

DSNG

user instruction and installation

1. Installation of acoustic piezo-elements on the glass

The elements are connected in the parallel circuit. There are no special requirements for the connection cable, double line 2 x 0.15mm is suitable for the whole installation. The cables can be installed under wall, or in narrow installation mouldings. The parallel tapping can be done in the installation moulding. Before sticking the piezo-elements, the flexible double-line cables must be properly soldered to the elements. The soldering must be done as fast as possible always with a temperature-controlled soldering equipment to avoid damage of the thin silver layer. A neutral soldering liquid is also recommended to shorten the soldering time. Each SNG is delivered with one properly soldered piezo-element as a demo-piece. Before sticking on the glass both sides of the piezo-element and the glass must be cleaned by a spirit. Use only the instant glass-metal glue (LOCTIC GLASS-ATTACK or equivalent). Because of wiping of the windows, it is better to install the elements to the top of the window. Each window glass needs one piezo-element. After sticking the elements on the window, the plastic covers should be stuck by a neutral silicone sealant.

2. Walls, ceilings, floors

The piezo-elements should be installed in frame 1.5 x 1.5 m. The elements can be directly glued on the surface or some 5-10 mm under the surface by an acrylic glue (the same glue like for plastic tiles).

3. Loudspeakers

Loudspeakers should be used in cavities between rooms and in different vertical or horizontal vents. The loudspeakers should be connected in serial-parallel combination to achieve 8-16 ohm load impedance. If the loudspeakers are close to the SNG or to the external electret microphone the AUTOMAT function will probably not work.

4. SNG terminals

-terminals + - connect to 12V (10-15V) 0.5-0.8A power supply. Stabilized voltage is not required

-piezo-elements (max.100 pcs) connect to terminals Q1 - Q2

-low impedance loudspeakers circuit is always connected between G -Q1 or G -Q2 (ground G is common for both Q1 or Q2)

-if a combination of piezo-elements and loudspeakers is required then the piezo-elements are connected to Q1 - Q2 and loudspeakers between Q1 -G or Q2 - G

IMPORTANT: Inside the SNG is the jumper marked N - H. For normal application with piezo elements only the jumper is in normal position N. If any low impedance loudspeaker is connected **switch the jumper to H** (high power)! H must be used also in case of combination of piezoelements and loudspeakers.

Note: The option switch is prepared for manual switching of second loop. For example, normally 1 = windows only, 1+2 = windows + loudspeakers.

5. Electret microphone

The microphone allows the automatic voice-controlled function of SNG. For standard applications the microphone is built inside the SNG. In a special case the microphone can be installed separately, the shielded cable could be extended to cca. 30m.

6. Mounting

SNG is normally hung on the wall on the two screws and fixed by the third screw beside the cable terminal. The SNG should be installed as close as possible to the negotiation table.

7. Controls

ON-OFF main switch

AUTOMAT-MANUAL mode switch, the smart voice-controlled function is activated only in AUTOMAT mode

HIGH-LOW POWER reduction of output power -12dB

High power should be used when the talks are held close to the windows, or more people are discussing (more loudly).

8. Internal adjustment

The SNG is pre-adjusted by a manufacturer (25/6 V peak-peak noise level and 2m talk distance). Correction of output noise level can be done by internal regulator LEVEL and voice sensitivity can be adjusted by M-GAIN. LED TEST should time to time flash during normal intensity talk at the room (only in AUTOMAT mode)

9. Temporary installation

The piezo-elements should be used without the plastic covers and can be stuck on the glass by an adhesive band.