

- 1 Operating indicator WRITE MODE
- 2 Operating indicator READ MODE
- 3 Indicator PRESETS SELECTION
- 4 OPERATION mode selector
- 5 PREVIOUS PRESET NUMBER button
- 6 NEXT PRESET NUMBER button
- 7 GPI inputs
- 8 Connection to computer running SF-99 software
- 9 Connection to PX-99

### TECHNICAL FEATURES

- GPI inputs (NO):	6
- USB device input - Type B:	Connection to computer (SF-99)
- USB host input - Type A:	Connection to PX-99
- Power supply:	Through USB
- Case finishing:	ABS / Black color
- Cover finishing:	Aluminum / black color

### DESCRIPTION

The **WX-99** is a remote control panel designed to control the digital preamplifier PX-99 through a third party controller.

The functions that can be controlled are:

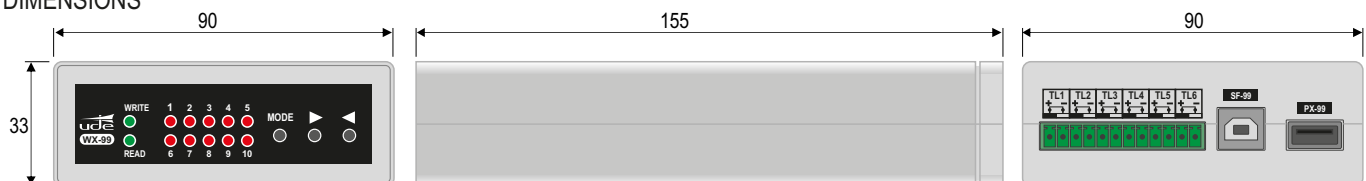
- Volume control.
- Selection of any of the 8 audio inputs.

With this module we offer versatility to use the digital preamplifier PX-99 in more types of applications. The integration with third-party equipment is done through the 6 GPI inputs (normally open) that allow the control of the following functions:

- TL1 - Increase source selection through presets (previously configured)
- TL2 - Decrease source selection through presets ( previously configured)
- TL3 - Increase volume of output A
- TL4 - Decrease volume of output A
- TL5 - Increase volume of output B
- TL6 - Decrease volume of output B

The equipment includes an internal non-volatile memory to save a maximum of 10 presets.

### DIMENSIONS



## USE

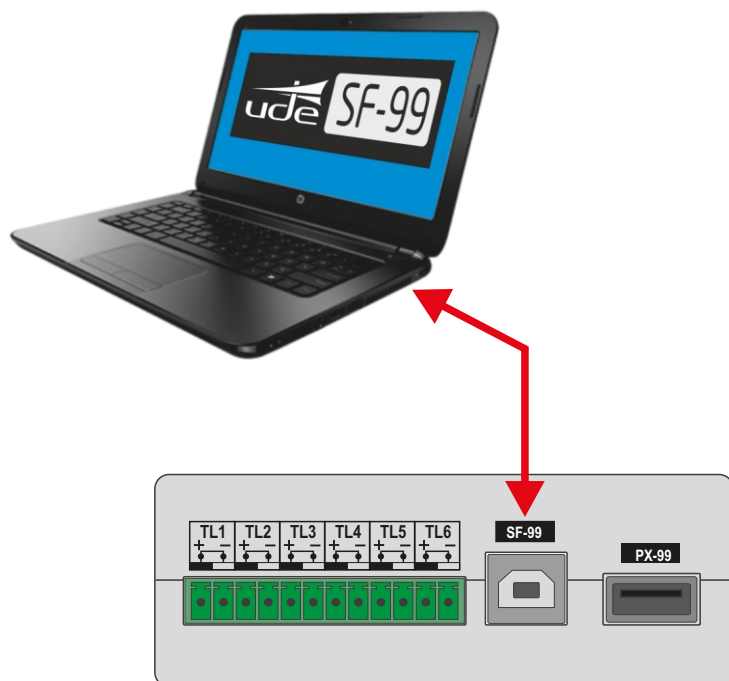
The equipment provides two operating modes that can be chosen by pressing the **MODE** button on the frontal panel.

**READ MODE:** This mode is used to configure the presets and to allow the equipment to choose any of the ten presets saved and stored in the internal memory. The mentioned configurations are done through the configuration software SF-99 that can be downloaded from the website.

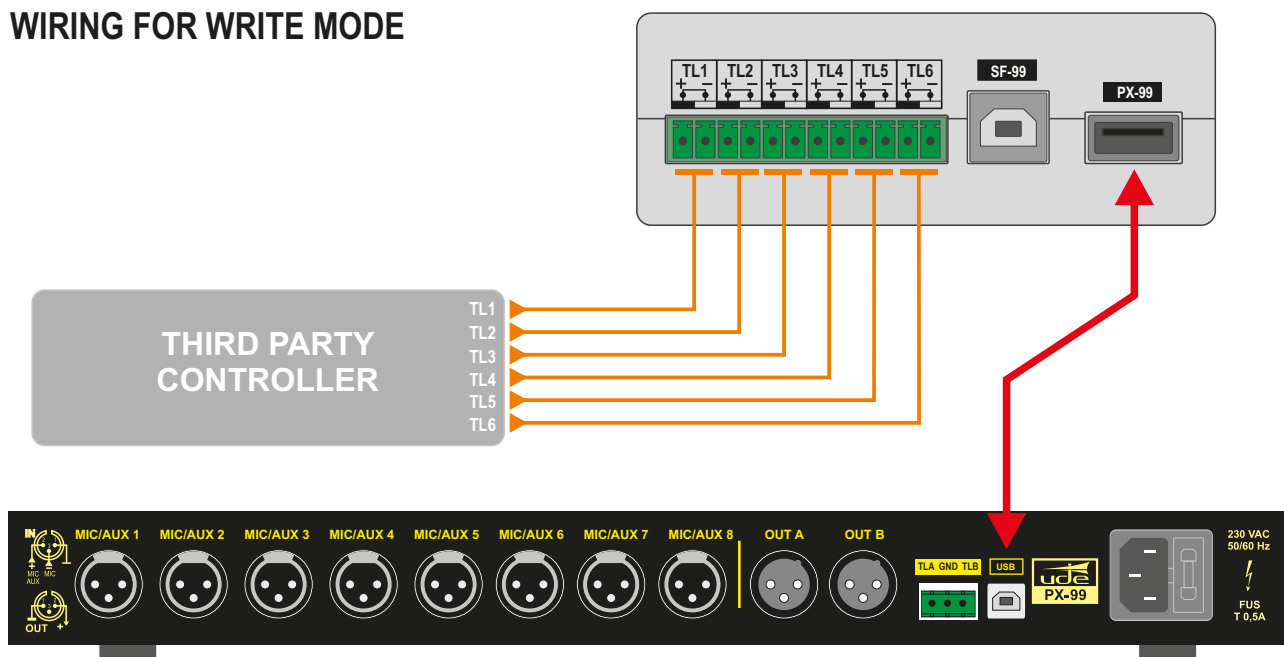
**WRITE MODE:** This mode enables the WX-99 to communicate with the digital preamplifier PX-99 and therefore allow the volume control and source selection by a third-party equipment through the presets previously configured on the READ MODE.

**IMPORTANT NOTE:** To be able to work on READ MODE it is mandatory to configure the WRITE MODE first.

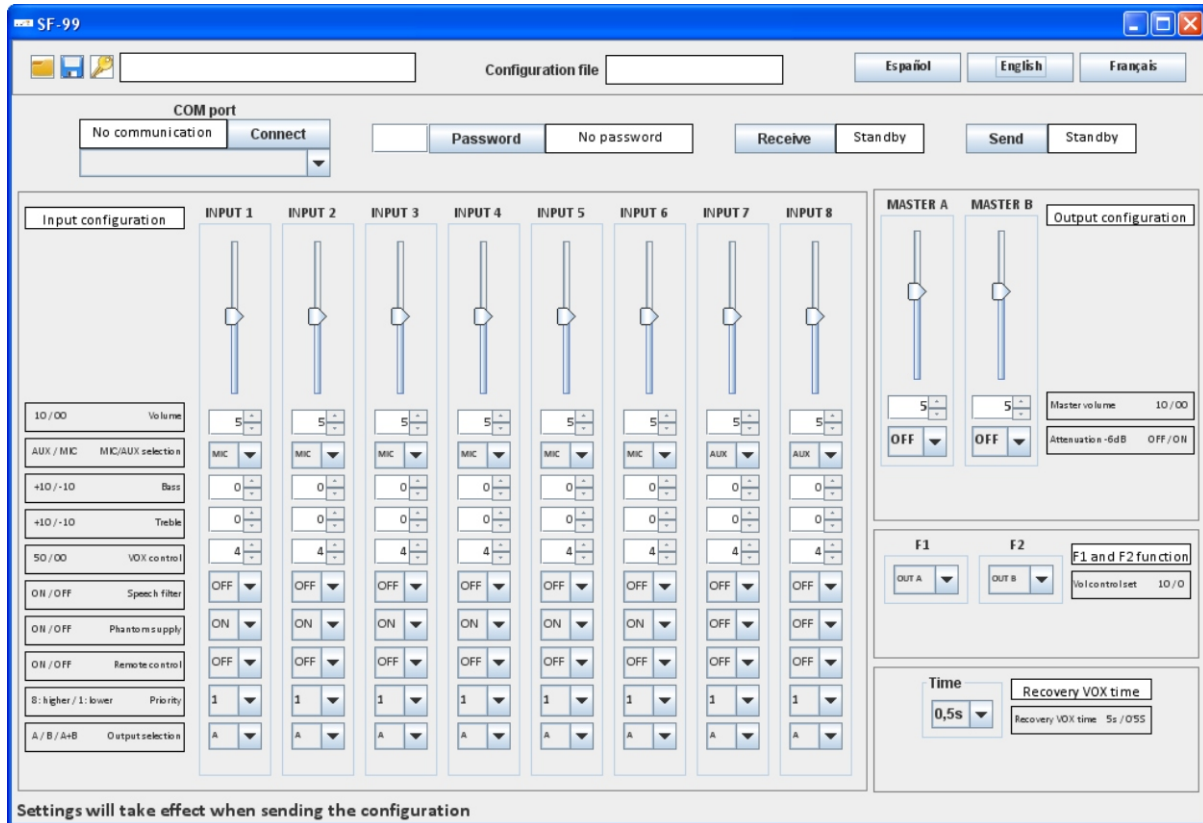
### WIRING FOR READ MODE



### WIRING FOR WRITE MODE



## SF-99 SOFTWARE INSTALLATION MANUAL



## SOFTWARE PERFORMANCE

- PX-99 password configuration
- Input and output volume control
- Microphone or auxiliary input configuration for each channel
- Treble and bass adjustment for each channel
- Speech filter configuration for each channel
- Phantom supply control for each channel
- Remote control configuration
- Priority adjustment
- Matrix control
- Fading adjustment of -6db per output
- Function keys configuration
- VOX recovery time adjustment

## MINIMUM SYSTEM REQUIREMENTS

Screen resolution : 1024X768  
 Processor: Pentium IV or later versions  
 Memory: 1GB  
 Microsoft Windows  
 JRE v.7 or later versions  
 Drivers included in installation package

## SF-99 INSTALLATION

The SF-99 software will only be installed once.

**1-** The SF-99 software is developed under JAVA version 7.0. You must have JRE installed before proceeding with the installation. If you have it installed, proceed to step 2. Otherwise, the JRE version is available as free download on this link: <http://www.java.com/download>.

**IMPORTANT:** for Windows 10 users uninstall any JAVA version installed in your PC, both versions x64 and x86. Install the JAVA version that we supply (version 8, 171 update). This is a 32 bits version, install it even if your system is 64bits.

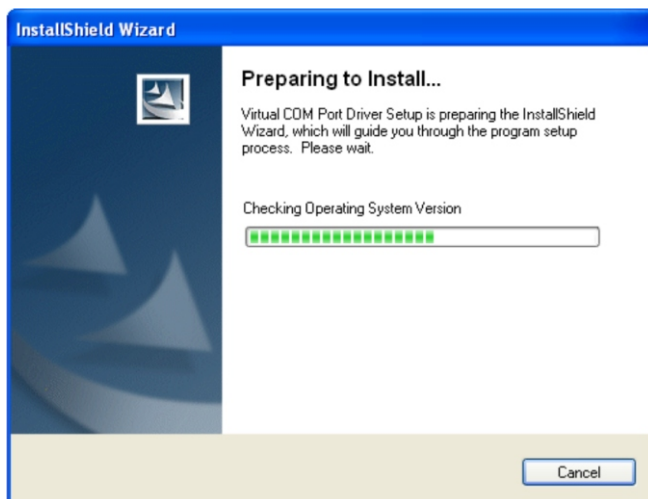
**2-** Download the SF-99 software from the website of Unión Desarrollos Electrónicos: [www.udeaudio.com](http://www.udeaudio.com)

Available two versions for different operating systems:

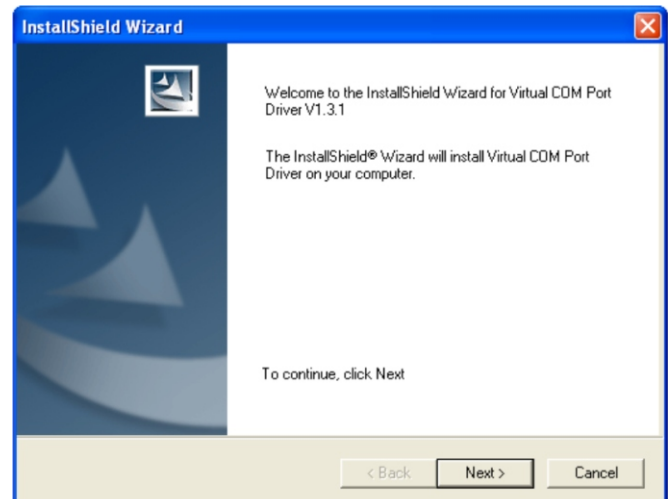
- Windows XP
- Windows vista and Windows 7.
- Windows 10

**3-** Unzip the RAR file "SF-99.rar" in a specific folder

**4-** Install the drivers of the virtual COM port from SF-99. In the unzipped folder, you will find a folder named "Drivers" in which you will find 2 executables, one for 32 bit processors and another one for 64 bit processors. Open the file according to the processor used in your computer.



The installation process will begin



Follow the instructions showing on screen  
Completing the installation of the virtual COM drivers

**5-** Copy the installation files located in the folder named "files" and paste them one by one in the JAVA folders as followed:

-File win32com.dll >> To folder Java\Bin  
Example: C:\Program files(x86)\Java\jre1.8.0\_171\bin

-File comm.jar >> To folder Java\lib\ext  
Example: C:\Program files(x86)\Java\jre1.8.0\_171\lib\ext.

-File javax.comm.properties >> To folder Java\lib  
Example: C:\Program files(x86)\Java\jre1.8.0\_171\lib.

Once the installation is finished, reset the computer for the system to apply the convenient modifications to the system.

## SF-99 FUNCTIONALITY

Before starting the software you must have installed the drivers and the configuration files.

Also you must connect the PX-99 to the computer using a USB cable A-B type ( as showed in the image ).



Next, switch on the PX-99:

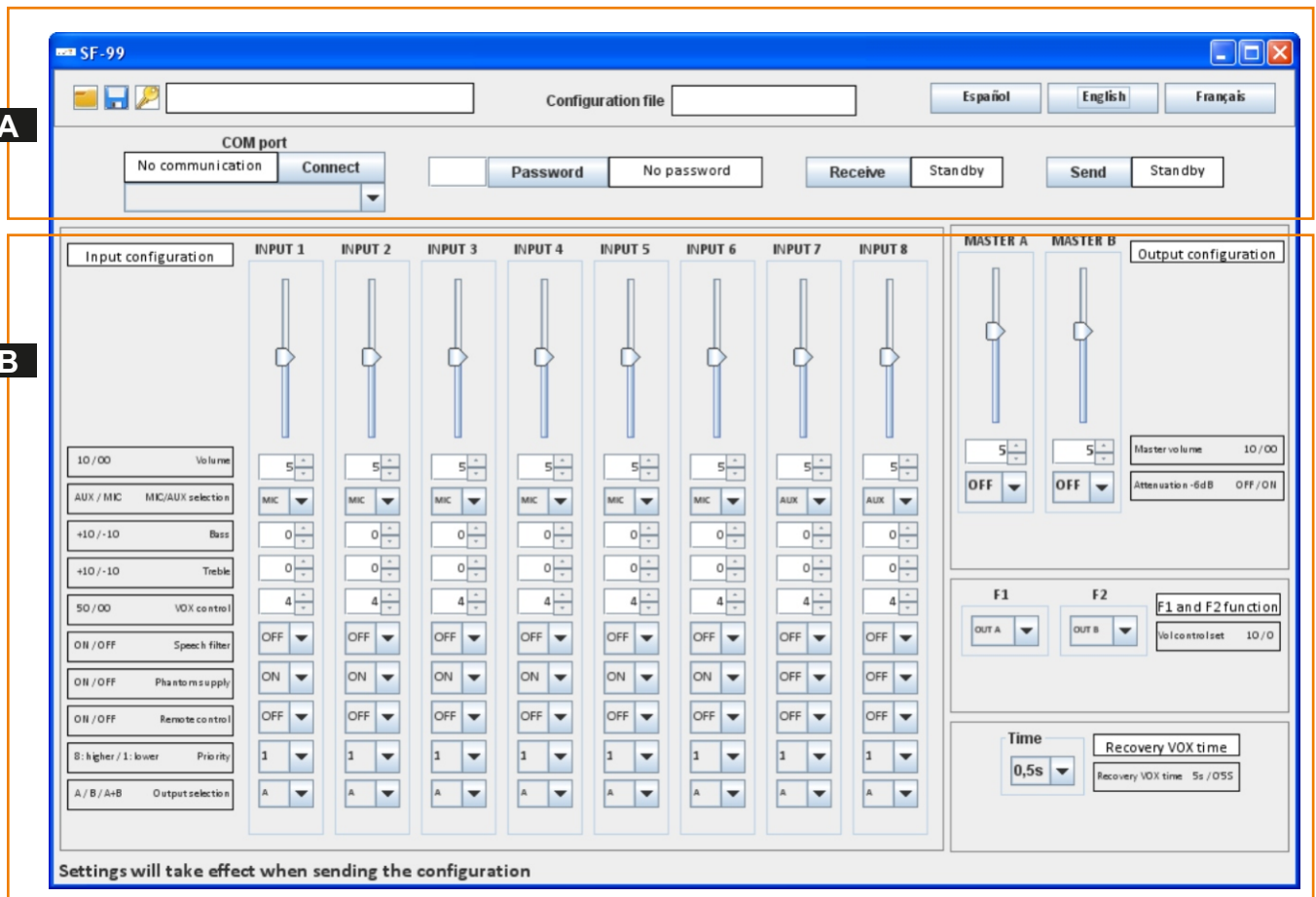
1-Open the file SF-99.jar

The next screen shows up

The SF-99 software is divided into two parts:

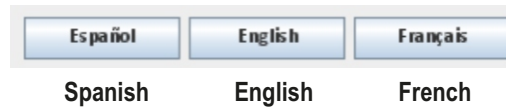
**A- CONFIGURATION/COMMUNICATION PANEL**

**B- AUDIO ADJUSTEMENTS PANEL**



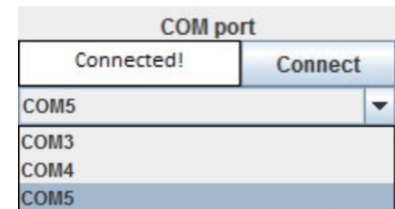
**A****CONFIGURATION / COMMUNICATION PANEL**

Software enables 3 different languages. To change language you just have to press the corresponding icon using the mouse.

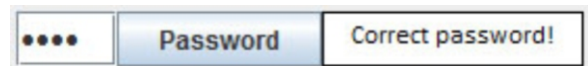


The communication panel allows initiating communication between software and PX-99.

**A-1.** Communication with COM port. Allows choosing between all COM ports available in the computer and connecting with the one chosen. Choose the COM port within the options offered on the list. Next, click on the Connect button. If equipment and software are correctly synched, the word Connected should appear.



**A-2.** You must enter a password for identification. Introduce the equipment password (Default value: 2 1 2 1) and press Password to verify.

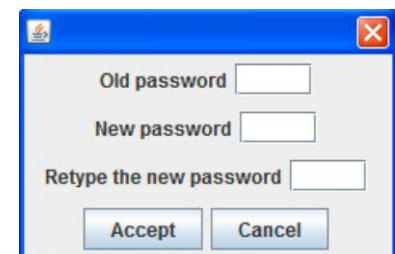


If steps **A-1** and **A-2** have been successfully completed, that means you are connected to PX-99. From now on you can change the basic configuration, load previous configurations from a file or also receive the actual PX-99 configuration.

**A-3.** Change of password

When you click on this icon, a screen shows up and you will be able to manage the equipment password.

**Attention!** Once the password is modified, it will remain permanent to access the technical mode, whether using SF-99 or PX-99.

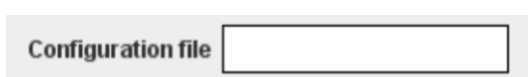
**A-4.** Save actual configuration of the SF-99 device.

Files must contain the .TXT extension.

**A-5.** Load a configuration file of the SF-99 device.

Files must contain the .TXT extension.

When the software loads the file correctly, the file's name should appear at the top of the screen.

**A-6.** Receive the SF-99 device actual configuration

If you want to receive all the configuration information set on the PX-99 you can load it directly to the program by clicking on this icon.

**A-7.** Send the actual configuration

Once you have set all the configuration on SF-99, you will need to send it to the PX-99 by clicking on this icon.

## B

## AUDIO ADJUSTEMENTS PANEL

Using this panel, the user is able to configure every parameter of the PX-99 device using SF-99.

The screenshot displays the 'AUDIO ADJUSTEMENTS PANEL' with various configuration options. On the left, under 'Input configuration', there are settings for Volume (10/00), AUX/MIC selection, Bass (+10/-10), Treble (+10/-10), VOX control (50/00), Speech filter (ON/OFF), Phantom supply (ON/OFF), Remote control (ON/OFF), Priority (8: higher / 1: lower), and Output selection (A/B/A+B). The main section shows eight input channels (INPUT 1 to INPUT 8), each with a volume slider, MIC/AUX selection, Bass/Treble controls, VOX control, Speech filter, Phantom supply, Remote control, Priority, and Output selection. On the right, under 'Output configuration', there are settings for MASTER A and MASTER B volume sliders, OFF buttons, Master volume (10/00), Attenuation (-6dB OFF/ON), F1 and F2 function (OUT A, OUT B), Vol control set (10/0), Time (0,5s), and Recovery VOX time (5s/05S).

Settings will take effect when sending the configuration

## INPUTS CONFIGURATION

INPUT 1  
INPUT 2  
INPUT 3  
INPUT 4  
INPUT 5  
INPUT 6  
INPUT 7  
INPUT 8

The diagram shows the INPUT 1 configuration panel with numbered callouts 1 through 10 pointing to specific controls: 1. Volume slider, 2. MIC/AUX selection, 3. Bass control, 4. Treble control, 5. VOX control, 6. Speech filter, 7. Phantom supply, 8. Remote control, 9. Priority, and 10. Output selection.

For each input:

1. Volume control (values between 0 and 10)
2. Input selection: Microphone or auxiliary.
3. Bass control (values between -10 and 10)
4. Treble control (values between -10 and 10)
5. VOX level control (values between 0 and 50)
6. Enable/Disable speech filter (ON/OFF)
7. Phantom supply (ON/OFF)
8. Remote control selection (ON/OFF)
9. Priorities configuration (values between 1 and 8)
10. Output assignment (A/B/A+B)

## OUTPUTS CONFIGURATION

OUT A  
OUT B

1. Control of master volume (values between 0 and 10).
2. -6dB attenuation selection (ON/OFF)

The diagram shows the OUTPUTS CONFIGURATION panel with numbered callouts 1 and 2 pointing to the MASTER A and MASTER B volume sliders and the OFF buttons, respectively.

## SET FUNCTION TO REMOTE CONTROLS F1 AND F2

They can be assigned to the volume control of any input or output.  
IN1 / IN2 / IN3 / IN4 / IN5 / IN6 / IN7 / IN8  
OU1 / OU2

The diagram shows the F1 and F2 function configuration panel with dropdown menus for F1 (OUT A) and F2 (OUT B), and a Vol control set (10/0).

## VOX RECOVERY TIME ADJUSTEMENT

Values between 0,5s (standard) and 5s.

The diagram shows the VOX RECOVERY TIME ADJUSTEMENT panel with a Time slider (0,5s) and a Recovery VOX time (5s/05S).

## IMPORTANT!

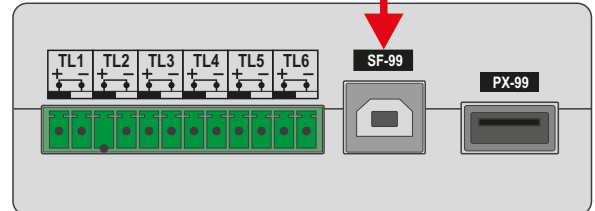
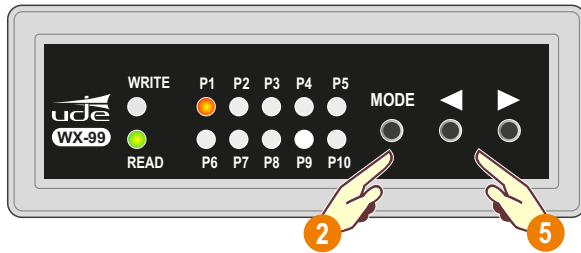
The equipment does not work in real time with the preamplifier.  
The configuration data must be sent or received in every case.

## Existing work conditions:

1. If an input has its priority set to 1, the remote control will switch to OFF.
2. If the auxiliary input is chosen, the phantom power and the speech filter will be disabled.



## INSTRUCTIONS FOR READ MODE



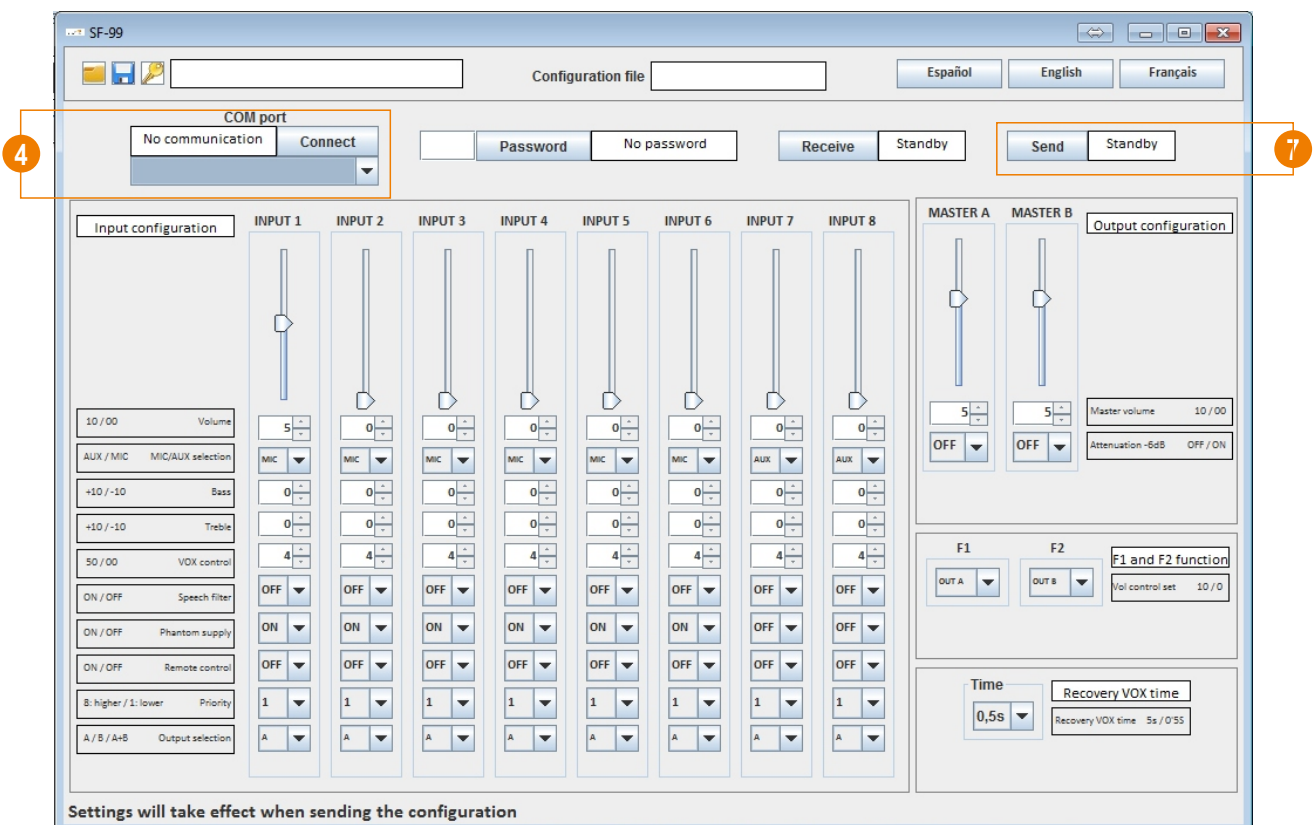
- 1 Connect the WX-99 to your computer with the SF-99 software in read mode.
- 2 Once connected, press the "MODE" button on the WX-99 and select the **READ MODE**. The "READ" led must light up.
- 3 Run the SF-99 software.
- 4 Select the corresponding **COM port** and press **CONNECT**. If the connection is successful, the message "**Connected!**" will appear. If not, try to select a different **COM port** until the connection is successful.
- 5 Select the preset that you want to configure on the WX-99.
- 6 Perform the desired configuration using the SF-99 software
- 7 Once the preset is configured in the SF-99 send the information through the "**Send**" button. During the data recording appears "**Sending**" and "**Standby**" when information is recorded.
- 8 Then, you can proceed with the configuration of the remaining presets.

### Example - Preset 1 Configuration:

For preset 1, we will set all the audio inputs volumes to zero except input number 1 (IN1), as indicated in the picture below.

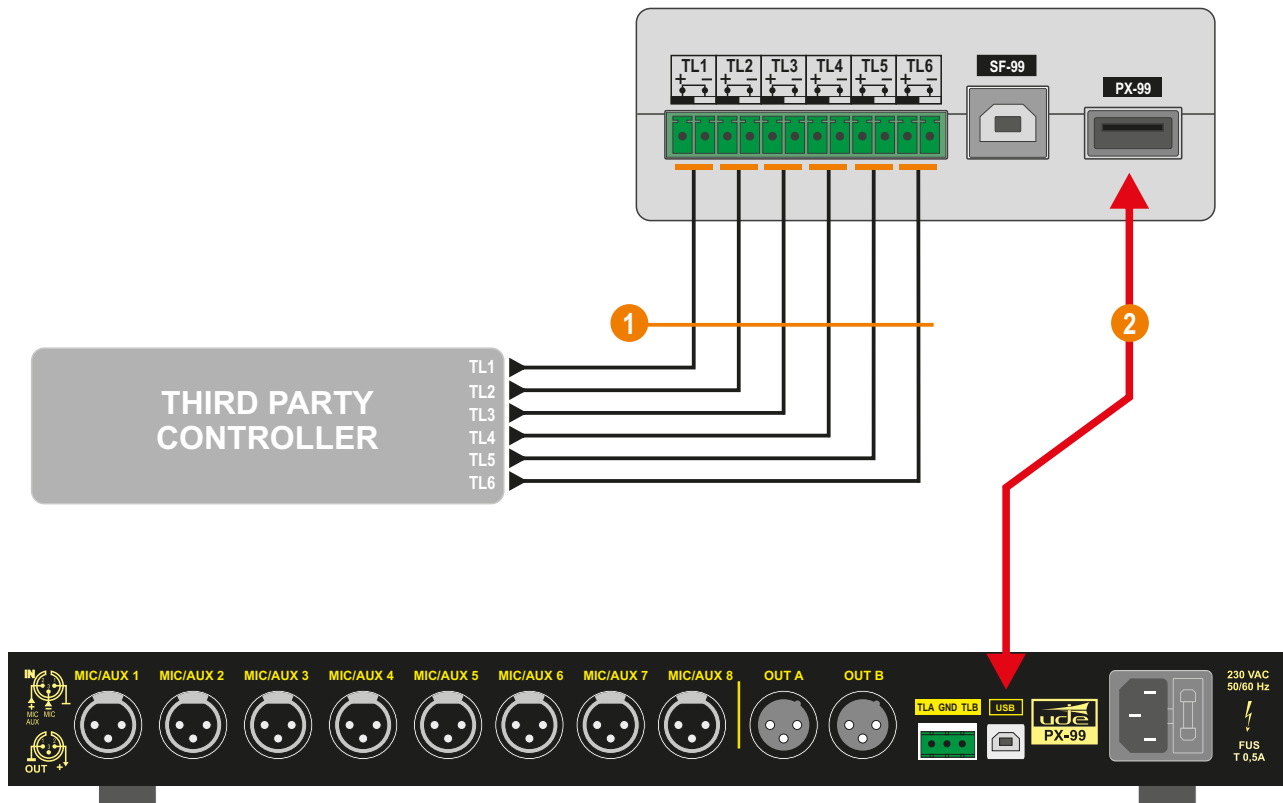
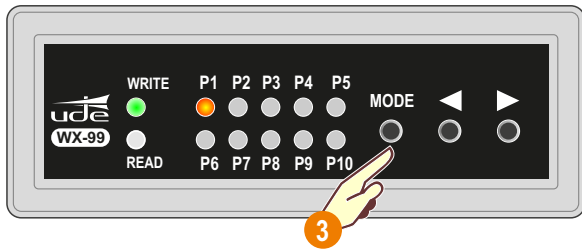
Then, we send the configuration to the WX-99. Now, when the READ mode is activated, selecting the preset 1 will be equivalent to selecting the audio input 1 (IN1) of the PX-99.

We proceed in the same way for the rest of the presets.





## INSTRUCTIONS FOR WRITE MODE



- 1 Connect the relay outputs of the third party controller to the WX-99 GPI inputs.
- 2 Connect the WX-99 to the PX-99 preamplifier.
- 3 Press the "MODE" button in order to switch to the **WRITE MODE**.  
The "WRITE" led should light up. The equipment is ready now to be integrated with the third party controller.

This mode enables the WX-99 to communicate with the digital preamplifier PX-99 and therefore allow the volume control and source selection by choosing any of the 10 presets stored in its internal memory.

Through the 6 GPI inputs, the WX-99 can control the following functions:

- TL1 - Increase source selection through presets
- TL2 - Decrease source selection through presets
- TL3 - Increase volume of output A
- TL4 - Decrease volume of output A
- TL5 - Increase volume of output B
- TL6 - Decrease volume of output B