

SPI-300

GB



**SETUP GUIDE FOR  
«SRF»/«SDC»/«SRC»/«SHC» RECEIVERS  
AND «SDF»/«SDE» DEMODULATORS**

DIGITAL SAT-TV



**IKUSI**

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## 1. THE START SCREENS

### 1.1 - Module Basic Information


As explained in the Basic Handling guide supplied with the SPI-300, when you connect this to the module all data for identification, configuration and status of the module are loaded on the SPI-300. A detection screen appears for a short time, and next the display shows the Basic Information screen, which identifies the module and presents its most representative configuration and status data.

As an example, the basic information screen for the SRF-112 module (Free-To-Air Digital Sat-TV Receiver) is the following:

SRF-112	Alarm:No
F01.02	Audio:A2
B05.17	BER: 1.02E-7
Acq:X	Vid:X
Aud:X	OK

These are the meanings of the expressions and data displayed:

- Name of the module.
- "F-." : Version of the firmware (the firmware is the software stored in the module that manages its basic running).
- "B-." : Version of the internal Bootloader.
- "Acq" : "X" means that synchronization with the QPSK input signal is acquired. Absence of synchronization is pointed out with "0".
- "Alarms" : Informs about the existence or not of module working failures.
- "Audio" : Displays the module's audio operation mode: Mono, A2, Nicam.
- "BER" : Displays the channel BER value.
- "Vid" : Informs about the existence of video component in the RF output signal.
- "Aud" : Idem, existence of audio component.

The screen closes using the OK command (key  ). Then the Main Menu Screen appears (page 8 of the Basic Handling guide).

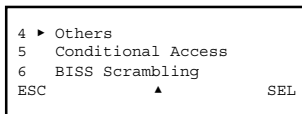
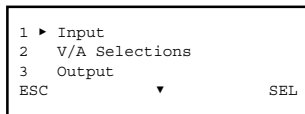
### 1.2 - Main Menus

As explained in the Basic Handling guide, the **General** menu is identical for all the modules and its contents was described on page 8. The **Settings** and **Info** menus include, however, options and information which are peculiar to each type of module:

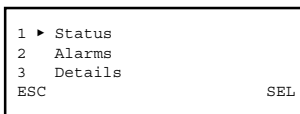
- **Settings** Menu: Contains all the setting parameters of the connected module, grouped by sections or categories which are displayed on one or several screens. Categories that are present at every module (SRF, SDC, SRC, SHC, SDF, SDE) are the following:
  - **Input** : You must select it to set the parameter values related to the input section of the module.
  - **V/A Selections** : Allows to select the desired TV programme and then the desired video and audio options.
  - **Output** : You must select it to set the parameter values related to the output section of the module.
  - **Others** : Includes setting parameters that are not classifiable within any of the aforementioned categories.
  - **BISS Scrambling** : Allows to operate with BISS Systems (BISS: Basic Interoperable Scrambling Systems).

The SDC, SRC, SHC and SDE modules have another section:

- **Conditional Access** : Through this section you can get access to the encrypted services of the operator.



- **Info** Menu: Allows to get access to detailed information about the functioning of the module, further on the one provided by the basic information screen (see previous page). Information is distributed in three screens, each one related to a menu option:
  - **Status** : Informs about the module working conditions.
  - **Alarms** : Informs whether the module has some alarm activated and its type.
  - **Details** : Identifies the module and displays outstanding data.



## 2. THE SETTING SCREENS

### 2.1 - The Input Signal Parameters Screen

This screen appears when you select the *Input* option in the **Settings** menu. It is used to enter the setting values of the following parameters:

- "Frequency" : Is the central frequency of the input channel, in MHz. There is a numerical field where you must enter the number by any one of the ways that were described in paragraph 1.3 of the Basic Handling guide (Entering Data, page 9).
- "Symbol Rate" : Is the symbol rate of the input channel, in MS/s. The number is entered in the same way.

```

1 ▶ Frequency   :   1550
2  SymbolRate  :  27.500

SEND ◀ ▶                               SEL

```

### 2.2 - The Video/Audio Selections Screen

When you select the *V/A Selections* option in the **Settings** menu, a waiting window appears while the current video and audio selections established in the module are transmitted to the SPI-300.

```

V/A SELECTIONS
Receiving Data
Wait...

                                OK

```


Next the first of four pages appears. Through these pages the different parameters and selection options are displayed (the scroll arrows ▲ and ▼ at the lower line warn that you are in a page). Remember that the change of page is accomplished by the keys ↑ or ↓.

```

1 ▶ Prog:  VC Travel
2  AuCh:  Aud 1-eng
3  AuMo:  By Sel
SEND ◀ ▶           ▼                               SEL


```

The following selections are made:

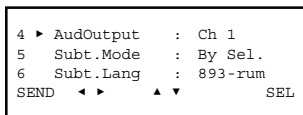
- "TV Programme" : Use the SEL command (key ) to open a pick list which includes all TV channels and the other services the channel multiplex may contain. (If there is not anything, the *Not Available* message appears).




Two letters going before the name of each programme or service have the following meaning:



VF : Free TV Programme.	AC : Encoded Radio Programme.
VC : Encoded TV Programme.	OF : Free Data.
AF : Free Radio Programme.	OC : Encoded Data.

- "Audio Channel" : Use the SEL command to open a pick list which includes all the audio channels contained in the selected TV programme (each channel is displayed with its number and the language). Place the slide on the desired line and press .
- "Audio — Mode" : Use the SEL command to open a pick list with two options: Auto and By Selection. If you select Auto, the "Audio Channel" selection you have made in the point before comes out of effect, so the selected audio channel is then the one that corresponds to the language that is selected as "automatic" in the Others screen (page 11). If you select By Selection, the "Audio Channel" selection at the point before is totally valid.

Press key  $\downarrow$ . The second page of the *V/A Selections* screen appears. Here you can do the following selections:



- "Audio — Output" : This selection is applicable only for receivers (SRF, SDC, SRC, SHC) and when the audio channel you have previously selected is "stereo" or "dual". It has different functionality depending on whether the connected receiver is a mono sound model or an A2 or Nicam sound model.
  - THE CONNECTED RECEIVER IS A "MONO" MODEL:  
Use the SEL command (key ) to open a pick list which includes the following options:
    - Channel 1 : It selects as output signal the one of the main sound (or L).
    - Channel 2 : It selects as output signal the one of the secondary sound (or R).
    - Channel 1 + Channel 2 : It selects as output audio signal the sum of the main and secondary sounds (or L+R). When the audio channel is dual you should not select this option for obvious reasons (sound would be unintelligible).
  - THE CONNECTED RECEIVER IS AN "A2" OR "NICAM" MODEL:  
Use the SEL command (key ) to open a pick list that presents three working options: Stereo, Dual and Auto. Place the slide on the line corresponding to the working desired for the audio output signal and press .

- "Subtitles — Mode" : Use the SEL command (key ) to open a pick list which includes the following four options:
  - Off : Subtitles are not *incrusted* in the image.
  - Auto : Subtitles are *incrusted*. The language is the one that will be selected in the Others Screen ("Automatic Language", page 11).
  - By Selection : Subtitles will be *incrusted*. The desired language is selected from a list in the "Subtitles Language" option screen.
  - By Page : Subtitles will be *incrusted*. The desired language is chosen by entering the number of the correspondent teletext page in the "Subtitles Page" option screen.
- "Subtitles Language" or "Subtitles Page" : The option which is displayed depend on you have chosen By Selection or By Page on the previous "Subtitles — Mode" option. Use the SEL command (key ) to open the selection screen.

Press key ↓ . The third page of the V/A Selections screen appears. The three selections on this page (and the one on the next page) constitute another way to perform the "TV Programme" and "Audio Channel" selections by using the PID numbers (Packet Identification) of the Video, Audio and PCR (Program Clock Reference). The selections carried out in this way invalidate those of the first page.

```

7 ► PID Video      : 01234
8  PID Audio       : 01234
9  PID PCR         : 01234
SEND ◀ ▶         ▲ ▼                               SEL
    
```

- "PID - Video" : Using the numerical keypad, enter the number of the desired TV programme. If you enter "0" (zero), selection is not carried out by PID and remain valid the one you have done in page 1.
- "PID - Audio" : Idem.
- "PID - PCR" : Using the numerical keypad, enter the PID PCR number of the desired TV programme.

The selection from PID numbers follows in the fourth page. Press key ↓ . The new page offers just the following selection:

```

i ► PID Clear
SEND ◀ ▶         ▲                               SEL
    
```

- "PID - Clear" : If you select this option, the three PID numbers are set to "0" (zero), so that all the video and audio selections you have done in page 1 take validity.

### 2.3 - The Output Signal Parameters Screen

This screen appears when you select the *Output* option in the **Settings** menu. If the connected module is a receiver (SRF, SDC, SRC, SHC), the screen has five pages. If it is a demodulator (SDF, SDE), the screen has a unique page.

- a) The connected module is a receiver (SRF, SDC, SRC, SHC). The first of five pages appears:

```

1  Frequency  : 175.25
2  Ch:
3  ▶ TV System :   B/G
SEND ◀ ▶ ▼ SEL

```


The setting values to be entered are the following:


- "Frequency" : Is the video carrier of the output TV channel, in MHz. You can enter the figure whether directly or using the "Ch" option which is explained next:
- "Ch" : If you select this option, a Channel Selection screen appears. This screen allows to do the frequency selection in a rapid and secure way through two pick lists, "TV System" and "TV Channel". Through these lists you select the TV system and the TV channel.

```

1  ▶ Sys: B/G
2  Ch: 21→471.25MHz
DONE ◀ ▶ SEL

```

Use the DONE command (key ) to validate the selection, or the CANCEL command to not validate. The screen closes and the above first page appears again (it will show the new value of Frequency, if this has been changed)..

- "TV System" : Use the SEL command to open a pick list with the B/G, D/K, I, L, M and N options. Place the slide on the desired option and press .




Press the key ↓ . The second page of the Output Signal Parameters screen appears. Here you can do the following settings:

```

4  ▶ Colour Sys :      PAL
5  2ndIntercar :    5.742
6  CaRatio :        12 dB
SEND ◀ ▶ ▼ ▲ SEL



```



- "Colour System" : Use the SEL command (key ) to open a pick list with the PAL, SECAM and NTSC options. Place the slide on the desired option and press .
- "2nd Sound Intercarrier" : If the receiver is an "A2" or "Nicam" model, this setting allows to select the frequency of the 2nd sound intercarrier. Open the pick list by using the SEL command (key ). Depending on the audio mode of the receiver and on the previously selected TV system for the output channel, the frequency to be selected is pointed out on the following tables:

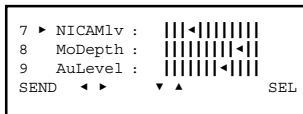
Receiver with <b>A2</b> audio mode	
TV System	2nd Intercarrier (MHz)
B/G	5.742
D/K	5.742 / 6.258 / 6.742

Receiver with <b>NICAM</b> audio mode	
TV System	2nd Intercarrier (MHz)
B/G/D/K/L	5.85
I	6.552

- "Carrier Level Ratio" : Is the ratio between the levels of the video and audio carriers (first audio carrier in A2 or Nicam receivers). Use the SEL command (key ) to open a pick list that presents two options: 12dB and 16dB. Place the slide on the desired option and press .

In A2 receivers, the level of the 2nd audio carrier is -20dB (unmodifiable).

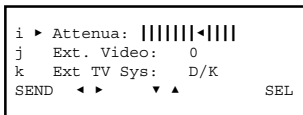
Press the key ↓ . The third page of the Output Signal Parameters screen appears. Here you can do the following settings:



- "NICAM level" : This adjustment is only available in receivers with Nicam audio mode. It refers to the level of the Nicam carrier. Standard ratio between the levels of the video and Nicam carriers is 20 dB for systems B, G, I, and 27 dB for systems D, K, L. Factory set value is 20 dB, and to modify it you must move the slide with the keys ← and → . Adjustment operates in real time and to state a very value you must use a spectrum analyzer.
- "Modulation Depth" : Is the video modulation depth of the TV channel output signal. The receiver is supplied with this parameter set to the standard value. To modify it you must operate on the slide. The adjustment will be eminently visual from a TV set.

- "Audio Level" : Is the audio modulation index —Volume— of the TV channel output signal. The adjustment will be eminently auditory from a TV set. It is also carried out through a slide icon.

Press the key ↓ . The fourth page of the Output Signal Parameters screen appears. Here you can do the following selections:

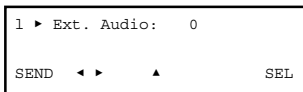


- "Attenuation" : Is the attenuation for the TV channel output level. Setting is also carried out in real time through a slide icon. To state the setting value you must use a spectrum analyzer.
- "External Video" : This option and the following two ones are only operative for receivers with Video/Audio Loop. It must be chosen either when you are going to implement a "video" scrambling system or when you have to use an external TV system converter to modify the number of lines of the video signal (from 525 to 625, for example). The option is activated and deactivated by placing the slide on the line and then using the SEL command. When option is active ("X"), the video loop of the module is open. If it is inactive ("0"), the video loop is internally closed.

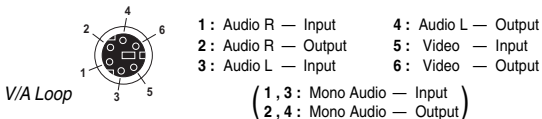
ONLY if you have activated this option you can accede the next one:

- "Ext TV System" : You select the TV system for the TV channel output signal, which is modulated by the external video signal. The line has a pick list with the B/G, D/K, I, L, M and N options.

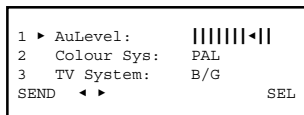
Press the key ↓ . The fifth and last page appears:





- "External Audio" : This option must be chosen to implement an "audio" scrambling system. The option is activated and deactivated by placing the slide on the line and then using the SEL command. When option is active ("X"), the audio loop of the module is open. If it is inactive ("0"), the audio loop is internally closed.



- b) The connected module is a demodulator (SDF, SDE). The *Output* section of the **Settings** menu presents the following screen:

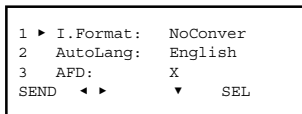



You must enter the following setting values:

- "Audio Level" : Is the level of the output audio signal. Setting is carried out in real time through a slide icon: when you move the slide, the new value of the carrier level ratio is instantaneously established in the module, that is to say, you have not to use the SEND command. To state the setting value you need unavoidably an audio level meter.
- "Colour System" : Is the colour system for the output video signal. Use the SEL command (key ) to open a pick list with the PAL, SECAM and NTSC options. Place the slide on the desired option and press  .
- "TV System" : The "TV System" term is used as significative reference. Use the SEL command to open a pick list with the B/G, D/K, I, L, M and N options. When you select one of these options, you are selecting in fact three corresponding base-band parameters: *raster frequency*, *line frequency* and *colour subcarrier frequency*.

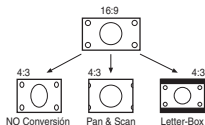
## 2.4 - The Others Screen

This screen appears when you select the Others screen in the **Settings** menu. Here you can do the following selections :



- "Image Format" : It is used to *convert or not* the 16:9 format of the input signal. It is not operative if this format is 4:3. Use the SEL command (key  ) to open a pick list with the following options :

- No Conversion.
- Pan&Scan : 16:9 converted to 4:3 Pan&Scan format.
- Letter-Box : 16:9 converted to 4:3 Letter-Box format.



- "Automatic Language" : Use the SEL command to open a pick list which allows to select the language you want to establish as "main". This language will be established for Audio Channel and Subtitles when you choose the AUTO option in the "Audio — Mode" and "Subtitles — Mode" selections on the *V/A Selections* screen (pages 6/7).
- "AFD" : Activates or deactivates AFD processing (Active Format Description) used to indicate advanced image format information.
- "WSS" : Activates or deactivates WSS insertion (Wide Screen Signaling) used to automatically adapt the image format.
- "VITS" : Activates or deactivates the insertion of VITS lines (Vertical Interval Test Signal).
- "TXT Deact" : Deactivates, when checked, the insertion of Teletext in the output.

```

4 ► WSS:      X
5  VITS:      0
6  TXT Deact: X
SEND ◀ ▶ ▲                                SEL
    
```

## 2.5 - The BISS Scrambling Screen

This screen appears when you select the BISS Scrambling screen in the **Settings** menu. BISS (Basic Interoperable Scrambling Systems) is a scrambling system with fixed keys which offers interoperativity between different equipment of transmitters and receivers (Specification EBU Tech 3292).

The screen presents three options: *Mode*, *S (Session Word)* and *ID (Identifier)*:

```


1 ▶ Mode:           Mode 1
2  S:             F3210AB456DE
3  ID:           Not available
SEND ◀ ▶                               SEL

```

```

1 ▶ Mode:           Mode E
2  S:             F3465ABCD0AB123E
3  ID:           B431679AF4300F
SEND ◀ ▶                               SEL

```

- "Mode": Use the SEL command (key ) to open a pick list with the Mode 1 and Mode E options, which refer to the two operation modes of BISS. If Mode 1 has been selected, the option ID of the third line is disabled.
- "S": You must enter the key SW (Session Word). The word has 12 hexadecimal characters when operating in Mode 1 and 16 characters when operating in Mode E.

The word is entered by any one of the ways that were described in paragraph 1.3 of the Basic Handling guide (Entering Data, page 9). To write an alphabetical character, enter any digit and next press repeatedly the key  $\uparrow$  or  $\downarrow$  until the desired character appears (...7, 8, 9, A, B, C...).

- "ID": Only is available if Mode E has been selected in the first option. You must enter the ID word with 14 hexadecimal characters.

## 2.6 - The Conditional Access Screen

The *Access Conditional* option is available in the **Settings** menu only if the connected module is an SDC, SRC or SHC Receiver, or an SDE Demodulator. When you select this option, first the screen shows a waiting screen while an information exchange is carried out between the module and the SPI-300. Then the *Access Conditional* screen appears; this screen provides diverse information about the smart card and the signed up services. The processes for Mediaguard™, Viaccess™, Conax™ and NDS VideoGuard™ systems are described in Appendix A (pages 16-20).

### 3. THE INFORMATION SCREENS


They provide information in detail about working of the connected module. Information is distributed in three screens which are related to the three options of the **Info** menu: *Status*, *Alarms* and *Details*.

#### 3.1 - The Status Screen

Informs about the module working conditions:

STATUS	
Acq:X	
Vid:X	BER: 1.02E-3
Aud:X	STOP

- "Signal Acquired" : Informs about the synchronization with the QPSK input signal. Affirmative answer is pointed out with "X" and negative answer with "0".
- "Video" : Informs about the existence of base-band video signal before modulation. The same type of representative symbols are used.
- "Audio" : Informs about the existence of base-band audio signal before modulation. Same symbols are used.
- "BER" : Displays the channel BER value in scientific notation <sup>(\*)</sup>.

Use the STOP command (key ) to stop the status information update. The OK command appears then in the same place; use now this one to close the screen.

<sup>(\*)</sup> In order to get optimum working of the module, the BER value must not be higher than  $1 \cdot 10^{-3}$ , that is to say, the screen should exhibit any of these expressions:

1E-3 ,, xE-4 ,, xE-5 ,, xE-6 ,, ...

x representing a number from 1 to 9.


A BER value higher than  $1 \cdot 10^{-3}$  (that is, 2E-3, 3E-3 ... 9E-3; 1E-2, 2E-2 ... 9E-2; 1E-1, 2E-1, 3E-1, ...) is related to bad quality of the input signal, even to an excessive level. The LNB offset and, maybe, the antenna pointing must be checked.

### 3.2 - The Alarms Screen

Informs about the existence of failures in the internal components of the module or bad processing of the signal. Character "X" warns there is an alarm situation and "0" means the status or working are correct:

```
Tuner      :X      SmartC.    :0
Demodul    :X      RF           :X
V/Aproc    :X      Modulat.    :0
Hardw.     :0      ALMSTOP
```

- "Tuner" : Working of the tuner.
- "Demodulation" : Demodulation process of the RF input signal.
- "V/A Processing" : Processing of the demodulated video and audio signals.
- "Hardware" : General hardware of the module.
- "Smart Card" or "CAM" :
  - The "Smart Card" text appears only for SDC receivers and SDE demodulators. Informs about working of the smart card.
  - The "CAM" text appears only for SRC and SHC receivers. Informs about working of the Conditional Access Module (CAM).
- "RF" : Only for Receiver Modules. Existence of RF output signal.
- "Modulation" : Only for Receiver Modules. Informs about the RF output signal modulation. Character "X" means overmodulation.


Use the ALMSTOP command (key ) to stop the alarms information update. The OK command appears then in the same place; use now this one to close the screen.

### 3.3 - The Details Screen

This screen identifies the module and displays software and hardware versions.

```
                SRF-111
F: 01.00          L: 01.00
l: --.--          HWvers:00
s/n : 123456789A          OK
```

- "F" : Version of the firmware of the module.
- "L" : Version of the main bootloader.
- "l" : Version of the pre-bootloader.
- "HWversion" : Version of the general hardware of the module.
- "s/n" : Serial number of the module.

Use the OK command (key ) to close the screen.

## 4. THE DIVERS SCREENS

These are two screens that benefit two operations that have already been described in the Basic Handling guide : Firmware Update and Use of Configurations. Both are applicable to all the SRF/SDC receivers and SDF demodulators.

### 4.1 - The Module Firmware Update Screen

This screen appears when you select the *Update* command in the **General** menu. The firmware update process was already described in detail on pages 14/15 of the Basic Handling guide, so it is not to add any additional information.

### 4.2 - The Configurations Screen

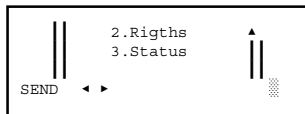
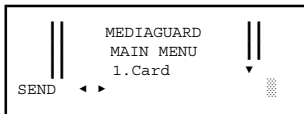
On pages 12/13 of the Basic Handling guide was defined what is a module configuration, were indicated the advantages of its use and were described the processes of creation and utilization through the screens that appear when you select the *Save* and *Recall* commands in the **General** menu. Therefore it is not to add more information.




## Appendix A - CONDITIONAL ACCESS

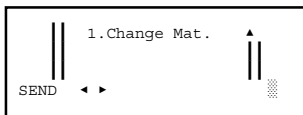
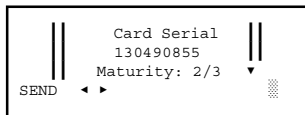
### A1 - Mediaguard® Conditional Access


When you select the *Conditional Access* option in the **Settings** menu, a waiting screen appears and next the MEDIAGUARD screen. This last presents three options: *Card*, *Rights* and *Status*.




#### 1. The Card Screen

Select the *Card* option by pressing the key "1" in the keypad and using the SEND command (key ). A new screen appears displaying the Card Serial Number, the Maturity Level and a *Change Maturity* option:




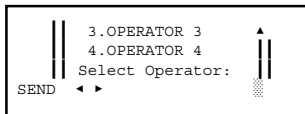
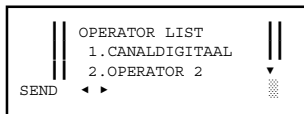
To select the *Change Mat.* option, press "1" in the keypad and use the SEND command (key ).

- "Change Maturity" : It is used to change the current maturity level stored in the card (possible values: 1, 2 or 3).

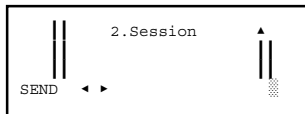
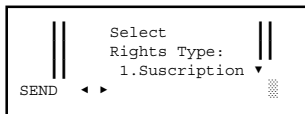
To go back to the MEDIAGUARD screen, use the CANCEL command. Or use the DONE command to go to the **Settings** menu. (Both commands are selected on the lower left corner through keys ← and →, as is already known, and are used by pressing the key .


## 2. The Rights Screen

Press the key "2" in the keypad and use the SEND command (key ). An Operator List appears:




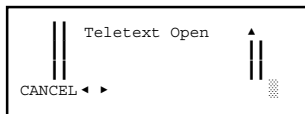
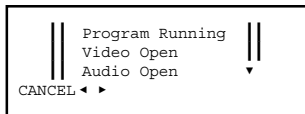
Select the desired operator by pressing the corresponding numerical key in the keypad and using the SEND command. It appears the following screen, where you can select the rights type. If, for example, number "1" is entered, a new screen will appear showing information referred to the suscription rights.



To go back to the MEDIAGUARD screen, use the CANCEL command. Or use the DONE command to go to the **Settings** menu. (Both commands are selected on the lower left corner through keys  $\leftarrow$  and  $\rightarrow$ , and are used by pressing the key ).

## 3. The Status Screen

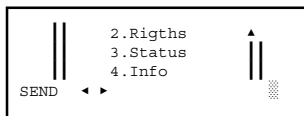
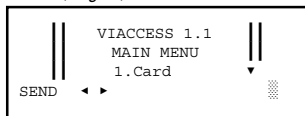
Select the *Status* option by pressing the key "3" in the keypad and using the SEND command (key ). A screen appears displaying the status of the conditional access:




For the closed services a text line will be added explaining the cause of this status. To go back to the MEDIAGUARD screen, use the CANCEL command. Or use the DONE command to go to the **Settings** menu.

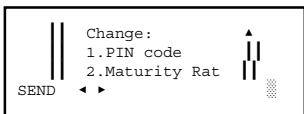
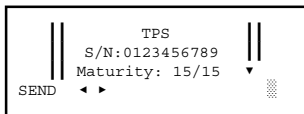
## A2 - Viaccess™ Conditional Access


When you select the *Conditional Access* option in the **Settings** menu, a waiting screen appears and next the VIACCESS™ screen. This last presents four options: *Card, Rights, Status* and *Info*.




### 1. The Card Screen

Select the *Card* option by pressing the key "1" in the keypad and using the SEND command (key ). A new screen appears displaying three information lines (card provider, card serial number, maturity rating) and a *Change* menu:




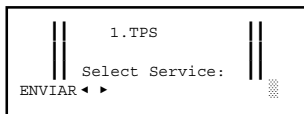
To select an option of the *Change* menu, press the corresponding key in the keypad and use the SEND command (key ).


- "PIN code" : It allows to change the current PIN code of the card (4 numerical characters).
- "Maturity Rating" : It is used to change the current maturity level stored in the card (max value: 15).

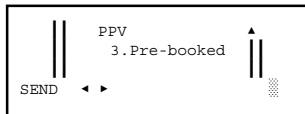
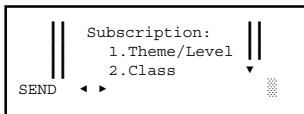
To go back to the VIACCESS screen, use the CANCEL command. Or use the DONE command to go to the **Settings** menu. (Both commands are selected on the lower left corner through keys ← and →, as is already known, and are used by pressing the key ).

### 2. The Rights Screen

Press the key "2" in the keypad and use the SEND command (key ). The appearing screen provides information about the signed up services:




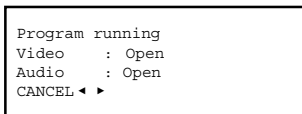
Select the service by pressing the corresponding key in the keypad and using the SEND command (key ). A screen appears displaying the rights of the selected service:



Select the information line by pressing the corresponding numerical key in the keypad and using the SEND command. The wished information screen appears. To go back to the VIACCESS screen use the CANCEL command. Or use the DONE command to go to the **Settings** menu.


### 3. The Status Screen

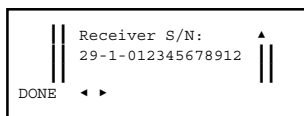
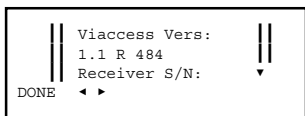
Select the *Status* option by pressing the key "3" in the keypad and using the SEND command (key ). A screen appears displaying the status of the conditional access:



For the closed services a text line will be added explaining the cause of this status. To go back to the VIACCESS screen, use the CANCEL command. Or use the DONE command to go to the **Settings** menu.

### 4. The Info Screen

Press the key "4" in the keypad and use the SEND command (key ). The appearing screen displays the Viaccess Version and the Serial Number of the receiver or demodulator:



To go back to the VIACCESS screen, use the CANCEL command. Or use the DONE command to go to the **Settings** menu.

### **A3 - Conax™ Conditional Access**

When you select the *Conditional Access* option in the **Settings** menu, a waiting screen appears and next the CONAX screen. The menu on the CONAX screen depends on the card implementation and may vary from a card to another. Contact the vendor of your card.

*(If the smart card is not operative, the "CA SYSTEM NOT READY" message appears).*

### **A4 - NDS VideoGuard™ Conditional Access**

When you select the *Conditional Access* option in the **Settings** menu, a waiting screen appears and next the NDS VideoGuard screen.

The menu on the NDS VideoGuard screen depends on the operator. Available options are different, but in any case they are shown in a clear way, so it is not necessary to go into details. Solely to make mention of two important items which are always displayed : the card serial number and the receiver or demodulator serial number. Both numbers may be requested by the operator when signing up encrypted services.

***IKUSI - Ángel Iglesias, S.A.***

Paseo Miramón, 170  
20009 San Sebastián  
SPAIN

Tel.: +34 943 44 88 00

Fax: +34 943 44 88 11

**www.ikusi.com**

