

**SETUP GUIDE FOR  
THE «SPC» IF-IF CONVERTERS  
USING THE SPI-300 PROGRAMMING UNIT**

DIGITAL SAT-TV



**Index**

**1. The Start Screens**  
 1.1 - Module Basic Information ..... 3  
 1.2 - Main Menu ..... 4

**2. The Setting Screens**  
 2.1 - The Input Configuration Screen ..... 5  
 2.2 - The Input Signal Parameters Screen ..... 5 / 6  
 2.3 - The Output Signal Parameters Screen ..... 7

**3. The Information Screens**  
 3.1 - The Alarms Screen ..... 8  
 3.2 - The Details Screen ..... 8

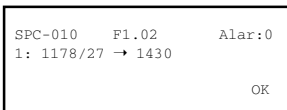
**4. The Divers Screens**  
 4.1 - The Configurations Screen ..... 9

**1. THE START SCREENS**

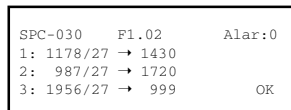
**1.1 - Module Basic Information**

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.

The basic information screen for SPC converters is the following:



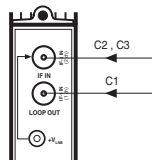
SPC-010



SPC-030

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).
- "Alarm" : Informs about the existence or not of module working failures. Character "X" warns existence of alarm situation and character "0" means no alarm.
- "1": If the converter is an SPC-010, they are Input Frequency (MHz) / Symbol Rate (MS/s) and Output Frequency (MHz) of the channel. If it is an SPC-030, they are these parameters of the channel C1 (the one that is connected to the lower port, see picture, if the converter has 2-Input configuration).
- "2": It appears only if the converter is an SPC-030. They are the above mentioned parameters of the channel C2 (one of the two channels that are connected to the upper port if the converter has 2-Input configuration).
- "3": Idem of the channel C3.



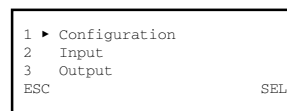
SPC-030

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

**1.2 - Main Menu**

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. Those of the SPC converters are the following:

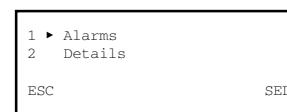
- **Settings** Menu : Contains all the setting parameters of the connected converter. They are grouped in three sections :



- **Configuration** : It is applicable only if the converter is SPC-030 type. It must be selected to configure the RF input connection.
- **Input** : You must select it to set the parameter values related to the input section of the module.
- **Output** : You must select it to set the parameter values related to the output section of the module.

- **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 two screens, each one related to a menu option:

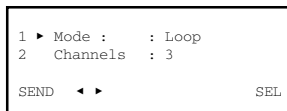
- **Alarms** : Informs whether the module has some alarm activated and its type.
- **Details** : Identifies the module and displays outstanding data.



## 2. THE SETTING SCREENS

### 2.1 - The Input Configuration Screen

This screen appears when you select the *Configuration* option in the **Settings** menu.



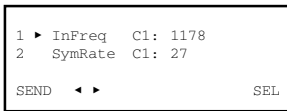
- "Mode" : Is the configuration RF input of the converter.  
If the converter is an SPC-010, the configuration is fixed: Loop-through.  
If it is an SPC-030, use the **SEL** command to open a pick list with two options: *Loop* and *2 Inputs*. You must select the *2 Inputs* option if you want that the two input ports be independent (two download cables come to the converter). Place the slide on the desired option and press **SEL**.
- "Channels" : Is the number of channels to be converted.  
If the converter is an SPC-010, the datum is merely informative : 1.  
If it is an SPC-030, use the **SEL** command to open a pick list with three options: 1, 2 and 3. Place the slide on the desired option and press **SEL**.

### 2.2 - The Input Signal Parameters Screen

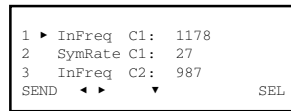
This screen appears when you select the *Input* option in the **Settings** menu.

If the converter is an SPC-010, you set here the frequency and the symbol rate of the channel to be converted.

If it is an SPC-030, the screen has two pages through which you set the frequency and the symbol rate of the two or three channels to be converted. The scroll arrows **▼** or **▲** at the lower line warn that you are in a page; remember that the change of page is accomplished by the keys **↑** or **↓**.



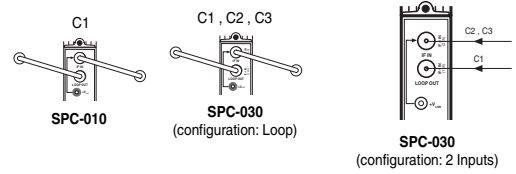
SPC-010



SPC-030  
(1st page)

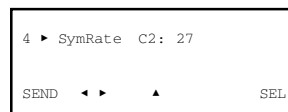
- "Input Frequency C1" : Is the input central frequency in MHz of the channel C1. There is a numerical field where you must enter the number by any one of the ways that were described in paragraph 1.3 of the Basic Handling guide (Entering Data, page 9).

*NOTE: The names C1, C2 and C3 used to name the satellite channels being converted do not have other meaning that to facilitate the programming process.*

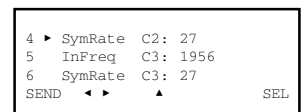


- "Symbol Rate C1" : Is the symbol rate in MS/s of the channel C1. Only whole numbers are accepted, so you must leave out the decimal part, if there is.
- "Input Frequency C2" : This line appears only if the converter is an SPC-030. Is the input central frequency in MHz of the channel C2. Enter the number into the numerical field.

If the converter is an SPC-030, press key **↓**. The second page of the *Input Signal Parameters* screen appears; this page is different depending on whether the converter has been configured to convert 2 or 3 channels :



( 2nd page if the SPC-030 is configured to convert 2 channels )



( 2nd page if the SPC-030 is configured to convert 3 channels )

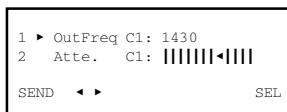
- "Symbol Rate C2" : Is the symbol rate in MS/s of the channel C2.
- "Input Frequency C3" : Is the input central frequency in MHz of the channel C3.
- "Symbol Rate C3" : Is the symbol rate in MS/s of the channel C3.

### 2.3 - The Output Signal Parameters Screen

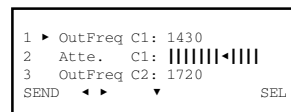
This screen appears when you select the *Output* option in the **Settings** menu.

If the converter is an SPC-010, you set here the frequency and the output attenuation of the converted channel.

If it is an SPC-030, the screen has two pages through which you set the frequency and the output attenuation of the two or three converted channels. The scroll arrows **▼** or **▲** at the lower line warn that you are in a page; remember that the change of page is accomplished by the keys **↑** or **↓**.



SPC-010



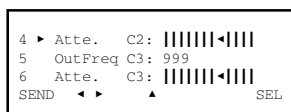
SPC-030  
(1st page)

- "Output Frequency C1" : Is the output central frequency in MHz of the channel C1. Enter the number into the numerical field..
- "Attenuation C1" : Is the signal level attenuation of the converted channel C1. Setting is carried out in real time through a slide icon. To state the setting value of the level you must use a level meter.
- "Output Frequency C2" : This line appears only if the converter is an SPC-030. Is the output central frequency in MHz of the channel C2. Enter the number into the numerical field.

If the converter is an SPC-030, press key **↓**. The second page of the *Output Signal Parameters* screen appears; this page is different depending on whether the converter has been configured to convert 2 or 3 channels :



( 2nd page if the SPC-030 is configured to convert 2 channels )



( 2nd page if the SPC-030 is configured to convert 3 channels )

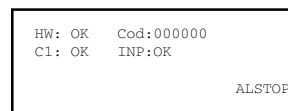
- "Attenuation C2" : Is the signal level attenuation of the converted channel C2.
- "Output Frequency C3" : Is the output central frequency in MHz of the channel C3.
- "Attenuation C3" : Is the signal level attenuation of the converted channel C3.

## 3. THE INFORMATION SCREENS

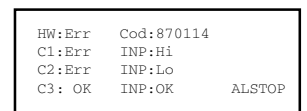
They provide information about operation of the connected SPC converter. Information is distributed in two screens related to the two options of the **Info** menu: *Alarms* and *Details*.

### 3.1 - The Alarms Screen

Informs about the existence of failures in the internal components of the module or bad processing of the signal.



SPC-010



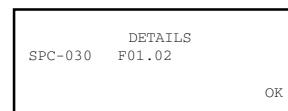
SPC-030

- "Hardware" : General hardware of the module.
- "Cod" : If there is a hardware alarm, it is the code of the failure.
- "C1", "C2", "C3" : Conversion sections of the converter module. Operating information.
- "INP" : Input signal level at each conversion section. (Hi: high ; Lo: low ; OK: in the range).

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

### 3.2 - The Details Screen

This screen identifies the module and displays the firmware version :



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

#### 4. THE DIVERS SCREENS

It is one screen that befit an operation that has already described in the Basic Handling guide : Use of Configurations.

##### 4.1 - 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.

#### **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](http://www.ikusi.com)

