

## GEC 880



## Digital Counter Intercom GEC 880

Digital desktop counter Intercom systems fulfil the widest variety of requirements – from security solutions in banks to ski-lift stations and ticket counters to isolation wards in hospitals.

The modular construction of the system allows any number

of desktop counter Intercom systems to be combined into one system. The basic unit is a digital Intercom station, which is available in two different versions (with and without gooseneck). Therefore it is very simple to select the optimum station for every counter requirement.

### 1. GEC 881

Digital desktop counter call station with plastic reinforced silicon keypad and built-in microphone with omnidirectional characteristic for unrestricted speech. Keypad with 15 keys, labelled with non-verbal pictograms.

Extent of supply: Outlet for surface mounting, 3 m connection cable.

Power supply and further accessories must be ordered separately.

### 2. GEC 882

Digital desktop counter call station with plastic reinforced silicon keypad, anti-tilt device and cardioid type goose neck microphone. Keypad with 15 keys, labelled with non-verbal pictograms.

Extent of supply: Outlet for surface mounting, 3 m connection cable.

Power supply and further accessories must be ordered separately.

# Technical Data – Benefits

## TECHNICAL DATA

|                              |   |
|------------------------------|---|
| IP-rating:                   | IP 30   |
| MTBF:                        | 1.37 mio. h   |
| Loudspeakers:                | Internal: 8 Ohm<br>External: connection possibility for loudspeaker(s) 4 – 16 Ohm   |
| Internal microphone:         | GEC 881: omnidirectional electret microphone<br>GEC 882: gooseneck electret noise cancelling microphone with cardioid characteristic both with adjustable speaking zone |
| Amplifier:                   | outside: built-in amplifier with 10/15 W<br>inside: built-in amplifier with 0.6/0.8 W   |
| Power supply:                | 12 – 18 VDC, 1.2 A  |
| Cabling:                     | 10 wires (8 signal + 2 power supply)  |
| Connection:                  | RJ 10 socket (for headset/handset)<br>RJ45 socket (for outside microphone, outside loudspeaker, proximity switch or bell button, AUX-output)                            |
| Frequency range:             | 500 Hz – 15 kHz   |
| Operating temperature range: | 0° C to +50° C<br>(32° F to 122° F)   |
| Storage temperature range:   | -20° C to +60° C<br>(-4° F to 140° F)   |
| Relative humidity:           | 20% to 80%  |
| Measurements:                | GEC 881: 66 x 55 x 230 mm<br>(2.6 x 2.2 x 9.1 in)<br>GEC 882: 179 x 280 x 230 mm (7.1 x 11 x 9.1 in)<br>length of gooseneck: 422 mm (16.6 in)                           |
| Weight incl. package:        | GEC 881: 280 g (0.6 lbs)<br>GEC 882: 440 g (1 lb)   |

## BENEFITS

- Excellent speech clarity, even under the most difficult acoustic conditions
- OpenDuplex®: Simultaneous speaking and listening in both directions
- Keypad with easily understandable, non-verbal pictograms
- Exceptionally high volume in the public area, additional loudspeakers can be connected
- Suitable for communication hatches of any size
- Continuous adaptation to the acoustics of the room
- Any number of desktop counter Intercom systems can be operated side-by-side (GEC 882 only)
- Easy and quick installation
- State-of-the-art DSP technology
- Future proof, via firmware updates

## EXTENT OF SUPPLY

Counter Intercom system including:

- Wall outlet for surface mounting
- 3 m (9.8 feet) connection cable ASKKAT6-3 from operator station to wall outlet
- Manual and quick installation guide

A fitting power supply, microphone and loudspeaker must be ordered separately (see page 3 and page 4).

## NOTE

CE conformity is only valid with the PA20W15V power supply.



# Accessories

## PA 20W15V

20 W high-efficiency switched-mode power supply. Available for: EU, UK, AUS, US

### TECHNICAL DATA

|               |  |
|---------------|--|
| Primary:      | 90 – 264 VAC   |
| Secondary:    | 15 VDC, 1.33 A   |
| Output:       | 2.5 mm coaxial plug                                      |
| Cable length: | 2.0 m (6.6 ft)   |
| Measurements: | W 42 mm x H 106 mm x D 76 mm                             |
| Weight:       | approx. 175 g  |
| Colour:       | Black  |
| Types:        | PA20W15V-EU (Europa)<br>PA20W15V-CA (UK, USA, Australia) |



Actual item may differ from photo.

## Q400

Miniature, cardioid-type extension microphone. Housing made from impact-resistant and distortion-free plastic, can be bonded to a flat surface. Improved acoustics.

### TECHNICAL DATA

|                    |   |
|--------------------|---|
| Directivity:       | hypercardioid to the front                    |
| Sensitivity:       | 15 mV / Pa                                    |
| Frequency range:   | 100 Hz – 8 kHz                                |
| Temperature range: | -25 to +70° C (-13° F to 158° F)              |
| Cable length:      | 2.8 m (9.2 ft) shielded                       |
| Measurements:      | W 24 x H 42 x D 13 mm (1.69 x 0.83 x 0.51 in) |
| Colour:            | Black   |



## MIC 480

Waterproof, omnidirectional build-in electret microphone for use with up to 10 mm (0.4 inch) thick glass panes or aluminium panels.

### TECHNICAL DATA

|                    |   |
|--------------------|---|
| Type:              | Back electret condenser microphone                                    |
| Directivity:       | omnidirectional   |
| Sensitivity:       | 5.6 mV / Pa   |
| Frequency range:   | 20 Hz – 16kHz   |
| IP rating:         | IP 53 (only if installed correctly)                                   |
| Temperature range: | -20°C to +60°C (-4° F to 140° F)                                      |
| Colour:            | black   |
| Measurements:      | ø 14 x D 20 mm (0.55 x 0.79 in)                                       |
| Colours:           | MIC480: 4 m (13.1 ft) shielded<br>MIC480S-10: 10 m (32.8 ft) shielded |



## Accessories

### AL10-16

Compact, high-efficiency column speaker. Weatherproof polyamide housing for indoor and outdoor use. Can be rotated and tilted. Mounting bracket included.



#### TECHNICAL DATA

|                                  |   |
|----------------------------------|---|
| Load rating / music power:       | 12/15 W   |
| Impedance:                       | 16 Ohm  |
| Sound Pressure Level:            | 94 dB/W/m   |
| Max. Sound Pressure Level:       | 110 dB (1 m)  |
| Transmission range (-3 dB):      | 220 - 16 000 Hz   |
| Transmission angle (-6 dB):      | Horizontal (3 m): 1/4/8 kHz: 220°/60°/60°<br>Vertical (3 m): 1/4/8 kHz: 140°/100°/30° |
| Material:                        | housing: plastic, grille: metal   |
| Net weight:                      | 1,600 g   |
| Connection:                      | 2-core cable (50 cm)  |
| Accessories (included):          | U-type mounting bracket   |
| Dimensions (including brackets): | W 100 mm, H 300 mm, D 98 mm<br>(3.9" x 11.8" x 3.9")                                  |
| Colours:                         | Black (AL10-16S), White (AL10-16W)  |

### KABJTAG3

Cable for firmware update of the stations GEC 881 / GEC 882 via PC. Connection via parallel port of the PC. DB-25 parallel port plug to 6-way header plug.

#### TECHNICAL DATA

|               |                |
|---------------|----------------|
| Weight:       | approx. 73 g   |
| Cable length: | 150 cm (60 in) |



# Installation

## MOUNTING THE CLIENT SIDE



The loudspeaker must be mounted at least 1 m / 40 inches away from the microphone. If possible, the loudspeaker should not face the microphone directly because this leads to an echo of the operator voice at the inside station.

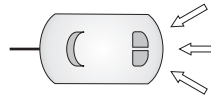
1. Mounting version A: Loudspeaker at the top (best for acoustic separation of multiple queues)
2. Mounting version B: Loudspeaker at the side in level of ears (best for single queue situations)

If possible, the microphone should be mounted at the bottom of the counter, in direction to the client. If this is not possible, the microphone has to be mounted aside in direction to the client. The closer the microphone is mounted to the clients mouth, the lower the volume required at the operator station.

3. Mounting version A: Microphone mounted in the middle of the counter
4. Mounting version B: Build-in microphone at the side

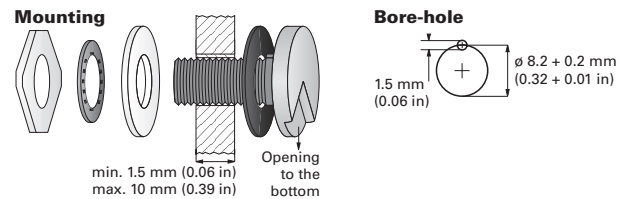
## MICROPHONE

### Mouse microphone Q400



This microphone has a special directional characteristic as shown in the picture. It should be mounted in such a way, that the speech of the client enters the microphone in direction of the arrows. The microphone can also be used for outdoor mounting, but it must be protected against rain and moisture. Technical data [see page 4](#).

### Build-in microphone MIC 480



The build-in microphone is designed to fit panels up to 10 mm (0.4 inch) thick. Technical data [see page 3](#).

**Note:** To fulfill the IP53-classification the opening of the microphone must face to the bottom.

## PRECAUTIONS

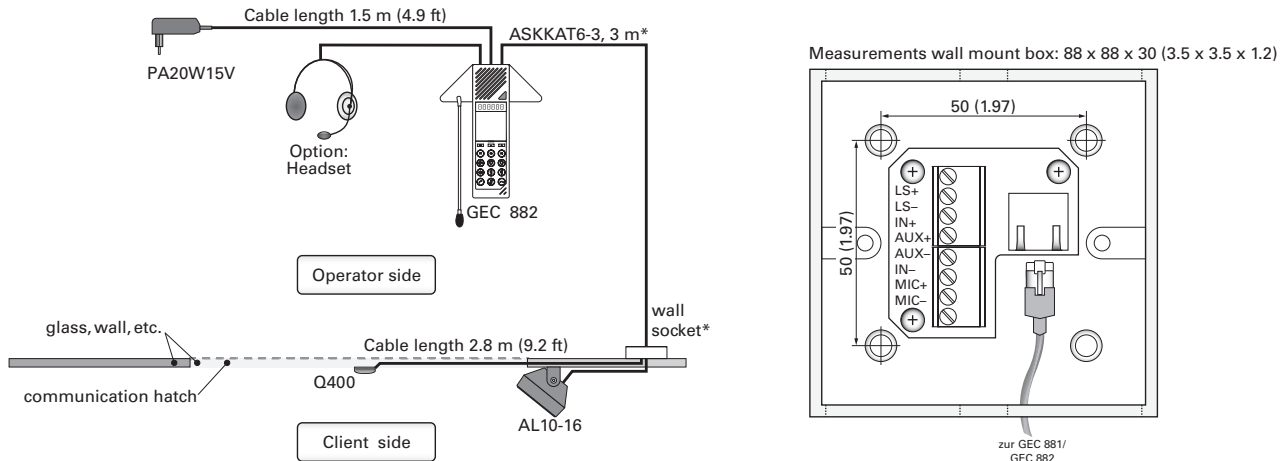
- With regard to the CE mark, the counter Intercom is suitable for the following types of application: residential buildings, office and commercial premises, small businesses and industrial premises with public mains supply.



# Installation

## CONNECTION DIAGRAM

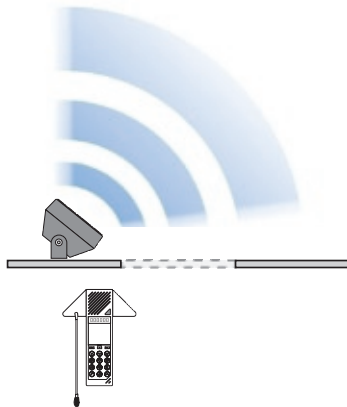
Example: Cabling of the components of a counter Intercom station with station GEC 882, outside loudspeaker AL10-16, outside microphone Q400, power supply PA20W15V and an optional headset.



\*...Included in extent of supply

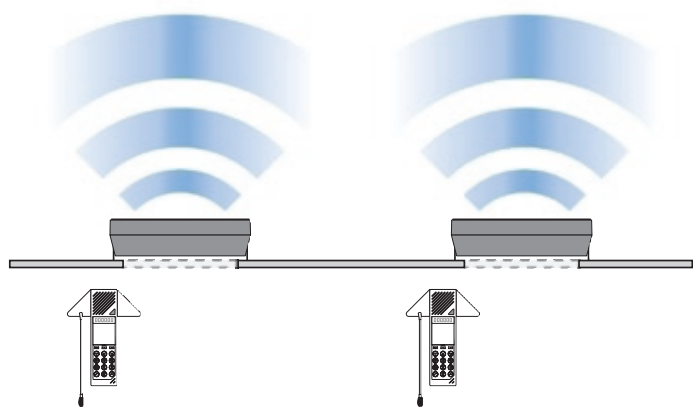
## POSITIONING THE OUTSIDE LOUDSPEAKER

Example for a single counter:



In this setup the speech of the operator is audible in the entire area in front of the counter.

Example for multiple counters:



Example how to utilize the directivity of a speaker line array (e.g. AL10-16) for separately addressing individual queues via horizontal mounting above the counter.