### Intelligent Conference System







**KLOTZ** is committed to providing the best solution for digital audio systems, which are specifically created for Broadcast & television, Public Address system, Reinforcement sound and Smart conference system.

For the broadcast division, we offer a complete solution from small radio stations to large broadcast centers. Except consoles and router, we provide various workflow software packages for radio station. For smart conferences division, we offer various solutions from small meetings to large international conferences. Besides wired and wireless conference discussions, voting, simultaneous interpretation and language distribution systems, we provides information display and E-paper name board. For Installed sound division, we offer digital public address system with varizones for evacuation, announcement and background music, professional reinforcement products for commercial sound system.

Klotz digital audio systems has already applied for a variety of airports, railway stations, hotels, conventions and exhibition center, theaters, museums, Universities in the 40 years. Numerous applications in the whole world have already proved the high quality and stability of Klotz products and systems.

#### Broadcast

Radio & TV consoles
Routing system

#### Installed sound

Public address system with Evacuation, Announcement and background music Commercial music system Live sound reinforcement system

#### ■ Smart Conferences

Full digital conference system with discussion, voting and interpretation Wireless conference system

Simultaneous interpretation and language distribution system

E-paper name board and information display





### Intelligent conference system

KLOTZ has simplified the wisdom of digital audio for many years and created a series of multimedia speaking equipment, conference management equipment, audio processing equipment, simultaneous interpretation equipment, language distribution equipment, voting equipment and various kinds of suitable for new conferences. Supporting software to suit the needs of small meetings and large international conferences. And a variety of customized hardware and software solutions also meet the individual needs of customers. The application of patented technology enables Klotz's conference equipment to have unparalleled sound quality, user-friendly control interface and highest system stability.

- Fully digital conference network, integrated conference discussion, simultaneous interpretation, voting and language distribution, information display.
  - esona portable microphone unit with discussion, voting, CS and e-paper display
  - 8000 portable/flush-mount microphone units with discussion, voting, CS
  - 8300 fully digital simultaneous interpretation and digital IR units
- Paperless conference system
  - 6900 paperless conference system
  - 6800 wireless e-paper display
- Wireless conference discussion, voting and simultaneous interpretation systems
  - 6100 infrared wireless discussion & voting system
  - 6200 wireless conference discussion system
  - 6300 infrared simultaneous interpretation and language distribution series
  - 6550 wireless voting system
- Wired digital conference discussion and interpretation system
  - 5900 pop-up microphone conference system
  - 5800 array microphone conference system
  - 5600 portable/ flush-mount microphone with 2+1 interpretation system
  - 4800 conference discussion system
- Reinforcement sound for conference series

Digital audio processor Professional Amplify series Professional loudspeaker series





#### Fully digital conference network



- Fully digital conference network.
- Uncompressed digital audio transfer in real time.
- Cost-efficient CAT5 cabling.
- Fully programmable RS485 and RS232 interface.
- Compliance with TCP/IP protocol.
- Real time recording.
- Discussion, voting and interpretation combined in one system.
- ldentification and display of attending delegates possible.
- Selectively wired or wireless language distribution.
- Base unit with 3 floor language channels and 24 interpreter channels.
- Extension to 64 interpretation channels possible on request Unique calendar and speaking time control.
- Remote control of external devices.
- System configuration via the operating elements on the central controller's front panel and via the software.
- Conference monitoring via the central controller.
- 3 voting functions (Yes, Abstention, No) and 5 election functions (1, 2, 3, 4, 5).
- Individual volume control on the chairman, delegate and interpretation unit.
- Digital signal processing via the operating elements of the interpretation unit.



8000 conference system integrates discussion, 24 channels interpretation, voting, and video camera control and powerful conference management software. The controller has 8 output buses, which can transfer up to 32 channels stereo or 64 mono channels of uncompressed audio data in real time via standard CAT5 cabling. Multiple systems can be connected via Ethernet to achieve large and complex solutions. 8000 also offers remote access to the management system software for monitoring and remote management in real time via the Internet.



### esona

### **Smart conference system**



- Patented microphone station with e-paper display, blind-mode and USB-charge.
- Colored e-paper display shows delegate information.
- Unique blind mode feature is feeling of warmth for the blindman.
- USB charging for tablet and telephone.
- Delegate information display.
- Independent DSP in each microphone.
- Superior German design quality.
- Discussion and voting functions of conference system.
- 24 channels selector for listening to the interpretation.
- ▶ LED indicator for requesting and speaking status.
- Speaking Timer.
- Calendar display.
- High quality monitor loudspeaker.
- ▶ 40cm/50cm detachable gooseneck microphone or Square shaped microphone.





KLOTZ Esona series are user-friendly microphone unit with the latest technology, which are patented with epaper display, blind-mode and USB-charge. Esona microphones are integrated delegate information display, voting and channel selector features, and can customized blind mode microphone for blind delegate. Esona microphone units connect to center units via cat 5 daisy chain.



#### Microphone units



- Speaking and Monitoring during the meeting.
- ≥ 24 channels wired selector and headphone port.
- 3/ 5 buttons voting features.
- Independent DSP in each microphone.
- Large LCD display for conference details.
- Metal base with exquisite hand feel.
- LED indicator for requesting and speaking.
- Speaking Timer.
- Calendar display.
- High quality monitor loudspeaker.
- Optional gooseneck microphones.
- Optional recorders and headphones.
- Buckles ensure the safe and stable cabling.
- Up to 10 microphone speak simultaneous.
- Priority of the Chairman Units.



8000 fully digital conference unit offers portable and flush mount options for its microphone units. With features like discussion, channel selector, and voting function integrated in one unit makes 8000 the perfect choice for conferences from small meetings to international congress.



#### Fully digital Interpretation and IR distribution system



- Excellent crystal-clear sound quality from the fully digital sound system.
- 24 channels interpretation system.
- Each language can be connected to 6 interpretation sets.
- ▶ 16/32 channels infrared language distribution system.
- Superior German design quality, outstanding intelligibility and sound quality.
- Modern and compact design, ergonomic, user-friendly handling.
- Highest security resistant to eavesdropping and disturbances.
- Failure-free transmission, no disturbances by lamplights and wireless communication devices.
- Interpretation channel output for recording.
- Easy compatible with other KLOTZ audio systems.
- Compatible with systems of other manufacturers.
- Firmware can be upgraded for future demands.



8300 fully digital Interpretation and IR distribution system guarantees most secure communication without any interference. Thanks to coded fully digital infrared signal transmission, the system is resistant to eavesdropping and disturbances caused by lamplights and wireless communication devices. With its outstanding technology and best manufacturing quality, a crystal-clear sound as well as a compact and modern design, the 8300 system becomes the best choice for every meeting place.



### 12-channels interpretation and IR distribution system







- > 8/12 channels interpretation system.
- 8/ 12 channels infrared language distribution system.
- Superior German design quality, outstanding intelligibility and sound quality.
- Modern and compact design, ergonomic, user-friendly handling.
- Highest security resistant to eavesdropping and disturbances.
- Failure-free transmission, no disturbances by lamplights and wireless communication devices.
- Interpretation channel output for recording.
- Easy compatible with other KLOTZ audio systems.
- Compatible with systems of other manufacturers.
- Firmware can be upgraded for future demands.



The 6300 system, 12-channels interpretation and distribution system, offers the ideal solution for the full spectrum of multi-language conferences. With it's outstanding sound quality, ergonomic design and easy system installation, 6300 components furnish company board meetings as well as international summits with hundreds of attendees and anything in between.



### Infrared wireless conference system



- Digital infrared conference discussion and voting system.
- Up to 128 discussion microphone units in one system.
- ► Highest security resistant to eavesdropping and disturbances.
- Failure-free transmission, no disturbances by lamplights and wireless communication devices.
- Full separation between side by side installed infrared conference systems
- No audible delays due to synchronized transmission.
- Ingenious transmission method facilitates up to 30 meters distance between microphone stations and receivers.
- 7 pre-configured conference management modes.
- Fastest installation due to cable-free set-up.
- Microphone stations with extraordinary battery lifetime (stand-by 30 hours, active 8 hours).
- Crystal clear sound quality and elimination of ambient noise. Individual positioning of the devices possible.



6100 wireless conference systems are easy to install, do not interfere with room decorations or furniture and delegate microphones can be positioned at any location within the room. 6100 can be used with 6300 interpretation system as a complete infrared interpretation solution.



### Wireless discussion system



- Wireless discussion system, which microphone station can be moved arbitrarily.
- Equipped wireless transmitter and receiver inside center controller and no any cable necessary.
- Unique communication algorithm for high-fidelity audio signals without delay.
- Within the signal coverage, up to 1000 microphones can be connected,
- Multiple management modes, up to 5 microphones speak simultaneously.
- Large-screen LCD to intelligently display menus and system status, including power, frequency, and signal strength indications
- Unique shock and noise-proof structure, resistant to environmental noise
- 8 hours of continuous speaking time and more than 20 hours of standby time
- Optional Klotz original lithium battery and smart charging box Video tracing via RS232 port
- Plug and play, easy to install, friendly user interface
- ▶ 40cm/50cm detachable gooseneck microphone



6200 wireless discussion system uses a unique data communication algorithm to transmit high fidelity and secrecy audio signals without any delay. Up to 1000 microphone units can be used within the signal coverage area. The large LCD displays the operation menu, status of the system including power, channel and signal strength, speaking time, calendar etc., which is friendly user interface.



#### Wireless voting system





- Wireless voting system with capacity up to 20,000 voting units.
- Redundant communication channels ensure stable and reliable.
- With 64 selectable frequency bands, automatically switched between 32 frequency bands.
- Unique encryption and verification prevent signal interference, interception and stealing.
- Unique control chip carries core algorithm.
- Online inspection via software and hardware to ensure stable system.
- Fault alarm and indication to help operator resolves fault.
- Remote control, remote diagnosis and monitoring of voting status of the system.
- The wireless voter has nine working modes:
  - ★ Voting mode: yes, no, abstain
  - ★Three evaluation modes can be customized:
    - ■2 key comments (eg "satisfied", "not satisfied")
    - ■3 key comments (eg "satisfaction", "unsatisfactory", "abstain")
    - ■4 key comments(eg"satisfaction", "basic satisfaction", "unsatisfactory", "abstain")
  - ★Four election modes:
    - ■Election 3 election 1
    - ■Election 3 election 3
    - ■Election 5 election 1
  - ■Election 5 election 5
  - ★Scoring mode: Customizable rating value The default value is: 100, 75, 50, 25, 0

The new generation 6550 wireless voting system is designed to meet the needs of various important conference voting, democratic evaluation, personnel election, evaluation and scoring, using mature and reliable wireless communication technology, advanced digital system architecture, power supply and all important components and communication. With powerful software, friendly user interface, 6550 is the best choice for various meetings and entertainment.



#### Pop-up microphone conference system



- ▶ Pop-up microphone conference system
- High fidelity microphone with dynamic adjustment to achieve perfect sound quality
- Exquisite compact microphone and hidden installation make the conference table clean and tidy.
- Automatic gain adjustment, the speak distance is up to 80cm

  Bright indicator light indicates the status of the speech
- Automatically turns off the microphone when hidden it.
- Multiple management modes, comprehensive discussion control
- ▶ Up to 100 microphones per controller and up to 999 microphones can be operated within a system.
- Automatic detection of loops and system devices
- Multiple management modes, comprehensive discussion control
- Connectivity of external control equipment and camera via RS 232 or RS 422 interface.



The 5900 conference discussion series is simple and elegant which features a Pop-up microphone. Free to bounce and hide which makes the table clean and wide also effectively protects the microphone at the same time. The 5900 Series inherits the capabilities of the 5000 Series Conference Units to meet the needs of a variety of meeting venues.



#### **Array microphone conference system**





- Array microphone conference system
- Portable array microphone and lift flush-mount microphone optional
- Dynamic adjustment of the array microphone to ensure sound quality
- Automatic gain adjustment, the speak distance is up to 80cm
- High quality metal case microphone unit, novelty and elegant appearance
- Light touch speak button, bright LED indicates microphone status
- Automatic switch off microphone when no-sound in defined time
- Automatically turns off the microphone when hide it.
- Multiple management modes, comprehensive discussion control
- Up to 100 microphones per controller and up to 999 microphones can be operated within a system.
- Automatic detection of loops and system devices
- Multiple management modes, comprehensive discussion control
- Connectivity of external control equipment and camera via RS 232 or RS 422 port



The 5800 new array microphone conference system, dynamic dsp processing, automatic gain adjustment, high-quality microphone, ensures that the array microphone sound quality is perfect. The user-friendly design, metal case and exquisite surface treatment make the 5800 array microphone be the best choice of high-end user.



#### Discussion with small interpretation system



- Modern digital conference system for small, mid-size and large conferences.
- 2+1 wired interpretation system.
- Modular hence flexible and cost-efficient.
- Portable and flush-mount microphone version available.
- up to 100 microphone units per controller.
- Up to 4 interpretation sets for each language channel.
- Up to 10 controllers can be cascaded in one system.
- Up to 999 channels can be operated within a system.
- Automatic test procedure for the complete system.
- Easy system control by PC-based control software.
- Future-safe framework allows upgrade for extensions.
- Connectivity of external control equipment and camera via RS 232 or RS 485 port.
- Complete discussion control by various management modes.
- Unique calendar and speaking time control.
- Feedback suppression by separate gain adjustment for each input channel.
- Ambient noise isolation of microphone capsule.
- Earphone connection on each microphone unit.
- ▶ 40cm/50cm detachable gooseneck microphone.



The 5600 is a small but highly cost-efficient interpretation and conference discussion system. 5600 provides interpretation units for two languages, which are connected using a single bus cable. Users can listen to the translation through headphones from 5600 series or wireless language distribution system, e.g. 6300 & 8300 system. Up to 100 microphones per controller and up to 999 microphones can be operated within a 5600 system, makes the system be fit for from small meeting to big parliament.



### **Cost-efficient discussion system**



- Discussion conference system up to 64 microphones.
- Portable metal case microphone station with 2 meters cable.
- 3.5mm headphone socket on each microphone station.
- Unique calendar and speaking time control.
- Automatic test procedure for the complete system.
- Connectivity of external control equipment and camera via RS 232 or RS 485 port.
- Complete discussion control by most various management modes.
- Feedback suppression by separate gain adjustment for each input channel.
- Ambient noise isolation of microphone capsule.
- ▶ 28CM/36CM fixed gooseneck microphone.



The 4800 is a cost-efficient conference discussion system, provides a high sound quality and is the ideal choice for small discussion systems. The system offers various conference modes and allows up to 64 microphone units to be connected with one central controller. Metal case compact design and elegant appearance makes it's very popular in the conference market.



#### **Paperless conference system**



- ▶ Paperless conference system for interaction, distribution and Sharing of Conference Documents
- Powerful conference management software with friendly user Interface
- Industrial controller and smart tablet computer ensure stability and reliability of the system
- Sponsoring conference, uploading and distribution meeting documents in advance
- Internal announcement of conference to participants
- Delegate Sign-in, exchange and voting functions
- Conference agenda, documents and delegate seating list can be displayed on tablet
- ▶ Delegate can note document via touch screen and save the original handwriting
- Conference document can be share on the large display for example projector.
- One-click call for help in the meeting
- Can be used in conjunction with any klotz audio conference discussion system



Through electronic exchange of documents, the 6900 system realizes paperless conference, including Sign-in, document upload, document distribution and synchronization demonstration, voting functions. Paperless makes the conference transform from traditional paper-based information recording carrier to digital and mobile multimedia, which is based on tablet computers and smart phones. This can not only improve the efficiency of conference, advocate low-carbon green conference, but also extend the conference from a fixed conference room to an off-site mobile terminal.



#### Wireless e-paper display



- Latest color e-paper display with bright colors
- Display the delegate information, for example, name, company and position etc.
- Multiple languages or graphic display
- No glare when taking photos
- Customized content and styles of e-paper display
- No battery or power is required after downloading the display information
- Portable wireless device, free to place according the meeting requirement
- Various colours are available
- Can be used alone or in combination with KLOTZ any conference system



By using the latest display technology, 6800 wireless e-paper display has bright color without glaring. Portable wireless device is free to place according the meeting requirement. Power is not necessary after download the content of the display. User can customize display contents and styles freely via computer, which are multiple languages or graphic formats.



# **UHF**

### Wireless microphone system

U1100/2 2pcs wireless microphone U1100/4 4pcs wireless microphone U1100/8 8pcs wireless microphone



- high-performance central unit with multiple emitters.
- Optional 4 types of microphone accessory can freely mix in one system.
- 2, 4, 8 microphone accessories are available in one system.
- Friendly user interface with large LCD display.
- Advanced PLL phase-locked loop technology.
- ► High anti-interference ability.
- Integrated feedback inhibition module and Noise cancellation module.
- ▶ Up to 100 transmit meters.



U1100/S microphone station



U1100/M Handheld microphone



U1100/C Collar-clip microphone



U1100/H Head-mounted microphone



### ICM-P10

#### **Intelligent Conference Management**



- Intelligent conference management device with built-in micro controller for controlling AV systems and IoT devices.
- 1 knob to adjust volume with circular programmable indicator.
- 10 user-defined programable buttons with dual color indicator enabling preset and recall conference scenes.
- Build-in multiple control ports includes 2\*RS232, 2\*relay, 1\*IR, 1\*I/O and 1\*TCP/IP.
- Complex logic programming control can be realized.
- 24V power supply or PoE remote power supply.
- ICM-P10 can be cascaded for multi-point and more devices are controlled.



ICM-P10 is an intelligent conference management device with built-in micro controller for controlling AV systems and IoT devices, enabling preset and recall conference scenes. ICM-P10 equips 1 knob and 10 user-defined programable buttons, which are equipped with dual color indicator light and complex logic programming control can be realized.



# DSP

### Digital audio processor



- Integrates various audio processor modules
- ▶ 8\*8, 12\*12, 16\*16 analog inputs and outputs are available
- Matrix mixer module
- Adaptively eliminates acoustic feedback and improves microphone gain
- Echo and noise cancellation modules
- Customizable preset 8 snapshot
- Powerful and friendly configuration software with multiple languages version
- Controlled by KLOTZ's patented touchstone mixer or smart tablet
- Priorial wall flush-mount panel to control volume, call scenes, etc.
- ▶ USB background music playback
- ▶ With RS232 and RS485 control ports
- Support GPI/O control
- Optional 8\*8, 16\*16, 32\*32 and 64\*64 Dante module interface
- Optional telephone module interface



Input settings



Evnander



Limite



Delaye



Equalizer



Automatic gain



Frequency divider



compressor



Automatic mixing

DSP series products integrate various audio processor modules and router. By using advanced DSP processors and powerful software, DSP series provide various audio processor module, including input settings, expanders, equalizers, compressors, automatic gain control, automatic mixing, feedback cancellation, echo cancellation, noise cancellation, delays, dividers, limiters, output settings, USB recording and more. DSP audio processors can solve various problems in the application scenario and apply to conference room, theaters, concert halls, classrooms, exhibition center, public transportation centers, stadiums, churches, public sound reinforcement systems etc.



Feedback Echo Noise cancellation cancellation



## Touchstone

#### Innovation touch controller



- Small mixer console for conference rooms, multifunction halls, etc.
- Optional control interface of DSP audio processor
  Stable and reliable industrial smart tablet
- Patented technology to fix physical fader and knob on touch screen
- Customized layout of mixer console
- Accessible video signal
- Customized operating interface
- Integrate third-party applications









KLOTZ's patented technology combines tablet applications with traditional physical faders and knobs to provide a powerful control platform that allows users to design their own mixers as they want. Touch stone is not only a mixing console, but also a platform integrated the control of conference system and background music. When linked with a third-party control system, it can control other equipment such as projection, lighting, curtains, etc., and become to be the third-party control platform

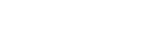


## DA

#### **Class D Power Amplifier**

VA 62035DA2 2 channels power amplifier VA 62050DA2 2 channels power amplifier VA 62080DA2 2 channels power amplifier VA 62080DA2 2 channels power amplifier VA 62100DA2 2 channels power amplifier VA 64035DA4 4 channels power amplifier VA 64065DA4 4 channels power amplifier VA 64080DA4 4 channels power amplifier VA 64100DA4 4 channels power amplifier VA 64100DA4 4 channels power amplifier

- Class D power amplifier, high efficiency power conversion circuit.
- The low frequency is powerful and strong, and the medium and high frequency is transparent, clear and well-defined.
- Soft switch LLC resonant switching power supply module.
- Active Power Factor Correction (PFC) for stable operation over the full voltage range (90~265V).
- Efficient speaker back EMF absorption system.
- Unique peak clipping limiter and ripple elimination network.
- Circuit protection: soft start, DC, sub audio, high frequency, overheat, short circuit, power on/off mute.
- Stereo and bridge output mode.
- input sensitivity 0.775v/1v/32dB can be switched.
- Temperature-controlled variable speed fan, reducing power consumption and environmental protection.
  - 2 channels and 4 channels version.
- Lightweight and compact in 1U chassis.



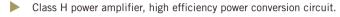
Model	62035DA2	62050DA2	62065DA2	62080DA2	62100DA2	64035DA2	64050DA2	64065DA2	64080DA2	64100DA2
Output Power(8Ω)	2 * 350W	2 * 500W	2 * 650W	2 * 800W	2 * 1000W	4 * 350W	4 * 500W	4 * 650W	4 * 800W	4 * 1000W
Output Power(4Ω)	2 * 580W	2 * 800W	2 * 1050W	2 * 1300W	2 * 1700W	4 * 580W	2 * 800W	2 * 1050W	2 * 1300W	2 * 1300W
Output Power(2Ω)	2 * 800W	2 * 1100W	2 * 1400W	2 * 1750W	2 * 2100W					
Output Power(8Ω bridge)	1 * 1160W	1 * 1600W	1 * 2100W	1 * 2600W	1 * 2600W	2 * 1160W	1 * 1600W	1 * 2100W	1 * 2600W	1 * 2600W
Output Power(4 $\Omega$ bridge)	1 * 1600W	1 * 2200W	1 * 2800W	1 * 3500W	1 * 3500W					
Frequency Response	20Hz~25kHz <±0.5dB									
THD	≤0.05% 1/8 Rated Power @ 8Ω, 1kHz									
Intermodulation Distortion	≤0.15% 1/8 Rated Power @ 8Ω, 1kHz									
Damping Factor	≥600 <b>@</b> 10Hz~400Hz, 8Ω									
SNR	>104dBA @ 20Hz~20kHz, 4Ω									
Crosstalk	>50dB @ 1kHz									
Input Sensitivity	0.775v/1v/32dB									
Input Impedance	$20$ k $\Omega$ balance or $10$ k $\Omega$ Unbalance									
Input Connector	XLR									
Output Connector	SPEAKON									
Power Supply	90~265VAC, 60/50Hz									
Dimension(W*D*H)	483 * 228 * 45mm									
Weight	5.1kg 5.5kg 5.8kg 6.2kg 6.3kg 6.0kg 6.2kg 6.5kg 6.8kg 7.0kg									





#### **Class H Power Amplifier**

VA 62020HA Dual channel power amplifier VA 62040HA Dual channel power amplifier VA 62080HA Dual channel power amplifier



- High fidelity sound quality, pure and natural tone, medium and high frequency transparent, low frequency full and flexible.
- Excellent signal conversion characteristics, with very small harmonic distortion, inter modulation distortion, transient inter modulation distortion.
- Complete protection system with audio limiter, overheat protection, DC protection, high frequency protection, over current limiter, surge limiter, switching delay and other functions.
- Stereo, parallel, and bridge output modes provide excellent music for different occasions.
- Temperature-controlled variable speed fan, reducing power consumption and environmental protection.
- Optional Dante module.
- $\triangleright$  8 $\Omega$  load output power: 2 × 200W/400W/800W optional.



Model	VA 62020HA	VA 62040HA	VA 62080HA		
Output Power(8Ω)	2 * 200W	2 * 400W	2 * 800W		
Output Power(4Ω)	2 * 300W	2 * 600W	2 * 1200W		
Output Power(8Ω bridge)		1 * 1000W	1 * 2000W		
Output Power(4 $\Omega$ bridge)		1 * 1200W	1 * 2400W		
Frequency Response	20Hz~20kHz ± 0.1dB				
THD	≤0.05% RMS @ 8Ω 1kHz				
Damping Factor	400:1	450:1	600:1		
SNR	90dB	95dB	104dB		
Input Sensitivity	32dB/1V/1.4V				
Input Impedance	20k $Ω$ balance or $10$ k $Ω$ Unbalance				
Voltage Gain	32dB				
Input Connector	XLR				
Output Connector	SPEAKON				
Power Supply	220~230 VAC, 50/60Hz				
Dimension(W*D*H)	483 * 430 * 88mm	483 * 430 * 88mm	483 * 430* 88mm		
Weight	13.5kg	16.3kg	23.6kg		



# CSB

### **Ceiling Speaker**

CSB 4010 4" Coaxial Ceiling Speaker CSB 6510 6.5" Coaxial Ceiling Speaker

CSB series coaxial two-way ceiling loudspeakers are high-quality, high-reliability speakers. They are specially designed for high-end occasions of music and language amplification. They are suitable for high-end meeting rooms, hotels, shopping malls, airports, museums, intelligent buildings, high-end residential and other places.



Model	CSB 4010	CSB 6510		
Woofer Driver	4" Woofer Driver	6.5" Woofer Driver		
Tweeter Driver	3/4" Tweeter Driver	3/4" Tweeter Driver		
RMS Power	20W	40W		
Program Power	40W	80W		
Peak Power	80W	160W		
Frequency Response	100Hz~20kHz	100Hz~20kHz		
Sensitivity(1W/m)	86dB	88dB		
Max. SPL	99dB	104dB		
Impedance	16Ω	16Ω		
Directivity	120° cone	120° cone		
Material	Metal rear cylinder, ABS panel			
Colour	White(RAL 9016)			
Dimension(Ø*H)	212 * 176mm, cylinder 166mm	252 * 210mm, cylinder 220mm		
Hole Size	185mm	225mm		
Weight	2.7kg	3.4kg		



## ROE

### **Cabinet Speaker**

ROE 8 8" Two-way Cabinet Speaker
ROE 10 10" Two-way Cabinet Speaker
ROE 12 12" Two-way Cabinet Speaker
ROE 15 15" Two-way Cabinet Speaker
ROE 215 Dual 15" Two-way Cabinet Speaker

ROE series loudspeakers use very low distortion tweeter rotary horn unit and high sensitivity tweeter converter to reduce resonance, improve sound quality, excellent transient response at low frequency, high fidelity at medium frequency, which can be used as both foldback and main amplifier. It can be used in full-range sound reinforcement, band sound reinforcement and multi-function hall, Karaok private rooms, clubs, stage foldback and other fields.





Model	ROE 8	ROE 10	ROE 12	ROE 15		
Woofer Driver	8" Woofer Driver	10" Woofer Driver	12" Woofer Driver	15" Woofer Driver		
Tweeter Driver	1.75" Tweeter Driver	1.75" Tweeter Driver	1.75" Tweeter Driver	1.75" Tweeter Driver		
RMS Power	200W	250W	350W	450W		
Program Power	400W	500W	700W	900W		
Peak Power	800W	1000W	1400W	1800W		
Frequency Response	59Hz~19kHz	53Hz~19kHz	50Hz~19kHz	45Hz~19kHz		
Sensitivity(1W/m)	95dB	102dB	103dB	105dB		
Max. SPL	118dB	126dB	128dB	132dB		
Impedance	8Ω	8Ω	8Ω	8Ω		
Directivity(H*V)	90° * 50°	90° * 50°	90° * 50°	90° * 50°		
Material	Composite Board, Metal Mask					
Colour	Black(RAL 9005)					
Dimension(W*D*H)	240 * 250 * 428mm	300 * 315 * 500mm	365 * 385 * 600mm	415 * 440 * 690mm		
Weight	9.8kg	15.6kg	20.3kg	32kg		



# CLB

### **Column Speaker**

CLB 3040 Column Speaker CLB 3080 Column Speaker

The CLB series loudspeakers are slender column speaker. They adopt 3" international famous brand full-range loudspeaker unit, which has high sensitivity, wide frequency response range and high speech clarity. It can effectively solve the problem caused by excessive reverberation time. It is suitable for use in environments with poor acoustic conditions.





Model	CLB 3040	CLB 3080		
Speaker Unit	4 * 3" Full-range Driver	8 * 3" Full-range Driver		
RMS Power	100W	200W		
Program Power	200W	400W		
Peak Power	400W	800W		
Frequency Response	100Hz~20kHz	100Hz~20kHz		
Sensitivity(1W/m)	96dB	99dB		
Max. SPL	116dB	122dB		
Impedance	8Ω	4Ω		
Directivity(H*V)	90° * 60°	90° * 60°		
Material	Composite Board, Metal Mask			
Colour	Black(RAL 9005)			
Dimension(W*D*H)	130 * 125 * 405mm	130 * 125 * 805mm		
Weight	4.2kg	7.6kg		

### customers

Active since 1979 in the Audio and Video industry, the branded KLOTZ stands for most innovative products as well as for highest product quality and value. Branded KLOTZ high quality products such as digital mixing consoles for Radio and Television, digital routers, PA-systems and Conference systems as well as cables, multicore systems and accessories are manufactured with the same ambition for innovation and quality standard. In Europe and the Americas, in Asia and in Australia, in Africa and the whole world, KLOTZ has set several paradigm shifts with its innovations which included the first networking digital mixing consoles, the biggest routers ever built and the first fully digital PA- and Evacuation-System in the world.

#### **Broadcast**

- XM Satellite Radio, USA
- American Broadcasting Company (ABC), USA
- Radio Television Malaysia
- YLE, Finland
- Radio Guangdong, China
- ABC, Australia
- · Austereo, Australia
- DMG Radio, Australia
- Gulf News Dubai, UAE
- Athens Concert Hall, Greece
- Russia's Bolshoi Theatre
- Radio Luoyang, China.

#### **PA and Conference business**

- Munich Airport, Germany
- Nanning Wuxu International Airport, China
- Beijing Government, China Water Cube (APEC), China
- Emper Qins Terra-cotta warriors and horses Museum, China
- Shenzhen Government, China
- Shanghai Municipal People's Congress, China
- the European Parliament Facilities, Brussels and Strasbourg
- the White House Briefing Room, Washington DC, USA.





