

Control Unit SC-400

Description

Thanks to the elements that make it up, the SC conference system permits the communication, management and control of debates, conferences, meetings and similar acts.

The new antilarsen device incorporated into the SC-400-system controller gives the system a high level of performance.

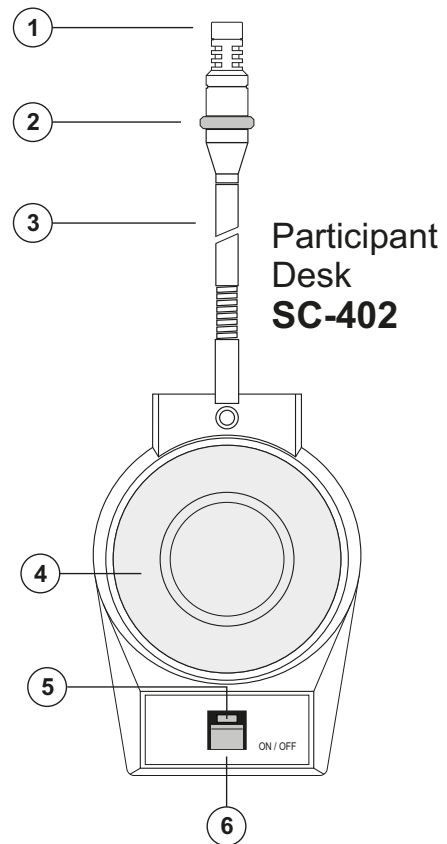
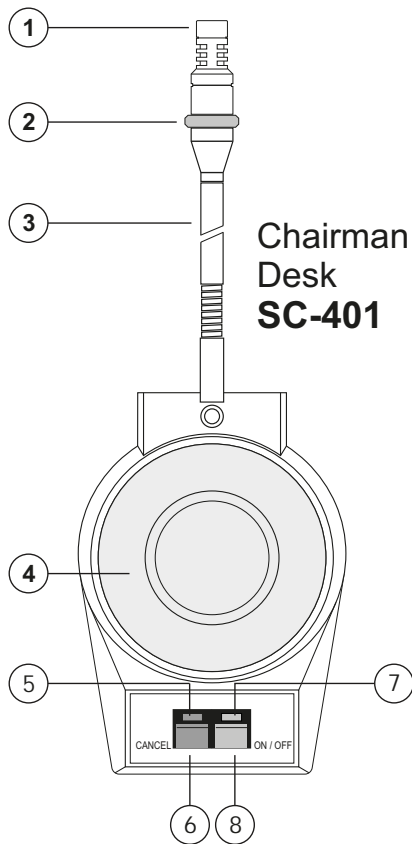
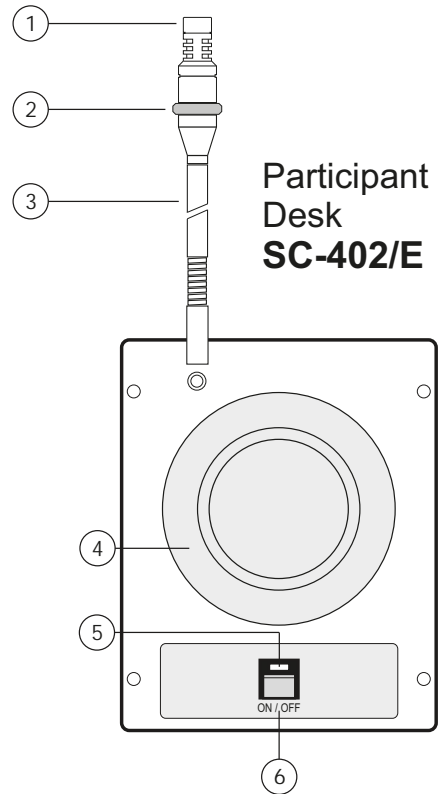
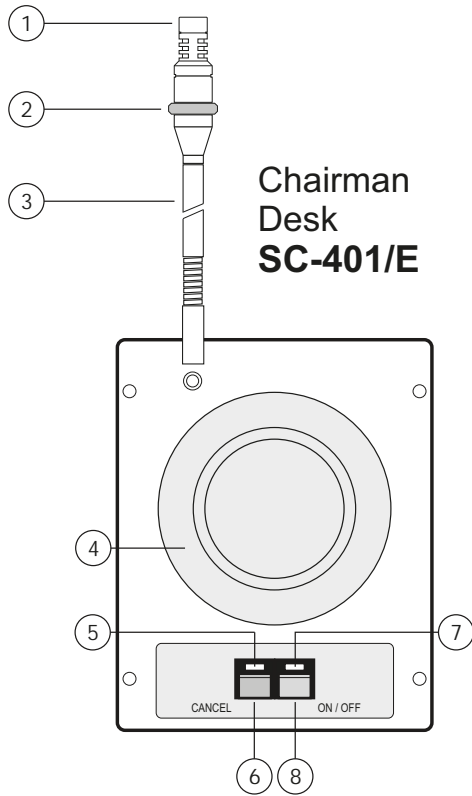
Installation

Each conference participant has a SC-402 / SC-402/E desktop unit which incorporates a microphone with an indicator in the form of a high performance luminous ring, an "ON/OFF" button, to speak/let others speak, and a loudspeaker for listening.

The chairman (or moderator's) unit, model SC-401 / SC-401/E (*) has, in addition, a priority button, which allows him to mute the other delegates when this is necessary.

All of these are connected to the SC-400 management, amplification and power source system controller by means of an omnibus line.

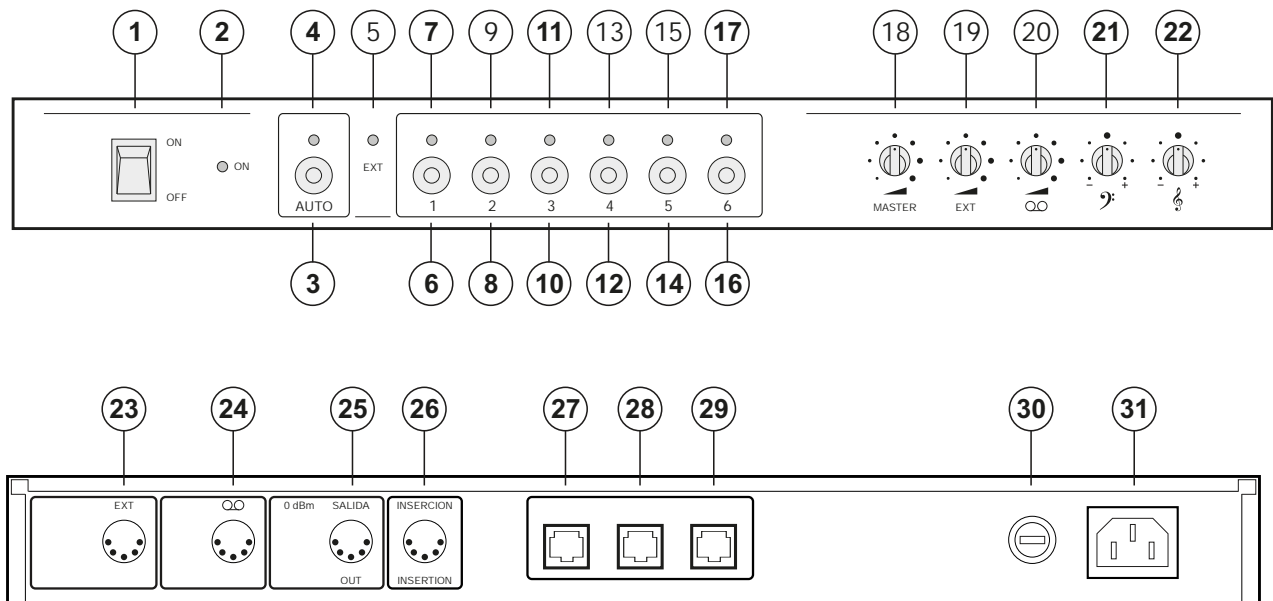
(*) For a SC systems with more than two SC-401 / SC-401/E desk, call.



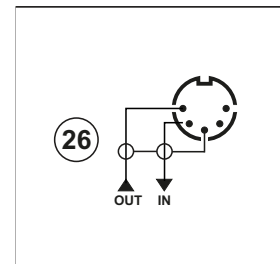
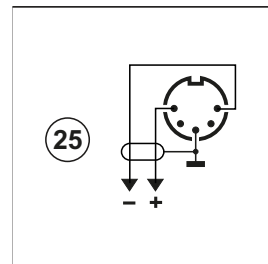
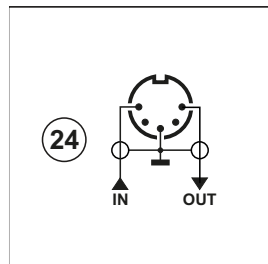
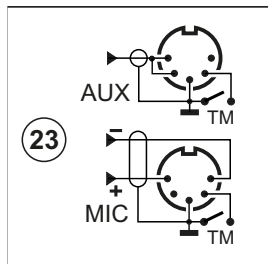
- ① - Microphone
- ② - Light ring indicator
- ③ - Gooseneck
- ④ - Loudspeaker
- ⑤ - Priority indicator pilot
- ⑥ - Priority push-button "CANCEL"
- ⑦ - ON indicator
- ⑧ - "ON/OFF" push-button

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SC-400



DIN CONNECTION DIAGRAMS



- ①- Power switch
- ②- ON light indicator
- ③- Automatic mode selector
- ④- Automatic mode indicator
- ⑤- External signal input ON indicator
- ⑥- Simultaneous mode 1 participant selector
- ⑦- Simultaneous mode 1 participant indicator
- ⑧- Simultaneous mode 2 participants selector
- ⑨- Simultaneous mode 2 participants indicator
- ⑩- Simultaneous mode 3 participants selector
- ⑪- Simultaneous mode 3 participants indicator
- ⑫- Simultaneous mode 4 participants selector
- ⑬- Simultaneous mode 4 participants indicator
- ⑭- Simultaneous mode 5 participants selector
- ⑮- Simultaneous mode 5 participants indicator
- ⑯- Simultaneous mode 6 participants selector
- ⑰- Simultaneous mode 6 participants indicator
- ⑱- Master level adjustment
- ⑲- External signal level adjustment
- ⑳- Tape input signal level adjustment
- ㉑- Bass control
- ㉒- Treble control
- ㉓- External input
- ㉔- Tape input / record output
- ㉕- Signal output for external amplifier
- ㉖- Insertion for graphic equalizer
- ㉗- RJ-45 jack for SC-401 / SC-402 desks (max. 20 units)
- ㉘- RJ-45 jack for SC-401 / SC-402 desks (max. 20 units)
- ㉙- RJ-45 jack for SC-401 / SC-402 desks (max. 20 units)
- ㉚- AC power fuse (T0.25A)
- ㉛- AC 230 V. 50/60 Hz inlet

Basic operation

Each conference participant may speak by pressing the "ON/OFF" button on his unit, in accordance with the operating mode that has been selected on the system controller.

A luminous ring around the microphone shows whose turn it is to speak. By releasing the button disconnects the microphone which changes to listen mode.

The chairman's unit may always speak and allow others to speak, independent of the operating mode that has been selected. Likewise, the chairman may also mute the other delegates at any moment.

The system can function in two different modes by means of a selection option on the SC 400 system controller:

A. Automatic mode: only one delegate at a time with automatic disconnection of his microphone, when another delegate speaks.

B. Simultaneous mode: with a limitation on the number of delegates. Each delegate speaks and hands over the right to speak by means of an "ON/OFF" button, with a maximum of 1 to 6 delegates being able to activate at any one time, depending on the number selected on the system controller.

Expanded operation

The SC-400 system controller incorporates an exterior "EXT" signal, which allows to connect either a microphone (dynamic, electret, phantom, cordless), or else the signal from a mixer with various microphones, depending on the requirements of each case (audience interaction, requests and questions etc.).

This external "EXT" signal source can operate (by means of an internal configuration in the SC-400 system controller) either as an extra delegate's station or in independent mode.

In both cases it is always subordinated to priority of the chairman's unit.

The right to speak of the "EXT" input is achieved by modulation and by remote control

The system has a signal input "OO" for a reproducer (cassette, CD, numerical recorder-reader, etc.) which allows recordings, hymns, etc. to be transmitted to all the units of the system.

By means of amplification and additional loudspeakers, it is possible to reproduce debates and conferences in other areas (attending public).

By using the signal jack available for this purpose, it is possible to record the contributions of the delegates in the act or debate.

External input "EXT"

The microphone associated to the external input "EXT" is activated by modulation (vox control) and also by remote control in the following way:

- **Vox control:** activated on speaking and deactivated two seconds after the delegate stops speaking.

- **Remote control:** activated when contact is closed and is deactivated when contact is opened. If there is a signal the vox control device predominates over the remote control

If it is configured as "independent", it is activated and deactivated without taking the operating mode of the system controller (auto / simultaneous) into consideration.

If it is configured as "delegate", it will be subject to the operating mode that has been selected, and will behave in the same way as any other delegate's unit.

In all cases the priority of the chairman's unit will affect all the delegates and the "EXT" input, and he can also participate in the debate at any moment he deems opportune by activating and deactivating his microphone.

NOTE 1 - The system controller incorporates its own antilarson device adjusted to optimise the performance of the SC-401, SC-402 and SC-403 units. If the system has an external amplifier with speakers, this will not be affected by the antilarson, and so if it is necessary the amplifier should be fitted with its own WX-19 antilarson.

NOTE 2 - In those cases where the bad acoustics of the hall has a strong impact on the performance of the SC system, it is recommendable to connect an EG-31 graphic equaliser using the CA-32 cable.

NOTE 3 - For the user's comfort, the SC-400 system controller incorporates a configurable internal device, in such a way that the start up of the system automatically selects the most common operating mode (automatic / simultaneous with limited number of delegates, from 1 to 6).

However, the user may select any other desired option by using the frontal buttons.

BASIC connection

Diagram 1

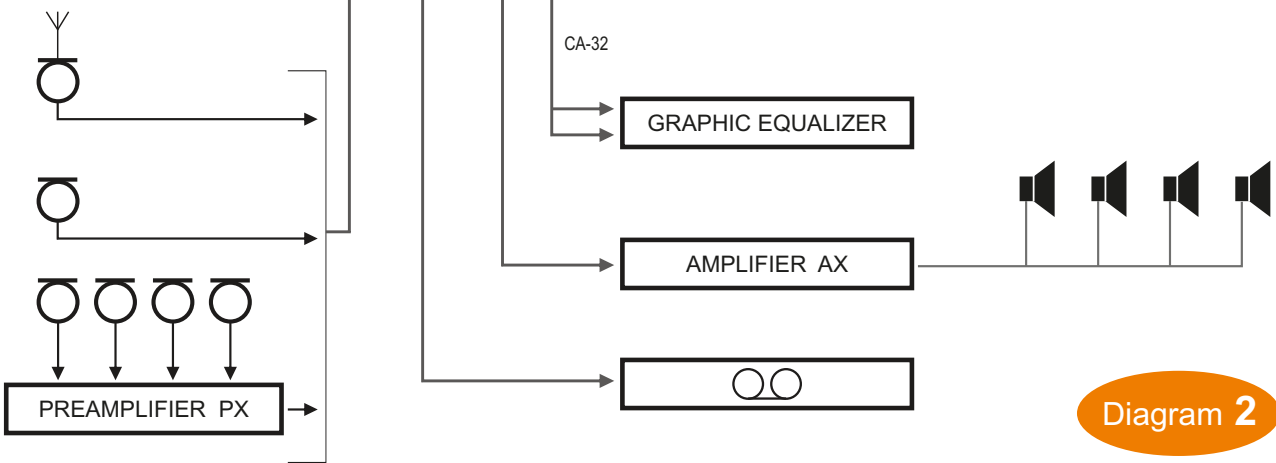
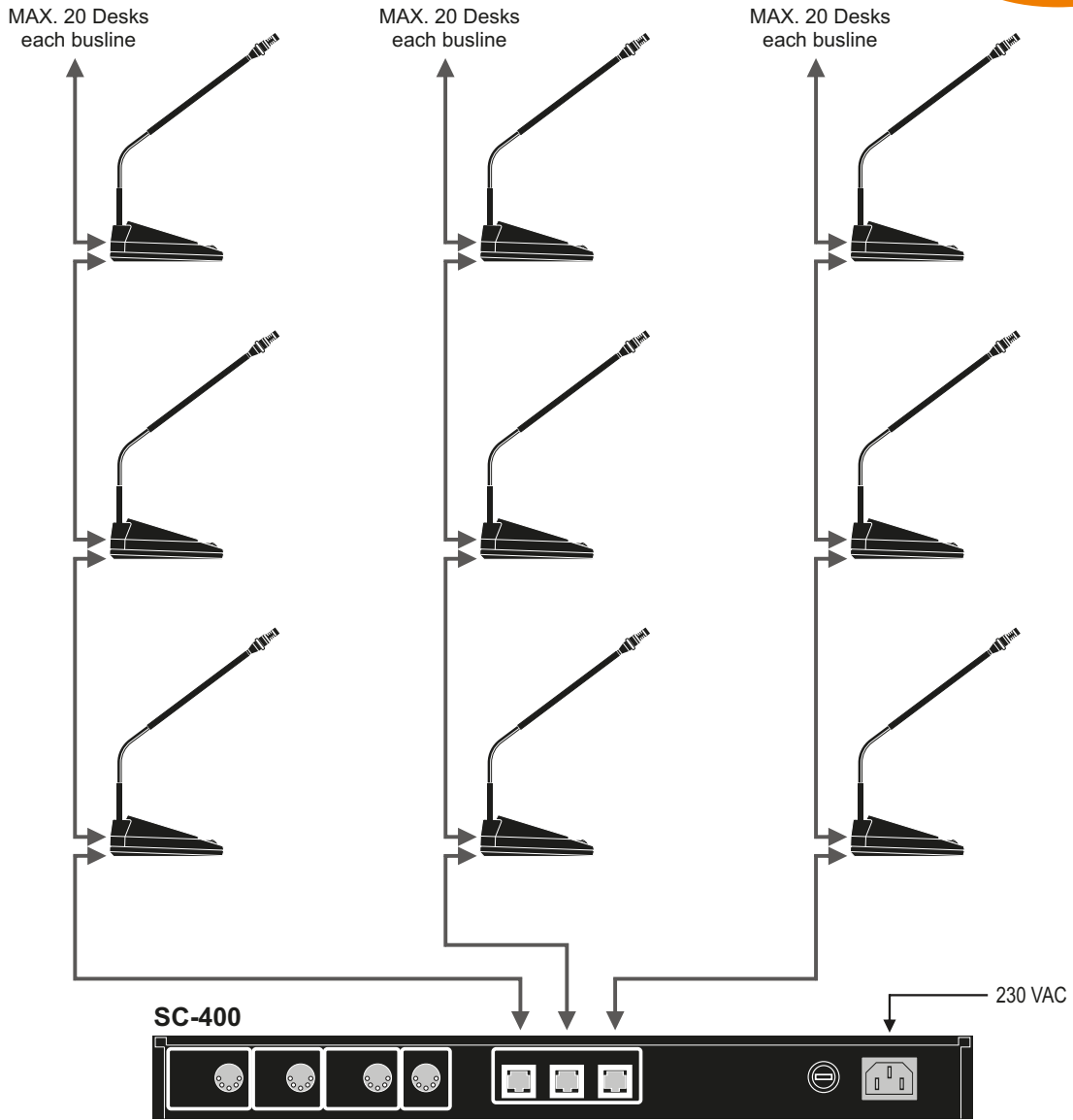


Diagram 2

EXPANDED connection

Installation

1. Connect the SC-401, SC-402 and SC-403 units to the SC-400-system controller, as indicated in the connection diagram, using the SC-416, and SC-417 cables (See **diagram 1**).

Where there are long distances between the system controller and the units, two SC-415 connection boxes should be used (See **diagram 5**).

When the connection of more than 60 delegates is required, it's necessary to use 3 connection boxes SC-415, one power supply 24 VDC and one booster amplifier 25 W. (See **diagram 6**).

2. Connect the complimentary elements that correspond according to the cases (See **diagram 2**).

- Microphone/ Cordless / external preamplifier
- Room amplifier and its associated speakers (See **note 1 - page 4**).
- Recorder-reproducer (tape, numerical etc.)
- Graphic equalizer EG-31 (See **note 2 - page 4**).

3. Using the plug-in bridges (jumpers), configure the SC-400 system controller.

4. Connect the AC 230 V power source to the system.

Configuration of the system

The SC 400 is factory set in the following way:

- **Reset to start up**: automatic operating mode (See **note 3 - page 4 and diagram 4**).
- **External input "EXT"**: microphone / music / phantom power source (See **diagram 3**).
- **Operation "EXT"**: independent (See **diagram 3**).

Should it be necessary, this configuration can be changed by positioning the interior bridges of the system controller in an adequate manner.

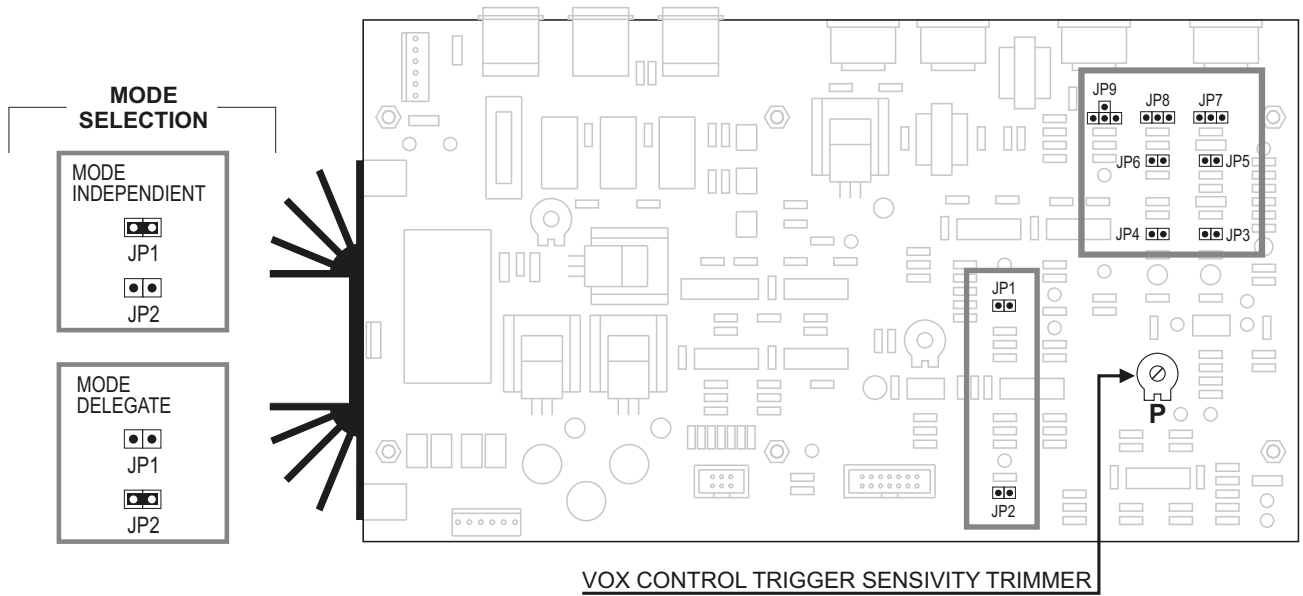
Adjustments

1. Set the master, exterior and tape volume to 0. Bass and treble tones at their middle position.
2. Activate the start switch of the system controller.
3. Activate the microphone of the chairman's unit (ON).
4. Adjust the "MASTER" volume for a correct reception on all the delegates' units.
5. Correct the bass and treble tones according to the requirements of use (Also adjust the EG-31 equalizer if necessary).
6. Activate each of the microphones of the delegates' units and check that they are working properly.
7. If necessary, adjust the rest of the external tape volume controls etc. as well as the additional amplifier etc.
8. The vox control trigger sensivity of the "EXT" input, is set at the factory. If needed, is possible reset by "P" trimmer (See **diagram 3**).

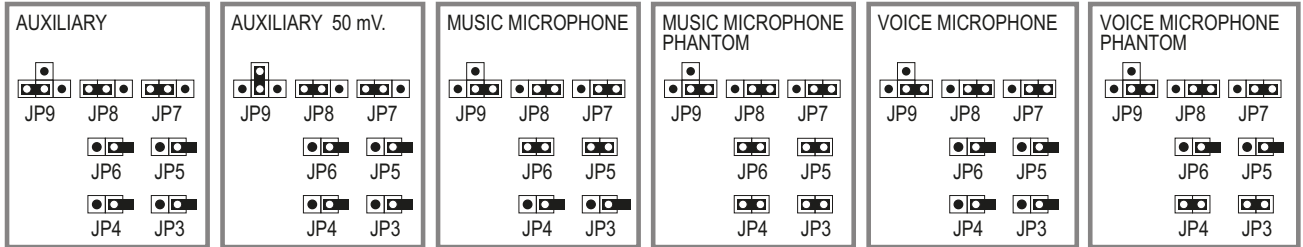
Configuration External Input "EXT" - SC-400

Diagram 3

REMOVE THE COVER AND SET THE JUMPERS AS FOLLOWS



CONFIGURATION

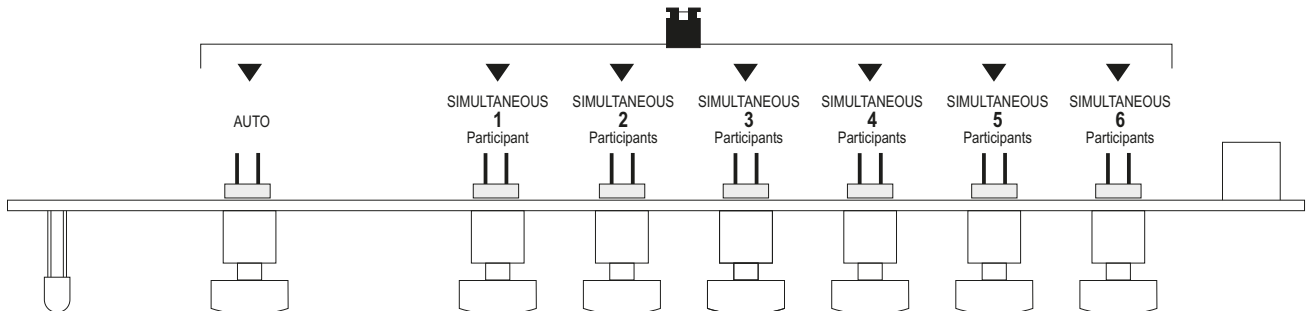


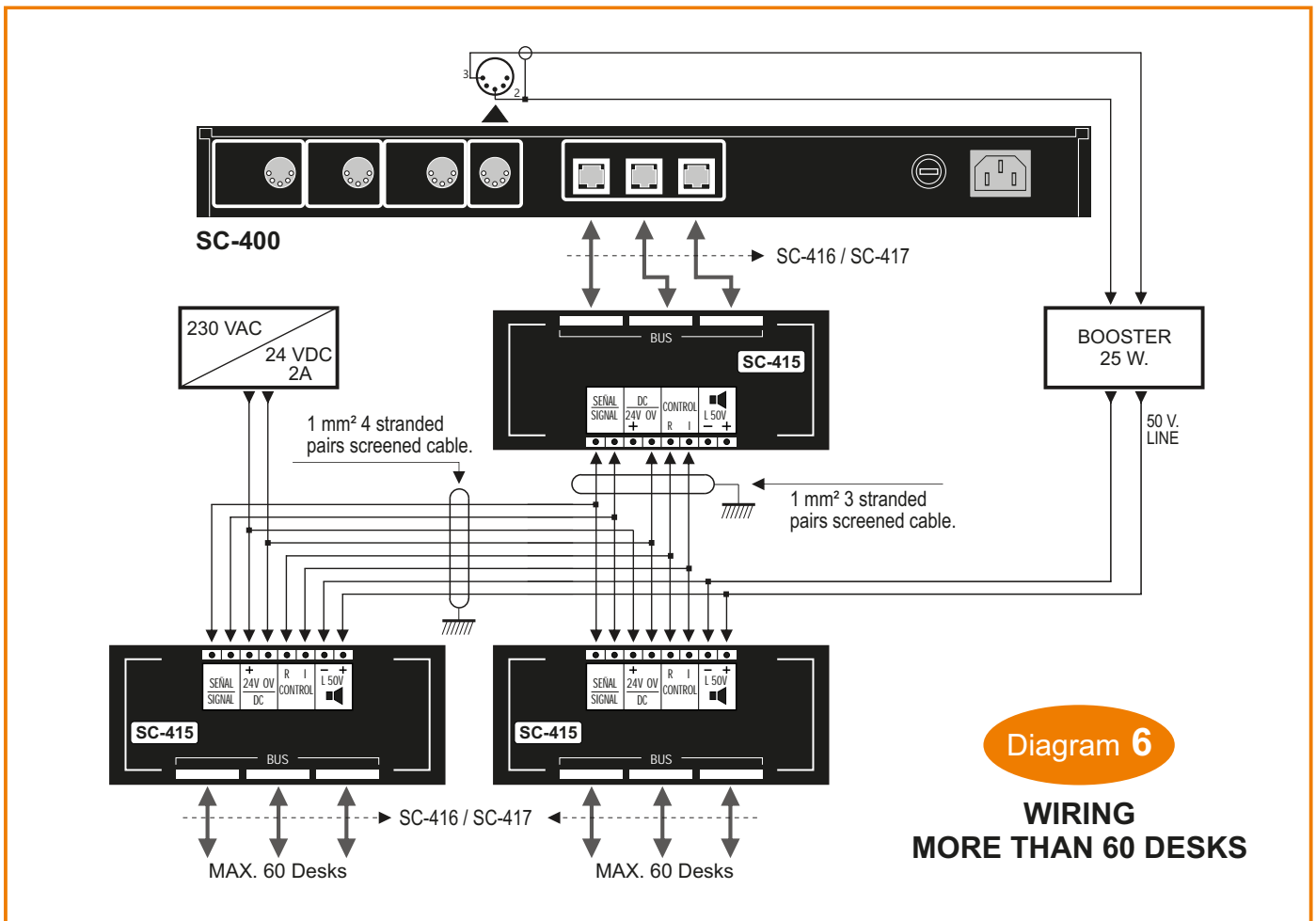
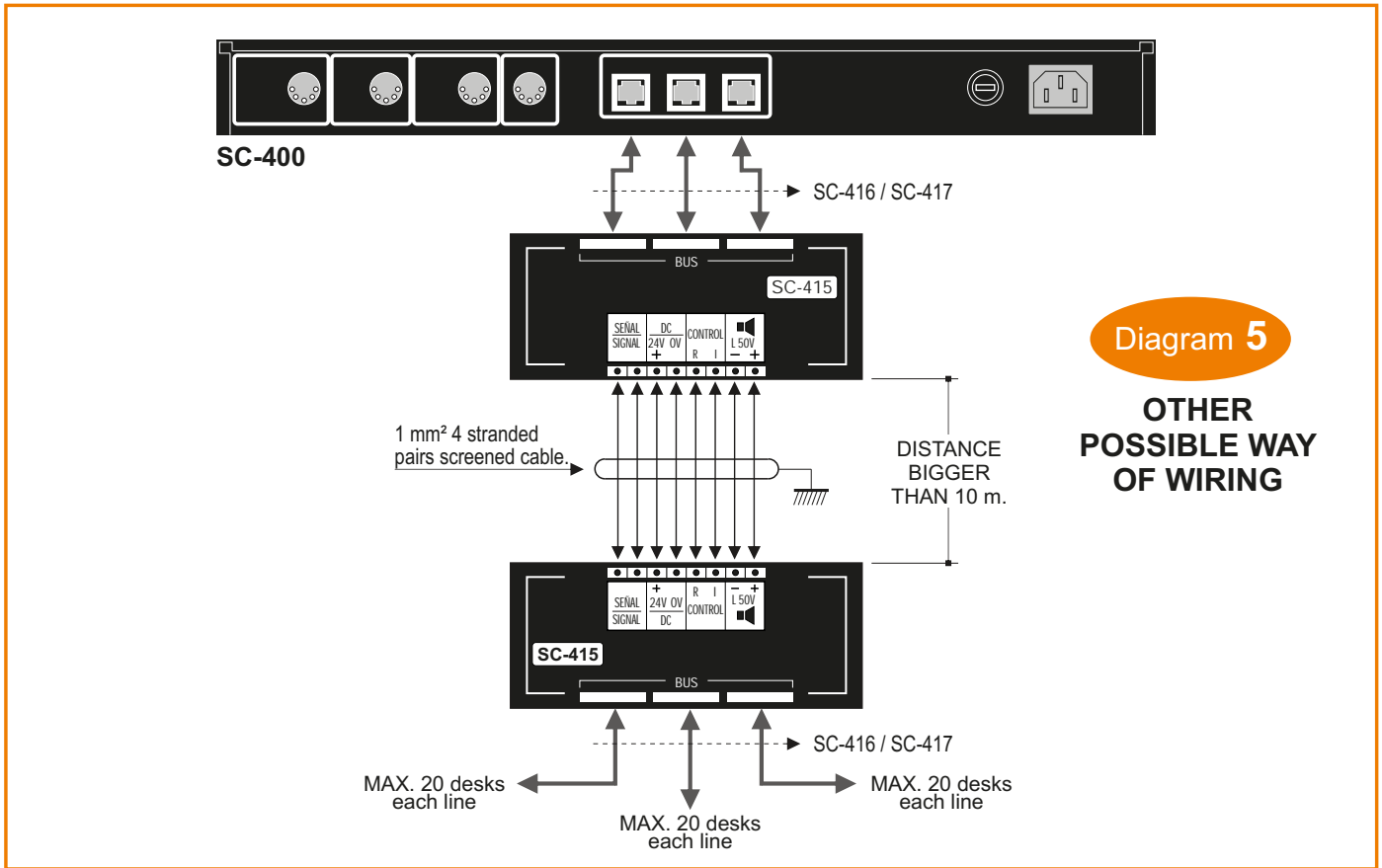
Configuration Reset to start up - SC-400

Diagram 4

REMOVE THE COVER AND SET THE JUMPERS AS FOLLOWS

PUT JUMPER AS NEEDED





System operation

SC-400 Central:

Activate the power switch of the SC-400 system controller (as well as the complimentary elements, equaliser, tape etc.).

If necessary, select the operating mode (automatic / simultaneous), by pressing the corresponding button on the system controller.

The system is then ready to operate.

SC-401 / SC-401/E Chairman desk:

Press the "ON/OFF" button to activate the microphone.

The luminous ring of the microphone comes on, together with the pilot light associated with this button.

To deactivate the microphone press the "ON/OFF" button again.

This happens independent of the operating mode (automatic / simultaneous) that has been selected.

To mute the rest of the delegates, press the "CANCEL" button. The pilot light associated with this button comes on, and the microphone of the chairman remains in the same state (ON/OFF) in which it was before the priority feature was activated.

SC-402 / SC-402/E Participant desk:

To activate the microphone press the "ON/OFF" button.

The microphone will be activated according to the operating mode selected at the system controller.

Automatic operation "AUTO":

Only one active participant is allowed.

A delegate activates his microphone and speaks.

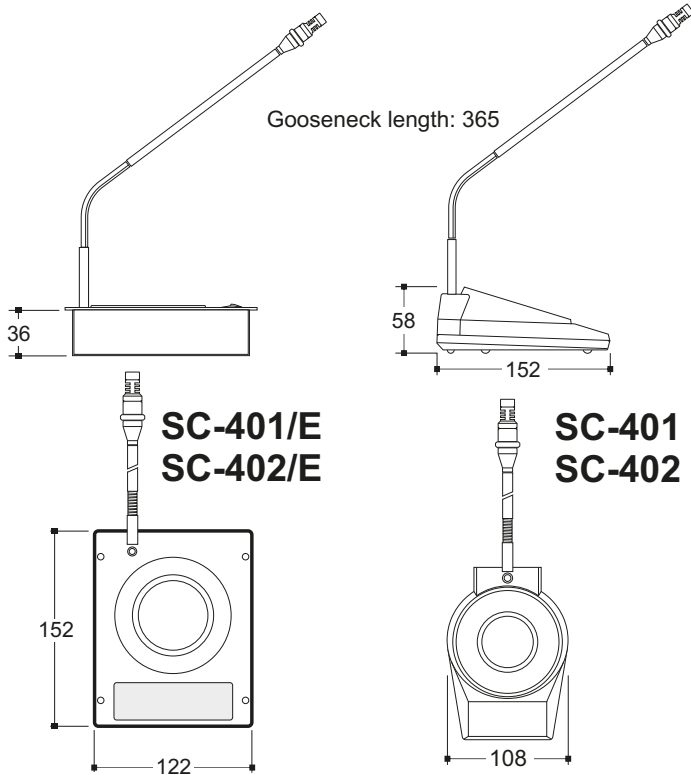
At the end of the intervention, he presses again and deactivates his microphone.

If another delegate activates his microphone while a delegate has his microphone activated, the latter is deactivated automatically.

Simultaneous operation with a limited number of delegates (from 1 to 6):

Each delegate presses to activate his microphone, and presses again to deactivate it.

Depending on the number selected at the system controller (from 1 to 6), one or various delegates may activate their microphones and speak simultaneously. When this number is the same as that selected at the system controller, no other delegate can enter the debate until one of the participants deactivates his microphone.

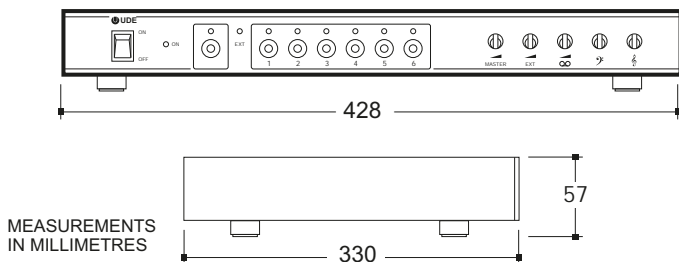


TECHNICAL CHARACTERISTICS - SC-401 / SC-401/E	
- Material:	ABS - Metal.
- Colour:	Anthracite grey.
- Electret microphone:	Unidirectional.
- Speaker:	2.5" / 8Ω.
- Connection:	RJ-45 connector.
- Lead delivered:	SC-417 (2 m.).
- Weight (SC-401):	430 gr.
- Weight (SC-401/E):	660 gr.

TECHNICAL CHARACTERISTICS - SC-402 / SC-402/E	
- Material:	ABS - Metal.
- Colour:	Anthracite grey.
- Electret microphone:	Unidirectional.
- Speaker:	2.5" / 8Ω.
- Connection:	RJ-45 connector.
- Lead delivered:	SC-417 (2 m.).
- Weight (SC-402):	430 gr.
- Weight (SC-402/E):	660 gr.

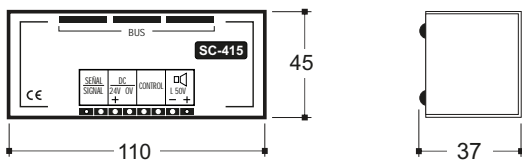
MEASUREMENTS IN MILLIMETRES

SC-400



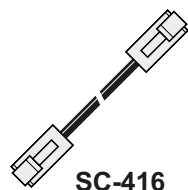
TECHNICAL CHARACTERISTICS - SC-400	
- Material:	Metal.
- Colour:	Black.
- Capacity:	60 desks.
- Amplifier:	10 W.
- Sensivity EXT input:	Micro: 2 mV. Aux: 50/250 mV.
- Sensivity TAPE input:	190 mV.
- Record output:	250 mV.
- Signal output amplifier:	50 V. line.
- Alimentation:	230 VAC.
- Lead delivered:	SC-416 (5 m.).
- Weight:	4.5 Kg.

SC-415

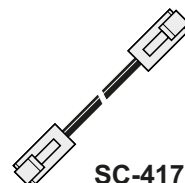


TECHNICAL CHARACTERISTICS - SC-415	
- Material:	Metal.
- Colour:	Black.
- Connection:	- 3 RJ-45 connectors. - 8 terminals block.
- Weight:	180 gr.

ACCESSORIES OPTIONAL



SC-416
- INTERCONNECTION LEAD
- 5 meters



SC-417
- INTERCONNECTION LEAD
- 2 meters



GZ-925
- CONNECTION CABLE