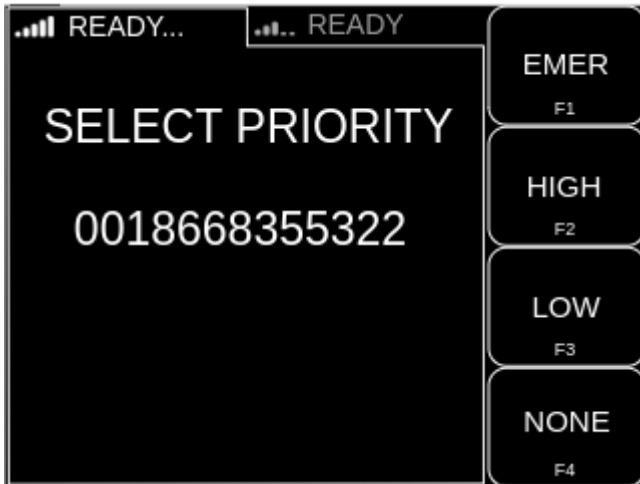
Warning Displayed	Meaning
PRIMARY COMMS FAILED TO INITIATE OUTGOING CALL	Communications channel failed to initiate outgoing call due to general phone error or no carrier (no Iridium network connection)
SECONDARY COMMS FAILED TO INITIATE OUTGOING CALL	
PRIMARY COMMS SAFETY VOICE CALL PENDING IN THE NEXT 15 SECONDS	A call has been terminated due to a Safety Voice call with a higher priority pending
SECONDARY COMMS SAFETY VOICE CALL PENDING IN THE NEXT 15 SECONDS	
INVALID PHONE NUMBER ENTERED	A phone number entered is rejected due to one of the following reasons: greater than 17 digits (maximum supported in E.164 number format) a character is found not in range of 0 to 9 or '+' '+' character is found but not in correct (first) position
SYSTEM POWERING OFF	The SVS is powering down, note this screen will only be seen momentarily as the SVS powers off
MISSED CALL ON PRIMARY COMMS	An incoming call was not picked up before being hung up at the other end. Note, missed calls will appear in the Recents screen list from where they may be called back.
MISSED CALL ON SECONDARY COMMS	

System Information Screens

Safety Voice Priority Select Screen

Overview

The select priority screen shows the number entered for calling and gives the operator four priority options to initiate the call with or use the ‘↵’ back key to abandon the call.



Main Screen Region

The main screen region contains “SELECT PRIORITY” text followed by the number entered for calling.

Key Functions

Key	Function
F1	Dial number with Safety Voice priority emergency
F2	Dial number with Safety Voice priority high
F3	Dial number with Safety Voice priority low
F4	Dial number with Safety Voice priority none (same as non-safety voice)
↵	Abandon call and go back to previous screen

Contact Details Screen

Overview

The contact details screen shows the operator the selected contact name, number, and default priority, and allows the contact to be called using the selected communications channel and default priority or allows the select priority popup screen to be raised and call with a different priority.



Main Screen Region

The main screen region contains the selected contact name, number and default priority.

Key Functions

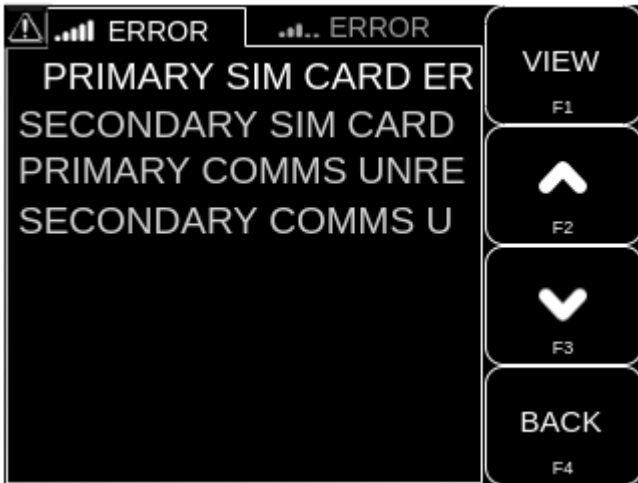
Key	Function
F1	Dial selected number using selected communications channel
F1 long press	Raise select priority screen
F2	No function
F3	No function
F4 or ↵	Clear contact details popup screen and go back to previous screen

Active Errors list Screen

Overview

The active errors list screen shows a list of all the persistent errors. Errors can be individually selected and raised as a popup screen to view the details.

The following example shows a typical errors list that will be seen when no SIM cards are fitted. It also demonstrates more than one error being raised from a single causing issue in the example a SIM error has also caused a more general 'COMMS UNRECOVERABLE' error.



Main Screen Region

The main screen region shows a list of all the persistent errors.

Key Functions

Key	Function
F1	Raise error popup screen for selected error
F2	Navigate up the errors list
F3	Navigate down the errors list
F4 or ↵	Clear active errors list popup and go back to previous screen

Modem One and Two diagnostics Screens

Overview

The modem one and two diagnostic screens show information to assist with communications channel diagnostics. Modem one is associated with the primary channel, and modem two with the secondary channel.



Main Screen Region

The main screen area shows the Modem designation (PRIMARY or SECONDARY) followed by:

Field	Values
FUNCTION	SAFETY VOICE, SAT PHONE, or, DISABLED
STATE	IDLE, DIALLING, RINGING, IN CALL, INITIALISING, INOPERABLE or
NETWORK	AVAILABLE or UNAVAILABLE
IMEI	International Mobile Equipment Identity number - a unique 15-digit number used to identify cellular and satellite modems.

Key Functions

Key	Function
F1	No function
F2	No function
F3	No function
F4 or ↵	Clear active modem diagnostics popup and go back to previous screen

Discrete Input diagnostics Screen

Overview

The discrete input diagnostic screen shows information to assist with diagnosing the analog and digital inputs. Raw values are shown in the form of an unsigned 16-bit number from 0 to 65535.

Main Screen Region

The main screen area shows a graphical representation of each of the six discrete inputs, plus a numerical representation of the internal analog reference value.



The input types and functions are listed below, with the type being fixed based on its allocated function:

Input	Signal processing type	Function
1	Digital	Audio Annunciation Suppression
2	Digital	EMCON mode
3	Digital	Modem 1 Call Answer/Terminate
4	Digital	Modem 2 Call Answer/Terminate
5	Analog	Backlight Dimming Control
6	Digital	NVIS mode

Digital Input representation

The digital input representation comprises of:

- » A 'slider' which is empty if the input senses a logic Low and filled when the input senses a logic High.
- » A raw input value, which is highlighted when the digital function of the input is active, and not highlighted if the digital function of input is inactive.

Analog Input representation (Input 5 only)

The Analog input representation comprises of:

- » A slider filled proportionally based on input value.
- » Raw input value.

Analog reference

The current internal analog reference value is shown on the last row of the screen.

Key Functions

Key	Function
F1	No function
F2	No function
F3	No function
F4 or ↵	Clear discrete input diagnostics popup and go back to previous screen

System Information diagnostics Screen

Overview

The system info screen shows general information to assist with diagnostics.



Main Screen Region

The main screen area shows the following fields:

Field	Value
SERIAL	SVS unique serial number
SW VER	SVS software version
STORAGE	Total storage space available and percentage used, or "ERROR" if the storage is not available
IP ADDR	Device IP address
MAC	Device MAC address
ETH LINK	Ethernet link status - UP or DOWN

Key Functions

Key	Function
F1	No function
F2	No function
F3	No function
F4 or ↵	Clear system information diagnostics popup and go back to previous screen

Section 6: Simultaneous Calls

SVS installations with two communications channels can manage simultaneous calls on the two channels.

Initiating a second call

When a communications channel is in a call a second call can be initiated on the other (unused) channel as follows:

Key	Function
MODE long press	Change to last base screen from where a second call can be initiated via one of the dialling screens. Note: while in these screens the first communications channel status field will show 'IN CALL' to indicate it is still in a call.

Switching between channels while two calls are active

When two communications channels are in a call simultaneously the operator can switch between call screens as follows:

Key	Function
MODE long press	Toggle between active call screens

Reverting to first call after initiating but not completing a second call

When the operator has changed to a base screen to initiate a second call, but the second call has not been completed, the operator can go back to first call as follows:

Key	Function
MODE long press	Change back to active call screen

Section 7: Safety Voice Priority and Pre-emption

Incoming call pre-emption

If a communications channel is in a Safety Voice call and receives a higher priority call:

- » The Iridium network will terminate the current call.
- » The SVS will raise a popup notification 'PRIMARY or SECONDARY COMMS SAFETY VOICE CALL PENDING IN THE NEXT 15 SECONDS' and a warning tone.
- » The Iridium network will put through the higher priority incoming call which will be raised as an incoming call.

Safety Voice Call Camp Awareness

If a communications channel is in a Safety Voice call and an incoming lower priority call has been queued in a 'call camp', the call will be put through as follows:

- » When the higher priority call is terminated the SVS will raise a 'PRIMARY or SECONDARY COMMS SAFETY VOICE CALL PENDING IN THE NEXT 15 SECONDS' warning popup.
- » The Iridium network will put through the lower priority incoming call which will be raised as an incoming call.

Section 8: Documentation and Information

Comprehensive documentation for the SVS is available on the Flightcell website <http://www.flightcell.com>.

Further information or technical support can be obtained by contacting Flightcell at tech@flightcell.com.

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Warranty

Flightcell International Limited's quality products are proudly designed and manufactured to the highest standards in New Zealand. Your SVS is warranted for one year from date of sale. Your warranty can be extended to five years if you have purchased the extended warranty and your SVS is registered on our product registration system, <http://www.Flightcell.com/Register>.

The SVS warranty covers Flightcell manufactured items only. Any ancillary items may be covered by individual manufacturer warranties.

The warranty is void if any labels are removed or if it is determined that your SVS has been:

- » Connected to a power supply delivering power outside the designs operational range (12-28V)
- » Installed incorrectly as per the guidelines outlined in either the Flightcell SVS Operator or Installation Manuals.
- » Physically damaged, or a fault has occurred due to the SVS being used beyond what is considered normal use, causing unusual deterioration of the product.

If the SVS is deemed to be faulty or in need of repair, please complete a Returned Materials Authorization form on www.Flightcell.com/RMA or contact Flightcell International info@flightcell.com