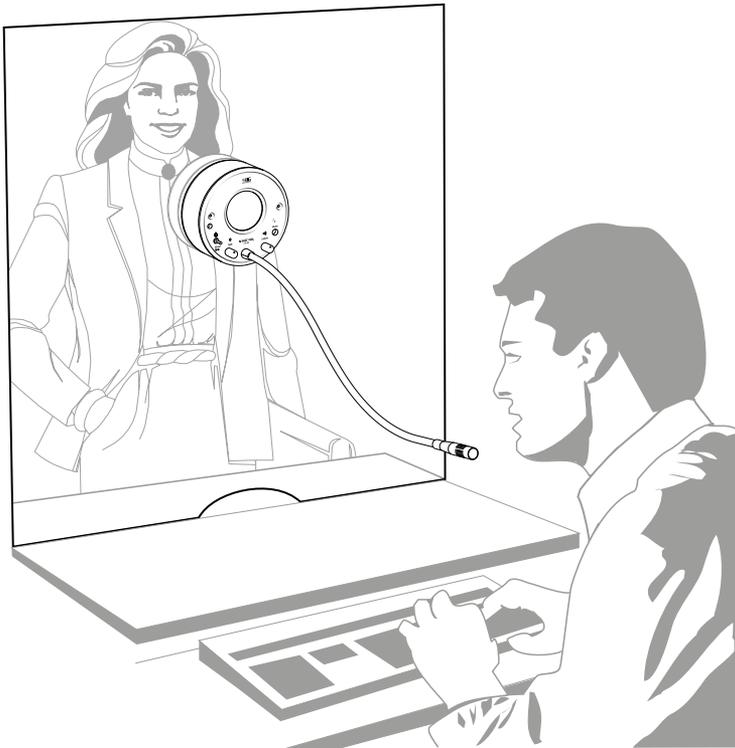


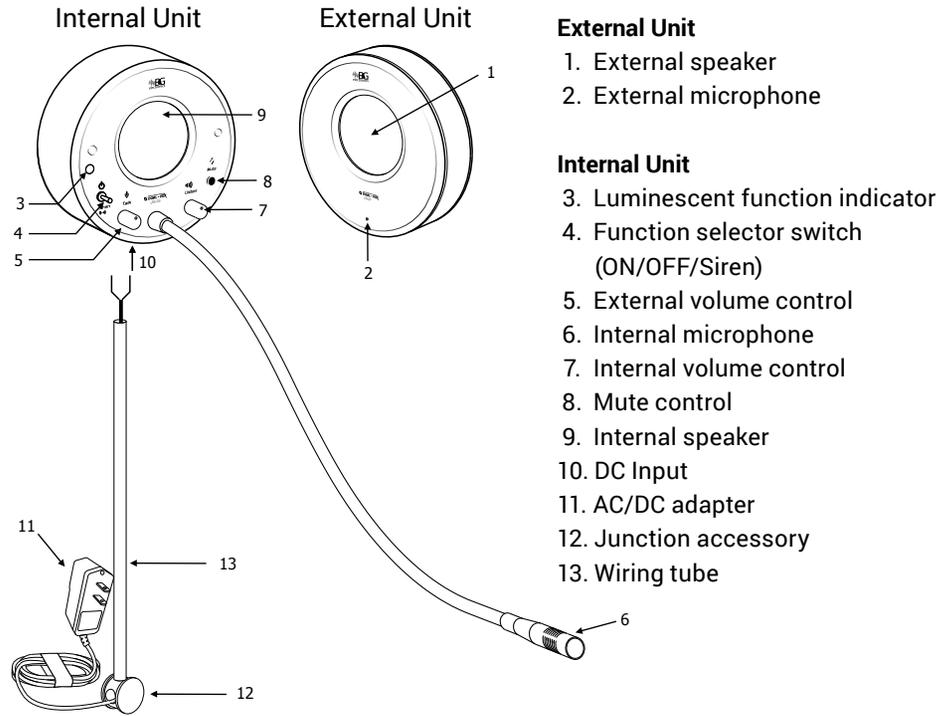
DUAL-VOX *Model LTG*

INSTALLATION AND OPERATION MANUAL
English



PLEASE READ BEFORE USING THE EQUIPMENT

COMPONENTS



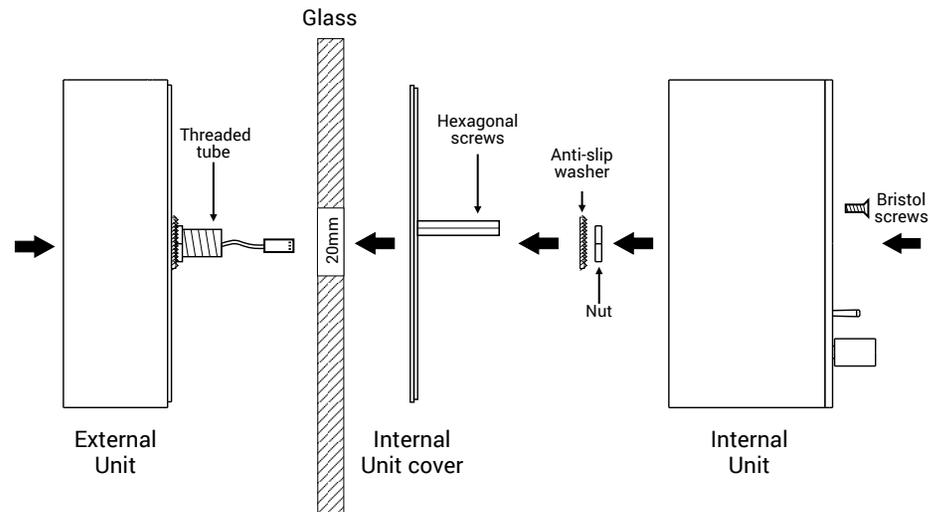
External Unit

1. External speaker
2. External microphone

Internal Unit

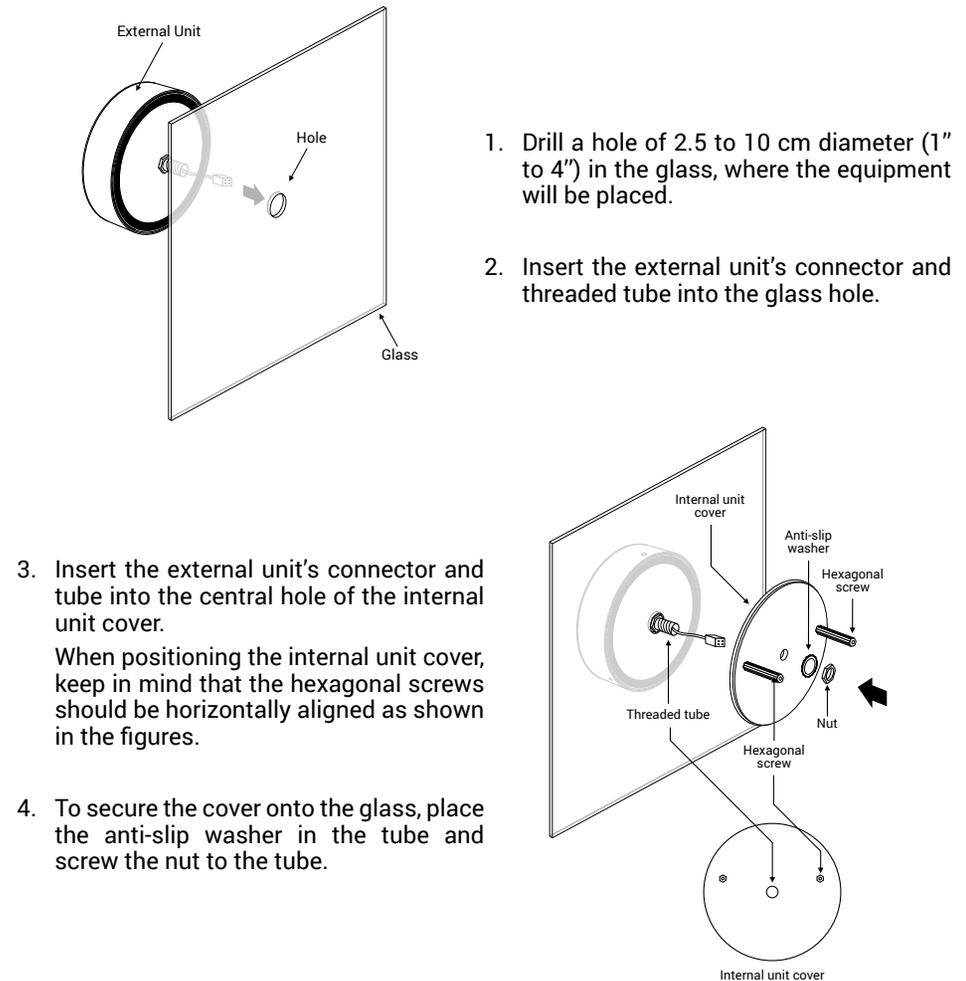
3. Luminescent function indicator
4. Function selector switch (ON/OFF/Siren)
5. External volume control
6. Internal microphone
7. Internal volume control
8. Mute control
9. Internal speaker
10. DC Input
11. AC/DC adapter
12. Junction accessory
13. Wiring tube

INSTALLATION



To install without drilling a hole in the glass, skip to page 5.

Fastening of the external unit to the glass

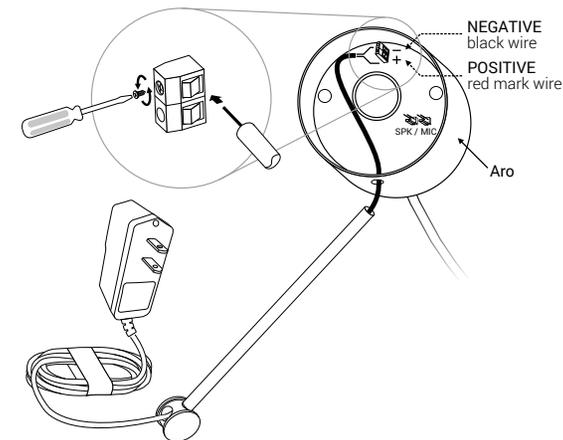


1. Drill a hole of 2.5 to 10 cm diameter (1" to 4") in the glass, where the equipment will be placed.
2. Insert the external unit's connector and threaded tube into the glass hole.

3. Insert the external unit's connector and tube into the central hole of the internal unit cover.

When positioning the internal unit cover, keep in mind that the hexagonal screws should be horizontally aligned as shown in the figures.

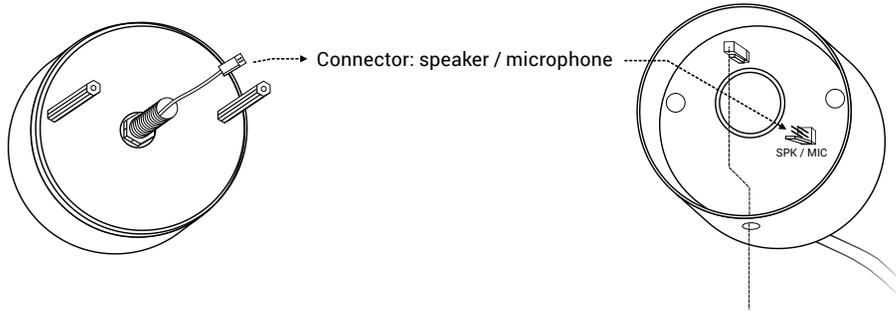
4. To secure the cover onto the glass, place the anti-slip washer in the tube and screw the nut to the tube.



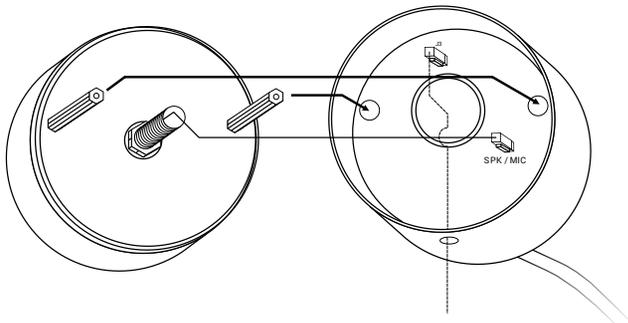
5. Connect the power adapter to the electronic board (internal unit) by inserting the power wire through the junction, wiring tube, and into the internal unit case.

Connect the wire marked with red at the red contact, and the black wire at the white contact of the terminal block, as shown in the figure on the left.

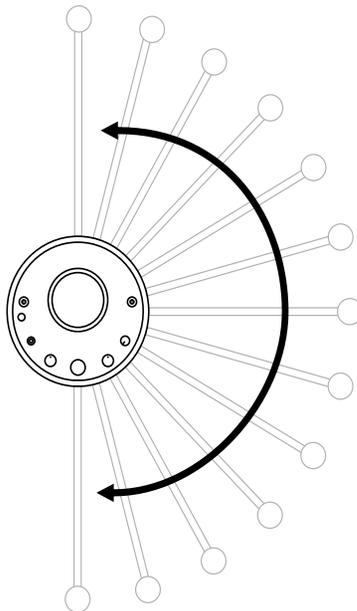
6. Connect the external unit to the electronic board of the internal unit. Use the 4 pin connector, as shown in the figure below.



7. Once the connections are finalized, the internal unit can now be closed. Assemble the internal unit to the cover, by inserting the hexagonal screws into the holes in the electronic card, as shown in the figure below.

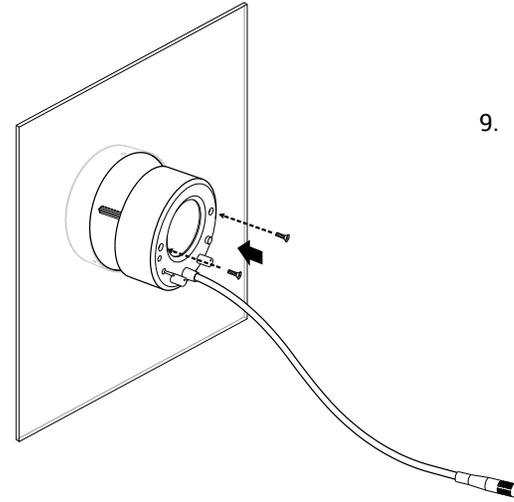


8. The equipment allows the possibility of installing the wiring tube in different positions, top-down, bottom-up, or in the angle best fitting to the installation setup.



9. Push the internal unit towards the glass until the rim fits to the cover already fixed on the glass.

Fasten the internal unit to the cover by screwing the two 3 mm bristol screws (included).

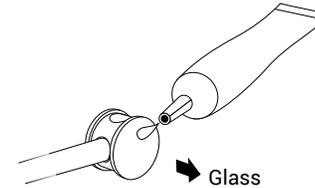


10. Lastly, connect the power adapter to the electrical outlet. The equipment is now ready to turn on.



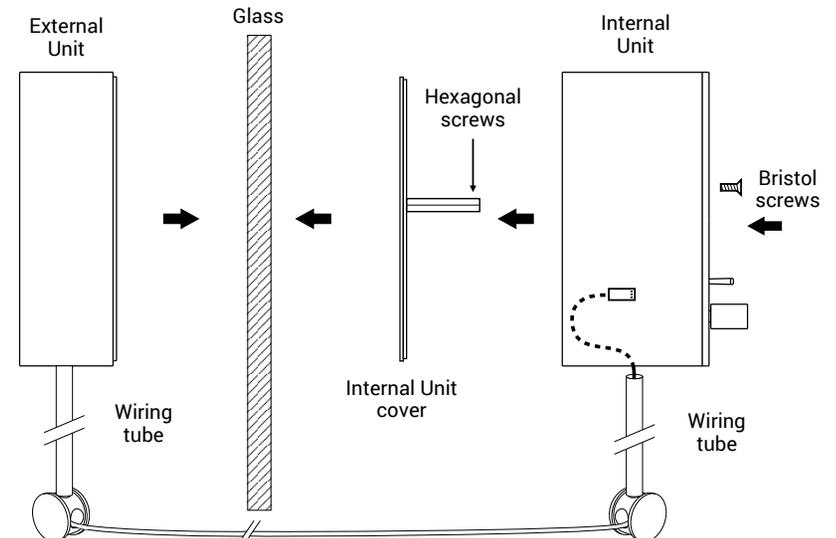
100-240V AC 50/60Hz

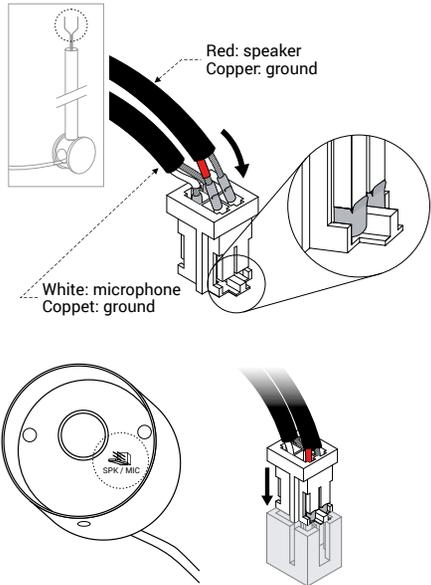
11. Once the equipment has been installed and the direction of the wiring tube decided, fit the tube's top end to the unit, the bottom end to the junction, apply glue to the junction's surface and stick it onto the glass.



INSTALLATION WITHOUT DRILLING A HOLE IN THE GLASS

1. Pass the wire coming from the external unit towards the internal side of the glass, and pass it through the wiring tube that will connect to the internal unit (see below).





2. Crimp the terminals coming from the wiring tube into the female connector (see figure on the left), ensuring an adequate attachment between terminals and connectors.

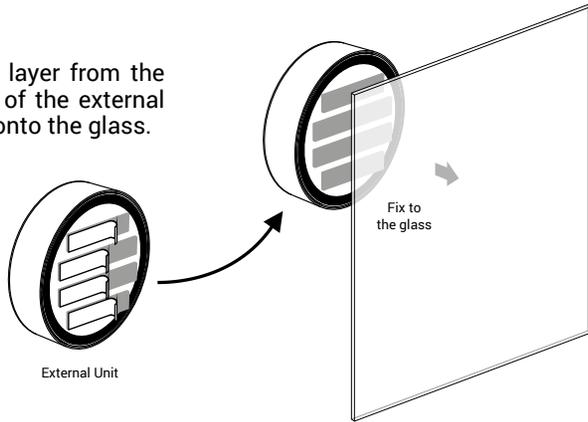
WARNING!

Pay close attention to the location of the terminals according to their colors. An incorrect crimping may cause damage to the equipment.

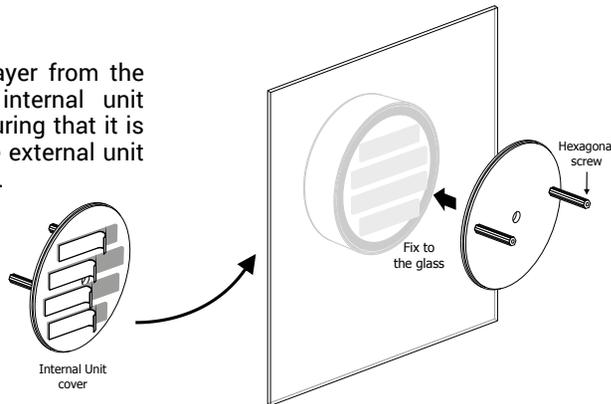
3. Crimp the female connector into the male connector located in the board.

Fixing of the external and internal units onto the glass

1. Remove the protective layer from the tapes on the backside of the external unit and then attach it onto the glass.



2. Remove the protective layer from the tapes and attach the internal unit base onto the glass, ensuring that it is adequately aligned to the external unit already fixed on the glass.



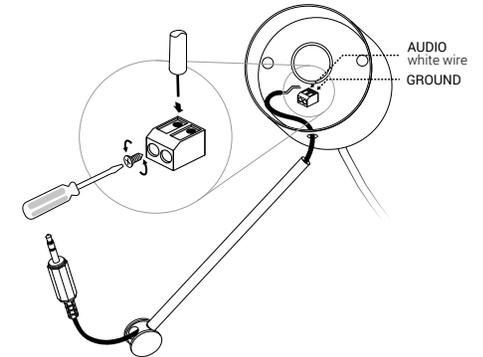
Continue with the installation procedure as follows in page 3, step 5.

CONNECTION TO THE RECORDING EQUIPMENT DAR-04

DAR-04 (Digital Audio Recording) is an equipment complementary to DUALVOX; it enables the automatic recording of conversations, starting from the moment when voice is detected by the intercom.

The procedure to connect the DUALVOX to the DAR-04 equipment is explained as follows (see figure on the right).

1. Insert the wire coming from the stereo plug through the junction, wiring tube, and into the internal unit case.
2. Connect the wires to the terminal block as follows: connect the audio wire (white) to the contact on the left, and the ground wire to the contact on the right.



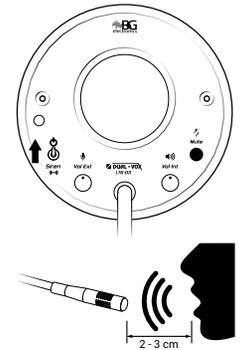
OPERATION

Both the internal and external units are equipped with microphone and speaker. All of the functions and configuration settings associated to them are explained below.

Intercom function

To activate it pull up the function selector switch to the ON position, as shown in the figure to the right. The function indicator will light up with a green color, showing that the equipment is on.

Fix the flexible microphone so that it rests 2 to 3 cm from the mouth, and speak in a normal voice. The function indicator lights up with an orange color, showing that the internal unit is picking up your voice and reproducing it through the external unit.



External volume

Use the *Vol Ext* knob to adjust the volume at which the sounds from the exterior are reproduced on the internal unit.

Internal volume

Use the *Vol Int* knob to adjust the volume at which the voice picked up by the internal microphone is reproduced on the external unit.

Mute

Deactivate the reproduction of your voice on the external unit by pressing *Mute*. The function indicator displays a fast-paced flashing green light while *Mute* is active.

To reopen the channel, press *Mute* once more.

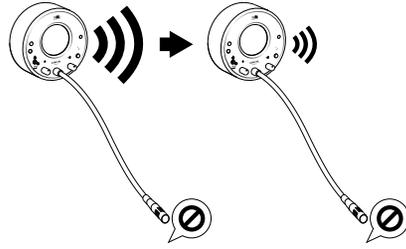


Automatic dimming function

After one minute of inactivity on the internal microphone, the volume automatically decreases to prevent the reproduction of exterior background noise while the equipment is not in use. The function indicator displays a slow-paced flashing green light, showing that automatic dimming is active.

Once the internal unit detects activity again (picks up voice on the internal microphone or receives activity from any knob/button), the volume goes back to its normal level.

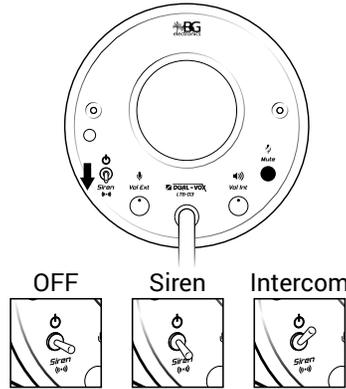
To deactivate automatic dimming so that the volume never decreases automatically, press and hold *Mute* during 3 seconds. To activate it, repeat the procedure.



Emergency siren function

The equipment includes an emergency siren sound. To activate the siren, pull down the function selector to *Siren* position. While the siren is on, the intercom function is deactivated.

To turn the siren off, pull up the switch.



Shut down

To shut down the equipment, pull the function control switch to its middle position, as shown in the figure to the right.

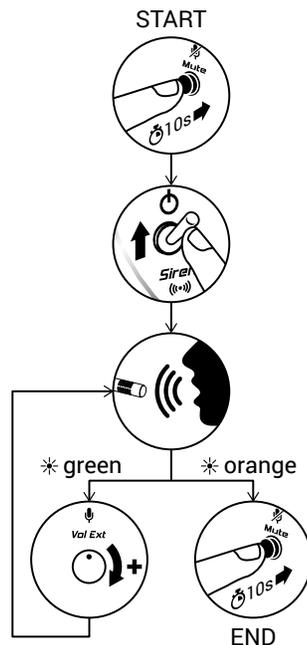
Calibration of the internal microphone sensitivity

The equipment reproduces only one communication channel at a time. This means that while the external unit is reproducing sounds from the internal microphone, the internal unit will not reproduce sounds from the external microphone, and the other way around. To calibrate sensitivity at which the internal microphone takes over the communication channel, perform the procedure explained as follows.

Place the flexible microphone at the distance that will remain and let us calibrate the sensitivity so that it takes over the communication channel while talking at a normal voice volume (see figure on the left).

1. While the equipment is off, press and hold *Mute* for 10 seconds, and then switch the selector ON; the indicator light will turn on blinking red when you enter calibration mode. Release *Mute*; the indicator light will be blinking green while the equipment is on calibration mode.

2. Talk to the microphone in normal volume while verifying if the communication channel is being taken over, meaning that the indicator light turns orange while speaking.



3. If the indicator light remains green while you speak, the communication channel is not being taken over, hence you need to increase the sensitivity of the microphone by turning the *Vol Ext* knob clockwise. After raising the sensitivity, repeat the procedure from step 2.

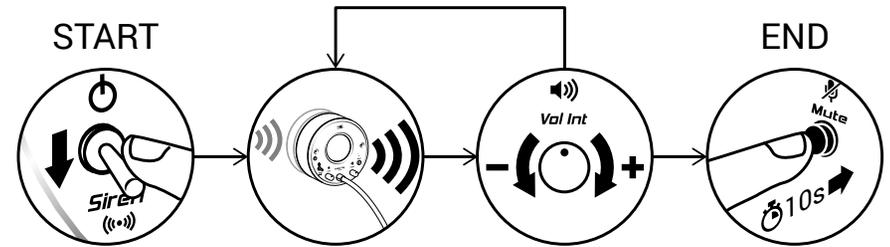
4. Once the indicator light turns orange, meaning that the internal microphone is taking over the channel at your desired microphone distance and voice volume, you can now terminate the calibration procedure by pressing and holding *Mute* for 10 seconds.

While deciding the microphone distance and calibrating, be aware of the fact that increasing the sensitivity to compensate for a lengthy distance will reduce the privacy of the counter.

Calibration of the internal volume

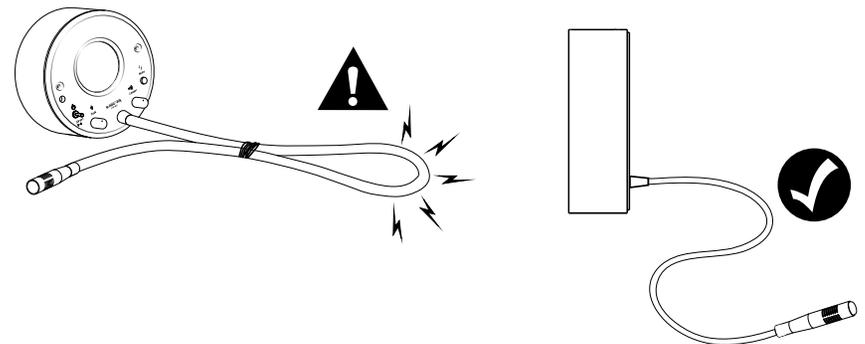
The internal speaker maximum volume is defined through this procedure, so that feedback would never occur when the volume is raised during the equipment's operation. Conducting an adequate calibration is specially important at facilities with low acoustic isolation.

To calibrate the internal volume follow the procedure explained as follows.



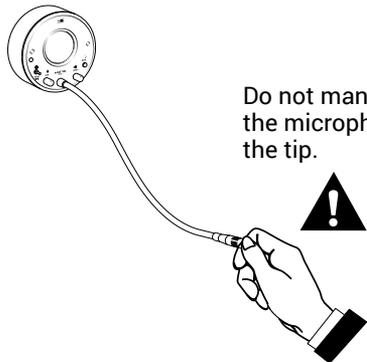
1. Pull down the switch to *Siren* position; the light starts blinking red, this indicates that the calibration mode has been entered.
2. Turn the *Vol Int* knob, searching for the position that yields an adequate maximum volume level.
3. Once the maximum internal volume has been successfully defined, finish the calibration procedure by pressing and holding down *Mute* for 10 seconds.

RECOMMENDATIONS OF USE AND MAINTENANCE

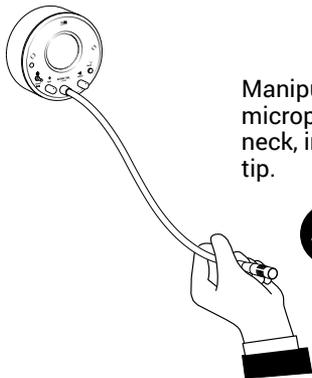


Do not force the microphone to bend, nor use any type of clamp to keep it bent.

If you want to reduce the reach of the microphone, curve it as shown in the figure above.



Do not manipulate the microphone by the tip.



Manipulate the microphone by the neck, instead of the tip.



Cleaning

Clean the surfaces with a cloth slightly dampened with soapy water or alcohol. Carefully clean the controls so as not to alter the configuration of the equipment.

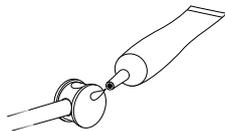
Avoid using any sort of solvent to clean the product.

After cleaning, remove the moisture with a dry cloth to restore the surface to its original brightness.



Maintenance

Periodically check that the mounting accessories are properly attached to the installation surfaces, and apply glue if needed.



TECHNICAL SPECIFICATIONS

MODEL	LTG-03		
DIMENSIONS	Internal Unit	12.7 x 7 cm	5" x 2 3/4"
	External Unit	12.7 x 4.8 cm	5" x 1 7/8"
	Internal Microphone neck	3 x 68 cm	1 1/4" x 27"
	AC/DC adapter	5 x 6 x 6 cm	2" x 2 1/4" x 2 1/4"
INPUT VOLTAGE	120V AC		
INPUT CURRENT	1 A		

WARRANTY AND SERVICE

AUTHORIZED DEALER



**B&G ELECTRONICS
ONE YEAR LIMITED WARRANTY**

BYG Electrónica S.A.S. guarantees that this product leaves the factory free from defects related to materials and manufacturing. If for any reason a failure related to materials and manufacturing were to occur during the period of one year after the date of purchase, BYG Electrónica S.A.S. would repair or replace the failing equipment free of charge. This warranty shall be voided if the product is modified, tampered with, misused, or subjected to abnormal working conditions. This warranty does not cover physical damage to the product surface. This warranty does not apply when the malfunction results from the use of this product in conjunction with accessories, other products, or peripheral equipment not designed by BYG Electrónica S.A.S.