

# Orbis SU 63

Digital System Unit

Order # 725.749

## FEATURES

- Shielded metal housing for remote installation
- Use as chairman or delegate microphone unit possible
- Phoenix® connectors for buttons, microphone, headphone and loudspeaker
- Two RJ45 sockets to connect the system unit to the control unit or another microphone unit/system unit

## DESCRIPTION

The Orbis SU 63 system unit is used for remote "under the table" installations in conference rooms.

In order to connect external components such as buttons, microphone, headphone or loudspeaker, the system unit provides one 5-pin and two 7-pin Phoenix® connectors.

By using the RJ45 sockets the system unit is connected to the control unit and to the previous system unit or microphone unit.

The Orbis SU 63 system unit can be used as a chairman unit with microphone, clear and function button or as a delegate unit with one microphone button.

The microphone button is used to turn the microphone on or off. By using the function button the chairman can interrupt the discussion and mute all activated delegate microphones. By using the clear button the chairman can turn off all activated delegate microphones. Depending on the configuration of the Orbis CU control unit one of the following operating modes is possible:

**Normal:** Each participant can turn on his/her microphone until the number of open microphones is achieved.

**FiFo:** If the selected number of open microphones (NOM) is exceeded, the microphone of the participant who turned on his/her microphone first is turned off when another participant turns on his/her microphone.

**Voice-controlled Activation:** The microphone is turned on when the participant speaks into it, until the number of open microphones is achieved.

The system units are connected in a daisy chain to the Orbis CU control unit, i.e. the first system unit is connected to the control unit, the second system unit is connected to the first, the third system unit to the second and so on. For connection standard CAT5 cables are used. Thus, one cable ensures the audio transmission, power supply and control.

### Connection to a control unit without redundancy

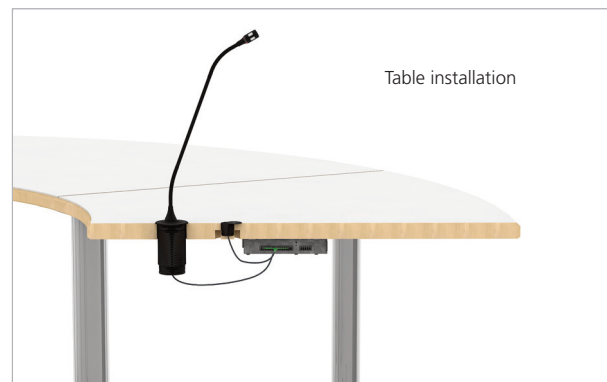
A maximum of 50 system units can be connected to one line of the Orbis CU control unit, i.e. a total of 100 microphone units can be operated with one Orbis CU control unit.

### Connection to a control unit with redundancy

A maximum of 50 system units is connected in a ring to the Orbis CU control unit, i.e. the last microphone unit is connected to the previous system unit and the control unit. The redundancy provides maximum reliability. Should a defect in a cable occur at one side of the system unit, the system unit will not fail to operate, because it will still be supplied via the cable from the other side. The cable in question or a defect system unit as well can be replaced during operation without causing any problems with the other system units.



Supplied without CA OL loudspeaker



# Orbis SU 63

## OPTIONAL ACCESSORIES

In combination with the ZSH 20 elastic suspension we recommend using the Classis GM 314 E and Classis GM 315 E gooseneck microphones.

Classis GM 314 E	Condenser gooseneck microphone (electret), with Scudio® technology, cardioid, matt black, 400 mm long . . . . .	Order # 489.581
Classis GM 315 E	same as above, but 500 mm long . . . . .	Order # 489.565

### Boundary microphones

Classis BM 32 E	Condenser boundary microphone (half-cardioid), black, without preamp, for table installation . . . . .	Order # 721.913
-----------------	--	-----------------

### Buttons

CA OP 2	Piezo button for Orbis SU 63 system unit, aluminium black anodised, with bicoloured LED s pot lighting . . . . .	Order # 725.773
CA OP 2 C	same as above, but with "Clear" symbol, without LED . . . . .	Order # 725.781
CA OP 2 F	same as above, but with "Func" symbol and LED spot lighting . . . . .	Order # 725.803

### Cables

CA OC 1	System cable, CAT5 with RJ45 connector, 1 m [3.28 ft].	Order # 725.811
CA OC 2	same as above, but 2.5 m [8.20 ft] . . . . .	Order # 725.838
CA OC 5	same as above, but 5 m [16.4 ft] . . . . .	Order # 725.846
CA OC 10	same as above, but 10 m [32.81 ft] . . . . .	Order # 725.854
CA OC 20	same as above, but 20 m [65.62 ft] . . . . .	Order # 725.862
CA OC 50	same as above, but 50 m [54.68 yd] . . . . .	Order # 725.889

### Shock mounts

ZSH 20	Shock mount for gooseneck microphones, black . . . . .	Order # 454.559
GMS 52	Shock mount for installation into tables, black. . . . .	Order # 725.757

### Loudspeakers

CA OL	Loudspeaker module for Orbis MU 41/43 and Orbis SU 63 . . . . .	Order # 725.765
-------	---	-----------------

## SUPPLIED ACCESSORY

- 1 x Phoenix connector, 5-pin
- 2 x Phoenix connector, 7-pin

## TECHNICAL SPECIFICATIONS

### General

Voltage supply . . . . .	Bus voltage (48 V DC)
Power consumption . . . . .	max. 1.1 W
Max. number of audio channels . . . . .	2 useable channels per system
Signal-to-noise ratio . . . . .	80 dB(V) typ., unweighted (external voltage)
Temperature range (humidity < 90%) . . . . .	+10 °C to +40 °C
Storage temperature (humidity < 90%) . . . . .	-20 °C to +55 °C
Dimensions . . . . .	134 x 110 x 26 mm [5.28" x 4.33" x 1.02"]
Weight . . . . .	320 g [11.28 oz]

### Connections

System connection . . . . .	2x RJ45 socket (not for Ethernet)
Max. cable length Line CU – MU . . . . .	80 m [87.49 yd] with AWG 24
Max. cable length Line MU – MU . . . . .	80 m [87.49 yd] with AWG 24
Specification line cable . . . . .	CAT5e S/UTP, cross-section min. AWG 26
Specification line connector . . . . .	RJ45 acc. to EIA/TIA 568 B, shielded
Headphone output . . . . .	Phoenix® connectors, contact spacing 3.5 mm
Min. output impedance . . . . .	16 Ω, short-circuit proof
Frequency response . . . . .	20 - 15,000 Hz
Loudspeaker output . . . . .	Phoenix® connectors contact spacing 3.5 mm
Min. output impedance . . . . .	8 Ω
Frequency response . . . . .	20 - 15,000 Hz
Microphone input . . . . .	Phoenix® connectors contact spacing 3.5 mm
AB powering . . . . .	2.2 V (2.2 kΩ)
Buttons and LED . . . . .	Phoenix® connectors contact spacing 3.5 mm
LED Power . . . . .	+5 V, max. 40 mA

# Orbis SU 63

## ARCHITECT'S SPECIFICATIONS

Digitally controlled system unit for use as chairman or delegate microphone unit.

Shielded fully metal housing with integrated mounting brackets for a remote installation e.g. under a table or vertical into an armrest.

In order to connect external components such as buttons, gooseneck microphone, headphone or loudspeaker the system unit features a 5-pin and two 7-pin Phoenix® connectors.

When configuring as a chairman microphone unit a maximum of 3 external buttons can be connected: for turning the microphone on or off or entering a request-to-speak, for clearing all active delegate microphone units and for priority (mute or normal) or a freely programmable function in conjunction with the serial interface on the control unit.

When configuring as a delegate microphone unit, an external button for turning the microphone on or off or entering a request-to-speak can be connected.

Depending on the configuration of the control unit the following operating modes are possible: Normal – each participant can turn the microphone on or off, FiFo – when the NOM is achieved and another microphone will be activated, the one that was activated first will be turned off, Voice Activation – as soon as someone speaks into the microphone, it is turned on.

The microphone unit is connected via two RJ45 sockets to the control unit or another microphone unit/system unit.

Dimensions (LxWxH): 134 x 110 x 26 mm. Weight: 0.32 kg.

Manufacturer: beyerdynamic  
Type: Orbis SU 63

# Orbis SU 63

## CONNECTIONS

### RJ 45 sockets

The Orbis SU 63 system unit is connected to the Orbis CU control unit via the RJ45 sockets. Furthermore, the RJ45 sockets are used to connect the Orbis SU 63 system units with one another or other Orbis MU microphone units.

### Phoenix® connectors

#### 5-pin connector, contact spacing 3.5 mm

You can connect a headphone or loudspeaker to the 5-pin Phoenix® connector of the Orbis SU 63 system unit.

**Headphone R and Headphone L:** connectors for a headphone

**Ground:** ground

**Speaker - and Speaker +:** connectors for a loudspeaker

#### 2 x 7-pin connector, contact spacing 3.5 mm

You can connect a gooseneck microphone, a microphone button and external LEDs to the 7-pin Phoenix® connector.

**Mic Input:** to connect a microphone

**Ground:** ground

**Mic Button:** to connect a microphone button

**Mic LED Green:** to connect an external LED, which displays an active microphone

**Mic LED Red:** to connect an external LED, which displays an entered request-to-speak and not yet released microphone

**Speak LED:** to connect an external LED, which displays the ready-to-speak status of the microphone

**LED-Power:** power source for the external LED

You can connect external LEDs and individual buttons to the other 7-pin Phoenix® connector.

**Function LED:** to connect an external LED, which displays the function mode of a chairman microphone unit

**Function:** to connect a button for prior turning on of a switched off chairman microphone unit, while muting the delegate microphones temporarily

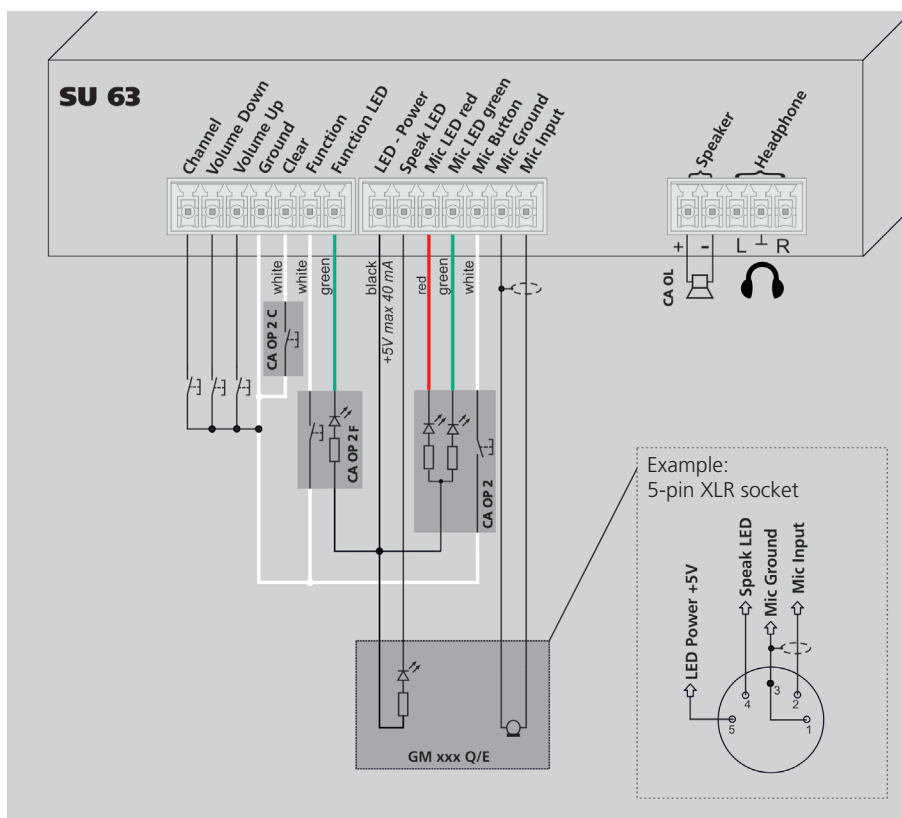
**Clear:** to connect a button to turn on the chairman microphone unit while turning off the switched on or registered delegate microphones. Depending on the the operating mode the requests to speak are cleared or not

**Ground:** ground

**Volume Up and Volume Down:** to connect buttons to adjust the volume of a connected headphone

**Channel:** to connect a button to select a channel (original or 1 AUX-IN e.g foreign language)

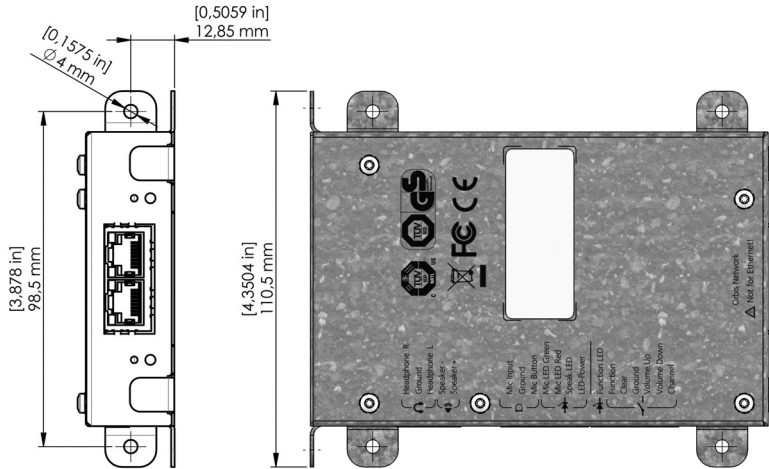
## WIRING DIAGRAM – CONNECTIONS



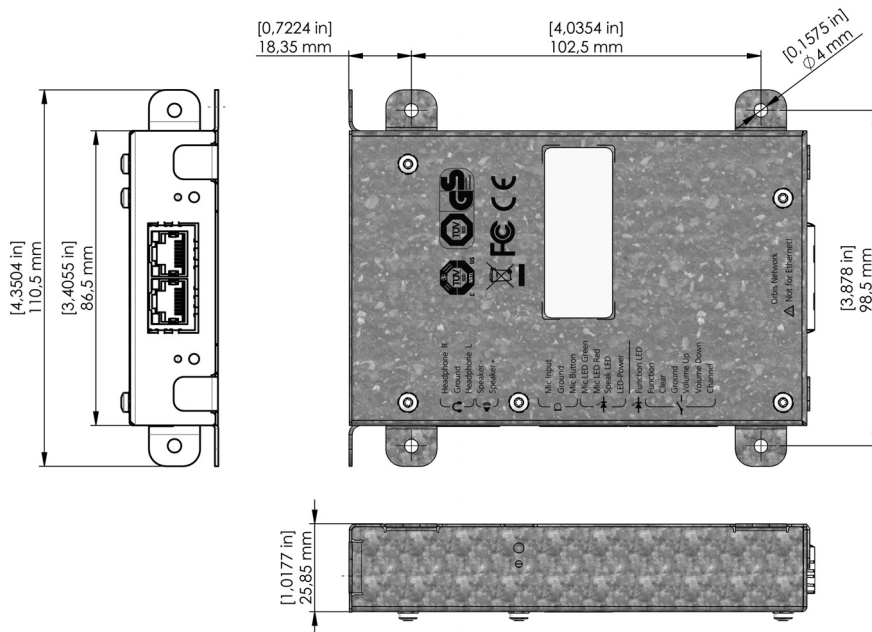
# Orbis SU 63

## DIMENSIONS

### Upright Installation



### Plane Installation



All dimensions in mm [inch]