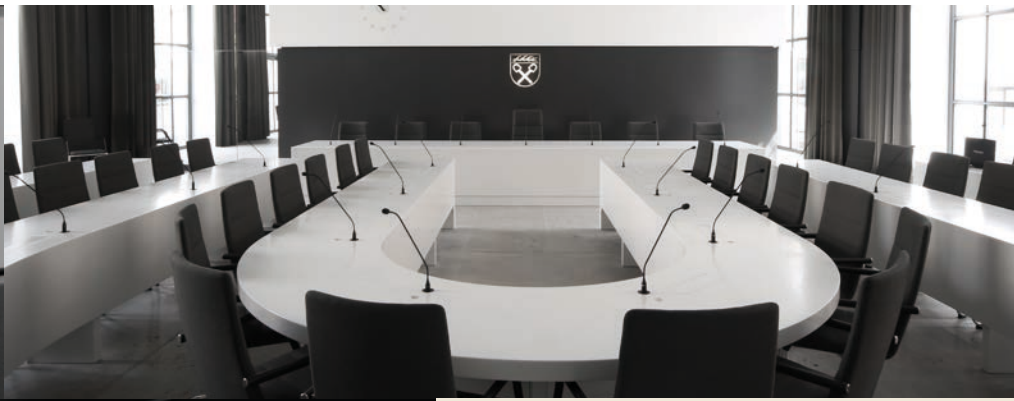# ORBIS
RELIABLE
CONFERENCING

CONFERENCE
TECHNOLOGY

MADE IN GERMANY

Reliable, intuitive, functional.
Orbis, the digital, wired conference system

reddot award 2015
winner

The spoken word and its effect on our fellow human beings is part of our communication on a daily basis, at conferences and lectures. Whether in conference rooms, council halls or boardrooms – the spoken word can only be powerful if it is understood. Therefore, technology becomes an indispensable part of your entire presentation.

This new wired conference system combines demanding design and discreet integration in high-quality furnishing and becomes an inherent part of your success.
During development we were very careful to concentrate on the operational reliability and user convenience of the system, without having to neglect technical refinements.

Modern design, ease-of-use, operational reliability and high-quality materials are now what make this new conference system stand out. Components of the new Orbis wired conference system have received the world-renowned "Red Dot Award".

CONTROL UNIT
RELIABLE, MODERN
INTUITIVE

The centre of your conference

The control unit sets new standards with regard to design and operability. High-quality materials and the innovative one-button navigation concept make this control unit unique and provide for extremely simple operation and configuration of numerous functions.

Advantages that you will remember.
The most important functions of the Orbis control unit.

Reliable operation

Maximum reliability due to redundancy. A set up with all microphone units in a loop ensures a system redundancy with a maximum operational reliability. Even when a defect within the cabling of the microphone units or a failure within the microphone units occurs, the conference system will still be powered from the other end of the loop.

OneButton Navigation

Unprecedented user-friendliness that speaks for itself. The innovative one-button navigation makes operation of the system intuitive and implementation uncomplicated. By consistently dispensing with numerous sub-menus, we have achieved an unprecedented level of user-friendliness. An overview of all functions and parameters can be seen at a glance on the glass panel display.

System capacity

Excellent consumption figures enable a high number of microphone units. The line system topology allows the operation with a maximum of 100 microphone units using one control unit. If the system is connected in a loop to achieve the redundant operating mode, a maximum of 50 microphone units can be connected to one control unit. This impressive system capacity is achieved with economical microphone units that use less than 1 Watt in operation and at maximum volume.

Hot plugging

Additional microphone units can be added to the system or, if necessary, individual microphone units can be replaced, without interrupting the conference. In both cases there is automatic system recognition in the network.

Display

The labelled and back-lit glass display provides clear and well-arranged presentation of the operating parameters. As only those functions which have been set are back-lit, the user has an overview at a glance and any changes are very simple.

Interfaces

Using the RS-232 interface, the Orbis can be connected to a media control system. Control commands allow convenient operation of the microphones and various status displays, such as redundancy, fire alarm and audio recording.

Recording

The integrated recorder allows each meeting to be recorded without an extra device to ensure the registration of important incidents. This function becomes only then visible, when an SD card has been inserted into the control unit.

Audio settings

Due to its flexibility, Orbis can be used for a variety of applications. Audio signals are channelled and emitted via inputs and outputs in the digital signal processor, for example for telephone or video conferences or for the inclusion of a foreign language channel for interpreting purposes.

19" rack mount kit

In order to mount the control unit in a 19" rack, we supply a 19" rack mount kit as an optional accessory.

MICROPHONE UNITS
MODERN, CLEAR
SOPHISTICATED

Modern design in harmony with high-quality materials.
Conference technology that exceeds the highest demands thanks to a consequent
design and premium-quality materials. With beyerdynamic's gene of individuality,
we are underlining not only the furnishings, but also your presentation in conference
rooms or meetings. With features like backlit, easy-to-feel silicone push-buttons
with Braille and a headphone connection for hearing assistance we adhere to the
UN Convention to ensure equal participation of disabled persons in society.

Properties that satisfy every need.
The main features of the Orbis microphone units at a glance.

Integrated solutions

Microphone units that can be adapted to the requirements of the conference setting. Integration is the most demanding requirement of a high-quality and individual table-mounted system. Intelligent build-in options enable the equipment to be integrated and combined individually, elegantly and discreetly with furniture and any conference environment – in the boardroom, in the council chamber, or in parliament.

Cable routing

Discreet or invisible. The practical cabling options allow the cables to be laid from below or behind. Depending on the requirements, the intelligent concept provides strain relief for the cables and allows them to be fixed and to be hidden.

Removable gooseneck microphones

Flexibility that pays. The gooseneck microphones are available in four different lengths. Thanks to the robust XLR connector, the gooseneck microphones can be replaced quickly and easily on site. The locking mechanism prevents accidental detachment of the microphones during the conference. The Scudio technology reliably eliminates interference caused by mobile phones.

Standard Cat5 cables

Global availability. Orbis is wired up using standard Cat5 cables. Global availability is guaranteed while affordable prices are maintained with the international standard TIA/EIA-568A/B. In accordance with the standards, the Orbis system transmits audio and control data and supplies voltage via the same cable.

High-quality surface

The microphone units are coated with a paint that was specially developed for the automotive industry and is particularly hard-wearing, scratch-resistant and impervious to fingerprints. The high-gloss control panel is made of specially hardened and therefore scratch-resistant acrylic glass.

Accessibility

The buttons on our microphone units are made of silicone and are Braille-marked, have a tactile feedback and thus touch-readable. Either a head-set or an induction loop for assisted listening can be connected via the headphone jack. This means accessibility and equality for all conference participants.

Theft protection

Fixtures on the underside of the microphone unit enable it to be screwed onto the table. This prevents the microphone unit from being stolen or used as a missile.

Headphone jack

The adjustable headphone jack on the microphone unit can be used for output in the original for assisted listening or for a foreign-language audio channel if interpreting is offered.
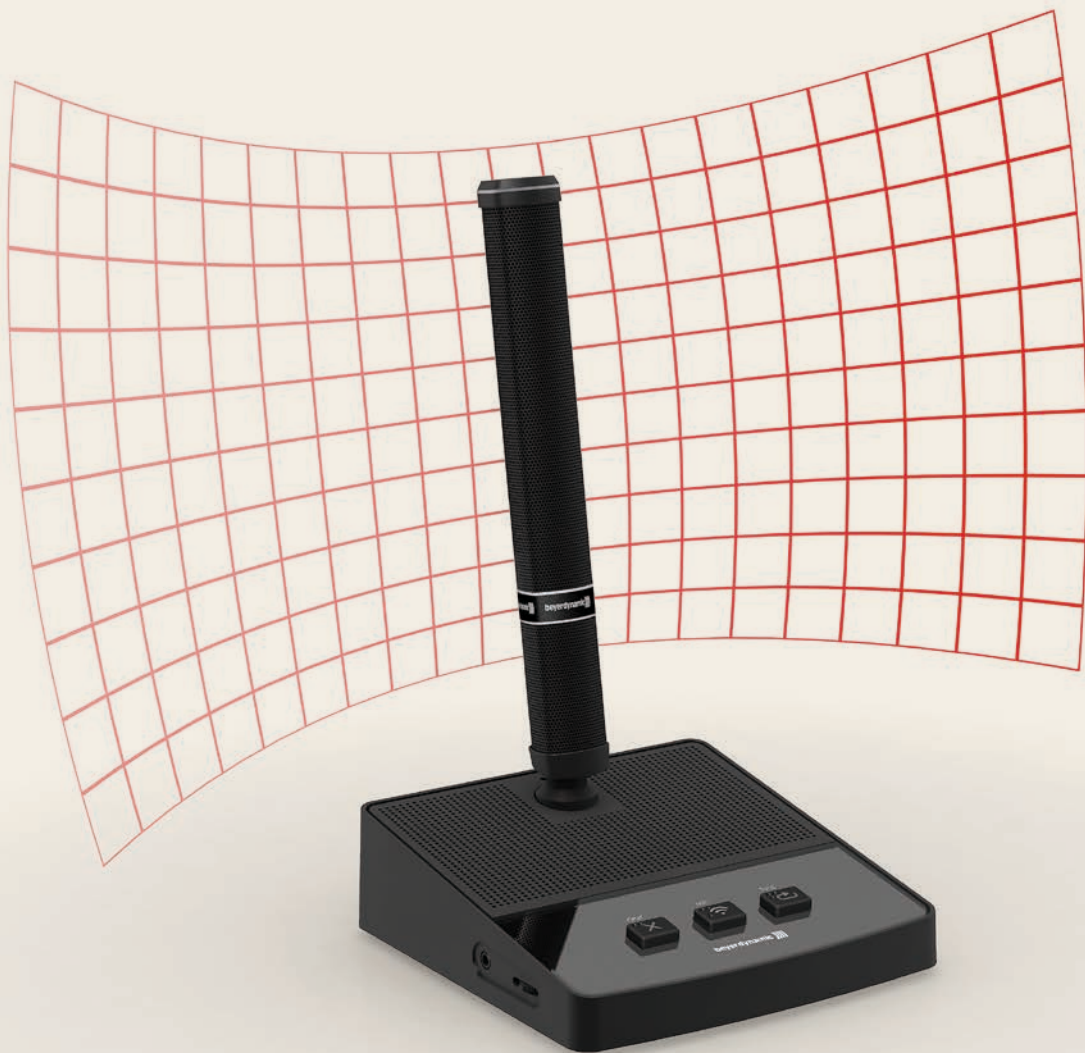
Value

The sturdy housing with a solid metal base ensures stability and optimum footfall sound isolation. This effectively reduces the transmission of vibrations from the table and prevents the microphone units from slipping off the table when the microphone is being adjusted.

Voice Activation

The microphone can be tuned on by either using the microphone button or automatically via voice activation when the participant starts to speak.

REVOLUTO
GOES VERTICAL

reddot award 2015
winner

Microphone for freedom of movement
Due to the Revoluto technology the vertical microphone array Classis RM 31 Q
provides a very large voice range and high quality sound.

Conference microphone
with Revoluto Technology.

The microphone can be connected to Orbis microphone units like a gooseneck microphone. The vertical microphone array results in a horizontal corridor characteristic (horizontal cardioid, vertical lobe). This allows the conference participant maximum freedom of movement at a consistent intelligibility of speech. It is possible for two people to share one microphone unit. The vertical lobe polar pattern also optimises the gain before feedback in ceiling installations.

Revoluto Technology

The Revoluto principle is based on the patented microphone array technology, where microphone capsules are arranged in a row. Compared to gooseneck microphones this creates a much greater voice range.
As a result, the speaker must comply with neither the pick up pattern nor the usual small speaking distance.

The speaker can be close to the microphone or further away. Due to the array technology sound fluctuations are minimised by different speech distance.

The vertical arrangement of the array allows maximum freedom of movement to the right and left without volume waste.
The attenuation up and down limits the recording of signals and noises from the ceiling and table.

Due to the large voice range two people can share one microphone. The microphone can also be used for video conferencing with several people. Due to the lateral placement of the microphone the workplace is free for laptops.

Reclinable microphone

The microphone can be reclined backwards to adapt the reclination and thus the alignment of the polar pattern to the situation and size of the speaker.

Gain before feedback

The vertical microphone arrays enables a high gain before feedback in ceiling installations.

RFI proof

The microphone is RFI proof so that no inference due to mobile phones is caused.

Made in Germany

Highest audio and product quality „Made in Germany". The Revoluto technology was developed in Germany, the production is also in Germany.

LED ring

The microphone has an LED ring indicating the ready to speak status by a red illumination.

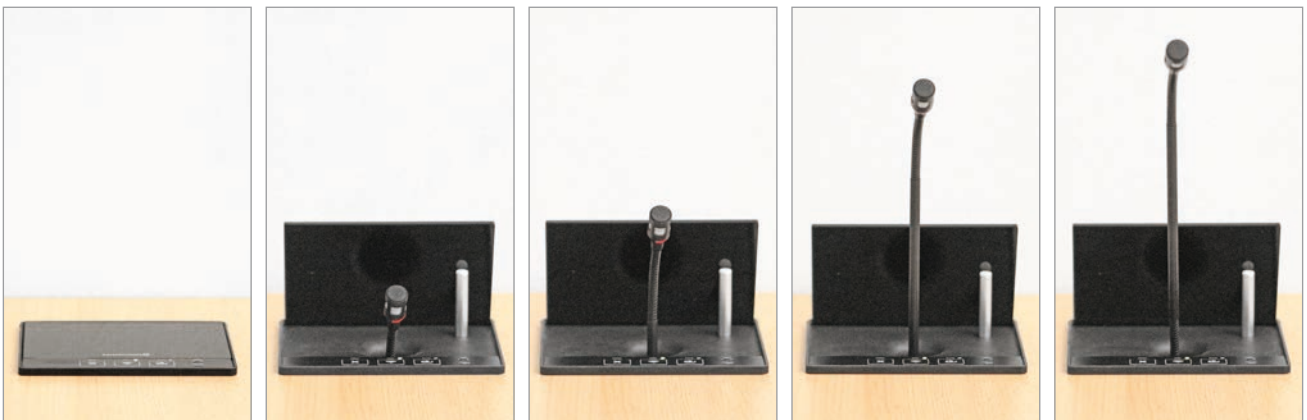# INTEGRATED SOLUTIONS
UNOBTRUSIVE
INTEGRATION

—

Technology should blend in with the singularity of the architecture.
Integrated solutions meet highest demands on design and functionality.

The Orbis MU 41 and Orbis MU 43 flush mount microphone units will be used with our Classis microphone series. An optional CA OL loudspeaker module is available.

conMIC Orbis allows the seamless integration of conference microphones to be placed below furniture level and elevating only upon request. conMIC Orbis contributes greatly to the room aesthetics, removing clutter and obstruction while retaining functionality. These may be controlled either by a single press on the keyplate or by remote control. conMIC Orbis is available at Element One.

Orbis Microphone Units –
further integrated solutions.

Table installation with a gooseneck microphone of the Classis microphone series, shockmount and button. The Orbis SU 63 system unit is mounted under the table.

Armrest installation with a gooseneck microphone of the Classis microphone series, shockmount and button. The Orbis SU 63 system unit is mounted upright into the armrest.

Flexible shockmount fixture with swivelling lid for Classis microphones.

The swivelling lid of the shockmount can be customised for a discreet installation into furniture in any environment. By using water transfer printing the swivelling lid can be coated according to your requested colour and demands.
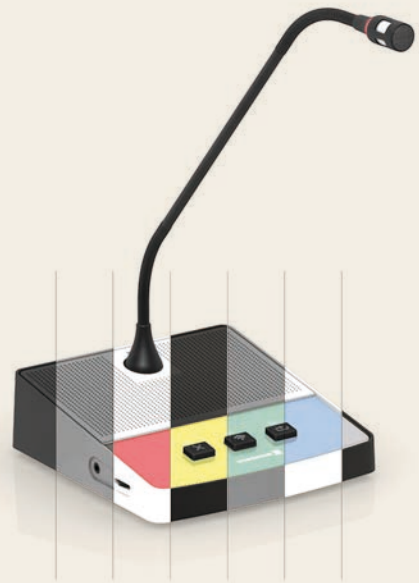
ORBIS
MANUFAKTUR

Products carefully handcrafted have always been the basis for our "Made in Germany" products.

Our MANUFAKTUR made the philosophy come alive. Lifestyle materials such as brushed stainless steel or carbon-fibre look, control panels in the corporate colour or with integrated logo: the beyerdynamic MANUFAKTUR provides individuality on a superior level. As with your personal dream car you can select the colour of the housing up to the material of the control panels according to your personal taste. Finally your conference system will become a real unique one.

We distinguish between two levels of customisation.

❶ The first stage of individualisation

Stage one includes the three pre-defined colours for the housing and seven pre-defined colours for the control panels, and a panel made of brushed stainless steel. The advantage for you: the conference system adapts even better to you, your environment and the conference room. Since we have these variants already on stock, there are no one-time costs for you and there are no long delivery times.

Option for housings

Standard black with soft-touch feeling
(Alexit "Comfort" lacquer)

Grey with soft-touch feeling
(Alexit "Comfort" lacquer)

White with soft-touch feeling
(Alexit "Comfort" lacquer)

Option for panels

Blue, Green, Yellow, Red, Grey, White, Black and a control panel made of brushed stainless steel

❷ The second stage of individualisation

Let your imagination run wild, the housing of the Orbis microphone units can be painted in any colour. Also there are no limits for the control panels: no matter which colour, whether images or logo and almost every material is possible. Please note that you have to calculate with a delivery time of approximately 8 weeks and one-time costs for additional expenses.

Custom for housings

Every RAL colour is possible
(without soft-touch-feeling)

Custom for panels

Every RAL / Pantone colour and
nearly every material is possible

System overview

Orbis CU
Digital control unit
for up to 100
microphone units

CA OR
19" rack mount kit, with
fixation option for the power
supply and cable strain relief

Cat5 connecting cable,
RJ45 connectors
CA OC 1 - length 1 m
CA OC 2 - length 2.5 m
CA OC 5 - length 5 m
CA OC 10 - length 10 m
CA OC 20 - length 20 m
CA OC 50 - length 50 m

Classis microphone series
Classis GM 313 Q: Condenser gooseneck mic, length 300 mm
Classis GM 314 Q: Condenser gooseneck mic, length 400 mm
Classis GM 315 Q: Condenser gooseneck mic, length 500 mm
Classis GM 316 Q: Condenser gooseneck mic, length 600 mm

Classis GM 115 Q: Condenser gooseneck mic (cardioid), length 500 mm
Classis RM 31 Q: Vertical array mic, length 219 mm
Classis GM 314 E: Condenser gooseneck mic cardioid), length 400 mm
Classis GM 315 E: Condenser gooseneck mic (cardioid), length 500 mm
Classis BM 32 E: Boundary microphone (semi-cardioid, condenser), black

Orbis MU 23
Chairman microphone unit,
used with Classis microphones

Orbis MU 21
Delegate microphone unit,
used with Classis microphones

CA OT
Transport case

ZSH 20
Flexible shockmount fixture for
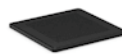Classis microphones, black

Orbis MU 43
Flush mount chairman
microphone unit, used with
Classis microphones optional
CA OL loudspeaker module

Orbis MU 41
Flush mount delegate
microphone unit, used with
Classis microphones optional
CA OL loudspeaker module

CA OL
Loudspeaker module
for Orbis MU 41/43
and Orbis SU 63

GMS 52 / GMS 52 w
Flexible shockmount fixture
with swivelling lid for Classis
microphones, black and white

Orbis SU 63
System unit for mounting
under the table, used with
Classis microphones, Phoenix
connectors for microphone,
CA OP piezo buttons and
CA OL loudspeaker module,
RJ 45 connection for the
conference network

CA OP 2
Piezo-button for Orbis SU 63
system units, black anodized
aluminium, with bicoloured
LED indicator dot

CA OP 2 C
Piezo-button for Orbis SU 63
system units, black anodized
aluminium, with "Clear"
symbol printing

CA OP 2 F
Piezo-button for Orbis SU 63
system units, black anodized
aluminium, with "Func" symbol
printing and single coloured
LED indicator dot

National

ARD Main Television Studio, Berlin

Ariola, Munich

Bavarian chamber for social benefits and pensions, Munich

Ministry of Interior Affairs, Berlin

Office of the president (Schloss Bellevue), Berlin

CSU Political Office, Munich

CDU Political Office, Berlin

Dyckerhoff Zement, Mainz

EZB European Central Bank, Frankfurt

Geographical Institute, Bonn

Chamber of Crafts, Bayreuth

IG Metall (Union), Frankfurt

Clinical Center of the University of Munich

Cultural Building Sachsenheim

Medical Association Hesse, Bad Nauheim

District Office Eichach

District Office Friedrichshafen

Parliament Baden-Württemberg, Stuttgart

MDR Television Studio, Dresden

MDR Television Studio, Leipzig

Trade Fair Center Essen

City hall Gotha

City hall Heilbronn

City hall Cologne

City hall Schorndorf

SPD Municipal Council Munich

Public Services Nuremberg

University of Marburg

Zeppelinstein Authority Center, Bad Homburg

International

Australian Medical Association, NSW - Australia

Kingston City Council, Vic - Australia

China National Power General Corporation, Beijing - China

Shenzhen Manager Building, South China - China

Shanghai Fuxing Commercial Building, Shanghai - China

City Hall Frederikshavn - Denmark

County Court Kolding - Denmark

Danish Emergency Management Agency, Bernstorff Castle - Denmark

ALCATEL Lannian - France

AXA Assurances, Paris - France

Gaz de France, Paris - France

Athens Exchange, Athens - Greece

Bank of Scotland - Great Britain

Warwick/Leicester University - Great Britain

Western Education and Library Board HQ, Omagh - Ireland

Ministry of Interiors, Beyt Hall, Tehran - Iran

Ministry of Interiors, Minister Office, Tehran - Iran

Lisburn County Council - Ireland

City of Waterloo Council Chambers, Waterloo, Ontario - Canada

Statistic Canada, Ottawa, Ontario - Canada

Pickering City Council Chambers, Pickering, Ontario - Canada

Macedonian Parliament - Macedonia

Auckland City Council - New Zealand

Waimakiriri District Council - New Zealand

Municipal Waterworks, Gorinchem - Netherlands

Town hall Rotterdam - Netherlands

Nexim Bank Head Office, Abuja - Nigeria

The Adamawa State House of Assembly, Yola - Nigeria

Church boardroom, Zurich - Switzerland

University, Bern - Switzerland

Sala de Presentaciones de Torre Picasso, Madrid - Spain

University Carlos III, Madrid - Spain

University of Alicante - Spain

Anaheim City Council, California - USA

Board of Education, New York - USA

Orlando City Council, Florida - USA

The University of Foreign Languages, Hanoi - Vietnam

National Library - Belarus

Made in Germany

Conference systems from beyerdynamic stand for optimal audio quality and highest quality standards "Made in Germany".

Sustainability

beyerdynamic products are of course produced as environmentally friendly as possible.

Further references and project reports at
www.beyerdynamic.com/references

More information at www.beyerdynamic.com/orbis