# xsuix 

## Porteros Telefónicos

## Surix IP Entrix

Made in Argentina

## Warranty Registration

Please proceed to complete the following information for warranty registration, and send it as soon as possible, by mail, e-mail, or fax.

IMPORTANT!: This product's warranty is 1 year from the reception of this Warranty Register. We will not accept any complaints for no-registered products

| Name of holder | FIRST NAME AND LAST NAME |  |
| :--- | :--- | :--- | :--- | :--- | :--- |
| Address where the IP Entrix is installed |  |  |
| STREET AND NUMBER |  |  |

How to contact us:
Correa 2573 (C1429DRO) Cap. Fed info@surix.net / www.surix.net Tel-fax: (54 11) 47029500 and rotary lines

For technical support: soporte@surix.net

## How to contact us:

## Door 1 opening password

## Door 2 opening password

This is what the user dials in the intern that is in communication with the IP Entrix to activate the relay that opens doors 1 and 2 , respectively.

## IP Entrix in IP PBX login password

Password that the IP Entrix uses to register in the IP PBX central if its registration is required.
In the submenu IP Entrix Status there are the following items:

## SURiX ip entrix

Cantidad de Departamentos / Casas: 25

$$
\text { soft v } 1.27 \text { - progv } 3.10
$$

Menu Principal
Manual On Line

| Ocupado (en conversacion o llamando) | Off |
| :--- | :---: |
| Registrado en central IP PBX | Off |
| Jumpers | $1: 0$ |
|  | $2: 00$ |
|  | $3: 00$ |

The red colour in the numbers indicates that it is not possible to alter them by programming (they are read-only values).

Busy (In conversation or call)
If at that moment the IP Entrix was making a call (or receiving one), this value will be On. If it was not, it will be Off.

## Registered in IP PBX central

It shows if it is registered in the IP PBX central whose data is in the Communication Parameters menu.

## Jumpers

It shows the conection state of the jumpers (in case you want to verify, for example, if the start jumper was left with the default IP address).

NOTE: This submenu tab is not renewed automatically. The user should reload the page in his browser to get the updated values.

## IP Entrix

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## Introduction

¡Welcome to the SURiX Door Phone products users' network!
The product you have purchased is part of a SURiX S.R.L's important line of products and communication systems for homes, office, and multifamily systems for buildings and gated communities.

## General Description

The SURiX IP Entrix is an intelligent IP Door Phone, that is connected as an IP intern of an IP PBX.
There are models for buildings (or gated communities) of diverse sizes: 25,50,75,100,150 200 and 250 apartments/houses. The model is shown in the box and on all the programming screens.
It has two dry-contact relays to open two doors (activate alerts or other applications). The IP Entrix setting is done through an internal web server, which can be used with any standard Internet browser. If you were not in a network environment, you can connect a crossover UTP patch cord.

Use of the IP Entrix:


In the submenu Temporizers there are the following elements to be programmed:


Maximum response waiting time
This is the time the IP Entrix waits for the extension it is calling to pick up, before it undoes the call.

In the submenu Passwords there are the following elements to be programmed:

## SURiX ip entrix

Cantidad de Departamentos / Casas: 25
soft v 1.27 - prog v 3.10

Menu Principal
Manual On Line

| Clave Administrador | $\underline{\text { sx1234 }}$ |
| :--- | :---: |
| Clave apertura de puerta 1 | $\underline{31}$ |
| Clave apertura de puerta 2 | $\underline{32}$ |
| Clave login de ip entrix en IP PBX | $\underline{105}$ |

## Administrator Password

Password used to enter programming. If it gets lost, the user can enter programming with the previously described procedure

## Parameters used by the IP Entrix for its communication:

## Equipment's address (IPEntrix)

IP address that will be used by the IP Entrix for all the IP communications.
Its default value is $\mathbf{1 0 . 0 . 0} \mathbf{1 0 0}$. If this address is changed, the next accesses to the programming web server will have to be made to: http://nueva_dirección:8085

UDP Port SIP protocol Origin
Number of UDP port the IP Entrix uses in the SIP protocol.
IP Entrix login password in IP PBX
Password the IP Entrix uses to register in the IP PBX if its registration is required.
Intern number of this equipment (IP Entrix)
Intern number the IP Entrix will have for the IP PBX central (if it is connected to an IP central).

## IP PBX IP Address

Verify that the IP address of the IP Entrix and the IP PBX are in the same range (accessible).

## IP PBX Port

Port number in which the IP PBX will attend the IP Entrix comunication requirement.
Minimum range number of UDP ports
Maximum range number of UDP ports
These parameters may have to be set if the network router filters the RTP packages by port (the rule foresees this may happen).

Sub-network Mask
Defines the network addresses range
IP Address Gateway
If there is an intermediate gateway.
IP PBX domain
For hosted centrals or broadworks systems.
Expiring time (in minutes) SIP Service Register
Negotiated time with the IP PBX central.
IMPORTANT: It is advised not to increase this number.

## Technical Features

- LAN/ IP-PBX integration
- Interface: Etherne
- Door opening through any LAN/ IP-PBX extension
- Separated microphone and speakers volume control
- Configurable through an internal web-server
- Supported codec: G. 711 PCM ley u 64 kbps
- VoIP protocol: SIP-RTP
- DTMF detection: RFC 2833
- Supply: 12 VAC/VDC 1 A
- Exit to relays: 20 A/125VAC - 20 A/14 VDC


## Installation

- Remove the screw from the bottom plastic tip.
- Slide downwards the front and separate it from the plastic flush mount
- ATTENTION: follow the assembly orientation of the flush mount, do not invert it
- The flush mount has weakened areas for wire entrance; drill the one that corresponds
- Fix the box to the wall in the hole that has been made to insert it.
- Enter the power cords and UTP wires in the box.
- Connect the wires to the board (See following section).
- Fix the cover to the flush mount again, first fitting the upper screw and slightly pushing up, set the inner top screw.


## Connection

1. Set the Ethernet wire on the RJ45 (CN 12) connector.
2. Connect a $12 \mathrm{Vca} / \mathrm{cc}-1 \mathrm{~A}$ power supply, in the CN 1 terminal.
3. If there are door-opening circuits (with external supply), pass those circuits through the terminals indicated as DOOR 1 and DOOR 2 that are basic open contacts, which close when they receive the corresponding command.


## Programming

The IP Entrix has an internal web server that responds in port 8085.
The setting of the configurable parameters of the IP Entrix is done by a web browser (Internet Explorer, Firefox, etc.)
At the initial start-up, the IP Entrix has the IP adrress: 10.0.0.100. To start the setting, browse: http://10.0.0.100:8085

## NOTES:

- If your network does not provide you this range of addresses, you can momentarily alter the computer setting from which you will program the equipment, removing the DHCP and placing a fixed address in the IP Entrix address range.
- If you want to program it without being in a network, you can do it considering the address (previous item) and placing a crossover UTP patch cord between the computer and the IP Entrix.

The last 3 types of action, are generally used in independent push-buttons but not in telephone keyboard keys.
After the key action is programmed, the element N Key Programming is programmed. It defines what digit, intern number, IP address, building number, floor, or Apartment activates this key.
To program the dialed digit, 0 to 9 are used for numbers, 10 for * (asterix), and 11 for \# (pound) in case the IP Entrix is required to dial these values.

In the submenu Push-buttons Programming there is the 10 push-buttons table that the IP Entrix can have as part of its equipment.
The programming of the push-buttons is identical to the one explained for keys.
The only difference is that the first 2 push-buttons (1 and 2 ) can have an additional function: Manual Door Opening.

If this action is programmed, the N Push-button Programming for the programmed pushbutton will define which of the 2 relays will activate a pulse in that push-button.

NOTE: This feature is used when a visitor is leaving (or someone from the security post), so that he can press a button that activates lock opening for a programmed time and exit the building.

In the submenu Communication Parameters you will see the following elements to be programmed:

| Cantidad de Departamentos/Casas: 50 soft v 1.24 - prog v 3.9 |  |
| :---: | :---: |
| Menu Principal Manc | al On Line |
| Direccion de este equipo (ip entrix) | 10.100.102.10 |
| Puerto UDP protocolo SIP Origen | 5060 |
| Clave login de ip entrix en IP PBX | 105 |
| Nro interno de este equipo (ip entrix) | 105 |
| Dir IP de IP PBX | 0.0.0.0 |
| Puerto de IP PBX | 5060 |
| Nro minimo de rango de puertos UDP | 50001 |
| Nro maximo de rango de puertos UDP | 59999 |
| Mascara de sub-red | 255.255 .255 .0 |
| Dir IP Gateway | 10.0.0.2 |
| Dominio IP PBX | Surix.net |
| Tiempo Expiracion (en minutos) Registro Servicio SIP | $\underline{2}$ |

In the submenu Key Programming it can be seen the telephone keyboard table, which includes the keys * (asterisk) and \# (pound).

## N key action

The telephone keyboard has the keys 0 to 9 , * (asterix), and \# (pound).
The action of all of these keys is programmable in the same way:

- Simple key

Generates the single-digit dialing (as in a regular phone) that will be used to compose an Intern Number.

- Direct extension call

Sends the direct call (one touch) to an intern number.

- Direct IP call

Sends the direct call (one touch) to an IP address

- Dials Building number

The key is interpreted as dialing a number of tower.

- Dials Floor number

The key is interpreted as dialing a floor number.

- Dials Apartment number

The key is interpreted as dialing an apartment number.

The IP Entrix should respond with this screen to entry the programming key:


The Online Guide button is available in all the menus and (with Internet access) by clicking it, another window will open, accessing to this guide in pdf.
It can be downloaded to the computer or read online.
The password/key by default is: sx1234
NOTES:

- If the programming is altered or unknown, follow this restart steps that allow the user to work with the default numbers: the equipment's IP address and programming key (the programmed IP and key numbers stay the way they were, the IP Entrix sets this numbers temporarily)
- Turn off the equipment
- Place a jumper between conector contacts 1 and 2, as shown in the figure
- Turn on the equipment
- Enter programming in the URL
http://10.0.0.100:8085 with the key sx1234
- Modify the programming parameters as wished
- Turn off the equipment
- Remove the previously indicated jumper from
between the contacts
- Turn on the equipment

- The programming is active for 10 minutes aproximately. If more time passes without any command entered, the equipment exits the programming and the key has to be reentered to start the programming again.

When in programming, the Main Menu screen is shown:

| SURiX ip entrix <br> Cantidad de Departamentos/Casas: 50 soft v 1.24 - prog v 3.9 |  |
| :---: | :---: |
| Manual On Line |  |
| Idioma del ip entrix | Español ARGENTINA |
| Volumen de Salida (parlante) | 5 |
| Volumen de Entrada (microfono) | 5 |
| Auto atencion de Llamada Recibida | On |
| Tono al comienzo de comunicacion | On |
| Funcionalidad de frente | Llama por Interno |
| Programacion de Frente |  |
| Programacion de Teclas |  |
| Programacion de Pulsadores |  |
| Parametros de Comunicacion |  |
| Temporizaciones |  |
| Claves |  |
| Status del ip entrix |  |
| Reinicio (toma nueva dir IP si fue modificada) |  |
| Restaura valores de fabrica (excepto dir IP) |  |

The main menu shows the parameters that usually require to be altered.
At the bottom, there are two buttons that are only in the main menu:

## - REBOOT:

Restarts the equipment (the address should be typed in the browser manually). Follow this procedure to reload the IP address if it was modified. Except for the IP address, all of the other parameters are immediately changed when the equipment is reprogrammed.

## - RESTORES:

Reloads all default programming values (except for the IP address).

In the submenu Interns by Number the numeration table that the user marks and its correspondence with the IP PBX interns the IP Entrix calls.
NOTE: See in this example that the user can mark 1 or 10.

## SURiX ip entrix

Cantidad de Departamentos / Casas: 25

$$
\text { soft v } 1.27 \text { - prog v } 3.10
$$

| Menu Principal |  | Manual On Line |
| :---: | :---: | :---: |
| Indice | Discado por usuario | Interno a llamar |
| 1 | 1 | 139 |
| 2 | $\underline{2}$ | 138 |
| 3 | $\underline{3}$ | 127 |
| 4 | 4 | 122 |
| 5 | $\underline{5}$ | 156 |
| 6 | $\underline{6}$ | 164 |
| 7 | 7 | 144 |
| 8 | 8 | 167 |
| 9 | 9 | 157 |
| 10 | 10 | 189 |

Primera Anterior Siguiente Ultima
Pagina: $\square$
(Minimo: 1 - Maximo: 3)

To avoid exiting the screen, the table is assebled in a paginated form (10 items per page). To move across it, you can move to Next, Back, First, or Last page through the indicated links, or entering the corresponding page number in the text box that says Page.

NOTE: In the figure, you are not able to click on First or Back, because it is the First page so there is not Back.

BS"D

When the element Front Functionality is programmed as Calls by intern, in the submenu Front Programming there can be seen the following elements to be programmed:


## Maximum number of dialing digits

## Maximum dialing time

For the operation to be intuitive, the visitor user is not asked to validate the data by pressing Enter or something similar. To recognize between apartments (house, ground lot, or intern) 1 and 15, the IP Entrix waits some time after every dialed digit. After that time, it automatically validates the data (as if the user would have pressed Enter).
On the other hand, to avoid waiting that time for data validation, a numeration plan with a fixed number of digits can be chosen so that the number of dialed digits is what validates the data. In the submenu Welcome texts and Invitation to dial Apartment (Intern number), the welcome text is programmed (E.g.: instead of Dial Intern, if it was a gated community, maybe the user prefers Enter number of House or Ground lot).

All the menus work the same way: they are tables with two kinds of rows:

- Elements to be programmed
- Links to other submenus

The Elements to be programmed show (in yellow background) the element's description and on its side (in link format) the actual value of the parameter. By clicking on this link, the screen that allows its reprogramming is visualized.

For example:

## SURiX iP Access

soft v 1.12 - prog v 3.6

Menu Principal
Manual On Line

Volumen de Salida (parlante)


In the text box (or drop-down list) you can:

- Write (or select) the new value and press the Programming button (the minimum and maximum values are specified), or
- Press the Back button to go back to the previous menu, or
- Press the Main Menu button to go back to the main menu

The links to submenus lead to other menus of elements to be programmed, grouped by concept.
Particularly, the Front Functionality element to be programmed defines the door phone operation from the users's point of view:

- The Building, Floor, Apartment sequence can be dialed (building+Floor+Apartment when there are many buildings in the same complex, or just Floor+Apartment if it is only one building), or
- Dial the intern number (extension, annex) of the IP PBX central to which it is connected.

IMPORTANT: The programming of many items depend on how this element is programmed; this way, it is convenient that it is programmed the right way before you continue to program.

When the element Front Functionality is programmed as: Calls by Building-Floor-Apartment in the submenu: Front Programming you will see the following elements to be programmed:

## SURiX ip entrix

Cantidad de Departamentos / Casas: 100

$$
\text { soft v } 1.27 \text { - prog v } 3.9
$$

Menu Principal
Manual On Line

| Tiempo maximo de marcado (en segundos) (tiempo entre digitos, luego, envia el valor) | $\underline{3}$ |
| :---: | :---: |
| Cantidad de Torres en el predio | 1 |
| Cantidad maxima de Pisos <br> Si en Planta Baja hay deptos, sume un piso Si es igual a 1 => Edificio horizontal o barrio de casas (no espera marcado de piso) | 1 |
| Cantidad maxima de Departamentos por piso Si es igual a 1 => Cada piso es un depto (y no espera marcado de departamento) | 1 |
| Marcado de Departamento (On: Letra - Off: Numero) | On |
| Textos de Bienvenida e invitacion a marcar (Torre, Piso, Departamento) |  |
| Torre Piso Departamento |  |

Genera todas las
combinaciones posibles de
Torre, Piso y Departamento

## Maximum dialing time

For the operation to be intuitive, the visitor user is not asked to validate the data with Enter or something similar. Therefore, to recognize between floor 1 and floor 15, the IP Entrix waits some time after every dialed digit. After that time, it validates the data automatically (as if the visitor user had pressed Enter).

In a case like this, you should modify the Floor and Apartment column, so that it reflects the reality. The table, then, would be as shown below (assuming that all apartments from 101 onwards were programmed, and that the street front is number 100):

| Indice | Torre | Piso | Depto | Interno a llamar |
| :---: | :---: | :---: | :---: | :---: |
| 1 | 1 | 1 | 1 | 101 |
| 2 | 1 | 1 | 2 | 102 |
| 3 | 1 | 1 | 3 | 103 |
| 4 | 1 | 1 | 4 | 104 |
| 5 | 1 | 2 | 1 | 105 |
| 6 | 1 | 2 | 2 | 106 |
| 7 | 1 | 2 | 3 | 107 |
| 8 | 1 | 2 | 4 | 108 |
| 9 | 1 | 3 | 1 | 109 |
| 10 | 1 | 3 | 2 | 110 |
| 11 | 1 | 3 | 3 | 111 |
| 12 | 1 | 3 | 4 | 112 |
| 13 | 1 | 4 | 1 | 113 |
| 14 | 1 | 4 | 2 | 114 |
| 15 | 1 | 4 | 3 | 115 |
| 16 | 1 | 4 | 4 | 116 |
| 17 | 1 | 5 | 1 | 117 |
| 18 | 1 | 5 | 2 | 118 |
| 19 | 1 | 7 | 2 | 122 |
| 20 | 1 | 8 | 1 | 123 |
| 21 | 1 | 6 | 1 | 119 |
| 22 | 1 | 6 | 2 | 120 |
| 23 | 1 | 8 | 2 | 124 |
| 24 | 1 | 6 | 4 | - |
| 25 | 1 | 7 | 1 | 121 |

Obsérvese cómo se reemplazó
1-5-3 por 1-7-2,
1-5-4 por 1-8-1, y
1-6-3 por 1-8-2

## Number of buildings in the property

Maximum number of floors
Maximum number of apartments by floor
These are the 3 variables that allow to rapidly create the table of apartments in the building (or buildings) to complete later each position (Tower:X - Floor:Y - Apartment: Z) with the corresponding internal number (IP PBX extension).
Once these 3 variables are programmed, the table is assembled by pressing on the bottom part of the screen, the Generates T-P-D button.

To set the Maximum number of floors, you should program the maximum number of floors that the building with more floors has (if there were more than one building) and take into consideration if there are apartments on the Ground Floor.
For example, if the building has a Ground Floor, 1st , 2nd, and 3rd floor, you should set: Maximum number of floors $=\mathbf{4}$ if there are apartments on the Ground Floor, and 3 if there are not.
If it were a horizontal building, set Maximum number of floors $=1$.
To program the Maximum number of apartments by floor, the number of apartments of the floor with more apartments should be programmed, considering all the buildings (if there were more than one building).
If it were a building (or several) where every floor is one apartment, set Maximum number of apartments by floor $=1$.

## Apartment dialing (On: Letter - Off: Number)

In some countries (such as Argentina), apartments are usually indicated with letters (1st A, 2nd $E, 5$ th $C$, etc.). In other cases, they are indicated with numbers.

In the submenu: Welcome texts and invitation to dial (Building, Floor, Apartment) welcome texts are programmed (E.g.: instead of Dial Building, maybe the user preffers Enter Building number).

In the submenu: Building Floor Apartment is the table created with the Generate B-F-A button, which contains all the apartments from all the floors and buildings, according to the programming of the first 3 variables of the previous menu..

NOTE: Even if the apartment is identified with a letter, in this table it is always shown with a number (the programer will have to consider that 1 corresponds to $\mathrm{A}, 2$ to B , and so on). The right-most column is the IP PBX extension number that corresponds to that apartment.

| SURiX ip entrix <br> Cantidad de Departamentos / Casas: 100 soft v 1.27 - prog v 3.9 |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
| Menu Principal |  |  | Manual On Line |  |
| Indice | Torre | Piso | Departamento | Interno a llamar |
| 0 | 1 | 1 | 1 | 100 |
| 1 | 1 | 1 | $\underline{2}$ | 138 |
| 2 | 1 | 1 | $\underline{3}$ | 127 |
| 3 | 1 | 1 | 4 | 122 |
| 4 | 1 | $\underline{2}$ | 1 | 156 |
| 5 | 1 | $\underline{2}$ | $\underline{2}$ | 164 |
| 6 | 1 | $\underline{2}$ | $\underline{3}$ | $=$ |
| 7 | 1 | $\underline{2}$ | 4 | = |
| 8 | 1 | $\underline{3}$ | 1 | 157 |
| 9 | 1 | $\underline{3}$ | $\underline{2}$ | 189 |
| Primera |  | Anterior $\square$ Ultima Pagina: $\square$ (Minimo: 1 - Maximo: 10) |  |  |

To avoid exiting the screen, the table is assembled in a paginated form ( 10 items per page). To move across it, you can move to Next, Back, First, or Last page through the indicated links, or entering the corresponding page number in the text box that says Page.

NOTE: In the figure, you are not able to click on First or Back, because it is the First page so there is not Back.

IMPORTANT! There are two possible situations:

- If the building has the same number of apartments in all the floors, the table will probably look as in reality, maybe with one or two blanks in some floor where apartments may be unified
For example, in the case of the figure, in the 2 nd floor there are only 2 apartments (not 4 as in the other floors).
In this case, leave unprogrammed the non-existing apartments (in our example, the 2nd 3 and 2nd 4 if identified with numbers, or 2nd C and 2nd D if identified with letters).
- If the building has different number of apartments per floor, it is possible that the table does not include all the apartments in the building as the maximum number of apartments supported by the IP Entrix will be reached before the table is completed Supposing a building with 24 apartments that has 4 apartments per floor on floors 1 to 4 , and 2 apartments per floor on floors 5 to 8 .

When we program, the variables:
Number of Buildings: 1 - Number of floors: 8 - Number of apartments per floor: 4.
A table as the following will result:

| Indice | Torre | Piso | Depto | Interno a llamar |
| :---: | :---: | :---: | :---: | :---: |
| 1 | 1 | 1 | 1 | - |
| 2 | 1 | 1 | 2 | - |
| 3 | 1 | 1 | 3 | - |
| 4 | 1 | 1 | 4 | - |
| 5 | 1 | 2 | 1 | - |
| 6 | 1 | 2 | 2 | - |
| 7 | 1 | 2 | 3 | - |
| 8 | 1 | 2 | 4 | - |
| 9 | 1 | 3 | 1 | - |
| 10 | 1 | 3 | 2 | - |
| 11 | 1 | 3 | 3 | - |
| 12 | 1 | 3 | 4 | - |
| 13 | 1 | 4 | 1 | - |
| 14 | 1 | 4 | 2 | - |
| 15 | 1 | 4 | 3 | - |
| 16 | 1 | 4 | 4 | - |
| 17 | 1 | 5 | 1 | - |
| 18 | 1 | 5 | 2 | - |
| 19 | 1 | 5 | 3 | - |
| 20 | 1 | 5 | 4 | - |
| 21 | 1 | 6 | 1 | - |
| 22 | 1 | 6 | 2 | - |
| 23 | 1 | 6 | 3 | - |
| 24 | 1 | 6 | 4 | - |
| 25 | 1 | 7 | 1 | - |

But in this table it figures floors 5th 3 and 4, and 6th 3 and 4 that does not exist (because on those floors there are only 2 apartments per floor) and does not figure 7 th 2 nor 8 th 1 and 2 .

