CLOCKAUDIO®

PROFESSIONAL MICROPHONE SYSTEMS

www.clockaudio.com
CLOCKAUDIO

Introduction

Clockaudio was established in 1994 by a Team of Audio Specialists with many years of experience in the design and manufacture of innovative Pro-Audio Products.

The Company's reputation has been established on sound principles, its dedication to quality, service and innovation.

Audio professionals actively seek out and recommend Clockaudio for its reputation as a trusted and dedicated Manufacturer and its acknowledged customer drive approach to audio solutions. Central to this is the In House Research and Development facility which allows clients to explore customised prototypes and develop specific briefs in partnership.

This partnership approach has struck a chord with Consultants and Contractors alike, giving them the opportunity to be involved in the final solution.

The ability to customise is just one of the many factors which makes Clockaudio clearly different.

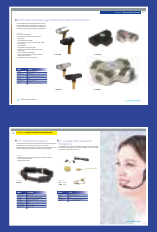
CLOCKAUDIO®

Clearly different.

T: +44 (0) 23 9225 1193 E: info@clockaudio.co.uk
F: +44 (0) 23 9225 1201 W: www.clockaudio.com

Member infoComm INTERNATIONAL

Contents



02~04 Gooseneck Microphones - Condenser
05 Twin-mount Microphones
06~07 Combination Series Microphones
08~09 Ceiling Rectracta
10 Suspended Microphones
12~19 Boundary Microphones & Switches
20~21 Headworn & Neckworn Microphones
22 Dynamic Gooseneck & Paging Microphones
23~24 Handheld Microphones
25~26 Headphones
27 Phantom Power Units & Adaptors
28~29 Shock Mounts & Bases
30 Microphone Stands & Adaptors
31 Automatic Microphone Mixer
32~37 UHF Wireless Systems
38~39 Tour Guide Systems
40 Security Intercom Systems & Induction Loops
41 Part Number Index

RF Series: GSM-friendly microphones and shock mounts

The **Clockaudio RF** product range has been developed in direct response to interference (noise) issues which have been introduced into microphones, IP phones, hearing aids, etc. by popular GSM devices such as PDAs and mobile phones with two-way walkie-talkie capability. The noise emitted from these devices can wreak havoc on everything from a simple phone call to a complex video conference, and everything in between.

These GSM devices emit a periodic hand shaking 'sync signal' to the nearest antenna tower even when these devices are at rest which creates noise, as well as data streaming noise when receiving or making calls, text messaging, sending or receiving e-mails or web surfing. Depending on the distance of the PDA or mobile device to the antenna tower, these devices will vary their strength in order to ensure proper hand shaking which can result in loud distracting noises which takes the focus away from the real business at hand; 'your business'.

Clockaudio's 'RF-Immunity' Series of microphones completely strips out this interference without any degradation of audio quality, frequency response or sensitivity, and allows the user to conduct business as usual without the need to have conference participants check their PDA or mobile phone at the door.

Availability options for RF-Immunity products in the Clockaudio microphone range continues to grow. RF-Immunity models are highlighted throughout the catalogue with the blue crossed-circle logo:

= RF-Immunity Version

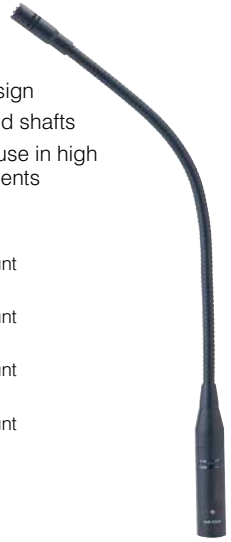
C 2 Series Goosenecks

Cardioid condenser gooseneck microphones designed for use in controlled acoustic environments such as schools, universities and public address paging systems.

Hypercardioid versions also available for noisy environments such as finance, transport termini and factory communications.

Features:

- Optimised for speech clarity
- Unobtrusive slimline design
- Fully-flexible or semi-rigid shafts
- Hypercardioid ideal for use in high ambient noise environments



Models:

C 22	200mm	Base mount
C 22E	180mm	XLR
C 23	300mm	Base mount
C 23E	280mm	XLR
C 24	400mm	Base mount
C 24E	380mm	XLR
C 25	500mm	Base mount
C 25E	480mm	XLR

- Includes W 2 windshield

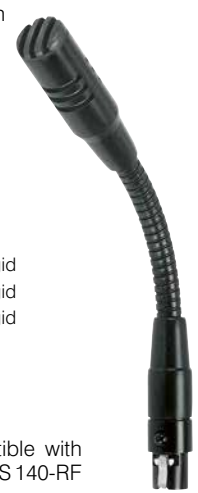
Model:	**C 2 Series**	
Type	Cardioid	Hypercardioid
Frequency Response	70Hz ~ 14KHz	60Hz ~ 12KHz
Sensitivity	-67dB ±3dB at 1KHz (0dB=1v/u.bar)	-71dB ±3dB at 1KHz (0dB=1v/u.bar)
Impedance	XLR: 200Ω Open-Ended Type: 1.6kΩ	
S/N Ratio	64dB (A)	
Termination	XLR: Male 3 pin XLR Open Ended: M10 x 1 Thread with shakeproof washer & nut	
Power Requirements	XLR: 9 ~ 48v Phantom Power Open Ended Type: 1.5v max through series resistor	

C 3 Slimline Goosenecks

Stylish, slimline, flexible goosnecks with cardioid condenser microphone for use in boardrooms, conferencing and a wide variety of applications requiring unobtrusive and easily-detachable gooseneck microphones with consistent sound quality.

Features:

- 6mm Ø slimline, flexible gooseneck
- Tini Q mini-XLR termination for easy interchange
- Engineered in high quality brass



Models:

C 3100	100mm	
C 310-R	100mm	Rigid
C 312-SR	200mm	Semi-rigid
C 313-SR	300mm	Semi-rigid
C 314-SR	400mm	Semi-rigid

These products are compatible with SM 20-RF, SM 80-RF, PPA-RF, S 140-RF and CW 9004.

- Includes W 2 windshield

Model:	**C 3100**
Frequency Response	50Hz ~ 18KHz
Sensitivity	-47dB ±3dB @ 1KHz (0dB=1v/Pa)
Impedance	200Ω
S/N Ratio	64dB(A)
Maximum SPL	125dB 1% THD
Power Requirements	9 ~ 48v Phantom Power
Termination	3 pin female Tini Q connector
Dimensions Head Ø	12mm
Shaft Ø	6mm

C 3 Series - Goosenecks

Cardioid condenser microphones designed for use in conference halls, places of worship, broadcasting and paging systems. Manufactured in high quality brass and finished in satin black.

Features:

- Response optimised for constant sound quality
- Superior grade components
- Finished in satin black
- Fully flexible or semi rigid gooseneck and knuckle joint options

Base Models:

C 31	180mm
C 32	280mm
C 33	380mm
C 34	480mm
C 35	580mm
C 36	680mm
C 301	Knuckle 180mm

Options:

Also available with RF-immunity and switch versions. See 'Available Gooseneck Options' (right) for full details.

- Includes W 2 windshield

Model:	C 3 Series	
Frequency Response	50Hz ~ 18KHz	
Sensitivity	-47dB ±3dB at 1KHz (0dB=1v/Pa)	
Impedance	XLR:	200Ω
S/N Ratio	64dB(A)	
Power Requirements	XLR:	9 ~ 48v Phantom Power
Termination	XLR:	Male 3 pin XLR

C 3 Halo Series - Goosenecks

These Halo versions of the C 3 Series are designed specifically for use in conference systems or other applications where speaker identification is required.

Features:

- High bright LED
- 5 pin XLR or base mounting
- Response optimised for constant sound quality
- Superior grade components
- Finished in satin black
- Fully flexible or semi rigid gooseneck and knuckle joint options

Base Models:

C 31HALO	180mm
C 32HALO	280mm
C 33HALO	380mm
C 34HALO	480mm
C 35HALO	580mm
C 36HALO	680mm
C 301HALO	Knuckle 180mm

Options:

Also available with RF-immunity and switch versions. See 'Available Gooseneck Options' (right) for full details.

- Includes W 2 windshield

Model:	C 3 Halo Series	
Frequency Response	50Hz ~ 18KHz	
Sensitivity	-47dB ±3dB at 1KHz (0dB=1v/Pa)	
Impedance	XLR:	200Ω
S/N Ratio	64dB(A)	
Power Requirements	XLR:	9 ~ 48v Phantom Power
Termination	XLR:	Male 5 pin XLR

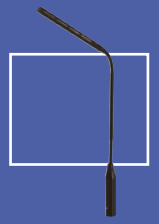
Available Gooseneck Options:

• XLR Connector Mount

3 or 5 pin male XLR, includes universal Phantom Power supply adaptor 9 ~ 48v with selectable bass cut filter* and -10dB pre attenuation pad (*Non RF models only)

• Shaft

Choice of fully flexible or semi rigid shafts



• Knuckle Joint

Unique design feature allowing horizontal rotation and verticle angle adjustment

• LED Halo

High bright Halo LED for speaker identification

• ON/OFF Switch

Silent, magnetic ON/OFF switch with LED indicator (RF models only)

• RF-immunity

Immune to RF artefacts - fully shielded against Radio Frequency Interference (RFI) from GSM devices operating in the 800MHz ~ 1.2GHz bandwidth

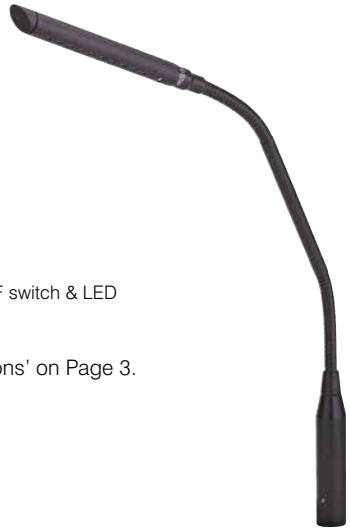
= RF-Immunity Version

C 800 Goosenecks (Mini Shotgun)

Slim, mini shotgun, hypercardioid microphone developed for speech purposes in a wide range of pro and live sound applications including places of worship, conference and leisure centres, banks and financial trading centres.

Features:

- Optimised for speech clarity
- Slimline gooseneck
- Superior grade components
- Finished in satin black



Models:

C 800
C 800E
C 800E-RF
C 800ES-RF With ON/OFF switch & LED

Options:

See 'Available Gooseneck Options' on Page 3.

- Includes W 8 windshield

Model:	C 800 Series
Frequency Response	50Hz ~ 18KHz
Sensitivity	-47dB ±3dB at 1KHz (0dB = 1v/Pa)
Impedance	XLR: 200Ω
Power Requirements	XLR: 9 ~ 48v Phantom Power
S/N Ratio	64dB(A)
Termination	XLR: Male 3 pin XLR

C 801 Knuckle Joint (Mini Shotgun)

Slim, mini shotgun, hypercardioid condenser microphone suitable for speech in a wide range of pro and live sound applications including places of worship, conference and leisure centres, banks and financial trading centres. Fitted with a knuckle joint giving both lateral and vertical adjustment.

Features:

- Optimised for speech clarity
- Slimline gooseneck
- Superior grade components
- Finished in satin black

Models:

C 801
C 801E
C 801E-RF
C 801ES-RF With ON/OFF switch & LED

Options:

See 'Available Gooseneck Options' on Page 3.

- Includes W 8 windshield

Model:	C 801 Series
Frequency Response	50Hz ~ 18KHz
Sensitivity	-47dB ±3dB at 1KHz (0dB = 1v/Pa)
Impedance	XLR: 200Ω
Power Requirements	XLR: 9 ~ 48v Phantom Power
S/N Ratio	64dB(A)
Termination	XLR: Male 3 pin XLR

C 815E-RF & C 816E-RF Goosenecks (Mini Shotgun)

Slimline, hypercardioid shotgun microphones for high quality speech in professional recording and live broadcasting applications.

Engineered in high quality brass and finished in satin black.

Features:

- Hypercardioid polar pattern
- Slimline mini shotgun
- Superior grade components
- Unobtrusive design
- Finished in satin black

Models:

C 815E-RF
C 816E-RF Semi-rigid

Options:

See 'Available Gooseneck Options' on Page 3.

- Includes W 85 windshield

Model:	C 815E-RF & C 816E-RF
Frequency Response	50Hz ~ 18KHz
Sensitivity	-45dB ±3dB at 1KHz (0dB = 1v/Pa)
Impedance	200Ω
Power Requirements	9 ~ 48v Phantom Power
S/N Ratio	64dB(A)
Termination	XLR: Male 3 Pin XLR

= RF-Immunity Version

C 420E Twin Mount

Cardioid condenser microphones mounted on twin rigid shafts vertically adjustable, individually, through 180º. Individually powered, providing live redundant capability so often required in a live broadcast situation. Finished in satin black.

Features:

- Optimised for consistent sound quality
- Integrated Phantom Power Adaptor
- 5 pin XLR mounting
- Shaft angles independently adjustable

Models:

C 420E

- Includes W 2 windshield

Model:	C 420E
Frequency Response	50Hz ~ 18KHz
Sensitivity	-44dB ±3dB @ 1KHz (0dB=1v/Pa)
Impedance	200Ω
S/N Ratio	64dB(A)
Power Requirements	9 ~ 48v Phantom Power
Termination	Male 5 Pin XLR

C 430E Twin Mount

Cardioid condenser microphones mounted on twin rigid shafts vertically adjustable, individually, through 180º. Individually powered, providing live redundant capability so often required in a live broadcast situation. Finished in satin black.

Features:

- Optimised for consistent sound quality
- Integrated Phantom Power Adaptor
- 5 pin XLR mounting
- Shaft angles independently adjustable
- Three microphone head variants - C 900, C 3H & C 800H
- Heads priced and supplied separately

Models:

C 430E

- Includes W 2 windshield

Model:	C 430E
Frequency Response	50Hz ~ 18KHz
Sensitivity	-44dB ±3dB @ 1KHz (0dB=1v/Pa)
Impedance	200Ω
S/N Ratio	64dB(A)
Power Requirements	9 ~ 48v Phantom Power
Termination	Male 5 Pin XLR

Capsule options available:

- **C 900**
  Rugged Cardioid condenser microphone capsule

- **C 3H**
  Slimline Cardioid condenser microphone capsule

- **C 800H**
  Hyper-cardioid Mini shotgun condenser microphone capsule

C 440E Twin Mount

Cardioid condenser microphones mounted on twin rigid shafts vertically adjustable, individually, through 180º. For use in a wide variety of applications including presentations, conferences, broadcasting and places of worship. Finished in satin black.

Features:

- Optimised for consistent sound quality
- Attractive slimline design
- Integrated Phantom Power Adaptor
- 3 pin XLR mounting
- Shaft angles independently adjustable

Models:

C 440E

- Includes W 2 windshield

Model:	C 440E
Frequency Response	50Hz ~ 18KHz
Sensitivity	-44dB ±3dB @ 1KHz (0dB=1v/Pa)
Impedance	200Ω
Power Requirements	9 ~ 48v Phantom Power
Switchable Bass Filter & -10dB Switchable Pad	✔
S/N Ratio	64dB(A)
Termination	Male 3 Pin XLR

= RF-Immunity Version

C 900 Combination Series

A series of easily interchangeable microphones, stands and shafts giving flexibility in choice of microphone and accessories for a wide range of applications including broadcast, conference halls, places of worship, leisure centres, etc. Finished in satin black.

Microphones

- **C 900** Rugged wide band cardioid condenser microphone for multiple use
- **C 3H** Short slimline cardioid condenser microphone for use in controlled acoustic environments
- **C 800H** Hyper-cardioid condenser mini shotgun microphone useful in a wide range of pro and live sound speech applications

• C 900

• C 3H

• C 800H

• C 3H: Includes W 2 windshield

• C 800H: Includes W 8 windshield

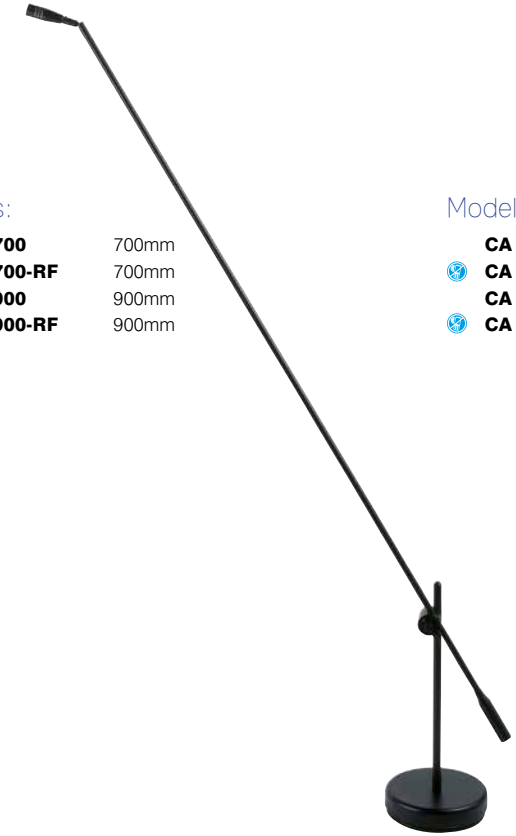
Model:	C 900	C 3H	C 800H
Frequency Response	50Hz ~ 20KHz	50Hz ~ 18KHz	50Hz ~ 18KHz
Sensitivity	-48dB	-47dB	-47dB
	±3dB at 1KHz (0dB = 1v/Pa)		
Power Requirements	1.8KΩ	1.8KΩ	1.8KΩ
	All models 9 ~ 48v via a Phantom Power Adaptor (PPA)		
S/N Ratio	68dB(A)	64dB(A)	64dB(A)
Termination	Male 3 pin Tini Q connector		

CA 700/CA 900 Floor Standing Long Shafts

Long, rigid shafts of 700mm and 1200mm respectively. Each connects to a short (350mm) upright shaft by a separate, lockable swivel joint allowing adjustments to angle, height and reach.

Features:

- Long Shaft includes Phantom Power Adaptor at bottom end terminated in Male 3 pin XLR
- Knuckle joint at microphone end terminated with Tini Q 3 pin female connector
- Short shaft connects to SM 155 floor mounting, shock absorbing base



Models:

	CA 700	700mm
RF	**CA 700-RF**	700mm
	CA 900	900mm
RF	**CA 900-RF**	900mm

CA 30/CA 40 Semi Rigid Shafts

Semi-rigid 300mm and 400mm shafts fitted with Phantom Power Adaptor at the bottom end terminated in Male 3 pin XLR and knuckle joint at tip with Tini Q 3 pin Female connector.

Features:

- Integrated Phantom Power Adaptor
- Male 3 pin XLR termination
- Finished in satin black

Models:

	CA 30	300mm
RF	**CA 30-RF**	300mm
	CA 40	400mm
RF	**CA 40-RF**	400mm

RF = RF-Immunity Version

CAK 1

Phantom Power Adaptor with knuckle and Tini Q 3 pin Female connector.

Models:

CAK 1
CAK 1-RF

S 750

Table microphone base fitted with knuckle and Tini Q 3 pin Female connector. Terminated with 3m of cable requiring a Phantom Power Adaptor. Diameter 75mm, height including connector 75mm.

Models:

S 750

SM 155

Floor mounting, shock absorbing microphone base of diameter 155mm and height 42.5mm.

Models:

SM 155

= RF-Immunity Version

C 901E Series (featuring 900 Capsule)

These 900 Series Microphones feature the C 900 cardioid condenser capsule and CAK Phantom Power Adaptor with knuckle joint for horizontal rotation and vertical angle adjustment.

Features:

- Integrated Phantom Power Adaptor
- Male 3 pin XLR termination
- Finished in satin black

Models:

C 901E-RF
C 901ES-RF With ON/OFF switch & LED

• C 901E-RF

• C 901ES-RF

Model:	C 901E-RF	C 901ES-RF
Frequency Response	50Hz ~ 20KHz	
Sensitivity	-48dB ±3dB @ 1KHz (0dB=1v/Pa)	
Impedance	200Ω	
S/N Ratio	68dB(A)	
Power Requirements	9 ~ 48v Phantom Power	
Termination	Male 3 Pin XLR	

CCRM 4000

The ceiling mounted retractable microphone has a wealth of benefits over traditional table mounted microphones. The table is left uncluttered, cables are now hidden in the ceiling and not under the conference room table, the audio from hanging microphones are superior to table mounted microphones as the height can be individually positioned according to the Speaker thus allowing for greater signal with less ambient noise. The noise / vibration transmitted across the table from delegates naturally moving laptop and other objects around the table are eliminated by the use of hanging microphones. At the end of the conference the microphones retract back into the ceiling leaving the conference room unspoiled by table mounted microphones.

Features:

- XLR Socket allow easy and fast connection of the audio to mixer or DSP. a 9-48 phantom power supply is required
- The Retracta can be mounted either horizonatelly or vertically depending on space and fixing requirements
- Microphone cable length 2.5 Metres
- Microphone is fitted with 350 degree roatation knuckle joint. High performance condenser microphone with Cardioid Polar Pattern is fitted as standard
- IR remote control or DSP
- IR Remote control supplied with the Master Retracta to allow easy set-up and programming of the cable height
- The remote control can be used to activate the Retracta in the absense of a DSP
- Control Ports allow DSP connection and daisy chain expansion to other units. A positive (2.5V to +12V) signal applied to the Master DSP control port will simultaneously activate all slave Retractors connected to the Master
- Wall or ceiling mounted IR Sensor with integral LED Master Retracta
- Up to 99 slave units can be daisy chained to the Master Retracta
- A switch mode power supply
- A ceiling mounting kit is available
- The ceiling bezel is fitted with an internal Hall effect detection switch
- Logic Hi / Lo for DSP mute detection port
- Two rotary 0-9 digital decimal switches accessed from the outside of the housing are used to set the Master (00) and 01-99 determines slave designation.
- Power Requirements 18VDC

= RF-Immunity Version

CCRM 4000

IR Remote Control

IR Sensor

= RF-Immunity Version

C 3S Suspended Cardioid Microphones

Slim, wide band, cardioid condenser microphone designed to be suspended in places of worship, conference halls, theatres, etc.

Features:

- Response optimised for consistent sound quality
- Short, flexible shaft with knuckle joint for easy adjustment of vertical angle
- Made in high quality brass and finished in satin black or ivory
- 7.5m of cable attached
- Open-ended termination, phantom power adaptor required (see page 27)
- Mounting plate option CP 73/73W

Models:

	C 3S	Black
RF	**C 3S-RF**	Black
	C 3SW	Ivory
RF	**C 3SW-RF**	Ivory

- Includes W 2 windshield

Model:	C 3S Series
Frequency Response	50Hz ~ 18KHz
Sensitivity	-47dB ±3dB @ 1KHz (0dB=1v/Pa)
Impedance	200Ω
S/N ratio	64dB(A)
Power Requirements	9 ~ 48v Phantom Power
Termination	Open-ended

C 8S Suspended Hypercardioid Mini Shotgun Microphones

Slim, mini shotgun, hypercardioid condenser microphone designed to be suspended in places of worship, conference halls, theatres etc.

Features:

- Response optimised for consistent sound quality
- Short, flexible shaft with knuckle joint for easy adjustment of vertical angle
- Made in high quality brass and finished in satin black or ivory with 7.5m of cable attached
- Open-ended termination, phantom power adaptor required (see page 27)
- Mounting plate option CP 73/73W

Models:

	C 8S	Black
RF	**C 8S-RF**	Black
	C 8SW	Ivory
RF	**C 8SW-RF**	Ivory

- Includes W 8 windshield

Model:	C 8S Series
Frequency Response	50Hz ~ 18KHz
Sensitivity	-67dB ±3dB @ 1KHz (0dB=1v/Pa)
Impedance	200Ω
S/N ratio	64dB(A)
Power Requirements	9 ~ 48v Phantom Power
Termination	Open-ended

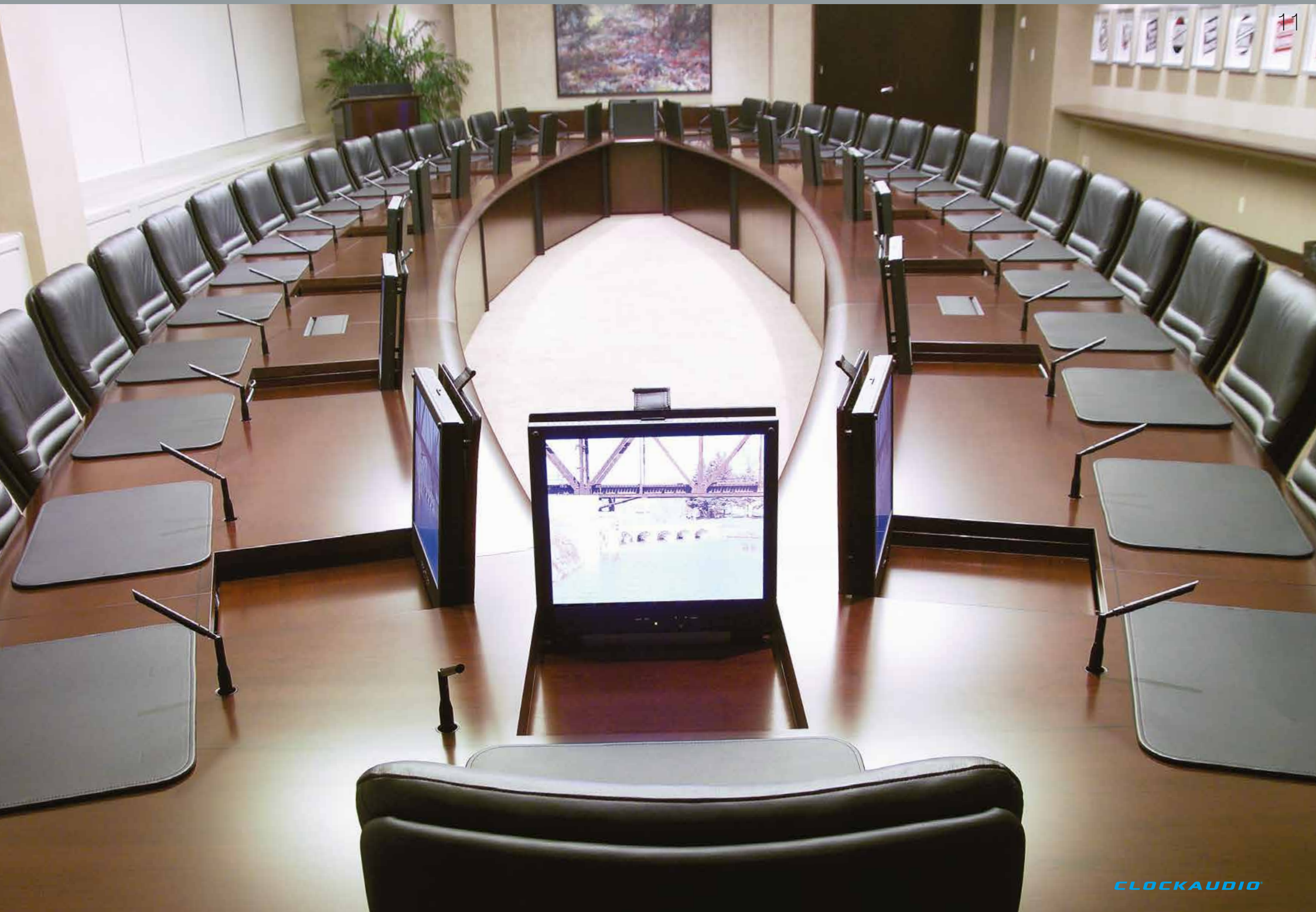
CP 73 Ceiling Mounting Plate

Available in black or ivory versions, this ceiling mounting plate is for use with our C 3S and C 8S Suspended Microphones.

Models:

CP 73	Black
CP 73W	Ivory

RF = RF-Immunity Version


CLOCKAUDIO

CS-RF Series Boundary Layer Professional Microphones

The CS Series (Consultant Series) was developed as a result of input and recommendations from key consultants in boardroom AV integration. The goal was to minimise the number of microphones on the conference table, but also keeping in mind performance, ease of installation and aesthetics, essential considerations in such projects.

The results of these discussions are the **CS 1-RF, CS 2-RF** and **C S3-RF** microphones. The CS 2-RF is a dual element boundary layer condenser microphone, with a half-cardioid polar pattern. It is designed to be placed in the middle of the conference table, with each element facing the participants. This microphone accommodates bottom cable exit, for permanent mounting in boardroom situations. These microphones are made of solid brass and include a 2m cable with open-ended termination. The Phantom Power Adaptor (PPA) is incorporated in the brass housing and will accept 9 ~ 48v DC (Phantom Power).

The CS 3-RF microphone has the same characteristics as the CS 2-RF with the addition of a third element. This microphone is to be positioned closer to the end of the conference table in order to capture the participants facing each other and also the participant sitting at the extremity of the table. If the participant at the end of the table is further away, it is then possible to use a combination of a CS 2-RF and CS 1-RF (single element version) to accommodate this situation.

The **CS 4-RF** is a new addition that completes the CS-RF Series microphone family, offering a 4-element microphone in a single housing. Like the CS 1, 2 and 3, the CS 4-RF offers half cardioid polar patterns and a bottom cable exit. The CS 4-RF can be positioned in the centre of a round conference table, giving maximum coverage from a small footprint. Engineered from high quality solid brass and finished in a durable non-reflective black Nextel or satin nickel.

Features:

- Half cardioid polar pattern
- Fully balanced
- High quality engineering in solid brass
- Non-reflective black Nextel or satin nickel

Features:

- The CS series available in other customised colours and special finishes upon request

Model:	CS-RF
Microphone	Condenser (back electret)
Polar Pattern	Half cardioid
Frequency Response	50Hz ~ 18KHz
Sensitivity	-47dB ±3dB @ 1KHz (0dB=1v/Pa)
Impedance	200Ω
Power Requirements	9 ~ 48v Phantom Power
S/N Ratio	64dB(A)
Termination	Open ended multi-core cable

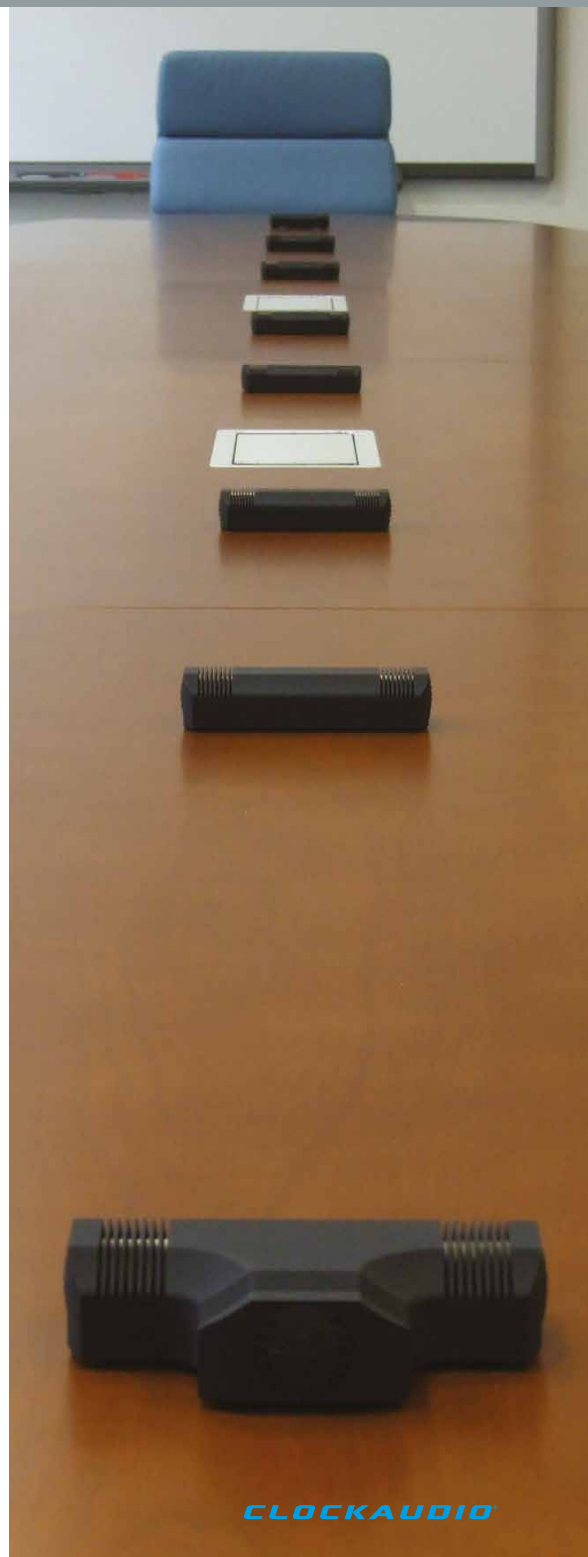
CS 1-RF - single element boundary microphone

CS 2-RF - dual element boundary microphone

CS 3-RF - triple element boundary microphone

CS 4-RF - quadruple element boundary microphone

= RF-Immunity Version



CS-RF Series Boundary Layer Professional Switched Microphones

The Consultant Boundary Series with inbuilt electronic touch sensitive switch. Developed to minimise the number of Microphones on the conference table whilst maintaining high performance and ease of installation.

Features:

- Immune to RF artefacts
- Boundary Layer dual element Condenser Microphone
- Half Cardioid Polar Pattern
- In built electronic touch switch with Red / Green LED Halo ring
- Fully balanced
- Engineered in high quality brass
- Finished in Non-reflective Black Nextel• and Satin Nickel
- Inbuilt Phantom Power Module
- Touch switch requires connection to a DSP or LB001 mute control box.
- Terminated with RJ 45 for switching

CS 1S-RF

CS 3S-RF

CS 2S-RF

CS 4S-RF

Model:	CS-RF
Microphone	Condenser (back electret)
Polar Pattern	Half cardioid
Frequency Response	50Hz ~ 18KHz
Sensitivity	-37.5dB +/- 3dB at 1 KHz (0dB = 1 V/Pa)
Impedance	200Ω
Power Requirements	9 ~ 48v Phantom Power
S/N Ratio	64dB(A)
Termination	Open ended for audio RJ 45 for switching

= RF-Immunity Version

Retracta Motorised ARM 100-RF Through-table Boundary Omni-directional Microphone

The ARM 100-RF is a boundary layer through table omni-directional microphone, with a built-in motorised mechanism that will allow the user to make the microphone disappear without having to physically touch it or remove it from the table. A positive (+2.5V to +12V) signal applied to the DSP control port will simultaneously activate all ARM motorised microphones connected to the ARM-C (control box M1 – M4 RJ45 motor outlet ports).

Features:

- Easy to install
- Low profile at surface level
- Robust brass construction
- Omni-directional polar pattern
- Built-in RF filter
- Balanced output
- Supplied with 2m (6.6ft) 2 core + screen cable
- Satin Nickel or Black Nextel finish

Model:	ARM 100-RF
Type	Condenser (Back Electret)
Polar Pattern	Omni-directional
Frequency Response	30Hz ~ 20KHz
Sensitivity	-42.5dB +/- 3dB @ 1KHz (0dB = 1v/Pa)
Impedance	200Ω
S/N Ratio	68dB(A)
Maximum SPL	120dB at 1KHz 1% T.H.D.
Power Requirements	9 ~ 48v Phantom Power
Termination	Open ended
Dimensions	Above Table: 15.00mm (0.59") Diameter: 36.00mm (1.42") Below Table: 149.00mm (5.86") Diameter: 30.00mm (1.18")

Retracta Motorised ARM 102-RF Through-table Boundary Cardioid Condenser Microphone

The ARM 102-RF is a boundary layer through table cardioid condenser microphone, with a built-in motorised mechanism that will allow the user to make the microphone disappear without having to physically touch it or remove it from the table. A positive (+2.5V to +12V) signal applied to the DSP control port will simultaneously activate all ARM motorised microphones connected to the ARM-C (control box M1 – M4 RJ45 motor outlet ports).

Features:

- Easy to install
- Low profile at surface level
- Robust brass construction
- Cardioid polar pattern
- Built-in RF filter
- Balanced output
- Supplied with 2m (6.6ft) 2 core + screen cable
- Satin Nickel or Black Nextel finish

Model:	ARM 102-RF
Type	Condenser (Back Electret)
Polar Pattern	Half Cardioid
Frequency Response	50Hz - 18KHz
Sensitivity	-47dB +/- 3dB @ 1KHz (0dB = 1v/Pa)
Impedance	200Ω
S/N Ratio	64dB(A)
Maximum SPL	125db at 1KHz 1% T.H.D.
Power Requirements	9 ~ 48v Phantom Power
Termination	Open ended
Dimensions	Above Table: 15.00mm (0.59") Diameter: 36.00mm (1.42") Below Table: 149.00mm (5.86") Diameter: 30.00mm (1.18")

ARMF/CRMF Straight Cut

Illustrating straight cut edge for counter sinking into table top to give a perfectly flat surface.

= RF-Immunity Version

CRM 100-RF Retractable through-table omni-directional condenser microphone

The CRM100-RF is a boundary layer, through-table, omni-directional condenser microphone, with a built-in mechanism that will allow the user to make the microphone 'disappear' without having to physically remove it from the table. This is achieved by simply pressing the top of the microphone downwards until it locks; then by pressing the microphone again it will raise itself back to its original position above the surface of the table. Engineered in high quality brass with built-in shock mount and RF filter.

Features:

- Easy to install
- Low profile at surface level
- Unique ability to lock capsule away from sight when not in use
- Robust brass construction
- Omni-directional polar pattern
- Built-in RF filter
- Balanced output
- Supplied with 2m (6.6 ft) 2 core + screen cable
- Satin Nickel or Black Nextel finish

Models:

CRM 100-RF

Model:	CRM 100-RF
Type	Condenser (Back Electret)
Polar Pattern	Omni-directional
Frequency Response	30Hz ~ 20KHz
Sensitivity	-42.5dB +/- 3dB @ 1KHz (0dB = 1v/Pa)
Impedance	200Ω
S/N Ratio	68dB(A)
Maximum SPL	120dB at 1KHz 1% T.H.D.
Power Requirements	9 ~ 48v Phantom Power
Termination	Open ended
Dimensions	Above Table: 15.00mm (0.59") Diameter: 36.00mm (1.42") Below Table: 111.00mm (4.37") Diameter: 30.00mm (1.18")

= RF-Immunity Version

CRM 102-RF Retractable through-table half-cardioid condenser microphone

The CRM102-RF is a boundary layer, through-table, cardioid condenser microphone, with a built-in mechanism that will allow the user to make the microphone 'disappear' without having to physically remove it from the table. This is achieved by simply pressing the top of the microphone downwards until it locks; then by pressing the microphone again it will raise itself back to its original position above the surface of the table. Engineered in high quality brass with built-in shock mount and RF filter.

Features:

- Easy to install
- Low profile at surface level
- Unique ability to lock capsule away from sight when not in use
- Robust brass construction
- Cardioid polar pattern
- Built-in RF filter
- Balanced output
- Supplied with 2m (6.6 ft) 2 core + screen cable
- Satin Nickel or Black Nextel finish

CRMF Straight Cut - see page 14

Models:

CRM 102-RF

Model:	CRM 102-RF
Type	Condenser (Back Electret)
Polar Pattern	Half Cardioid
Frequency Response	50Hz - 18KHz
Sensitivity	-47dB +/- 3dB @ 1KHz (0dB = 1v/Pa)
Impedance	200Ω
S/N Ratio	64dB(A)
Maximum SPL	125db at 1KHz 1% T.H.D.
Power Requirements	9 ~ 48v Phantom Power
Termination	Open ended
Dimensions	Above Table: 15.00mm (0.59") Diameter: 36.00mm (1.42") Below Table: 111.00mm (4.37") Diameter: 30.00mm (1.18")

CRM 202-RF

The CRM 202-RF is a dual element boundary layer through table cardioid condenser microphone with a built-in mechanism that will allow the user to make the microphone disappear without having to physically remove it from the table. This is achieved by simply pressing the top of the microphone downwards until it locks; then by pressing the microphone again it will raise itself back to its original position above the surface of the table. It is designed to be placed in the middle of the conference table, with each element facing the participants. Engineered in high quality brass with built in shock mount and RF filter. Standard finish: Black Nextel or Satin Nickel.

Features:

- Offering two independently wired microphones
- Integral reed contact switch designed to be used for remote switching by DSP
- Easy to install
- Low profile at surface level
- Unique ability to lock capsules away from sight when not in use
- Robust brass construction
- Cardioid polar pattern
- Built in RF filter
- Balanced output
- Supplied with 2 x 2m (6.6ft) 2 core + screen audio cable
- Satin Nickel or Black Nextel finish

CRM 202S-RF

The CRM 202S-RF includes a Touch Sensitive Switch with Bi-Colour LED Halo mounted into the top of the microphone housing (See TS 001 page19 for details)

Models:

CRM 202-RF

CRM 202S-RF

Model:	CRM 202-RF
Type	Condenser (Back Electret)
Polar Pattern	Half Cardioid
Frequency Response	50Hz - 18 KHz
Sensitivity	-47dB +/- 3dB @ 1 KHz (0dB = 1v/Pa)
Impedance	200W
S/N Ratio	64dB (A)
Maximum SPL	125db at 1 KHz 1% T.H.D.
Power Requirements	9 ~ 48v Phantom Power
Termination	Open ended
Dimensions	Above Table: 2mm (0.08") Diameter: 63mm (2.48") Below Table: 112mm (4.41") Diameter: 56.5mm (2.22")

C 002E-RF Low Profile Boundary Microphone

Omni-directional, low profile, boundary layer condenser professional microphone. Ideal for applications such as conference tables, floors, pianos, etc.

Features:

- Omni-directional polar pattern
- Wide range, smooth response
- Very low profile
- Available in Black and Stone Grey Nextel finish

Models:

C 002E-RF
C 002EG-RF

Model:	C 002E-RF
Frequency Response	50Hz ~ 18KHz
Sensitivity	-47dB ±3dB at 1KHz (0dB=1v/Pa)
Impedance	200Ω
Power Requirements	9 ~ 48v Phantom Power
S/N Ratio	64dB(A)
Termination	Male 3 pin XLR

C 006E Low Profile Boundary Microphone

Half cardioid, small sensitive professional boundary layer condenser microphone for a variety of A.V. and induction loop applications.

Features:

- Half-cardioid polar pattern
- Fully balanced
- Low profile
- Available in Black and Stone Grey Nextel finish

Models:

C 006E
C 006EG

Model:	C 006E
Frequency Response	50Hz ~ 18KHz
Sensitivity	-48dB ±3dB at 1KHz (0dB=1v/Pa)
Impedance	200Ω
Power requirements	9 ~ 48v Phantom Power
Switchable Bass Filter & -10dB Switchable Pad	✔
S/N Ratio	64dB(A)
Termination	Male 3 pin XLR

C 008E Tabletop Boundary Microphones

Cardioid boundary layer condenser microphone, particularly suitable for speech purposes in a wide range of pro and live sound applications including conference, lectern and theatre.

Features:

- Cardioid polar pattern
- Fully balanced
- High quality engineering in solid brass
- Concealed cable and fixing screw mounting
- Available in Black and Stone Grey Nextel finish

Models:

C 008E
C 008E-RF
C 008EG
C 008EG-RF

Model:	C 008E
Frequency Response	50Hz ~ 18KHz
Sensitivity	-47dB ±3dB at 1KHz (0dB=1v/Pa)
Impedance	200Ω
Power Requirements	9 ~ 48v Phantom Power
S/N Ratio	64dB(A)
Termination	Male XLR

C 009E-RF Large Surface Boundary Microphone

Omni-directional boundary layer condenser microphone for easy use on large surfaces in a wide range of professional sound applications. Ideal for mounting on walls, floors, pianos, etc.

Features:

- Omni-directional polar pattern
- Wide range, smooth response
- Very low profile
- Available in Black and Stone Grey Nextel finish

Models:

C 009E-RF
C 009EG-RF

Model:	C 009E-RF
Frequency Response	30Hz ~ 20KHz
Sensitivity	-42.5dB ±2dB at 1KHz (0dB=1v/Pa)
Impedance	200Ω
Power Requirements	9 ~ 48v Phantom Power
S/N Ratio	68dB(A)
Termination	Male 3 pin XLR

= RF-Immunity Version

C 003E / C 004E Through-table Boundary Microphones

Omni-directional (C 003E) or Cardioid (C 004E) boundary layer condenser microphones designed for a wide range of installed audio, conferencing or security applications.

Features:

- Engineered in high quality brass
- Balanced output
- Simple through-table shock mounting
- Finished in satin black or matt white

Models:

	C 003E	Black
	C 003EW	White
RF	**C 003E-RF**	Black
RF	**C 003EW-RF**	White
	C 004E	Black
	C 004EW	White
RF	**C 004E-RF**	Black
RF	**C 004EW-RF**	White

- Available in white

Model:	C 003E-RF	C 004E-RF
Polar Pattern	Omni-directional	Cardioid
Frequency Response	20Hz ~ 20KHz	100Hz ~ 16KHz
Sensitivity	-42dB ±3dB at 1KHz (0dB=1v/Pa)	-47dB
Impedance	200Ω	200Ω
Power Requirements	9 ~ 48v Phantom Power	
S/N Ratio	58dB(A)	60dB(A)
Termination	Male 3 pin XLR	Male 3 pin XLR

C 011E-RF / C 012E-RF Through-table Boundary Microphones

These through-table omni (C 011E-RF) and cardioid (C 012E-RF) microphones were created for applications demanding sonic quality, but also requiring an extremely robust housing within an extreme environment.

Features:

- RF-immune
- Balanced output
- Simple through-table shock mounting
- Finished in satin black or nickel

Models:

RF	**C 011E-RF**	Black
RF	**C 011EN-RF**	Nickel
RF	**C 012E-RF**	Black
RF	**C 012EN-RF**	Nickel

Model:	C 011E-RF	C 012E-RF
Polar Pattern	Omni-directional	Cardioid
Frequency Response	50Hz ~ 20KHz	50Hz ~ 18KHz
Sensitivity	-42dB ±3dB at 1KHz (0dB=1v/Pa)	-47dB
Impedance	200Ω	200Ω
S/N Ratio	58dB(A)	60dB(A)
Termination	Male 3 pin XLR	Male 3 pin XLR

C 015E-RF / C 016E-RF Tabletop Boundary Microphones

New style omni-directional (C 015E-RF) and cardioid (C 016E-RF) boundary layer condenser microphones featuring programmable touch pad switching for professional AV applications such as meetings, conference and lectern installations.

Optimised for speech clarity, these RF-immune boundary microphones feature built-in Phantom Power module and are finished in satin black.

Models:

RF	**C 015E-RF**	Omni-directional
RF	**C 016E-RF**	Cardioid

Model:	C 015E-RF	C 016E-RF
Type	Condenser (Back Electret)	
Frequency Response	50Hz ~ 20KHz	50Hz ~ 18KHz
Sensitivity	-42dB ±3dB @ 1KHz (0dB = 1vPa)	-47dB ±3dB @ 1KHz (0dB = 1vPa)
Impedance	200Ω	200Ω
Switching	Programmable for PTT PTM & Latching	
Power Requirements	48v Phantom Power	
S/N Ratio	58dB(A)	60dB(A)
Termination	Male 5 pin XLR with remote switch ability Optional Male 3 pin XLR varient	

RF = RF-Immunity Version

C 007E Series 'Button' Boundary Microphones

Omni-directional, boundary layer condenser microphones suitable for surveillance and recording in sensitive areas such as banks, airports, railway stations, law courts, conference and convention centres. Very low profile and easily mounted with M12 x 1 nut and washer supplied.

Features:

- Non-reflective Delrin with non-conductive body (Non-RF only)
- 3 colour options (Black, White & Nickel)
- RF & Non-RF versions available
- Water resistant option (Non-RF only)
- Bi-colour LED Red or Green (RF Version only)

Models:

C 007
C 007E
C 007E-RF
C 007E-LED-RF

- RF versions available with bi-colour LED

Model:	C 007	C 007E	C 007E-RF
Frequency Response	50Hz ~ 20KHz	50Hz ~ 20KHz	50Hz ~ 20KHz
Sensitivity	-42.5dB ±2dB at 1KHz (0dB=1v/Pa)		
Impedance	1KΩ	200Ω	200Ω
Power Requirements	2 ~ 10v max through series resistor	9 ~ 48v Phantom Power	9 ~ 48v Phantom Power (12v DC for LED version)
Switchable Bass Filter & -10dB Switchable Pad	-	✔	-
S/N Ratio	40dB(A)	40dB(A)	40dB(A)
Termination	Open-ended	Male 3 pin XLR	Male 3 pin XLR with PPA-RF

C 005

Boundary Layer Condenser Microphone designed for surveillance and recording sensitive areas such as banks, conferences and convention centres, law courts, airports and railways.

Features:

- Omni-Directional Polar Pattern
- Wide smooth response
- Simple fixing with 4 screws provided
- Strong ABS flanged housing
- Finish: Black
- Inbuilt Phantom Power Module
- Internal screw fixing terminals for wiring

Model:	C 005
Frequency response	50Hz ~ 18KHz
Impedance	200Ω
Sensitivity	-37.5dB +/- 3dB @ 1 KHz (0dB = 1 V/Pa)
S/N Ratio	68dB(A)
Power Requirements	9 - 48 volts Phantom Power
Finish	Black

SEC 09

Designed for security and surveillance applications. Offering easy mounting to walls or ceilings the SEC 09 has the appearance of an ordinary fire detector. Electronics housed within the SEC 09 offer screw terminals, eliminating the need for connectors.

Features:

- Omni-directional
- Built-in line level pre-amp
- Selectable sensitivity switching
- 9-48V Phantom power switchable for 12-24V dc operation
- Pick up range of 15m (50ft)
- Red LED status indicators
- Sturdy ABS housing
- Easy to install
- Universal mounting to electrical conduit boxes

Model:	SEC 09
Frequency response	50Hz ~ 12KHz
Impedance	75Ω
Sensitivity	1.4V/Pa
Current Consumption	40mA
Dimensions	Height: 55 mm Diameter: 105 mm Weight: 126g

= RF-Immunity Version

CH 32 (Litetouch) Dual Colour Halo Ring & Touch Pad Switch

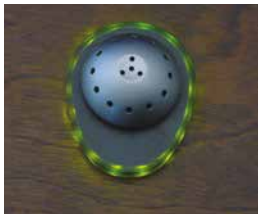
Comprising a dual-colour Halo ring and switch combination that can be used with all Clockaudio through-table products (excluding Retracta products), the Litetouch allows users to easily identify the status of microphones, as well as mute the units for privacy.

With no moving parts, the switch is touch-sensitive, so there are no clicking noises when switching from one status to another. Both the switch and the Halo have been designed to operate remotely with all popular brands of electronic system control, so an integrator has complete freedom to assign function and LED colour.

Importantly, the Litetouch can be easily retrofitted to any Clockaudio through-table microphone product (excluding Retracta products).

Features:

- Designed for remote switching
- Housing 32 LEDs to give all round illumination
- 12 or 24v DC operation
- Current consumption 40mA
- Retrofittable to all Clockaudio through-table microphones
- Fitted with RJ 45 connector



Models:

CH 32 (Smoked Finish)
CH 32W (White)

Model:	CH 32
Type	Dual Colour Halo Ring & Touch Sensitive Switch
LED Colour	Red and Green
Operating Voltage	12 or 24v DC (Regulated) For 24v DC operation a 300Ω 1 Watt resistor must be put in series with both the green and red LED wires.
Current Consumption	40mA
Termination	5 way socket terminal block (with fixing screws)

TS 001

The TS 001 is a flush mount Bi-Colour Halo ring and switch combination which has been designed for use with all Clockaudio microphones requiring a remote switch facility.

The TS 001 allows users to easily identify the status of Microphones, as well as mute the units for privacy. With no moving parts, the switch is touch-sensitive, so there are no clicking noises when switching from one status to another. Both the switch and the Halo have been designed to operate remotely with all popular brands of electronic system control, so an integrator has complete freedom to assign function and LED colour.

Features:

- Designed for remote switching
- Housing 10 LEDs to give all round illumination
- 12 or 24v DC operation
- Current consumption 40mA
- Supplied with 5 core ribbon cable + connector

Model:	TS 001
Type	Dual Colour Halo Ring & Touch Sensitive Switch
LED Colour	Red and Green
Operating Voltage	12 or 24v DC (Regulated)
	For 24v DC operation a 300W 1 Watt resistor must be put in series with both the green and red LED wires
Current Consumption	40mA
Termination	5 core ribbon cable + connector
Dimensions	Above Table: 1.34mm (0.05") Diameter: 20mm (0.79") Below Table: 40mm (1.75") Diameter: 15mm (0.59")

LB 001 / LB 001-PS

Designed for applications requiring local switching as opposed to remote logic control. Includes in and out cable fitted with Tini Q connector and optional power supply.

Features:

- 3 programmable settings via internal dip switch: Press to Talk & Press to Mute. Press once to speak with auto 80 second time out to mute if held. Press to mute with auto 80 second time out to speak if held
- Blue led power indicator
- Red / Green microphone status leds
- Standard Tini Q microphone Input / Output connectors (Tini Q connectors supplied with 0.5 Metre cable to bare end)
- Touch switch module connection via Phoenix blocks (no tools required)
- Dimensions W138mm H32mm D74mm
- Requires 12 VDC Regulated power adaptor (optional LS 001-PS)
- Default setting momentary push to mute with 80 second hold time out
- Weight 0.2Kgs
- Satin Black finish

= RF-Immunity Version

CTH 100 Throat Microphone

This throat microphone has been engineered to provide superb speech intelligibility even in high background noise environments.

Special attention has been given to ensure a comfortable wear over long durations with ergonomic strap and transducer housing design.

Features:

- Available with a variety of IP67 terminations and PTT switches
- Water immersion resistant
- Rugged and durable

Models:

CTH 100

Model:	CTH 100
Generating Element	Electret Condenser
Frequency Response	350Hz ~ 8KHz
Sensitivity	Equivalent output to standard microphones
Current Drain	0.54mA at 2.5v through 2.2kΩ
Bias Voltage	2.5 ~ 6v DC
Output Impedance	900Ω
Operating Temperature	-20ºC ~ +70ºC
Storage Temperature	-40ºC ~ +70ºC
Weight	0.05kg

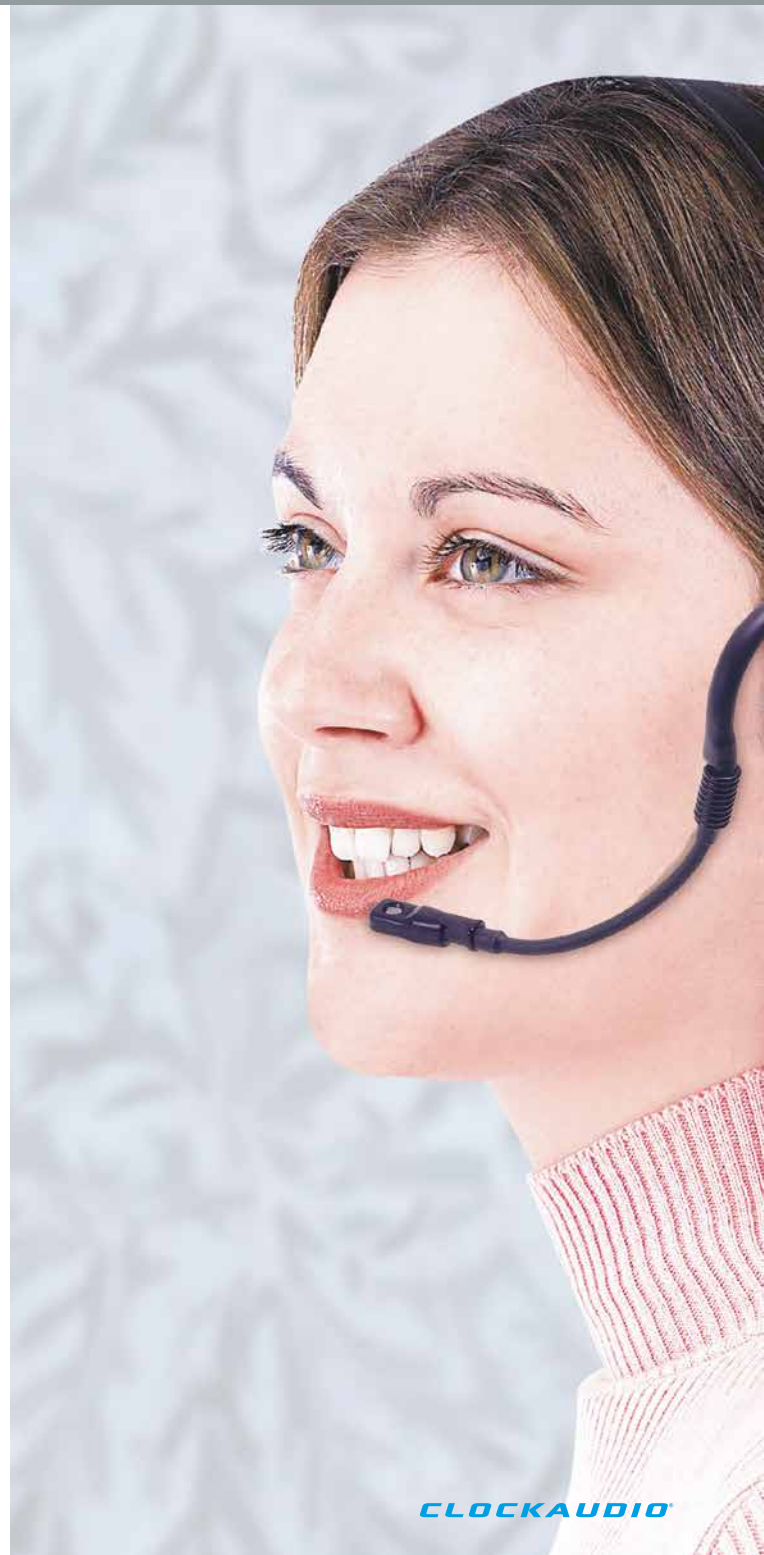
CL 4 Lavalier Omni-directional Microphone

Ultra miniature, omni-directional lavalier condenser microphone suitable for hands-free applications in pro-audio. Available in black or beige, complete with windshield and tie clip.

Models:

CL 4 Black
CL 4B Beige

Model:	CL 4
Frequency Response	50Hz ~ 18KHz
Sensitivity	-44dB @ 1KHz (0dB=1v/Pa)
Impedance	1KΩ
Power Requirements	1.5 ~ 9v (standard operating voltage 1.5v)
Termination	Tini Q Female 4 pin connector



CMH 2000 Micro Lightweight Headworn Boom Microphones

Extremely lightweight and low profile professional microphone for use in theatres, presentations, broadcast studios and places of worship. Shaped and lightly sprung to fit any head contour and remain in place even during high activity. Flexible boom arm for optimum positioning of microphone.

Features:

- Omni-directional back electret condenser microphone
- Perspiration drip barrier to protect microphone
- Wide band, smooth response
- Black or beige, easy-clean finish

Models:

CMH 2000 Black
CMH 2000B Beige

Model:	CMH 2000
Microphone	Condenser (back electret)
Polar Pattern	Omni-directional
Frequency Response	30Hz ~ 18KHz
Sensitivity	-33dB ±3dB @ 1KHz (0dB=1v/Pa)
Impedance	4.4KΩ
Power Requirements	1.5 ~ 9v (Standard operating voltage 1.5v)
Termination	Tini Q Female 4 pin connector

HW 1500 Rugged Lightweight Headworn Boom Microphone

Rugged and lightweight for use in presentations, commentaries, broadcast reporting and by instructors - waterproof microphone makes it particularly suitable for aerobic and fitness instructors. Shaped, lightly sprung and with headband to fit all head contours comfortably and remain in place even with vigorous activity.

Features:

- Plastic injected headband, gooseneck and capsule head for protection against corrosion
- Flexible boom arm for optimum positioning of microphone
- Waterproof bi-directional close talking back electret condenser microphone with smooth low feedback response

Models:

HW 1500

- Includes W 15 windshield

Model:	HW 1500
Microphone	Condenser (back electret)
Polar Pattern	Bi-directional close talking with W15 Windshield
Frequency Response	300Hz ~ 5KHz
Sensitivity	-44db ±3dB @ 1KHz (0dB=1v/Pa)
Impedance	1KΩ
Power Requirements	1.3 ~ 12v (Standard operating voltage 1.5v)
Termination	Tini Q Female 4 pin connector

HW 1200 Lightweight Headworn Boom Microphone

A lightweight cardioid microphone for use in presentations, guided tour systems and telesales applications.

Models:

HW 1200

- Includes W 12 windshield

Model:	HW 1200
Microphone	Condenser (back electret)
Polar Pattern	Cardioid
Frequency Response	50Hz ~ 18KHz
Sensitivity	-50db @ 1KHz (0dB=1v/Pa)
Impedance	680Ω
Power Requirements	1.5 ~ 9v DC (standard operating voltage 1.5v)
Termination	Tini Q Female 4 pin connector

D 33/D 34 Dynamic Goosenecks

Dynamic cardioid gooseneck microphones designed for speech purposes in a variety of commercial audio applications.

Features:

- Rugged all-metal construction
- Response optimised for speech
- Fully flexible or semi-rigid shaft
- Finished in satin black

Models:

D 33	300mm	Base mount
D 33E	350mm	3 pin XLR
D 34	425mm	Base mount
D 34E	475mm	3 pin XLR

For semi-rigid variant add SR to product code.

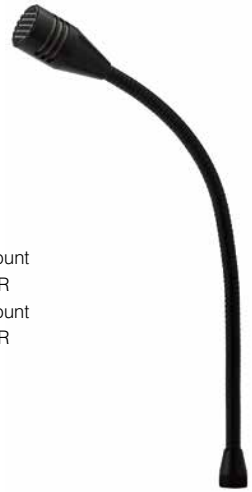
Model:	**D 33/D 34**
Frequency Response	150Hz ~ 12KHz
Sensitivity	-63.5dB ±3dB @ 1KHz (0dB=1v/Pa)
Impedance	200Ω
Termination	M10 x 1 thread with shakeproof washer and nut or Male 3 pin XLR

D43/D44 Dynamic Goosenecks

Dynamic cardioid gooseneck microphone suitable for speech purposes in a variety of commercial audio applications.

Features:

- Rugged all-metal construction
- Response optimised for speech
- Finished in satin black



Models:

D 43	300mm	Base mount
D 43E	350mm	3 pin XLR
D 44	400mm	Base mount
D 44E	450mm	3 pin XLR

Model:	**D 43/D 44**
Frequency Response	150Hz ~ 12KHz
Sensitivity	-60dB ±3dB @ 1KHz (0dB=1v/Pa)
Impedance	200Ω
Termination	M10 x 1 thread with shakeproof washer and nut or Male 3 pin XLR

DMB 1/DMB 2 Desk Paging Microphones

Simple but effective, easy to use Desk Paging cardioid microphones for use in all types of industrial, commercial, entertainment and retail paging applications.

Features:

- Single and two zone options
- Choice of dynamic cardioid microphones (D 33, D 34, D 43 or D 44)
- Latched or momentary switching
- Rugged, all-metal construction

Models:

DMB 1	Single Zone
DMB 2	Two Zone

D 5

General purpose Dynamic Microphone module with Cardioid Polar Pattern.

Features:

- Dynamic Microphone has a Cardioid Polar Pattern
- Optimised for speech purposes
- Made of robust high quality brass construction and terminated with 3 pin XLR
- Application include: Paging, Intercom, Ticket counter, Bus, Train, Restaurant, Dispatch desk
- Finish: low reflective Satin Black finish

Model:	**D 5**
Polar Pattern	Cardioid
Frequency Response	150Hz ~ 12KHz
Sensitivity	-63dB ±3dB @ 1KHz (0dB=1v/Pa)
Impedance	200Ω
Termination	3 pin XLR
Finish	Satin Black

C 600 Slimline Condenser Microphone

Professional slimline hand held cardioid condenser microphone designed for a wide range of vocal and speech applications. Also suitable for many musical instrument applications.

Features:

- Cardioid polar pattern
- Balanced output
- Engineered in high quality brass
- Finished in satin black

Models:

C 600

- Includes SA 3 clip

Model:	C 600
Frequency Response	50Hz ~ 20KHz
Sensitivity	-47dB ±3dB at 1KHz (0dB=1v/Pa)
Impedance	200Ω
Power Requirements	9 ~ 48v Phantom Power
Switchable Bass Filter -10dB Switchable Pad	✔
S/N Ratio	64dB(A)
Termination	Male 3 pin XLR

C 650E Cardioid Condenser Handheld Microphone

Professional condenser handheld microphone designed for vocal and speech applications.

Features:

- Rugged metal construction
- Wide response
- Shock mount suspension
- Balanced output
- Nextel finish

Models:

C 650E

- Includes SA 5 clip

Model:	C 650E
Frequency Response	50Hz ~ 20KHz
Sensitivity	-48dB ±3dB @ 1KHz (0db=1v/Pa)
Impedance	200Ω
Power Requirements	9 ~ 48v Phantom Power
Switchable Bass Filter & -10dB switchable Pad	✔
S/N Ratio	68dB(A)
Termination	Male 3 pin XLR

C 850E Shotgun Supercardioid Microphone

Supercardioid shotgun microphone for use in broadcast, film/video recording and theatre sound reinforcement. Wide, smooth response and fully balanced output.

Features:

- Superior grade components
- Selectable bass roll-off and 10dB pad
- XLR termination
- Finished in satin black

Models:

C 850E

- Includes W 85 windshield and SA 8 clip

Model:	C 850E
Frequency Response	50Hz ~ 20KHz
Sensitivity	-48dB ±3dB @ 1KHz (0db=1v/Pa)
Impedance	200Ω
Power Requirements	9 ~ 48v Phantom Power
Switchable Bass Filter & -10dB switchable Pad	✔
S/N Ratio	68dB(A)
Termination	Male 3 pin XLR

D 500 Cardioid Dynamic Handheld Microphone

Versatile, professional, dynamic cardioid handheld microphone designed for a wide variety of vocal, speech and instrument applications. It has a wide smooth response, with neodymium magnet for high sensitivity and balanced output.

Features:

- Rugged die-cast metal construction
- Cardioid polar pattern
- Wide, smooth response
- Balanced output
- Black, soft-touch finish for reduced handling noise
- Supplied in a presentation case

Models:

D 500

- Includes SA 5 clip

Model:	D 500
Frequency Response	50Hz ~ 16KHz
Sensitivity	-55dB ±3dB @ 1KHz (0dB=1v/Pa)
Impedance	500Ω balanced
Termination	Male 3 pin XLR

D 700S Dynamic Supercardioid Microphone

Optimised for speech and musical instruments.

Features:

- Rugged die cast metal construction
- Super Cardioid Polar Pattern
- Wide smooth frequency response
- Neodymium magnet
- Balanced output
- Silent magnetic on-off reed switch
- Inbuilt shock mount for superior low handling noise
- Termination 3 pin male XLR
- Supplied with swivel stand adaptor
- Finish Low reflective Satin Black

- Includes W 5 windshield and SA 8 clip

Model:	D 700S
Frequency Response	50Hz ~ 16KHz
Sensitivity	-73dB +/- 3dB @ 1KHz (odB = 1V/Pa)
Impedance	300Ω
Termination	Male 3 pin XLR

D 525E Dynamic Supercardioid ENG Microphone

Designed for electronic news gathering and video production.

Features:

- Die-cast housing and steel grille screen
- Long shaft for easy handling
- Neodymium alloy magnet
- Optional soft protective case
- Finished in soft-touch satin black

Models:

D 525E

- Includes W 5 windshield and SA 8 clip

Model:	D 525E
Frequency Response	50Hz ~ 18KHz
Sensitivity	-54dBv/(1.6mv/Pa)
Impedance	300Ω
Termination	Male 3 pin XLR

D 550E Dynamic Omni-directional ENG Microphone

Designed for reporting, interviewing and news gathering.

Features:

- High sensitivity Neodymium alloy magnet
- Long shaft for easy handling
- Die-cast housing and steel grille screen
- Finished in soft-touch satin black

Models:

D 550E

- Includes W 5 windshield and SA 8 clip

Model:	D 550E
Frequency Response	50Hz ~ 18KHz
Sensitivity	-54dBv/(1.6mv/Pa)
Impedance	300Ω
Termination	Male 3 pin XLR

H 500 Monitor Headphones

Studio quality, cost-effective monitor headphones, featuring removable jack-to-mini jack cable and soft case cover.

Features:

- Wide frequency response
- Closed diffused studio headphones
- Enhanced bass response
- High SPL capacity
- Excellent isolation from ambient noise

Models:

H 500

Model:	H 500
Type	Dynamic closed-back circumaural
Sensitivity	96dB SPL ±3dB @1mw
Frequency	15Hz ~ 22KHz
Max Input Power	500mw
Impedance	24Ω
TDH	<0.3%
Cable	Plug-in single cable approx 3m
Connector	Gold-plated mini stereo jack
Stereo Adaptor	Gold-plated mini stereo jack to ¼" screw-on-adaptor
Weight	0.37kg

AH 3000 Active Protection Stereo Headphones

Designed as ear defenders for protection against hazardous noises with the ability to set essential listening levels to each ear to hear normally. Suitable for use in a wide range of noisy environments including industrial and building locations, transport termini and sports and leisure locations.

Features:

- Defender system maintains preset listening level
- Wide bandwidth for natural sound to the ear
- Individual listening level adjustment for each ear
- Batteries operate for up to 50 hours from full charge
- Finished in cobalt blue Nextel with black trim

Models:

AH 3000

Model:	AH 3000
Headphones	Micro dynamic
Design	Circumaural
Frequency Response	20Hz ~ 18KHz
Sensitivity	104dB ±3dB @1KHz
Ear Cup Attenuation	29dB
Microphone	Condenser (back electret)
Powering	3.6v 70mAH Ni-MH rechargeable batteries
Weight	0.42kg

HS 1000 Series Communications Headset with Dynamic or Condenser Microphone

The HS1000 is a ruggedly built headset with a choice of dynamic or condenser microphone, designed for a wide range of applications such as theatres, concert halls and studios. The earpieces effectively reduce high surrounding noise and equally contain the received sounds when working in quiet environments.

Features:

- Wide band headphones
- Robust boom assembly
- Comfortable padded ear cups giving high ambient noise attenuation
- Finished in cobalt blue Nextel with black trim

Models:

H 1000	Ear Defender Headphones
HS 1000D	Ear Defender talk-back with Dynamic Microphone
HS 1000E	Ear Defender talk-back with Condenser Microphone

- Includes W 2 windshield

Model:	HS 1000D	HS 1000E
Microphone	Dynamic	Condenser (back electret)
Polar Pattern	Noise cancelling	Noise cancelling
Frequency Range	150Hz ~ 10KHz	100Hz ~ 10KHz
Impedance	300Ω	1.6KΩ
Powering	1.5 ~ 9v DC through series resistor	
Cable Length	2m	2m
Weight	0.5kg	0.5kg

CAP 002 Line Level Pre-Amplifier

The CAP 002 is a line level pre-amplifier fitted in a robust plastic case.

Features:

- Can be powered with a simple 12 ~ 24v DC adaptor or 24v AC from a camera
- Ideal for situations where the microphone needs to be sent directly to a camera or DVR
- Also very useful when microphone level input is not available
- Uses barrier strips for quick termination

Models:

CAP 002

PPA

9 ~ 48v Phantom Power Adaptor for electret condenser microphones.

Features:

- Switchable bass cut filter and switchable -10dB pad (Non-RF version only)
- Robust all-metal construction finished in satin black
- Terminated in 3 pin male XLR and fitted with 3 pin Male Tini Q XLR connector
- Female Tini Q miniature cord plug also supplied

Models:

PPA
PPA-RF

PPM

Beltpack 1.5v battery supply/9 ~ 48v Phantom Power Adaptor for electret condenser microphones with switched flat response or low roll-off.

Features:

- Input termination Tini Q Male 3 pin socket
- Output termination XLR Male 3 pin socket
- Finished in satin black

Models:

PPM

PP 2

2 Channel 48v DC Phantom Power Supply with XLR microphone inputs/outputs.

Features:

- 20Hz ~ 20KHz bandwidth and fully balanced
- 100/115/220/240v adjustable AC voltage selector
- LED power ON/OFF indicator

Models:

PP2

CPPW 01

Phantom Power Adaptor for permanent installation.

Features:

- Fitted in a robust case, the CPPW 01 is practical for quick termination and will accept 9 ~ 48v DC Phantom Power

- CPPW 01-RF Phantom Power Adaptor

Models:

CPPW 01	Plastic case
CPPW 01-RF	Aluminium case

= RF-Immunity Version

SM 10

Low profile through table shock mount fitted with 3 pin female XLR input and 3 pin male XLR output. Compatible with all Clockaudio gooseneck microphones.

Models:

SM 10

SM 10 X5

Model:	SM 10
Height Above Surface	36mm
Diameter	31mm
Body Diameter	20mm
Depth Below Surface	64mm
Mounting hole	23.5mm

SM 70

Smooth low profile 74 mm diameter through table shock mount microphone holder and base, finished in matt black.

Models:

SM 70

Model:	SM 70
Overall Diameter	74mm
Height Above Surface	10mm
Body Diameter	51mm
Depth Below Surface	50mm

SM 80

A low profile, table-mounted shock mount fitted with flip cover to conceal connector when closed.

Features:

- 3 pin & 5 pin XLR connector versions available
- Finished in satin nickel or matt black
- RF option also available (3 pin Male Tini Q)

Base Models:

SM 80

SM 80S

SM 80-RF

SM 80S-RF

- SM 80S model with remote momentary or latching switch facility and red LED.

Model:	SM 80 Series
Height Above Surface	3mm
Diameter	58mm
Body Diameter	51mm
Body Below Surface	XLR version 61mm RF version 166mm

S 80S

Low profile through table shock mount suitable for use with C 003/C 004/C 011 and C 012.

Features:

- Low profile
- Bi-Colour LED to confirm status
- Latching or Push to Talk Switch

Model:	SM 80 Series
Height Above Surface	2mm
Diameter	50mm
Body Diameter	58mm
Body Below Surface	XLR version 61mm

SM 20-RF

A low profile, through-table shock mount fitted with RF-immunity PPA with 3 pin Male Tini Q input connector.

Features:

- M25 threaded nut supplied
- Made in high quality brass
- Finished in satin black

Models:

SM 20-RF

Model:	SM 20-RF
Height Above Surface	3mm
Diameter	31mm
Body Diameter	20mm
Depth Below Surface	75mm
Mounting hole	23.5mm

SM 75

75mm diameter shock absorbing microphone base for permanent fitting above or below the surface.

Features:

- Supplied with female XLR and conversion adaptor for 3/8" BSW or 10mm screw fittings
- Finished in matt black

Models:

SM 75 3 pin XLR

SM 75x5 5 pin XLR

Model:	SM 75
Height	32mm 64mm including XLR
Base Diameter	75mm

= RF-Immunity Version

SM 93 & SM 95

Low profile, recessed, shock absorbing microphone base.

Features:

- 3 pin & 5 pin XLR connector versions available
- Wiring connections are made via 3-way/5-way screw terminal block
- Finished in matt black

Models:

SM 93 3 pin XLR
SM 95 5 pin XLR

Model:	SM 93 / SM 95
Length	87mm
Width	82mm
Height Above Surface	9mm
Depth Below Surface	SM 93 32mm SM 95 22mm

S 133, S 135, S 140 & S 155

These stylish, RF-Immune microphone bases feature fully-programmable touch pad switch & LED for PTT, PTM and latching.

Features:

- RF-immune
- Heavy die-cast construction
- Touch pad switch
- Fully programmable
- LED indicator

Models:

S 133 3 pin XLR in, 3 pin XLR out
S 135 3 pin XLR in, 5 pin XLR out
S 140 3 pin Tini Q in, 5 pin XLR out with integrated PPA
S 155 5 pin XLR in, 5 pin XLR out (for use with Halo microphones)

Model:	S 133 / S 135 / S140 / S155	
Switching		Touch pad fully programmable for PTT, PTM & Latching
Indication		Red LED
Power Requirements		48v Phantom Power
Dimensions	Length Width Height	120mm 100mm 32mm (60mm with XLR)
Weight		0.64kg

S 120

Table microphone base fitted with M10x screw thread mounting hole.

Features:

- 'Press-to-Talk' or latching switch option

Models:

S 120
S 120S PTT or latching switch

Model:	S 120
Height	32mm
Diameter	120mm
Weight	1.86kg

S 120X Series

Table microphone base fitted with XLR connector.

Features:

- 'Press-to-Talk' or latching switch option
- 3 or 5 pin options

Models:

S 120X 3 pin XLR
S 120XS 3 pin XLR & switch
S 120X-2 3 pin XLR & 2m cable
S 120XS-2 3 pin XLR, switch & 2m cable
S 120X5 5 pin XLR
S 120X5S 5 pin XLR & switch
S 120X5-2 5 pin XLR & 2m cable
S 120X5S-2 5 pin XLR, switch & 2m cable

Model:	S 120X Series
Height	57mm (with XLR)
Diameter	120mm
Weight	1.86kg

= RF-Immunity Version

SM 110

Heavy, stable, shock-absorbing table microphone stand with SA3 microphone holder.

Features:

- Steel construction finished in satin black with neoprene shock mount for the microphone holder
- Overall height incl. microphone holder: 85mm
- Base diameter: 110mm
- Weight: 0.77kg

SA 3

Small swivel microphone holder and stand adaptor with 5/8" ~ 3/8" female thread.

Features:

- Finished in black plastic to avoid damage and microphone scratching
- Suitable for C 600 handheld microphone and all gooseneck microphones mounted on standard PPA *(Phantom Power Adaptor)*

SA 5

Swivel microphone holder and stand adaptor suitable for D 500 series handheld microphones.

Features:

- With 5/8" ~ 3/8" female thread and black rubber finish resistant to damage and microphone scratching

S 210 Boom Stand

Microphone floor stand and boom arm combination. Folding base for ease of transport. Long legs for added stability.

Models:

S 210

Model:	S 210
Boom Arm Length	840mm
Finished	Black
Height	900 ~ 1605mm
Weight	3.2kg

F 237 Aluminium Fishpole

Lightweight, adjustable 3-piece aluminium tube used for remote positioning of microphones for recording and broadcasting. Rough textured hand grips and secure locking rings. Protective carrying case included.

Models:

F 237

Model:	F 237
Finished	Black
Height	950 ~ 3220mm
Weight	800g

= RF-Immunity Version

MR 88 Digital Automatic Microphone Mixer

The MR 88 Digital Automatic Microphone Mixer incorporates advanced DSP technology. It has been carefully designed to give outstanding performance and flexibility whilst maintaining simplicity of set-up and use.

Eight input channels, fully adjustable for microphone and line level, can be output from either or both of the two channels. The MR88 incorporates advanced DSP technology and has been carefully designed to give outstanding performance and flexibility whilst maintaining simplicity of set up and use. It provides eight input channels, fully adjustable for microphone or line levels, and two output channels. Flexible routing gives easy use of mono or stereo sources. Each input channel can be assigned to a four-level priority system.

The MR-88 provides full set-up and control of the mixer via a user-friendly LCD interface on the front panel, allowing the mixer settings to be selected and adjusted without the need to remove the case covers. Mixers may be linked together to make a large multi-source system with priority and NOMA information extending throughout. All settings are retained, even when the mixer is disconnected from the power supply.

Features:

- Easy set up with LCD display of all functions and settings from front panel and by PC through RS232 socket
- Fast, silent automatic microphone selection
- 8 Channel mic/line inputs on XLR connectors
- Record outputs for each input channel
- 2 Channel mic/line outputs on XLR connectors
- Output level LED meter
- 2 Band equalisation on each input channel
- Compression
- Multi-level channel priority system
- Easy use with mono or stereo inputs
- Dual mono or stereo outputs
- Security mode
- Adjustable limiters on each input prevent channel overloads
- Adjustable 'off' attenuation of each input channel
- Channel LEDs indicate active or locked out channels
- Select NOMA operation on/off
- Simple daisy-chain set up for multiple microphone operations
- 48v Phantom Power individually selectable for each channel
- Remote VCA control and RS232
- External TTL control and monitoring of channel selection
- 1U rack-mounting

Model:		MR 88
Input Impedance		2.4KΩ differential
Output Impedance	Balanced: Pre-Amp Out:	50Ω 560Ω
Max Input Level	Mic Level: Line Level:	-23dBv +16dBv
Max Output Level		+19dBv
Nominal Output Level at 0dBv on Meter	Pre-Amp Out: Balanced:	-10dBv -60dBv ~ +4dBv
Frequency Response		20Hz ~ 20KHz
THD+N		-70dB
Max Noma Attenuation		20dB
Phantom Power		+48v
Power Supply		15v DC
Operating Temperature		0° ~ 40°C

= RF-Immunity Version

CW-8000 Wireless Microphone

- UHF PLL True Diversity System with an operating range from 200 to 480 meters subject to local regulations
- Frequency range 502 - 960MHz
- 3000 Selectable channels across 75MHz
- 6 Pre-set groups each of up to 40 compatible channels
- Automatic space scanning function
- Squelch mute and tone key
- Antenna boost power provided for various external antennas
- Adjustable transmission power between 10mW and 50mW

= RF-Immunity Version

Model:	CW 8000R
FM Carrier	UHF PPL
Frequency Range	502-960MHz according to local regulations
S/N Ratio	>105dB
T.H.D	<0.6%@1KHz
Display	LCD
Display Contents	Frequency, Antenna A/B, Mute Display RF/AF Level Meter, Battery fuel gauge ID Number
Controls	Power On/Off, Frequency Up/Down, Frequency Scan, Audio Level Lock-on, ID Pairing
Audio Output	- 12dB
AF Output Impedance	600 Ω
Squelch	Pilot tone and Noise mute
Output Connector	XLR Balanced Socket/6.3mm Unbalanced phone jack
Operating Voltage	100-240 VAC
Dimensions	W 212mm (8.3") H 44mm (1.7") D 213.9mm (8.42")

Model:	CW 8000H
FM Carrier	UHF PPL
Frequency Range	502-960MHz according to local regulations
RF Output	10mW/50mW Switchable
Stability	±10KHz
Frequency Deviation	±48KHz
Display	LCD
Controls	Frequency, Battery fuel gauge, ID Number
Spurious Emissions	<-50 dBC
Audio Frequency	50Hz - 16.5KHz
Battery	2 x AA 1.5V

Model:	CW 8001
FM Carrier	UHF PPL
Frequency Range	502-960MHz according to local regulations
RF Output	10mW/50mW Switchable
Stability	±10KHz
Frequency Deviation	±48KHz
Display	LCD
Display Contents	Frequency, Battery Fuel Gauge, ID Number
Controls	Power On/Off, AF Level Frequency Up/Down, Lock-on Mode, ID Pairing
Spurious Emissions	<-50 dBC
Audio Frequency	50Hz - 16.5KHz
Battery	2 x AA 1.5V

- **WDA 9000**
  Directional Antenna

- **WSP 9000**
  Antenna Splitter

= RF-Immunity Version

CW-7000 Wireless Microphone

- UHF PLL True Diversity System with an operating range from 200 to 480 meters subject to local regulations
- Frequency range 502 - 960MHz
- 1441 Selectable channels across 36MHz
- 6 Pre-set groups each of up to 23 channels
- Automatic space scanning function
- Squelch mute and tone key
- Antenna boost power provided for various external antennas
- Adjustable transmission power between 10mW and 50mW

Model:	CW 7000R
FM Carrier	UHF PPL
Frequency Range	502-960MHz according to local regulations
S/N Ratio	>105dB
T.H.D	<0.6%@1KHz
Display	LCD/LED
Display Contents	Frequency, Antenna A/B. Mute Display LED Meter, Battery fuel gauge
Controls	Power On/Off, Frequency Up/Down, Frequency Scan, Audio Level, Lock-on
Audio Output	- 12dB
AF Output Impedance	600 Ω Noise Mute
Squelch	Pilot tone and Noise mute
Output Connector	XLR Balanced Socket/6.3mm Unbalanced phone jack
Operating Voltage	100-240 VAC
Dimensions	W 212.3mm (8.36") H 38.3mm (1.51") D 144mm (5.7")

Model:	CW 7000H
FM Carrier	UHF PPL
Frequency Range	502-960MHz according to local regulations
RF Output	10mW/50mW Switchable
Stability	±10KHz
Frequency Deviation	±48KHz
LCD Display	Frequency
Controls	Power On/Off, Mode Setting, AF Level Frequency Up/Down, Lock-on Mode
Spurious Emissions	<-50 dBC
Audio Frequency	50Hz - 16KHz
Battery	2 x AA 1.5V

Model:	CW 7001
FM Carrier	UHF PPL
Frequency Range	502-960MHz according to local regulations
RF Output	10mW/50mW Switchable
Stability	±10KHz
Frequency Deviation	±48KHz
Display	LCD
Display Contents	Frequency, Battery Fuel Gauge
Controls	Power On/Off, AF Level Frequency Up/Down, Lock-on Mode
Spurious Emissions	<-50 dBC
Audio Frequency	40Hz - 18KHz
Output Connector	4 Pin Mini XLR
Battery	2 x AA 1.5V

CW-200 Wireless System

System comprises two transmitters and dual receiver

- UHF PLL 602 - 634 MHz, 638 - 670 MHz, 690-722 MHz, 744 - 776 MHz
- Versatile Dual Channel Boundary wireless microphone systems
- The Dual Channel Receiver 64 selectable channels
- Multi Function LCD display
- Auto Scan and lock on interference free frequency
- Infrared Upload from transmitter to receiver
- 'Noise Lock' Squelch effectively blocks stray RF noise
- RFI Shielding technology rejects radio frequency interference
- Battery life approximately 10 hours
- Heavy die-cast and non-slip silicon pads mininises surface vibration
- Rack mounting kit

Model:	CW 200R
System FM Carrier	UHF PLL
Frequency Range	602-634MHz 638-670MHz 690-722MHz 744-776HMz
Channel Frequencies	32 selectable
Frequency Stability	± 0.005%
S/N Ratio	>60dB @ 25kHz deviation
Audio Output Level	-12dB @ 1KHz
AF Output Impedance	600 Ω
Squelch	'Noise Mute' 0-50 dB in 5 dB Steps
Connections	Audio Balanced Out XLR Un-balanced Jack plug
Power	100 - 240 V 50/60 Hz 10 Watts
Dimensions	1 U 410mm W (16.15") x 265mm D (10.5")

Model:	CW 200T
Microphone	Condenser (black electret)
Polar Pattern	Half-Cardioid
Frequency Range	50Hz - 17KHz
System FM Carrier	UHF PLL
Frequency Range	602MHz - 634MHz
Channel Frequencies	32 selectable
RF Output	30mW
Frequency Stability	± 0.005%
Frequency Deviation	± 45KHz
Dynamic Range	>90dB, 1KHz @ Max SPL
Powering Supply	2 x AA Alkaline giving approximately 10 hours
Control	Power ON/OFF - Frequency
Finish	Black
Dimensions	110mm (4.3") x 110mm ((4.3") x 40mm (1.5")

CW9000 Series UHF Multi-channel Radio Microphone System

Versatile, flexible and easy to use, multi-channel system with two receiver, full diversity reception.

UHF operation for resistance to interference (bands within the range 630 ~ 960MHz according to local regulation). 192 PLL pre-selectable channels per band. Compact half rack size, full diversity receiver with full controls, comprehensive LED display and balanced/unbalanced outputs.

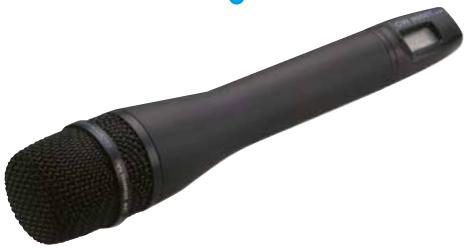
Receiver

- **CW 9000R** Receiver

Beltpack Transmitter

- **CW 9000IT** Beltpack Transmitter
- **CL 6** Lavalier Cardioid Microhone

Handheld Transmitter



- **CW 9000T** Handheld Radio Microphone

Desktop Transmitters

- **CW 9004T**

- **CW 9006T**
- **CW9005T**

Available with a choice of beltpack transmitter with lavalier microphone, handheld transmitter microphone or our innovative new wireless desktop base mounts for use with Clockaudio's full range of gooseneck microphones.

Each transmitter option features LCD display for frequency and battery status, easy-to-use controls for ON/OFF, frequency selection and AF levels. A full range of included and optional accessories are also available to complement the CW 9000 Series.

Model:	CW 9000R
System FM Carrier	UHF
Frequency Range	630MHz ~ 960MHz (bands according to regulation)
Channel Frequencies	192 PLL selectable channels per band
Frequency Stability	± 0.005%
S/N Ratio	>100dB
Audio Output Level	-12dB
AF Output Impedance	600Ω
Squelch	'Pilot Tone' and 'Noise Mute'
Power	External 12v DC; 500mA

Model:	CW 9000T
Microphone	Dynamic Cardiod
LCD Display Information	Frequency, AF level and battery status
Power	2 x AA batteries giving more than 10 hours use

Model:	CW 9000IT
System FM Carrier	UHF for reduced interference
Frequency Range	630MHz ~ 960MHz (bands according to regulation)
Channel Frequencies	192 PLL selectable channels per band
RF Output	10mW
Frequency Stability	± 0.005%
Frequency Deviation	± 48KHz
Frequency Response	50Hz ~ 15KHz
Dynamic Range	> +110dB
Controls	Power ON/OFF, Frequency and AF level set

Model:	CL 6
Microphone	Condenser (black electret)
Polar Pattern	Cardiod
Frequency Response	100Hz ~ 12KHz
Sensitivity	-50dB @ 1KHz (0dB = 1v/Pa)
Impedance	2.2KΩ
Termination	4 pin Tini Q connector

RF, AF and control information as for CW9000IT

UHF Desk-based Wireless Transmitters

Microphones for use with CW 9004T Unit (See page 3 for full specifications):

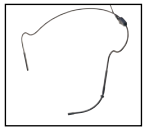
C 3100	100mm	
C 310-R	100mm	rigid
C 312-SR	200mm	semi-rigid
C 313-SR	300mm	semi-rigid
C 314-SR	400mm	semi-rigid

- **CW 9004T** UHF Desk Wireless Microphone Transmitter
- Tini Q XLR

- **CW 9005T** UHF Desk Wireless Microphone Transmitter
- Built-in Microphone

- **CW 9006T** UHF Desk Wireless Microphone Transmitter
- XLR

Model:	CW 9004T	CW 9005T	CW 9006T
Frequency Range	630 ~ 960MHz (According to local regulation)		
Channel Frequencies	192 PLL selectable channels per frequency band		
Polar Pattern	-	Omni-directional	-
Audio Bandwidth	-	50Hz ~ 18KHz	-
RF Output	10mW		
Frequency Deviation	±48KHz		
S/N Ratio	> 102dB		
Audio Frequency Response	50Hz ~ 15KHz		
Dynamic Range	> +110dB		
LCD Information	Frequency and battery status		
Switching	Programmable touch switch and LED indicator		
Power Supply	2 x AA batteries giving more than 9 hours use		
Output	-	-	24v Phantom Power
Connections	3 Pin Tini Q Mini XLR	-	3 Pin XLR
Dimensions & Weight	125(L) x 115(W) x 40(H) mm / 0.4kg		



- **CMH 2000** Micro Lightweight Headworn Boom Mic

- **HW 1500** Rugged Lightweight Headworn Boom Mic

- **HW 1200** Lightweight Headworn Boom Mic

See page 21 for full details of headworn microphones.

CU 2 Intelligent Battery Charger

- Processor controlled
- Built-in active monitoring circuitry
- Pulse charging system
- Temperature sensor
- Two dedicated compartments for charging two CW 9004T, CW 9005T or CW 9006T Transmitters
- Charging time: 6 hours
- Power Supply: Input 90 ~ 260v AC
  Output 12v DC 1.25A

Wireless Accessories

- **AA 9000** Antenna Distribution Amplifier

Model:	AA 9000
Carrier Frequency	470 ~ 870MHz
Antenna Inputs	2 (BNC)
Antenna Outputs	4 x pairs (BNC)
Output Connector Isolation	24dB
Nominal Cascade Gain	3dB
Inline Antenna Power	12v DC 120mA
Power Supply	4 x 12v DC
Mains Input Voltage	90 ~ 264 AC 50/60 Hz

- **CW 9000C** Interchangeable Microphone Head

Model:	CW 9000T-C
Type	Condenser (Back Electret)
Polar Diagram	Cardioid
Frequency Response	60Hz ~ 18KHz
Impedance	400Ω
Sensitivity	-50dB (0dB=1v/Pa)

- **AB 9000** Antenna Booster

- **WDA 9000** Directional Antenna

Model:	AB 9000
Carrier Frequency	470 ~ 870MHz
Antenna Gain	1.8dBi
Booster Gain	0dB +2/-1
Antenna Coverage	360°
Operating Voltage	12 ~ 18v DC
Inline Antenna Power	12v DC 120mA

- **WSP 9000** Antenna Splitter

Guided Tour System

A licence-free system of lightweight, 32 channel personal portable units developed for commentary or narration on guided tours, for individuals or for groups in situations such as museums, zoos, factories, garden tours or outside events. Also suitable for language tuition, talk-back and multi-language translation. UHF for reduced interference. 32 PLL selectable channels for easy and reliable operation. Built-in microphone or loudspeaker for hand held use and external microphone or earpiece for use when clipped to a belt or pocket. Open space range >100m.

Features:

- UHF PLL Licence-free
- 32 Selectable Channels
- Single or multi receiver capability
- Lightweight portable units with audio level adjustment
- Receiver with built-in loudspeaker for handheld use, and external ear piece for use when clipped to a belt or pocket
- Transmitter with built-in condenser microphone for hand held use, and external microphone for use when clipped to a belt or pocket
- Powered by lithium rechargeable batteries giving up to 20 hours use on full charge
- Intelligent chargers for 2, 10, 20 units
- Accessories available - lanyard and disposable ear pads

Model:	GT 400R	GT 400T
Includes	Ear piece	Omni-directional Condenser Microphone
System FM Carrier	UHF PLL Synthesized	UHF PLL Synthesized
Frequency Range	UHF 863 ~ 870MHz	UHF 863 ~ 870MHz
Channel Frequencies	32 Pre-programmed switchable	32 Pre-programmed switchable
Switchable Bandwidth	12MHz	12MHz
Frequency Stability	±0.005%	±0.005%
Maximum Deviation	±50KHz with level limiter	±50KHz with level limiter
Dynamic Range	<80dB	<80dB
Frequency Response	150Hz ~ 10KHz	-
RF Output	-	10mW
Powering	Lithium batteries averaging 20 hours use on full charge	Lithium batteries averaging 20 hours use on full charge

- **GT 400R** - Receiver

- **GT 400T** - Belt Pack Transmitter

- **DC 430** - Charging Flight Case
  (Transmitters sold separately)

Model:	DC 430 Charging Flight Case
Capacity	30 (receiver or transmitter belt style only)
Indicator LED	Red charging, green fully charged
Charging Current	120mA
Charging Time	Lithium 4 hours
Charging Control	PWM (timer power OFF detector)

DC 402 2 Unit Desktop Charger (for hand held or belt style transmitter / receiver)
DC 430 20 Unit 19" Rack Mounted Charger in fitted flight case

Model:	GT 402T	GT 520T
System FM Carrier	UHF PLL Synthesized	UHF PLL synthesized
Frequency Range	UHF 863 ~ 870MHz	UHF 863 ~ 870MHz
Channel Frequencies	32 Pre-programmed switchable	32 Pre-programmed switchable
Frequency Stability	±0.005%	±0.005%
Maximum Deviation	±50KHz with level limiting	±50KHz with level limiting
Dynamic Range	<80dB	<80dB
Powering	2 x AA Ni-MH batteries averaging 10 hours use on full charge	External 12v DC 500MA, AC Adaptor 115v ~ 230v AC

- **GT 402T** -Hand Held Transmitter

- **GT 520T** - Transmitter

- **DC 402** - 2 unit desktop charger

Communicator Two-way Intercom

The Clockaudio Communicator Full Duplex Two-way Communicator System is designed for use in situations where company staff need to be able to deal efficiently with visitors, whilst at the same time remaining totally secure.

Communicator has a wide range of applications and is especially ideal for use in areas where money transactions take place, where cash or other valuables are on view or where staff require a higher level than usual of personal safety.

Communicator also allows staff to deal in an efficient and friendly way with visitors, without giving them actual access to inner parts of the building where such access may be inappropriate. Communicator comprises of a range of professionally designed loudspeaker and microphone units, superbly styled to enhance any location. It is powered by a simple to operate, ruggedly-built amplifier providing excellent speech clarity.

CSU 100 Staff Speech Unit

The Staff Speech Unit provides two way communication with visitors via a high quality gooseneck microphone and loudspeaker, all housed within a single unit. A staff mute switch also ensures that visitors are unable to hear the operator in confidential conversations.

CA 100 Audio & Induction Amplifier

The CA 100 Audio and Induction Loop Amplifier is the control centre of the Communicator and provides full open duplex communication.

CLS 100/CML 100 Surface Mount Loudspeaker & Mic

The visitor enclosure can be used to house either a microphone or loudspeaker for visitors' use. It can be wall or counter top mounted and is well styled although its rugged construction ensures that it is long wearing and vandal resistant.

CLF 100/CMF 100 Flush Mount Loudspeaker & Mic

Visitor microphones and loudspeakers can alternatively be positioned in a housing which can be recessed into a wall or counter top, ideal for smoother styling and less intrusive positioning on busy counter tops and for providing additional protection from abuse.

CILP-10 Portable Induction Loop & PLS-10 Shelf

Designed as a highly portable, free-standing system to provide communication for people wearing a hearing aid featuring the 'T' facility. Suitable for use in a wide range of applications in meetings rooms, customer service counters, receptions and interview areas.

Features:

- Portable and easy to carry
- Very quick and simple to set up
- Integral microphone
- External microphone socket
- Microprocessor-controlled latest technology for optimum reception of speech and to conserve battery life
- Powered by rechargeable batteries with more than 24 hours use from full charge
- LED indications of speech and battery status
- Plug-in Power Adaptor for recharging and continuous use
- Elegant and robust ABS plastic construction

- CILP-10 Portable Induction Loop & PLS-10 Shelf

Model:	CILP-10
Power	Rechargeable 12v internal battery
Battery Life	24 Hours
Microphone	Condenser (back electret)
Polar Pattern	Omni-directional
External Mic. Connector	2.5mm jack plug socket (C 006 Boundary Layer recommended)
Power Adaptor Connection (12v)	2.1mm jack plug socket
Dimensions	250(H) x 275(W) x 110(D) mm
Weight	0.5kg

Part Number Index

Part Number:	Description:	Page No:
ARM 100-RF	Retracta Motorised Through Table Omni-directional Mic	14
ARM 102-RF	Retracta Motorised Through Table Cardioid Condenser Mic	14
ARMF 100-RF/102-RF	Straight Cut Motorised Mics	14
C 002E-RF	Low Profile Boundary Microphone	16
C 003E Series	Omni-directional Thru-table Boundary Mics	17
C 004E Series	Cardioid Thru-table Boundary Mics	17
C 005	Tabletop Boundary Mic	18
C 006E	Low Profile Boundary Mic	16
C 007E Series	'Button' Boundary Mics	18
C 008E	Tabletop Boundary Mics	16
C 009E-RF	Large Surface Boundary Mic	16
C 011E-RF	Omni-directional Thru-table Boundary Layer Mics	17
C 012E-RF	Cardioid Thru-table Boundary Layer Mics	17
C 015E-RF	Omni-directional Tabletop Boundary Mic	17
C 016E-RF	Cardioid Tabletop Boundary Mic	17
C 2 Series	Cardioid Condenser Gooseneck Mics	02
C 3 Series	Cardioid Condenser Gooseneck Mics	02-03
C 3 HALO Series	Cardioid Condenser Goosenecks incl. Halo	03
C 3 Slimline Series	Cardioid Condenser Slimline Gooseneck Mics	02
C 3S Series	Suspended Cardioid Mics	10
C 420E	Twin Mount Mic	05
C 430E	Twin Mount Mic	05
C 440E	Twin Mount Mic	05
C 600	Handheld Condenser Mic	23
C 650E	Cardioid Condenser Handheld Mic	23
C 800 Series	Gooseneck (Mini Shotgun) Mics	04
C 801 Series	Knuckle Joint (Mini Shotgun) Mics	04
C 815E-RF	Gooseneck (Mini Shotgun) Mic	04
C 816E-RF	Semi-rigid Gooseneck (Mini Shotgun) Mic	04
C 850E	Shotgun Supercardioid Mic	23
C 8S Series	Suspended Hypercardioid Mini Shotgun Mics	10
C 900	Combination Series Mics	06
C 901E Series	Cardiod Condenser Mics – Knuckle Joint	07

Part Number:	Description:	Page No:
CA 30	Semi-Rigid Shafts	06
CA 40	Semi-Rigid Shafts	06
CA 700	Floor-standing Long Shafts	06
CA 900	Floor-standing Long Shafts	06
CAK 1	Phantom Power Adaptors with Knuckle Joint	07
CAP 002	Line Level Pre-amplifier	27
CCRM 4000	Ceiling Retracta Mic	08-09
CH 32	(Litetouch) Dual Colour Halo Ring & Touch Pad Switch	19
CILP-10	Portable Induction Loop	40
CL 4	Lavalier Omni-directional Mic	20
CMH 2000	Micro Lightweight Headworn Boom Mics	21
Communicator	Two-way Intercom	40
CP 73	Ceiling Mounting Plate	10
CPPW 01	Phantom Power Adaptors	25
CRM 100-RF	Retracta through-table Omni-directional Mic	15
CRM 102-RF	Retracta through-table Half-cardioid Mic	15
CRM 202-RF	Dual element boundary layer thought-table Mic	15
CRMF 100-RF/102-RF	Straight Cut Retracta Mics	14
CS-RF Series	Boundary Layer Professional Mics	12
CS-RF Series	Boundary Layer Professional Switched Mics	13
CTH 100	Throat Microphone	20
CW 200	Wireless System	35
CW 7000	Wireless System	34
CW 8000	Wireless System	32-33
CW 9000 Series	UHF Multi-channel Radio Mic System	36-37
D 33	Dynamic Gooseneck Mics	22
D 34	Dynamic Gooseneck Mics	22
D 43	Dynamic Gooseneck Mics	22
D 44	Dynamic Gooseneck Mics	22
D 5	Dynamic Microphone	22
D 500	Cardioid Dynamic Handheld Mic	24
D 525E	Dynamic Supercardioid ENG Mic	24

Part Number:	Description:	Page No:
D 550E	Dynamic Omni-directional ENG Mic	24
D 700S	Dynamic Supercardioid Handheld Mic with Switch	24
DMB 1/DMB 2	Desk Paging Mics	22
F 237	Aluminium Fishpole	30
GT Series	Guided Tour System	38-39
H 500	Monitor Headphones	25
HW 1200	Lightweight Headworn Boom Mic	21
HW 1500	Rugged Lightweight Headworn Boom Mic	21
LB 001 / LB 001-PS	Logic Box	19
MR 88	Digital Automatic Mic Mixer	31
PP 2	2 Channel 48v DC Phantom Power Supply	27
PPA	Phantom Power Adaptors	27
PPM	Beltpack 1.5v Battery Supply	27
S 80S	Low Profile, Thru-table Mic Base with Switch	28
S 120	Table Microphone Base	29
S 120X Series	Table Microphone Bases with XLR	29
S 750	Table Mic Base with Knuckle Joint	07
S 133, S 135 & S 140	RF-Immune Mic Desk Bases	29
S 210	Mic Floor Stand & Boom	29
SA 3	Mic Holder & Stand Adaptor	29
SA 5	Mic Holder & Stand Adaptor	29
SEC 09	Security and Surveillance Mic	19
SM 10	Low Profile, Thru-table Shock Mount	28
SM 110	Shock-absorbing Table Mic Stand	30
SM 20-RF	Low Profile, Thru-table Shock Mount	28
SM 70	Thru-table Shock Mount	28
SM 75	Shock-absorbing Mic Base	28
SM 80	Thru-table Shock Mount with flip cover	28
SM 93	Low Profile, Shock Absorbing Mic Base	29
SM 95	Low Profile, Shock Absorbing Mic Base	29
SM 155	Floor Mounting, Shock Absorbing Mic Base	07
TS 001	Flush Mount Bi-Colour Halo Ring and Switch	19

Custom Solutions

In addition to the standard products featured in this catalogue, Clockaudio offer a comprehensive OEM service and will also, in many cases, customise existing products to individual requirements.

To find out more about the Clockaudio OEM service plus the range of custom colours, finishes and configurations available, please contact our corporate office on **Tel:** +44 (0)23 9225 1193 or **Email:** info@clockaudio.co.uk

CLOCKAUDIO®
PROFESSIONAL MICROPHONE SYSTEMS

T: +44 (0) 23 9225 1193 F: +44 (0) 23 9225 1201 E: info@clockaudio.co.uk W: www.clockaudio.com
Clockaudio Ltd 22 Arnside Road Waterlooville Hampshire PO7 7UP England

Clockaudio North America Inc. 2891 du Meunier Unit 103 Vaudreuil-Dorion QC Canada J7V 8P2

Clockaudio Pte. Ltd 627A Aljunied Road BizTech Centre #01-02 Singapore 389842

This Brochure is
Fully Recyclable