

 **CLOCKAUDIO[®]**

PROFESSIONAL MICROPHONE SYSTEMS

Clearly different.



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 w: www.clockaudio.com





CONTENTS

06	Tracking Intelligent Microphone
08	Gooseneck Microphones
11	Twin-mount Microphones
12	Combination Series Microphones
13	Dynamic Gooseneck & Paging Microphones
15-27	Boundary Microphones & Switches
29	Phantom Power Units & Adaptors
30-33	Ceiling and Suspended
34-37	Dante products
38	Handheld Microphones
40	Microphone Stands & Adaptors
42	Shock Mounts & Bases
44-47	UHF Wireless Systems
48	Headworn & Neckworn Microphones
50	Headphones
52	Tour Guide Systems
54	Automatic Microphone Mixer
56	Part Number Index

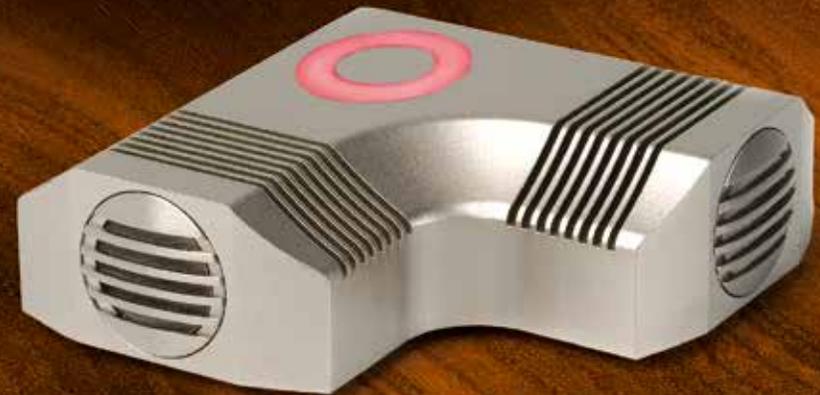
RF Series: GSM-friendly microphones and shock mounts

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:



INTRODUCING

TIM-1000

The Clockaudio Tracking Intelligent Microphone (TIM) sets a brand new standard for ceiling mounted microphones for use in AV conference and huddle room applications. The ultra low profile ceiling microphone with tracking ability and Adaptive Proximity Tracking technology (APT). TIM tracks participants and follows them anywhere in the room while the APT constantly adjusts their levels.

Other features include noise suppression, 3-band EQ, intuitive GUI, and an RGB ring for visual room status. Powered over ethernet, the device utilizes API control via UDP commands and comes with separate control and audio paths. Single audio channel output to Dante & AES67 networks.



TIM-1000

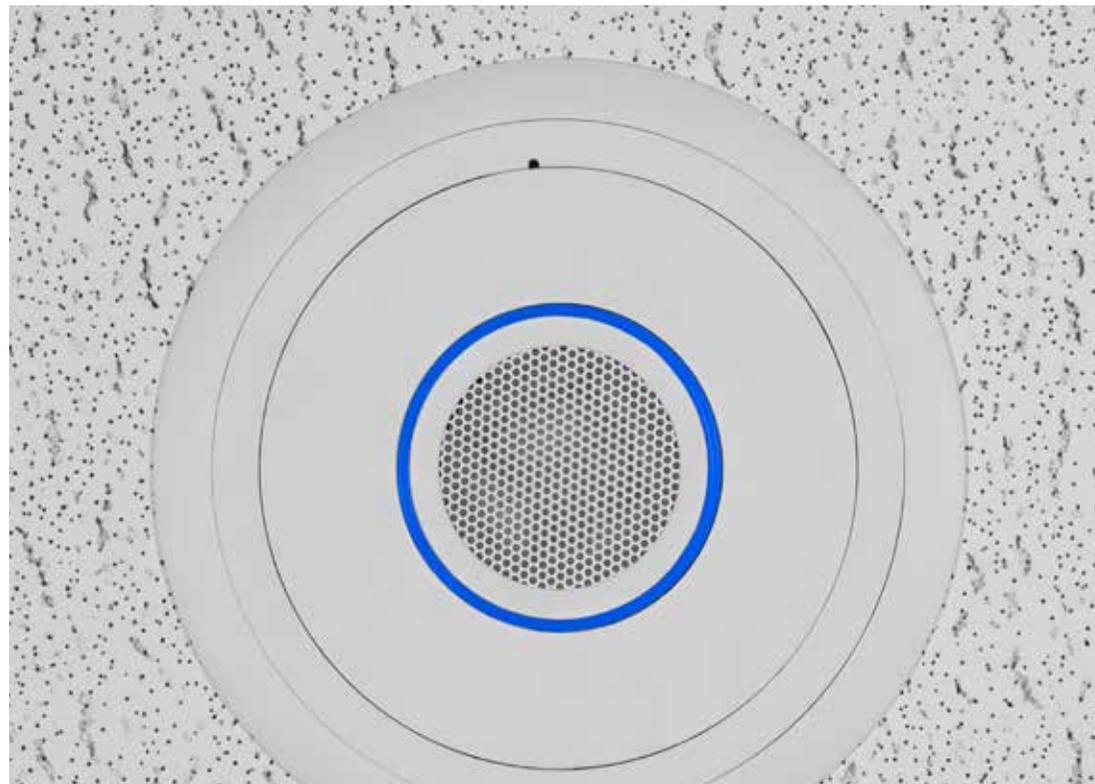
The Tracking Intelligent Microphone (TIM) breaks the mould for ceiling microphones. Designed for use in AV conference and huddle room applications. Low profile Ceiling Microphone with tracking ability and Adaptive Proximity Tracking Technology (APT). TIM tracks participants and follows them anywhere in the room while the APT constantly adjusts their levels. Other features include noise suppression, 3-band EQ, intuitive GUI, and an RGB ring for visual room status. Powered over ethernet, the device utilizes API control via UDP commands and comes with separate control and audio paths. Single audio channel output to Dante & AES67 networks. Designed for use in AV conference and huddle room applications. The microphone is constructed with UL 2043 rated plastics and Aluminium shell.

- Tracks meeting participants within a room.
- APT technology for best possible sound output.
- Eliminates unwanted steady state noise e.g. air conditioning , projectors.
- Built-in equalizer.
- Supports DANTE and AES67.
- Intuitive GUI through standard Web browser.
- Powered over Ethernet (PoE+).
- Separate control and data paths for added security.
- API commands via UDP.
- Easy setup and install.
- Finish: White

Models:

 **TIM-1000-CM** Ceiling Mount version

Model:	TIM-1000-CM
Type	Condenser microphone array
Operating Temperature	0 to 40 deg C
Storage Temperature	minus 20 to 60 deg C
Power Requirements	8W (42~57vDC, POE+, IEEE 802.3at)
Termination	RJ 45
Wiring Connections	shielded CAT 5e or better
Supplied Accessories	Suspension kit
Finish	White
Weight	1.35Kg (3lbs)
Dimensions	Diameter: 270mm (10.63") Height: 75mm (2.95")



TIM-1000-PM



TIM-1000-PM-Kit

TIM-1000 top cover for pole mount application on a standard 2" inch pole (pole not included).



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



C 3 Series

slimline goosenecks

Stylish, slimline, flexible goosenecks 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.

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

Models:

C 3100	125mm	Full-flex
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 and S 140-RF.

Model: C 3 Slimline Gooseneck

Frequency Response	50Hz ~ 18KHz
Sensitivity	-37dB ±3dB @ 1KHz (0dB=1v/Pa)
Impedance	1.8kΩ
S/N Ratio	69dB(A)
Maximum SPL	120dB 1% THD
Power Requirements	9 ~ 48v Phantom Power
Termination	3 pin female mini XLR connector
Dimensions	Head Ø 12mm Shaft Ø 6mm



Includes W 2 windshield



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.

C3 Series are open-ended, C3E Series have PPA with Male 3 pin XLR.

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

Base Models:

C 31	100mm	+ PPA 180mm
C 32	200mm	+ PPA 280mm
C 33	300mm	+ PPA 380mm
C 34	400mm	+ PPA 480mm
C 35	500mm	+ PPA 580mm
C 36	600mm	+ PPA 680mm
C 301	Knuckle 80mm	+ PPA 180mm

Options:

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

Model: C 3 and C3E Series

Frequency Response	50Hz ~ 18KHz
Sensitivity	-37dB ±3dB @ 1KHz (0dB=1v/Pa)
Impedance	C3: 1.8kΩ C3E: 200Ω
S/N Ratio	69dB(A)
Power Requirements	C3 Series: 1.5 - 9v through resistor C3E Series: 9 ~ 48v Phantom Power



Includes W 2 windshield



C 3 Series

halo 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.

C3 series open-ended; C3E series with PPA with male 5 pin XLR.

- 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	100mm	+ PPA 200mm
C 32HALO	200mm	+ PPA 300mm
C 33HALO	300mm	+ PPA 400mm
C 34HALO	400mm	+ PPA 500mm
C 35HALO	500mm	+ PPA 600mm
C 36HALO	600mm	+ PPA 700mm
C 301HALO	Knuckle	+ PPA 199mm

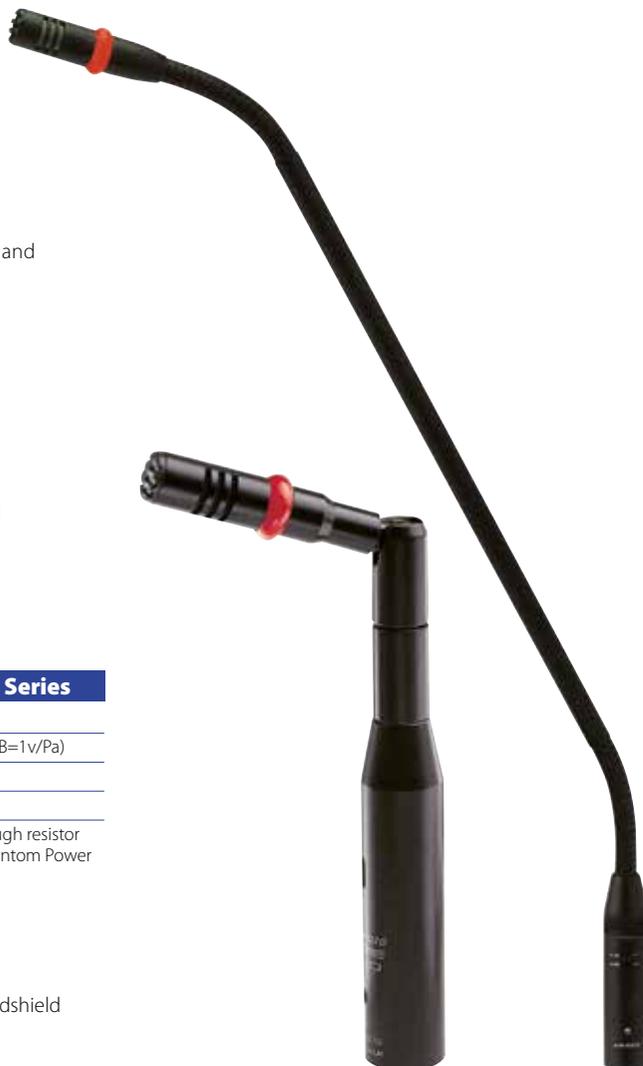
Options:

Also available with  RF-immunity. See 'Available Gooseneck Options' (left) for full details.

Model:	C3 and C3E Halo Series
Frequency Response	50Hz ~ 18KHz
Sensitivity	-37dB \pm 3dB at 1KHz (0dB=1v/Pa)
Impedance	C3: 1.8k Ω C3E: 200 Ω
S/N Ratio	69dB(A)
Power Requirements	C3 Series: 1.5 - 9v through resistor C3E Series: 9 ~ 48v Phantom Power



Includes W 2 windshield



C 1001E-RF Series

The 'ready-made' C 1001E-RF Series Microphones feature the C 1000H super-cardioid condenser capsule and CAK Phantom Power Adaptor with knuckle joint for horizontal rotation and vertical angle adjustment. Supplied with a male 3 pin XLR connector and a PPA adapter, the C1000H can be used with any of the Clockaudio bases that support XLR connection. They are suitable for a wide range of applications including conference halls, places of worship, board rooms, leisure centres, etc.

- Uses the C 1000H super-cardioid condenser capsule.
- Knuckle joint provides horizontal rotation and vertical angle adjustment.
- Integrated Phantom Power Adaptor
- Male 3 pin XLR termination facilitating use of multiple Clockaudio bases
- Finish: Satin Black.
- Also available in Nextel Suede Coating finishes (Custom Orders Only)

Models:

 **C 1001E-RF**

Model:	C 1001E-RF
Frequency Response	50Hz ~ 20KHz
Sensitivity	-39dB \pm 3dB @ 1KHz (0dB=1v/Pa)
Impedance	200 Ω
S/N Ratio	68dB(A) \pm 3dB
Power Requirements	9 ~ 48v Phantom Power
Termination	Male 3 Pin XLR



C 800 shotgun gooseneck

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.



- 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

Model: C 800 Series

Frequency Response	50Hz ~ 18KHz
Sensitivity	-37dB ±3dB at 1KHz (0dB = 1v/Pa)
Impedance	C800: 1.8kΩ C800E: 200Ω
Power Requirements	9 ~ 48v Phantom Power
S/N Ratio	69dB(A)
Termination	XLR: Male 3 pin XLR



Includes W 8 windshield

C 801 shotgun knuckle joint

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.



- Optimised for speech clarity
- 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 8.

Model: C 801 Series

Frequency Response	50Hz ~ 18KHz
Sensitivity	-37dB ±3dB at 1KHz (0dB = 1v/Pa)
Impedance	C801: 1.8kΩ C801E: 200Ω
Power Requirements	9 ~ 48v Phantom Power
S/N Ratio	69dB(A)
Termination	XLR: Male 3 pin XLR



Includes W 8 windshield

C 815E-RF & C 816E-RF shotgun goosenecks

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.



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

Models:

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

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



Includes W 85 windshield

C 420E

twin mount

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



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

Models:

C 420E

Model:	C 420E
Frequency Response	50Hz ~ 18KHz
Sensitivity	-37dB ±3dB @ 1KHz (0dB=1v/Pa)
Impedance	200Ω
S/N Ratio	69dB(A)
Power Requirements	9 ~ 48v Phantom Power
Termination	Male 5 Pin XLR



Includes W 2 windshield

 = RF-Immunity Version

C 430E

twin mount

Twin rigid shafts vertically adjustable, individually through 180degrees. Accepts C 3H, C 1000H and C 800H capsules. Individually powered, providing live redundant capability so often required in a live broadcast situation. Finished in satin black.



- Optimised for consistent sound quality
- Integrated Phantom Power Adaptor
- 5 pin XLR mounting
- Shaft angles independently adjustable
- Three microphone head variants
C 1000H Rugged Super Cardioid condenser
C 3H Slimline Cardioid condenser
C 800H Hyper-cardioid Mini shotgun
- Heads priced and supplied separately

Capsule options available:



C 1000H

C 3H

C 800H

Models:

C 430E

Model:	C 430E
Power Requirements	9 ~ 48v Phantom Power
Termination	Male 5 Pin XLR

Includes W 2 windshield

C 440E

twin mount

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



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

Models:

C 440E

Model:	C 440E
Frequency Response	50Hz ~ 18KHz
Sensitivity	-37dB ±3dB @ 1KHz (0dB=1v/Pa)
Impedance	200Ω
Power Requirements	9 ~ 48v Phantom Power
	Switchable Bass Filter & -10dB Switchable Pad
S/N Ratio	69dB(A)
Termination	Male 3 Pin XLR



Includes W 2 windshield



Combination Series

The C 1000H, C 3H, C 3HW and C 800H microphones with mini-XLR connections are a series of easily interchangeable microphones. Together with various bases that support mini-XLR connectivity this group of products is referred to as the combination series. They are suitable for a wide range of applications including broadcast, conference halls, places of worship, leisure centres, etc.

Microphones

- **C 1000H** Rugged wide band super-cardioid condenser microphone for multiple use. Available in Satin black.
- **C 3H** Short slimline cardioid condenser microphone for use in controlled acoustic environments. Available in Satin black (C 3H) and white (C 3HW).
- **C 800H** Hyper-cardioid condenser mini shotgun microphone useful in a wide range of pro and live sound speech applications. Available in Satin black.



• C 1000H



• C 3H



• C 800H



• C 3H: Includes W 2 windshield



• C 800H: Includes W 8 windshield

Model:	C 1000H	C 3H, C 3HW	C 800H
Frequency Response	50Hz ~ 20KHz	50Hz ~ 18KHz	50Hz ~ 18KHz
Sensitivity	-37dB ±3dB at 1KHz	-39dB ±3dB at 1KHz	-37dB ±3dB at 1KHz
Impedance	1.0KΩ	1.8KΩ	1.8KΩ
S/N Ratio	68dB(A)	69dB(A)	69dB(A)
Power requirements	Requires a PPA	Requires a PPA	Requires a PPA
Termination	3 pin Mini XLR	3 pin Mini XLR	3 pin Mini XLR

= RF-Immunity Version

Combination Series related products

CAK 1

Phantom Power Adaptor with knuckle joint and mini XLR Female connector .short microphone holder.



SM 155

Floor mounting, shock absorbing microphone base.

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 mini XLR 3 pin Female connector.



CA 700/CA 900

floor standing long shafts

Long, rigid shafts of 700mm and 1200mm respectively.



D 33/D 34

dynamic goosenecks

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

- 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.

- 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 microphone

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

- 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.

- 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

ARM 102-RF

motorised 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 unit for ARM microphones).

- 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

Models:

- **ARM 102-RF** Black
- **ARM 102N-RF** Nickel

Model:	ARM 102-RF
Type	Condenser (Back Electret)
Polar Pattern	Half Cardioid
Frequency Response	50Hz - 18KHz
Sensitivity	-37dB +/- 3dB @ 1KHz (0dB = 1v/Pa)
Impedance	200Ω
S/N Ratio	69dB(A)
Maximum SPL	125dB at 1KHz 1% T.H.D.
Power Requirements	9 ~ 48v Phantom Power
Termination	Open ended
Dimensions	Above Table: 18mm (0.70") Diameter: 36mm (1.42") Below Table: 149mm (5.86") Diameter: 30mm (1.18")



ARMF Straight Cut

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



ARM 202-RF

motorised through-table boundary cardioid condenser microphone

The ARM 202-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 unit for ARM microphones).

- 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

Models:

- **ARM 202-RF** Black
- **ARM 202N-RF** Nickel

Model:	ARM 202-RF
Type	Condenser (Back Electret)
Polar Pattern	Half Cardioid
Frequency Response	50Hz - 18KHz
Sensitivity	-37dB +/- 3dB @ 1KHz (0dB = 1v/Pa)
Impedance	200Ω
S/N Ratio	69dB(A)
Maximum SPL	125db at 1KHz 1% T.H.D.
Power Requirements	9 ~ 48v Phantom Power
Termination	Open ended
Dimensions	Above Table: 18mm (0.70") Diameter: 63mm (2.48") Below Table: 199mm (7.83") Diameter: 58mm (2.25")



Accessories

ARM-C

Digital four channel motor Control Box for use with the ARM series of motorised through desk Boundary microphones.

ARM-PSU 4

Switched mode power supply capable of delivering regulated 12vDC @ 5 Amps.

see page 28

CRM 200-RF Series

retractable through-table cardioid microphones

The CRM 200-RF Series is a multi element boundary layer through-table microphone, which includes a built-in mechanism that allows the user to make the microphone disappear without having to physically remove it from the table. Simply by 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. Engineered in high quality brass with built-in shock mount and RF filter.

- Integral reed contact switch designed to be used for remote switching by DSP.
- Easy to install.
- Low profile at surface level.
- Lock capsule away from sight when not in use.
- Robust brass construction.
- Cardioid polar pattern
- Built-in RF filter.
- Balanced output.
- Inbuilt Phantom Power module.
- Supplied with 2m (6.6 ft) 2 core + screen audio cable.
- Black Nextel or Satin Nickel.

Models:

- **CRM 202-RF** dual element cardioid Black
- **CRM 202N-RF** dual element cardioid Nickel
- **CRM 203-RF** triple element cardioid Black
- **CRM 203N-RF** triple element cardioid Nickel

CRM Straight Cut

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



CRM 202-RF dual element cardioid condenser microphone

Offering two independently wired microphones. Dual Cardioid polar pattern. 2 x balanced outputs. Inbuilt Phantom Power modules.

CRM 203-RF tri element cardioid condenser microphone

Offering three independently wired microphones. Tri Cardioid polar pattern. 3 x balanced outputs. Inbuilt Phantom Power modules.



Model:	CRM 202-RF	CRM 203-RF
Type	Condenser (Back Electret)	Condenser (Back Electret)
Polar Pattern	Half Cardioid	Half Cardioid
Frequency Response	50Hz - 18 KHz	50Hz - 18 KHz
Sensitivity	-37dB +/- 3dB @ 1 KHz (0dB = 1v/Pa)	-37dB +/- 3dB @ 1 KHz (0dB = 1v/Pa)
Impedance	200Ω	200Ω
S/N Ratio	69dB (A)	69dB (A)
Maximum SPL	125db at 1 KHz 1% T.H.D.	125db at 1 KHz 1% T.H.D.
Power Requirements	9 ~ 48v Phantom Power	9 ~ 48v Phantom Power
Termination	Open ended	Open ended
Dimensions	Above Table: 15mm (0.58") Diameter: 63mm (2.48") Below Table: 112mm (4.41") Diameter: 56.5mm (2.22")	Above Table: 15mm (0.58") Diameter: 63mm (2.48") Below Table: 112mm (4.41") Diameter: 56.5mm (2.22")

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.

- 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	-37dB +/- 3dB @ 1KHz (0dB = 1v/Pa)
Impedance	200Ω
S/N Ratio	69dB(A)
Maximum SPL	125db at 1KHz 1% T.H.D.
Power Requirements	9 ~ 48v Phantom Power
Termination	Open ended
Dimensions	Above Table: 15mm (0.58") Diameter: 36mm (1.42") Below Table: 111mm (4.37") Diameter: 30mm (1.18")

C 004E

through-table boundary microphone

Cardioid boundary layer condenser microphones designed for a wide range of installed audio, conferencing or security applications.

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



Models:

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

Model:	C 004E-RF
Polar Pattern	Cardioid
Frequency Response	50Hz ~ 18KHz
Sensitivity	-37dB ±3dB at 1KHz (0dB=1v/Pa)
Impedance	200Ω
Power Requirements	9 ~ 48v Phantom Power
S/N Ratio	69dB(A)
Termination	Male 3 pin XLR

C 012E-RF

through-table boundary microphone

This through-table cardioid microphone was created for applications demanding sonic quality, but also requiring an extremely robust housing within an extreme environment.

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



Models:

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

Model:	C 012E-RF
Polar Pattern	Cardioid
Frequency Response	50Hz ~ 18KHz
Sensitivity	-37dB ±3dB at 1KHz (0dB=1v/Pa)
Impedance	200Ω
Power Requirements	9 ~ 48v Phantom Power
S/N Ratio	69dB(A)
Termination	Male 3 pin XLR

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 **CS 1-RF** is a **single element** microphone, the CS 2-RF is a dual element boundary layer condenser microphone, with a half-cardioid polar pattern, designed to be placed in the middle of the conference table, with each element facing the participants. 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 to accommodate this situation.

The **CS 4-RF** completes the CS-RF Series microphone family, offering a 4-element microphone in a single housing. The CS 4-RF can be positioned in the centre of a round conference table, giving maximum coverage from a small footprint.

These microphones are made of solid brass and finished in a durable non-reflective black Nextel or satin nickel 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 microphones accommodate bottom cable exit, for permanent mounting in boardroom situations.

- Half cardioid polar pattern
- Fully balanced
- Non-reflective black Nextel or satin nickel
- The CS series available in other customised colours and special finishes upon request

Models:

- 🌐 **CS 1-RF** single element
- 🌐 **CS 2-RF** dual element
- 🌐 **CS 3-RF** triple element
- 🌐 **CS 4-RF** quadruple element

Model:	CS-RF
Microphone	Condenser (back electret)
Polar Pattern	Half cardioid
Frequency Response	50Hz ~ 18KHz
Sensitivity	-37dB ±3dB @ 1KHz (0dB=1v/Pa)
Impedance	200Ω
Power Requirements	9 ~ 48v Phantom Power
S/N Ratio	69dB(A)
Termination	Open ended multi-core cable



🌐 CS 1-RF - single element boundary microphone



🌐 CS 2-RF - dual element boundary microphone



🌐 CS 4-RF - quadruple element boundary microphone



🌐 CS 3-RF - triple element boundary microphone



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.

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



Models:

C 006E Male 3 pin XLR

C 006EG Male 3 pin XLR

C 006-JP 3.5 mm Jack plug

Model:	C 006E
Frequency Response	50Hz ~ 18KHz
Sensitivity	-37dB ±3dB at 1KHz (0dB=1v/Pa)
Impedance	200Ω
Power requirements	9 ~ 48v Phantom Power
	Switchable Bass Filter & -10dB Switchable Pad
S/N Ratio	69dB(A)

C 008E

tabletop boundary microphone

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.

- Half-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-RF

C 008EG-RF

Model:	C 008E
Frequency Response	50Hz ~ 18KHz
Sensitivity	-37dB ±3dB at 1KHz (0dB=1v/Pa)
Impedance	200Ω
Power Requirements	9 ~ 48v Phantom Power
S/N Ratio	69dB(A)
Termination	Male 3 pin XLR

C 016E-RF

tabletop boundary microphone

New style cardioid boundary layer condenser microphone 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:

C 016E-RF Cardioid

Model:	C 016E-RF
Polar Pattern	Cardioid
Frequency Response	50Hz ~ 18KHz
Sensitivity	-37dB ±3dB @ 1KHz (0dB = 1vPa)
Impedance	200Ω
Switching	Programmable for PTT PTM & Latching
Power Requirements	48v Phantom Power
S/N Ratio	69dB(A)
Termination	Male 5 pin XLR with remote switch ability

ARM 100-RF

motorised 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 unit for ARM microphones).

- 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

Models:

- **ARM 100-RF** low profile
- **ARMF 100-RF** countersunk profile

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: 18mm (0.70") Diameter: 36mm (1.42") Below Table: 149mm (5.86") Diameter: 30mm (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.

- 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** low profile
- **CRMF 100-RF** countersunk profile

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: 15mm (0.59") Diameter: 36mm (1.42") Below Table: 111mm (4.37") Diameter: 30mm (1.18")





C 003E-RF

through-table
boundary microphone

Omni-directional boundary layer condenser microphones designed for a wide range of installed audio, conferencing or security applications.

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



- Models:**
- 🌐 **C 003E-RF** Black
 - 🌐 **C 003EW-RF** White



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

C 011E-RF

through-table
boundary microphone

This through-table omni microphone was created for applications demanding sonic quality, but also requiring an extremely robust housing within an extreme environment.

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



- Models:**
- 🌐 **C 011E-RF** Black
 - 🌐 **C 011EN-RF** Nickel

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

C 30H

through chair / panel mount boundary microphone

Through desk/ceiling/panel mount Boundary Layer Microphone. The microphone is constructed from high quality brass and includes filters offering immunity from GSM and other sources of frequency interference.

- RF friendly technology offering immunity from GSM (cellphones) and other sources of frequency interference.
- Low profile Back electret Condenser Microphone..
- Designed for conferencing and security applications.
- The Microphone is constructed from high quality brass.
- Total Harmonic Distortion (THD) at an operating level of 120dB is no greater than 1%.
- Finish: Satin Black.
- Also available in Nextel Suede Coating finishes (Custom Orders Only)

Models:

 **C 30H**



Model:	C 30H
Type	Condenser (Back Electret)
Polar Pattern	Omni-Directional
Frequency Response	50Hz~20KHz
Sensitivity	-68dB ± 3dB @ 1 KHz (0dB = 1 v/Pa)
Impedance	200 Ohms
S/N Ratio	68dB(A)
Power Requirements	9~48v Phantom Power through CPPW 01-RF
Termination	Open ended
Finish	Satin Black
Dimensions	30mm x 17mm x 11mm

C 015E-RF

tabletop boundary microphone

New style omni-directional boundary layer condenser microphone 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:

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

Model:	C 015E-RF
Polar Pattern	Omni-directional
Frequency Response	50Hz ~ 20KHz
Sensitivity	-44dB ±3dB @ 1KHz (0dB=1vPa)
Impedance	200Ω
Switching	Programmable for PTT PTM & Latching
Power Requirements	9 ~ 48v Phantom Power
S/N Ratio	70dB(A)
Termination	Male 5 pin XLR with remote switch ability

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.

- 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 ~ 20KHz
Sensitivity	-44dB \pm 3dB at 1KHz (0dB=1v/Pa)
Impedance	200 Ω
Power Requirements	9 ~ 48v Phantom Power
S/N Ratio	70dB(A)
Termination	Male 3 pin 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.

- 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	50Hz ~ 20KHz
Sensitivity	-44dB \pm 3dB at 1KHz (0dB=1v/Pa)
Impedance	200 Ω
Power Requirements	9 ~ 48v Phantom Power
S/N Ratio	70dB(A)
Termination	Male 3 pin XLR

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.

- 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	200 Ω
Sensitivity	-42.5dB +/- 3dB @ 1 KHz (0dB = 1 V/Pa)
S/N Ratio	68dB(A)
Power Requirements	9 - 48 volts Phantom Power
Finish	Black

CS S-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.

- Immune to RF artefacts
- Boundary Layer dual element Condenser Microphone
- Half Cardioid Polar Pattern
- In built electronic touch switch with RGB 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

Models:

- 🌐 **CS 1S-RF** single element
- 🌐 **CS 2S-RF** dual element
- 🌐 **CS 2SV-RF** dual element
- 🌐 **CS 3S-RF** triplle element
- 🌐 **CS 4S-RF** quadruple element

Model:	CS S-RF
Microphone	Condenser (back electret)
Polar Pattern	Half cardioid
Frequency Response	50Hz ~ 18KHz
Sensitivity	-37dB +/- 3dB at 1 KHz (0dB = 1 V/Pa)
Impedance	200Ω
Power Requirements	9 ~ 48v Phantom Power
S/N Ratio	69dB(A)
Termination	Open ended for audio RJ 45 for switching



🌐 CS 1S-RF



🌐 CS 2S-RF



🌐 CS 2SV-RF



🌐 CS 3S-RF



🌐 CS 4S-RF

CRM 200S-RF Series

retractable through-table microphones with tri-color halo ring and touch sensitive switch

The CRM 200S RF Series is a boundary layer through-table microphone, which includes a touch sensitive switch with Tri-Colour LED Halo mounted into the top of the microphone housing. The CRM 200S-RF Series has a built-in mechanism that allows the user to make the microphone disappear without having to physically remove it from the table. Simply by 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. Engineered in high quality brass with built-in shock mount and RF filter.

- Integral reed contact switch designed to be used for remote switching by DSP.
- Touch sensitive switch with RGB with TS-C1.
- Easy to install.
- Low profile at surface level.
- Lock capsule away from sight when not in use.
- Robust brass construction.
- Built-In RF filter.
- Balanced output.
- Inbuilt Phantom Power module.
- Supplied with 2m (6.6 ft) 2 core + shield cable.
- Black Nextel or Satin Nickel.

Models:

- **CRM 200S-RF** single omni directional Black
- **CRM 200SN-RF** single omni directional Nickel
- **CRM 202S-RF** dual half cardioid Black
- **CRM 202SN-RF** dual half cardioid Nickel
- **CRM 203S-RF** triple cardioid Black
- **CRM 203SN-RF** triple cardioid Nickel

CRM 200S-RF single omni directional element

Omni directional polar pattern.
Balanced outputs.
Inbuilt Phantom Power module.

CRM 202S-RF dual element cardioid condenser microphone

Offering two independently wired microphones.
Dual Cardioid polar pattern.
2 x balanced outputs.
Inbuilt Phantom Power modules.

CRM 203S-RF tri element cardioid condenser microphone

Offering three independently wired microphones.
Tri Cardioid polar pattern.
3 x balanced outputs.
Inbuilt Phantom Power modules.



Model:	CRM 200S-RF	CRM 202S-RF	CRM 203S-RF
Type	Condenser (Back Electret)	Condenser (Back Electret)	Condenser (Back Electret)
Polar Pattern	Omni-Directional	2 x Half-Cardioid	3 x Cardioid
Frequency Response	50Hz~18KHz	50Hz~18KHz	50Hz~18KHz
Sensitivity	-37.5dB ± 3dB @ 1 KHz (0dB = 1 v/Pa)	-37dB ± 3dB @ 1 KHz (0dB = 1 v/Pa)	-37dB ± 3dB @ 1 KHz (0dB = 1 v/Pa)
Impedance	200 Ohms	200 Ohms	200 Ohms
S/N Ratio	68dB(A)	69dB(A)	69dB(A)
Maximum SPL	125dB at 1 KHz 1% THD	125dB at 1 KHz 1% THD	125dB at 1 KHz 1% THD
Power Requirements	9~48v Phantom Power	9~48v Phantom Power	9~48v Phantom Power
Supplied Accessories	TS-C1	TS-C1	TS-C1
Termination	Audio: Open ended Touch Switch: CAT5 cable terminated via TS-C1 with RJ45	Audio: Open ended Touch Switch: CAT5 cable terminated via TS-C1 with RJ45	Audio: Open ended Touch Switch: CAT5 cable terminated via TS-C1 with RJ45
Dimensions	Above Table Deployed: 15mm (0.59") Diameter: 63mm (2.5") Below Table: 112mm (4.41") Diameter: 56.5mm (2.22")	Above Table Deployed: 15mm (0.59") Diameter: 63mm (2.5") Below Table: 112mm (4.41") Diameter: 56.5mm (2.22")	Above Table Deployed: 15mm (0.59") Diameter: 63mm (2.5") Below Table: 112mm (4.41") Diameter: 56.5mm (2.22")



TS 003

The TS 003 is a flush mount Halo ring and switch combination which has been designed for use with all Clockaudio microphones requiring a remote switch facility.

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 RGB LED colour.

- Designed for remote switching
- Clear polycarbonate ring integrated with RGB LED and Touch Switch
- 12v DC operation
- Current consumption 70mA
- Supplied with TS-C1 controller to interface with DSP or CDT-100

Model:	TS 003
--------	--------

Type	Ring integrated with RGB LED & Touch Sensitive Switch
LED Colour	Red, Green, Blue
Operating Voltage	12v DC (Regulated)
Current Consumption	70mA
Termination	6 core ribbon cable + connector
Dimensions	Above Table: 2.5mm (0.1") Diameter: 20mm (0.79") Below Table: 42.5mm (1.67") Diameter: 15mm (0.59")

TS 005

halo ring & touch pad switch

The TS 005 capacitive touch switch is specially designed for use with Clockaudio's through table microphones. With no moving parts, low-profile mounting and encapsulated electronics, TS 005 provides multiple colours, clear and precise visual operational status as well as protection from office contaminants affecting its operation. Comes with modular under desk mount TS-C1 controller for easy install.

- Self-calibrating, low profile mount capacitive touch switch facilitating click / pop free switching of a microphone from DSP.
- LED provides multi-colour combination for clear precise visual status of microphone.
- Suitable for fitting Clockaudio's C 003E-RF, C 004E-RF, C 011E-RF, C 012E-RF microphones, SM 10 and SM 20-RF stands.
- Terminated with RJ 45 connector and supplied with a touch switch controller (TS-C1) allows connection via CAT 5E patch cable back to CDT-100 or directly to DSP.
- Programmable via DSP to operate in PTT, PTM or latching modes.
- 12V DC operation using regulated power supply or CDT-100
- RS-IN on TS-C1 provides connectivity to an external switch.
- Maximum current consumption 140mA.

Models:

- TS005** Black
- TS005W** White

Model:	TS 005
--------	--------

Type	RGB Halo Ring & Touch Sensitive Switch
LED Colour	Red, Green, Blue
Operating Voltage	12v DC (Regulated)
Current Consumption	140mA
Termination	RJ 45



SWP2

Through table microphone mount made from solid brass with electronic touch switch and RGB LED to give clear precise visual status of operation. Touch switch has no moving parts and the electronic circuitry is encapsulated to prevent liquids or other contaminants affecting its operation. Used in conjunction with DSP units and other electronic mute switching boxes to facilitate soft PTT, PTM and Latching Switching. Requiring 12vDC power.

- Easy to install.
- Low profile at surface level.
- Cutouts to support ARMF and CRMF.
- Switch plate integrated with the low profile TS 006 capacitive touch switch.
- TS 006 is self-calibrating and provides a RGB LED that can produce multi-colour combination for clear precise visual status of microphone or other devices.
- Terminated with RJ45 connector and supplied with a touch switch controller (TS-C1) allows connection via CAT 5E patch cable back to CDT-100 or directly to DSP.
- Finish: Black Nextel® or Satin Nickel.
- Also available in Nextel Suede Coating finishes (Custom Orders Only)



Models:

SWP2 Black

SWP2N Nickel

Model:	SWP2
Power Requirements	12vDC @ 70mA
Termination	RJ45 Plug Pins 1-7 used
Supplied Accessories	TS-C1
Finish	Black Nextel or Satin Nickel
Weight	160g
Dimensions	Length: 92mm (3.6") Width: 64mm (2.5") Height: 2.60mm (0.1")



ARM-C

digital four channel motor control box

Digital four channel motor Control Box for use with the ARM series of motorised through desk Boundary microphones.

- Power LED indicator Blue.
- Ports: 2 x RJ12 for DSP and Linking to another ARM-C control box.
- Logic input port will simultaneously raise / lower all ARM microphones.
- Powered by ARM-PSU 4, an external 12VDC switched mode Power Supply.
- DC connections to the box are via a 2 terminal removable Phoenix connector.
- All microphones and controller boxes are preset / calibrated at the factory.
- Capable of operating up to 4 ARM microphones.

Models:

ARM-C



Model:	ARM-C
Weight	0.2Kgs
Finish	Black
Dimension	Length: 85mm Width: 198mm Height: 42mm

ARM-PSU 4

power supply

ARM-PSU 4 is a switched mode power supply capable of delivering regulated 12VDC @ 5 Amps. For use with 4 X ARM-C Control Box. May be used on mains supplies from 100~230vAC. Mains cable is detachable IEC design.

- For use with the ARM-C Control Box
- Power supply is capable of delivering regulated 12VDC @ 5 Amps.
- For use with up to 4 X ARM C Control Boxes.
- Can be used on mains supplies from 100~230vAC.
- Mains cable is detachable IEC design.

Models:

ARM-PSU 4



Model:	ARM-PSU 4
Weight	0.32Kgs
Finish	Black
Dimension	Length: 120mm Width: 58mm Height: 35mm

CAP 002

line level pre-amplifier

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

- 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

Model:	CAP 002
Frequency response	80 - 20KHz
Impedance	220Ω
Power requirements	12 / 24v DC
Finish	Satin Black

PPA

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

- 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 mini XLR connector
- Female Tini Q miniature cord plug also supplied



Models:

- PPA
- PPA-RF

PPM

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

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



Models:

- PPM

CPPW 01

Phantom Power Adaptor for permanent installation.

- 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

PP 2

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

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



Models:

- PP2

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 laptops or 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: Single element microphone

- Single element motorised ceiling microphone with cardioid polar pattern for boardrooms, conferencing, courtrooms and other venues)
- 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 horizontally or vertically depending on space and fixing requirement
- Microphone cable length 2.5 Metres
- Microphone is fitted with 350 degree rotation knuckle joint. High performance condenser microphone with Cardioid Polar Pattern is fitted as standard
- 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 Retractas connected to the Master
- IR Remote control supplied with the Main 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
- Wall or ceiling mounted IR Sensor with integral LED (Main Retracta)
- A switch mode power supply (Main unit only)
- A ceiling mounting kit is available
- Logic Hi / Lo for DSP mute detection port
- The ceiling bezel is fitted with an internal Hall effect detection switch
- Two rotary 0-9 digital decimal switches accessed from the outside of the housing are used to set the Main (00) and 01-99 determines secondary designation.
- Power Requirements 18VDC

The CCRM is also available with a 9.14 Metres drop (30' Feet) Model Number **CCRM-4030**

Models: With prewired single element C3 microphone

- **CCRM 4000-M-RF** Main Unit with single microphone, in Black
- **CCRM 4000W-M-RF** Main Unit with single microphone, in White
- **CCRM 4000-SL-RF** Secondary Unit with single microphone, in Black
- **CCRM 4000W-SL-RF** Secondary Unit with single microphone, in White

Accessories

- CCRM 4000-R** Remote control for CCRM 4000
- CCRM 4000-IR** Infrared sensor for CCRM 4000
- CCRM 4000-MB** Metal wall mounting brackets for CCRM 4000
- PSU-018** 18V DC, 2A PSU for CCRM 4000



IR Remote Control



IR Sensor

CCRM 4000/C-303-RF

Features: Tri element microphone

- Tri-element motorised ceiling microphone with three cardioid polar patterns covering 360° for boardrooms, conferencing, courtrooms and other venues
- Designed to capture 360 degree pickup
- RJ-45 Socket complete with RJ-45 to Phoenix connectors for fast connection to mixer or DSP. A 9-48 volt phantom power supply is required.
- Patent pending 1109720.1
- Control Ports allow DSP connection and link/daisy chain expansion to other CCRM 4000/C303 Retracta units.
- Up to 99 secondary units can be daisy chained to the Main Retracta
- Logic Hi / Lo for DSP mute detection port
- Main and secondary units are identical in construction. Two rotary 0-9 digital decimal encoders are used to set the Master (00) and 01-99 determines slave designation.
- IR remote control or DSP
- IR Remote control supplied with the Main Retracta to allow easy set-up and programming of the cable height
- The remote control can be used to activate the Retracta in the absence of a DSP
- Wall or ceiling mounted IR Sensor with integral LED supplied with Main Retracta

The CCRM is also available with a tri element C303 microphone with a 9.14 Meters drop (30 feet).
Model Number CCRM-4030

Models: With prewired tri element C303 microphone

- **CCRM 4000-M-C303-RF** Main Unit with single microphone Black
- **CCRM 4000W-M-C303W-RF** Main Unit with single microphone White
- **CCRM 4000-SL-C303-RF** Secondary Unit with single microphone Black
- **CCRM 4000W-SL-C303W-RF** Secondary Unit with single microphone White



C 3S

suspended cardioid microphone

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

- 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
- Mounting plate option CP 73/73W

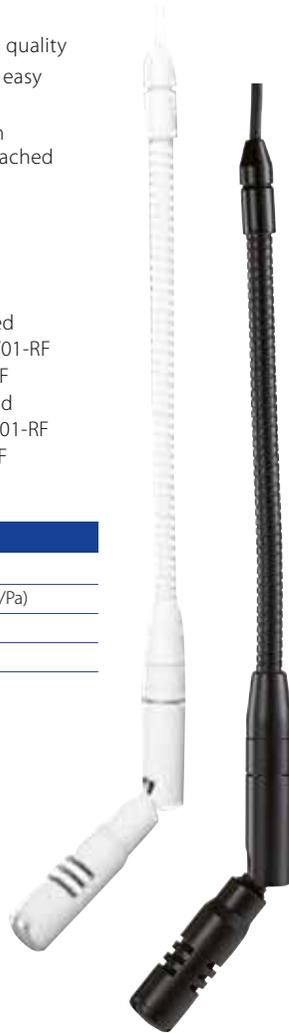
Models:

- C 3S** Black supplied open-ended
- C 3S-RF** Black supplied with CPPW01-RF
- C 3SE-RF** Black supplied with PPA-RF
- C 3SW** Ivory supplied open-ended
- C 3SW-RF** Ivory supplied with CPPW01-RF
- C 3SEW-RF** Ivory supplied with PPA-RF

Model:	C 3S Series
Frequency Response	50Hz ~ 18KHz
Sensitivity	-37dB ±3dB @ 1KHz (0dB=1v/Pa)
Impedance	200Ω
S/N ratio	69dB(A)
Power Requirements	9 ~ 48v Phantom Power



- Includes W 2 windshield



C 8S

suspended hypercardioid mini shotgun microphone

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

- 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
- Mounting plate option CP 73/73W

Models:

- C 8S** Black supplied open-ended
- C 8S-RF** Black supplied with CPPW01-RF
- C 8SE-RF** Black supplied with PPA-RF
- C 8SW** Ivory supplied open-ended
- C 8SW-RF** Ivory supplied with CPPW01-RF
- C 8SEW-RF** Ivory supplied with PPA-RF

Model:	C 8S Series
Frequency Response	50Hz ~ 18KHz
Sensitivity	-37dB ±3dB @ 1KHz (0dB=1v/Pa)
Impedance	200Ω
S/N ratio	69dB(A)
Power Requirements	9 ~ 48v Phantom Power



- Includes W 8 windshield



C3S and C8S Available Options:

XLR-PPA

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



CPPW01-RF

Phantom Power Adaptor for permanent installation.



Open ended (C 3S and C 8S)

Terminated with an open ended 7.5m cable. Requires PPA

Ceiling plates

C 3S-RF and C 8S-RF come supplied with C 3S-RF-CP and C 8S-RF-CP ceiling plate

Models:

- C 3S-RF-CP** Black
- C 3SW-RF-CP** White
- C 8S-RF-CP** Black
- C 8SW-RF-CP** White



CP73

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** White

C 303-RF

tri-element suspended microphone array

Tri-element array hanging microphone designed for unobtrusive all round high quality pickup necessary in places such as boardrooms, conferencing, court rooms and other venues.

- Response optimised for consistent sound quality
- Made in high quality brass and finished in satin black or white with 7.5m of cable attached
- RJ-45 termination, phantom power adaptor required



Models:

- 🌐 **C 303-RF** Black
- 🌐 **C 303W-RF** White

Model:	C 303-RF
Type	Condenser
Polar Pattern	Cardioid
Frequency Response	50Hz ~ 18KHz
Sensitivity	-37dB ±3dB @ 1KHz (0dB=1v/Pa)
Impedance	200Ω
S/N ratio	69dB(A)
Power Requirements	9 ~ 48v Phantom Power
Termination	RJ-45 to Phoenix

C 007E Series

'Button' boundary microphone

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.

- 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**

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 required 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

SEC 07

Designed for security and surveillance applications. Offering easy mounting to walls or ceilings the SEC 07 has the appearance of an ordinary fire detector. Electronics housed within the SEC 07 offer screw terminals, eliminating the need for connectors.

- 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 07
Frequency response	50Hz ~ 12KHz
Impedance	75Ω
Sensitivity	-42.5dB +/- 3dB @ 1 KHz (0dB = 1 V/Pa)
Current Consumption	40mA
Dimensions	Height: 45 mm Diameter: 100 mm Weight: 126g

TIM-1000

The Tracking Intelligent Microphone (TIM) breaks the mould for ceiling microphones. Designed for use in AV conference and huddle room applications. Low profile Ceiling Microphone with tracking ability and Adaptive Proximity Tracking Technology (APT). TIM tracks participants and follows them anywhere in the room while the APT constantly adjusts their levels. Other features include noise suppression, 3-band EQ, intuitive GUI, and an RGB ring for visual room status. Powered over ethernet, the device utilizes API control via UDP commands and comes with separate control and audio paths. Single audio channel output to Dante & AES67 networks. Designed for use in AV conference and huddle room applications. The microphone is constructed with UL 2043 rated plastics and Aluminium shell.

Tracks meeting participants within a room.

APT technology for best possible sound output.

Eliminates unwanted steady state noise e.g. air conditioning, projectors.

Built-in equalizer.

Supports DANTE and AES67.

Intuitive GUI through standard Web browser.

Powered over Ethernet (PoE+).

Separate control and data paths for added security.

API commands via UDP.

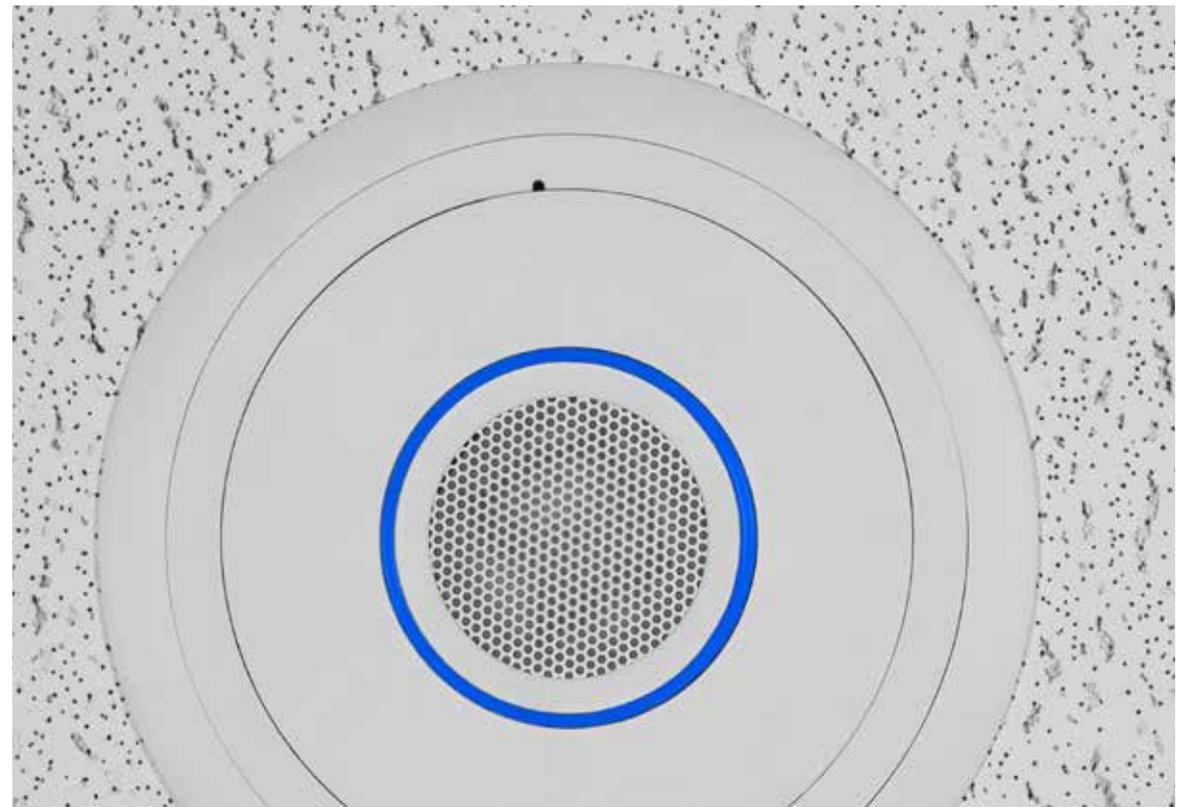
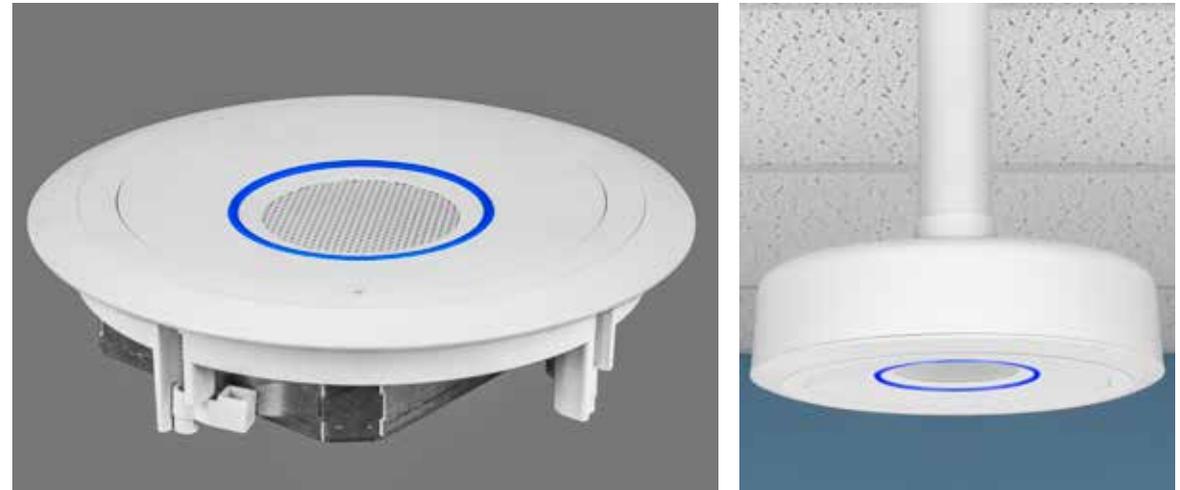
Easy setup and install.

Finish: White

Models:

-  **TIM-1000-CM** Ceiling Mount version
-  **TIM-1000-PM** Pole Mount version

Model:	TIM-1000-CM
Type	Condenser microphone array
Operating Temperature	0 to 40 deg C
Storage Temperature	minus 20 to 60 deg C
Power Requirements	8W (42~57vDC, POE+, IEEE 802.3at)
Termination	RJ 45
Wiring Connections	shielded CAT 5e or better
Supplied Accessories	Suspension kit
Finish	White
Weight	1.35Kg (3lbs)
Dimensions	Diameter: 270mm (10.63") Height: 75mm (2.95")



C 303-D

tri-element suspended microphone array

The C303-D extends the use and allows the tri-element array to be available via Dante and AES67 enabled interfaces. Supporting POE, the C303-D is also capable of driving a programmable RGB LED in the ceiling rose.

Supporting PoE, Dante & AES67, the C303-D Tri element array hanging microphone is designed for unobtrusive all round high quality pickup necessary in places such as boardrooms, conferencing, court rooms and other venues

- Supports Dante and AES67 Network out for easy connection to a compatible DSP
- POE powered
- Contains 3 high sensitivity cardioid capsules.
- Designed to capture 360 degree pickup.
- Includes a ceiling enclosure & Ceiling rose with RGB LED ring indicator
- Supplied with 2.5 Metre microphone cable.
- Easy installation
- Finished in Satin Black or Gloss white
- Uses same microphone as C303-RF

Models:

- **C 303-D** Black
- **C 303W-D** White

Model:	C 303-RF
Type	Condenser
Polar Pattern	Cardioid
Frequency Response	50Hz ~ 18KHz
Sensitivity	-37dB ±3dB @ 1KHz (0dB=1v/Pa)
Impedance	200Ω
S/N ratio	69dB(A)
Power Requirements	POE
Termination	RJ-45



CDT 100 MK2

Dante transporter

The Clockaudio Dante Transporter is an advanced professional Dante communication product which combines audio and control transport using network based Dante protocol. By taking advantage of the Dante technology and based on the high performance and pre-configurable hardware platform, this product transfers audio and control signals via widely used Ethernet and is able to guarantee perfect sound quality.

This product has a variety of uses including but not limited to boardrooms, conference rooms, video conference rooms and any place where multiple table microphones and control devices are connected back to the AV equipment cabinet.

- Easy to install with under table mounting
- Audio and control signals transported over Dante
- 4 audio inputs, multiple inputs may be daisy chained (maximum of 6 units on a single CAT-5)
- Provides Phantom Power for each mic input
- 4 control inputs compatible with all Clockaudio devices including:
 - direct connection to TS-005 switch and LED, TS003, Retracta CRM202S-RF, CS-S Series, SM80S, S80S
 - direct connection to ARM-C controller
- Open API for interfacing with Control Systems
- Compatible with any Dante capable audio DSP used in combination with a Crestron or AMX Controller*
- Easy use with mono or stereo inputs
- Dual mono or stereo outputs
- Power supply for the CDT-100 is sold separately

Model:	CDT 100
Input type	Balanced and RF filtered
Gain	0dB
Input impedance	>1.8K ohms
Phantom Power	+48V, software selectable
EIN	-115dBu
System THD+N	<0.01% at any gain, input signal 3dB below maximum
Physical level	Standard Ethernet
Connector	Single RJ-45
Cable Quality	CAT5
Transmission speed	100 Mbps

 = RF-Immunity Version



Models:

CDT 100-UDP Mk2
For Crestron/AMX logic control users only

CDT 100-ConMon Mk2
For Symetrix Logic control users only

*The CDT100-UDP requires a Crestron or AMX control system for logic and Phantom Power activation.

Dante compatible Symetrix DSP requires CDT100-ConMon for logic control and Phantom Power activation unless used in combination with a Crestron or AMX control system

CUI-2

The Clockaudio's USB Interface (CUI-2) enables virtually any of the Clockaudio's microphones to be used as a solution to meet the needs of a remote worker. Providing input for up to two microphones, excellent built-in pre-amp, RGB LED Switch buttons and together with a host of setup features, it is well positioned to deliver the highest level of audio.

CUI-2 is ideally suited for any application where the user can only connect a mic via a USB interface e.g. a laptop, desk computer, tablet. Whether you are a day-trader, yoga instructor, podcaster, gamer, or a business professional trying to conduct business, the CUI-2 enables provision of proper audio quality when working remotely.

- USB Stereo Microphone Preamp Interface
- USB Bus Powered, 24-bit/48kHz, Plug-and-Play driverless with PC, MAC & others
- Easy to install and mounts under desk or table with two screws
- Low noise design, optimised for Clockaudio microphones
- 10-50dB Gain Control
- 48V Phantom Power
- Touch switch port for use with Clockaudio capacitive touch switches
- LED brightness control
- RGB colour selection for Mute and Unmute
- Latching Mute and Push to Mute Modes
- VU Metering for microphone Gain setup via TS buttons
- Demo Mode plays audio Test Tone to USB input and RGB colour show
- Compact aluminium enclosure with flange mounts
- Tamper resistant front cover included
- Optional 12V external supply



Model:	CUI-2
Audio Specifications	
Input type	Balanced and RF filtered
Gain	Variable, 10-50dB
Input Impedance	2.5K ohms
Phantom Power	48V, always on
System THD+N	<0.01% at any gain, input signal 3dB below maximum
Frequency Response	20Hz - 20kHz, +/- 1dB @ 40dB Gain
General Specifications	
TS Control Device Input	RJ45, interfaces with Clockaudio TS-C1 and Clockaudio Touch Switches
Power Consumption (USB type B)	2W
Max Product Dimensions	129mm (5.07") x 85mm (3.35") x 37mm (1.44")
Unit Weight	227g (0.5 lbs)
Packaged Weight	363g (0.8 lbs)

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.

- 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	-37dB ±3dB at 1KHz (0dB=1v/Pa)
Impedance	200Ω
Power Requirements	9 ~ 48v Phantom Power
Switchable Bass Filter & -10dB Switchable Pad	✓
S/N Ratio	69dB(A)
Termination	Male 3 pin XLR

C 650E

cardioid condenser handheld microphone

Professional condenser handheld microphone designed for vocal and speech applications.

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



Models:

C 650E



- Includes SA 5 clip

Model: C 650E

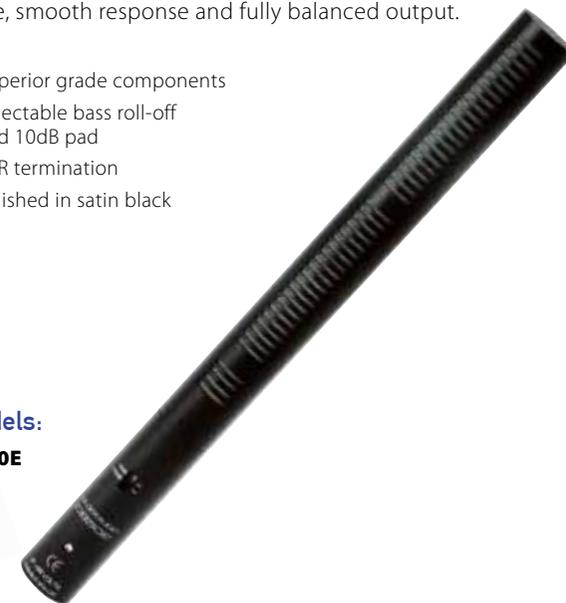
Frequency Response	50Hz ~ 20KHz
Sensitivity	-48dB ±3dB @ 1KHz (0dB=1v/Pa)
Impedance	200Ω
Power Requirements	9 ~ 48v Phantom Power
Switchable Bass Filter & -10dB switchable Pad	✓
S/N Ratio	70dB(A)
Termination	Male 3 pin XLR

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.

- 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	70dB(A)
Termination	Male 3 pin XLR

D 700

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.

- Rugged die-cast metal construction
- Cardioid polar pattern
- Wide, smooth response
- Balanced output
- Black finish



Models:

D 700



• Includes SA 5 clip

Model: D 700

Frequency Response	50Hz ~ 18KHz
Sensitivity	-73dB ±3dB @ 1KHz (0dB=1v/Pa)
Impedance	300Ω balanced
Termination	Male 3 pin XLR

D 700S

dynamic supercardioid microphone

Optimised for speech and musical instruments.

- 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 SA 5 clip

Model: D 700S

Frequency Response	50Hz ~ 18KHz
Sensitivity	-73dB +/- 3dB @ 1KHz (0dB = 1V/Pa)
Impedance	300Ω
Termination	Male 3 pin XLR

D 525E

dynamic supercardioid ENG microphone

Designed for electronic news gathering and video production.

- 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 a 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.

- 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 a clip

Model: D 550E

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

CAK 1

Phantom Power Adaptor with knuckle joint and mini XLR Female connector. Short microphone holder designed for fast connection of condenser microphones requiring phantom power adaptor.

Constructed from high quality brass a knuckle joint allowing horizontal rotation and vertical adjustment.

A Mini XLR connector is fitted at the top of the joint to allow connecting our Clockaudio modular capsules.

- Constructed from high quality brass.
- A knuckle joint allows horizontal rotation and vertical adjustment.
- A Mini XLR connector is fitted at the top of the joint to allow fixing of Microphones with same connector.
- A Phantom Power Adaptor with balanced output is fitted for electret condenser microphones.
- The Phantom Power Adaptor is fully protected against RF interference from GSM devices and is terminated with a 3 Pin male XLR.
- Impedance 200 Ohms
- Finish: Satin Black
- Also available in Nextel Suede Coating finishes (Custom Orders Only)

Models:

- **CAK 1-RF**



CA 700/CA 900

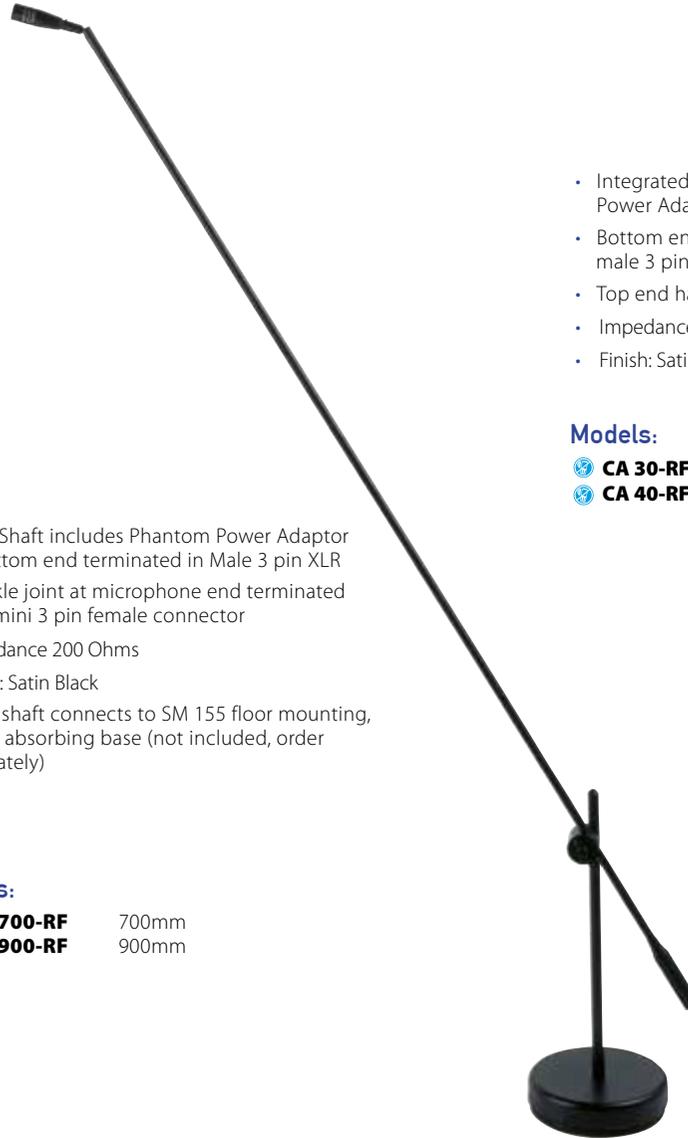
floor standing long shafts

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.

- Long Shaft includes Phantom Power Adaptor at bottom end terminated in Male 3 pin XLR
- Knuckle joint at microphone end terminated with mini 3 pin female connector
- Impedance 200 Ohms
- Finish: Satin Black
- Short shaft connects to SM 155 floor mounting, shock absorbing base (not included, order separately)

Models:

- **CA 700-RF** 700mm
- **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.

- Integrated Phantom Power Adaptor
- Bottom end has male 3 pin XLR
- Top end has a mini 3 pin XLR
- Impedance 200 Ohms
- Finish: Satin Black

Models:

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



S 750

Table microphone base fitted with knuckle and mini XLR 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



SM 110

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

- 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 5

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

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



SA 3

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

- 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*)



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



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** 3 pin XLR
- SM 10x5** 5 pin XLR



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 20-RF

A low profile, through-table shock mount fitted with RF-immunity PPA with 3 pin male mini XLR input connector.

- M20 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.

- 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
- SM 75-10** 10mm screw fitting

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

SM 80

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

- 3 pin & 5 pin XLR connector versions available
- Finished in satin nickel or black nextel
- RF option also available (3 pin male mini XLR)



Base Models:

- SM 80**
- SM 80S**
- SM 80-RF**
- SM 80S-RF**



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

Model:	SM 80 Series
Height Above Surface	2mm
Diameter	58mm
Body Diameter	50mm
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.

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



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

SM 93 & SM 95

Low profile, recessed, shock absorbing microphone base.

- 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 & S 157

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

- 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 mini XLR in, 5 pin XLR out with integrated PPA
-  **S 155** 5 pin XLR in, 5 pin XLR out (for use with Halo microphones)
-  **S 157** 5 pin XLR in, 7 pin XLR out (for remote switching)



Model: S 133 / S 135 / S 140 / S 155 / S 157

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

S 120

Table microphone base fitted with M10x screw thread mounting hole.

- '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.

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



Models:

- S 120X** 3 pin XLR
- S 120XS Latch** 3 pin XLR, latching switch
- S 120XS PTT** 3 pin XLR, PTT switch
- S 120X5** 5 pin XLR
- S 120X5 Latch** 5 pin XLR, latching switch
- S 120X5 PTT** 5 pin XLR, PTT switch

All models also available with a 2 meter cable option

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

CW-8000

wireless microphone system

- 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



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	100-240VAC
Dimensions	Width 212mm (8.3") Height 44mm (1.7") Depth 213.9mm (8.42")

Model:	CW 8000
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

CW-7000

wireless microphone system

- 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	Width 212.3mm (8.36") Height 38.3mm (1.51") Depth 144mm (5.7")

Model:	CW 7000
FM Carrier	UHF PPL
Frequency Range	502-960MHz according to local regulations
RF Output	10mW/50mW Switchable
Stability	\pm 10KHz
Frequency Deviation	\pm 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	\pm 10KHz
Frequency Deviation	\pm 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

Wireless Accessories



• **AA 8000** Antenna Distribution Amplifier



• **CW 7000C** Interchangeable Condenser Microphone Head



• **UDA 8000** Directional Antenna



• **USP 8000** Antenna Splitter



- **UOA 8000**
Omni Directional Antenna
provides consistent reception across 470-960 MHz

- **AB 9000** Antenna Booster

- **AEP 9000** Antenna Extension Panel



- **RRM9000/RCP9000** Rack mount for CW7000 with half rack blanking plate
- **RM10** Rack mount for CW8000



Model:	AA 8000
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

Model:	CW 7000C
Type	Condenser (Back Electret)
Polar Diagram	Cardioid
Frequency Response	60Hz ~ 18KHz
Impedance	400Ω
Sensitivity	-50dB (0dB=1v/Pa)

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

Model:	UDA 8000
Frequency Band	470 ~ 960MHz
Effective working angle	100°
Antenna Gain	10dBi
Booster Gain	3dB /10dB selectable
Power Supply	12v DC 50mA

Model:	UOA 8000
Frequency Band	470 ~ 960MHz
Polar Pattern	Omni-directional

Model:	USP 8000
Frequency Band	470 ~ 960MHz
RF Carrier Frequency range	10-1000 MHz
VSWR	1.2 (Voltage Wave Standing Ratio)
Impedance	50 Ω
Isolation	20dB
Insertion Loss	2dB

One BNC In and two BNC out connectors

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.

- 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	-20°C ~ +70°C
Storage Temperature	-40°C ~ +70°C
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	mini XLR Female 4 pin connector

CL 6

Lavalier cardioid condenser microphone

Miniature high performance, cardioid lavalier condenser microphone designed for a wide range of "hands free" Broadcasting and Pro Audio applications. Also useable for sound reinforcement on string instruments. Wide range smooth response. Useable with most power modules and wireless transmitters. Finished in black with 1,5 meters (59,6") of cable attached, matching windshield and tie clip included.

- Lavalier back electret condenser Microphone.
- Terminating with a 4pin mini XLR connector.
- Supplied with tie clip and foam windshield.
- Cardioid polar pattern.

Models:
CL 6



Model:	CL 6
Type	Condenser (Back Electret)
Polar Pattern	Cardioid
Frequency Response	50Hz ~ 16KHz
Sensitivity	-44dB ± 3dB @ 1 KHz (0dB = 1 v/Pa)
Impedance	1K Ohms
Power Requirements	5v Bias Voltage
Termination	Female 4 pin Mini XLR connector.
Supplied Accessories	Tie clip and foam windshield.

CMH 2000

micro lightweight headworn boom microphone

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.

- 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	Mini XLR Female 4 pin connector

HW 1600

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.

- Plastic injected headband, gooseneck and capsule head for protection against corrosion
- Flexible boom arm for optimum positioning of microphone
- Highly flexible cable remains supple under long exposure of perspiration and/or cosmetics



Models:

HW 1600



- Includes W 2 windshield

Model:	HW 1600
Microphone	Condenser
Polar Pattern	Super cardioid
Frequency Response	100Hz ~ 15KHz
Sensitivity	-40db ±3dB @ 1KHz (0dB=1v/Pa)
Impedance	1KΩ
Power Requirements	1.5 ~ 9v (Standard operating voltage 1.5v)
Termination	Mini XLR 4 pin connector

HW 1200

lightweight headworn boom microphone

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



- Includes W 12 windshield

Models:

HW 1200



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	Mini XLR Female 4 pin connector

H 500

monitor headphones

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

- 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 \pm 3dB @1mw
Frequency	15Hz ~ 22KHz
Max Input Power	500mw
Impedance	24 Ω
TDH	<0.3%
Cable	Plug-in single cable approx 3m
Connector	Gold-plated mini stereo jack
Stereo Adaptor	Gold-plated mini stereo jack to 1/4" 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.

- 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
- Internal batteries charger supplied
- 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.

- 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

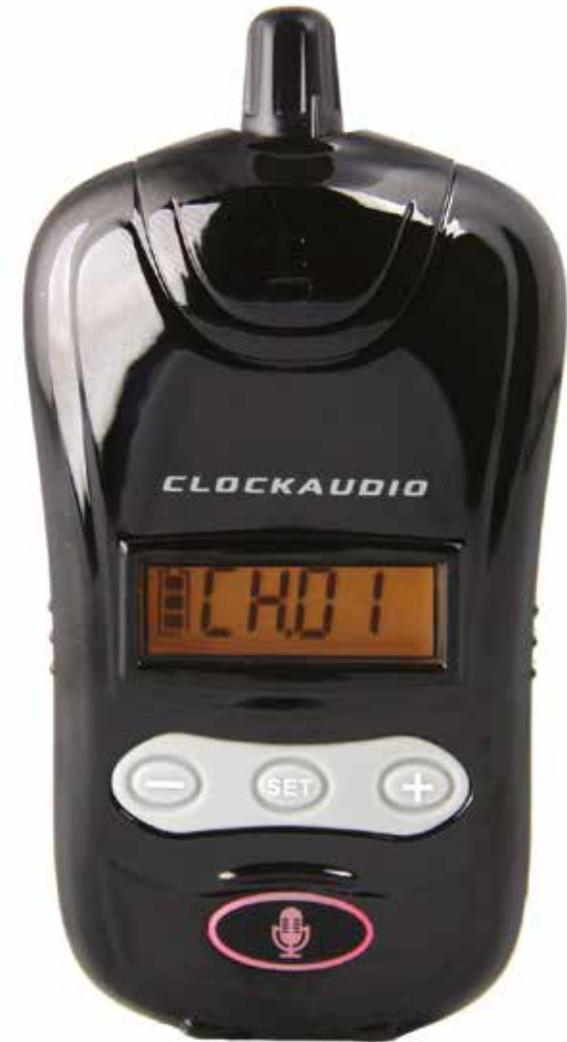


Model:	HS 1000D	HS 1000E
Microphone	Dynamic	Condenser (back electret)
Polar Pattern	Noise cancelling	Noise cancelling
Frequency Range	150Hz ~ 10KHz	100Hz ~ 10KHz
Impedance	300Ω	1.6KΩ
Powering	1.5 ~ 9v DC through series resistor	
Cable Length	2m	2m
Weight	0.5kg	0.5kg

Guided Tour System

A licence-free (UK only) 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.

- 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 and 30 units
- Accessories available - lanyard and disposable ear pads



• **GT 400T** - Belt Pack Transmitter

• **GT 400R** - Receiver

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



• **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



• **DC 402** - 2 unit desktop charger

Model:	GT 420T	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 420T** - Hand Held Transmitter



• **GT 520T** - Transmitter





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.

- 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	2.4K Ω differential	
Output Impedance	Balanced:	50 Ω
	Pre-Amp Out:	560 Ω
Max Input Level	Mic Level:	-23dBv
	Line Level:	+16dBv
Max Output Level	+19dBv	
Nominal Output Level at 0dBv on Meter	Pre-Amp Out:	-10dBv
	Balanced:	-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	

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.



CLF 100 Flush Mount Loudspeaker

Visitor loudspeaker 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.

Visitor loudspeaker unit CLF 100 is a part of the security system allowing speech through security windows and screens. The CLF 100 Visitors unit is constructed from steel and is part of a full duplex two-way communication system with the CSU 100 Staff unit. The CLF 100 is a flush mount loudspeaker that can be recessed into a wall or counter top. Elliptical paper cone loudspeaker.



For ease of fitting, the visitor loudspeaker and microphone units use the same steel housing which can be flush mounted recessed into a wall or counter top or surface mounted on the counter top.

CMF 100 Flush Mount Condenser Microphone

Visitor microphone fitted 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.

Visitor Flush mount Electret condenser microphone unit CMF 100 is a part of the security system allowing speech through security windows and screens. The CMF 100 Visitors unit is constructed from steel and is part of a full duplex two-way communication system with the CSU 100 Staff unit. The CMF 100 is a flush mount microphone that can be recessed into a wall or counter top.

CLS 100 Surface Loudspeaker

Visitor loudspeaker unit CLS 100 is a surface mount loudspeaker that can be fixed on a counter top, part of the security system allowing speech through security windows and screens. The CLS 100 Visitors unit is constructed from steel and is part of a full duplex two-way communication system with the CSU 100 Staff unit.

Both above must be used in conjunction with the amplifier unit CA 100, and visitor microphone CMF/L 100 and CSU 100 Staff control unit.



CMS 100 Surface Condenser Microphone

Visitor surface mount Back Electret condenser microphone unit CML 100 is a part of the security system allowing speech through security windows and screens. The CMS 100 Visitors surface mount unit is constructed from steel and is part of a full duplex two-way communication system with the CSU 100 Staff unit.

Both above must be used in conjunction with the amplifier unit CA 100, and visitor loudspeaker CLF/S 100 and CSU 100 Staff control unit.

Model:	CLF 100	CLS 100
Frequency Response	180Hz~16KHz	180Hz~16KHz
Impedance	4 Ohms	4 Ohms
Maximum SPL	85dB at 1 KHz 1% THD	85dB at 1 KHz 1% THD
Power Requirements	5 Watts	5 Watts
Finish	Matte Black	Matte Black
Dimensions	Height Above Surface: 2mm (0.1") Width: 65mm (2.6") Length: 120mm (4.8") Height Below Surface: 45mm (1.8")	Height: 75mm (3") Width: 60mm (2.4") Length: 98mm (3.9")

Model:	CMF 100	CML 100
Polar Pattern	Cardioid	Cardioid
Frequency Response	50Hz ~ 18KHz	50Hz ~ 18KHz
Sensitivity	-47dB ± 3dB @ 1 KHz (0dB = 1 v/Pa)	-47dB ± 3dB @ 1 KHz (0dB = 1 v/Pa)
Impedance	1.8K Ohms	1.8K Ohms
Maximum SPL	125dB at 1 KHz 1% THD	125dB at 1 KHz 1% THD
Power Requirements	1.5 ~ 9v Phantom Power	1.5 ~ 9v Phantom Power
Finish	Matte Black	Matte Black
Dimensions	Height Above Surface: 2mm (0.1") Width: 65mm (2.6") Length: 120mm (4.8") Height Below Surface: 45mm (1.8")	Height: 75mm (3") Width: 60mm (2.4") Length: 98mm (3.9")

CSU 100 Staff Control Unit

Staff control unit for the Communicator 2 Way security system allowing speech through security windows and screens. The CSU 100 Staff control is constructed from steel and has full Duplex two way communication with the visitor unit. The Staff unit has a combined loudspeaker with a goose neck microphone offering high quality speech reproduction. A staff mute switch also ensures that visitors are unable to hear the operator in confidential conversations.



Must be used in conjunction with the amplifier unit CA 100, visitor loudspeaker unit CLF / CLS 100 and visitor microphone CMF / CMS 100.

Model:	CSU 100
Polar Pattern	Cardioid
Frequency Response	50Hz ~ 18KHz
Sensitivity	-47dB ± 3dB @ 1 KHz (0dB = 1 v/Pa)
Impedance	1.8K Ohms
Maximum SPL	125dB at 1 KHz 1% THD
Power Requirements	1.5 ~ 9V Phantom Power
Finish	Matte Black
Dimensions	Height: 75mm (3") Width: 60mm (2.4") Length: 98mm (3.9")

CA 100 Audio and Induction Amplifier

2 Channel Audio and Induction Loop Amplifier is the control centre of the Communicator and provides full open duplex communication. For use in areas that requires consistently safe communication between secure places.

- 2 channel audio and induction loop amplifier for the Communicator security system.
- Contains press button controls for Staff / customer loudspeaker audio output.
- Adjustments for Staff / customer microphone settings.
- The amplifier has feed available for the connection of a magnetic loop inductance unit.
- Power is via 110~230vAC – 12vDC adaptor.
- Front panel contains led status bar.
- Connections to / from the unit is via screw plug Pheonix connector.
- Finish: Matte Grey.



CILA 100

The CILA100 Induction loop coil will allow users with hearing aids having a T facility to hear clearly information being relayed by the CA100 security system.

- Plugs into the CA100 security system amplifier.
- Induction range up to 1 Metre square area.
- The loop antenna can be fixed discretely underneath a table and comes supplied with 5.5 metre long cable.



CPS 100 Power Supply

12vDC Power supply for the Communicator Security system.

- Plug in 12v Power Adaptor for CA 100.
- Detachable mains cable.
- DC cord length 1.7 Metres terminating in a 2.1mm DC socket.
- Adaptor is switched mode and can be connected to mains voltages 50~60Hz - 100~230vAC.
- Green power LED illuminates to indicate Power ON.
- Finish: Black.

Model:	CPS 100
Weight	0.30Kgs
Finish	Black
Dimensions	Height: 35mm Width: 50mm Length: 94mm



CILP 10

A free standing portable induction loop system used to provide audible communication for people wearing a hearing aid with the "T" facility.

- Made from robust ABS plastic material.
- Maximum 1.2m coverage.
- Quick and simple to set up.
- Rechargeable batteries included.
- Battery charger is supplied that can also give continuous use
- LED indicators provide visual confirmation of battery status and speech operation.



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 (C006 Boundary Layer recommended)
Power Adaptor Connection (12V)	2.1mm jack plug socket
Dimensions	250mm x 275mm x 110mm
Weight	0.5Kg

Part Number Index

Part Number:	Description:	Page No:	Part Number:	Description:	Page No	Part Number:	Description:	Page No:
AH 3000	Active Protection Stereo Headphones	51	CA 30	Semi-Rigid Shafts	40	D 700	Cardioid Dynamic Handheld Mic	39
ARM 100-RF	Retracta Motorised Through Table Omni-directional Mic	20	CA 40	Semi-Rigid Shafts	40	D 525E	Dynamic Supercardioid ENG Mic	39
ARM 102-RF	Retracta Motorised Through Table Cardioid Condenser Mic	14	CA 100	Communicator Audio and Induction Amplifier	57	D 550E	Dynamic Omni-directional ENG Mic	39
ARM 202-RF	Retracta Motorised Through Table Cardioid Condenser Mic	15	CA 700	Floor-standing Long Shafts	40	D 700S	Dynamic Supercardioid Handheld Mic with Switch	39
ARMF 100-RF/102-RF	Straight Cut Motorised Mics	14	CA 900	Floor-standing Long Shafts	40	DMB 1/DMB 2	Desk Paging Mics	13
C 002E-RF	Low Profile Boundary Microphone	23	CAK 1	Phantom Power Adaptors with Knuckle Joint	40	GT Series	Guided Tour System	52
C 003E Series	Omni-directional Thru-table Boundary Mics	21	CAP 002	Line Level Pre-amplifier	28	H 500	Monitor Headphones	50
C 004E Series	Cardioid Thru-table Boundary Mics	17	CCRM 4000	Ceiling Retracta Mic	30	HS 1000	Communications Headset and microphone	51
C 005	Tabletop Boundary Mic	23	CDT100	Dante Transporter	36	HW 1200	Lightweight Headworn Boom Mic	49
C 006E	Low Profile Boundary Mic	19	CILA 100	Communicator Induction Loop Coil	57	HW 1600	Rugged Lightweight Headworn Boom Mic	49
C 007E Series	'Button' Ceiling Mics	33	CILP 10	Communicator Induction Loop System	57	MR 88	Digital Automatic Mic Mixer	54
C 008E	Tabletop Boundary Mics	19	CL 4	Lavalier Omni-directional Mic	48	PP 2	2 Channel 48v DC Phantom Power Supply	29
C 009E-RF	Large Surface Boundary Mic	23	CL 6	Lavalier Cardioid Mic	48	PPA	Phantom Power Adaptors	29
C 011E-RF	Omni-directional Thru-table Boundary Layer Mics	21	CLF/S 100	Communicator loudspeaker	56	PPM	Beltpack 1.5v Battery Supply	29
C 012E-RF	Cardioid Thru-table Boundary Layer Mics	17	CMF/S 100	Communicator microphone	56	S 80S	Low Profile, Thru-table Mic Base with Switch	42
C 015E-RF	Omni-directional Tabletop Boundary Mic	22	CMH 2000	Micro Lightweight Headworn Boom Mics	49	S 120X Series	Table Microphone Bases with XLR	43
C 016E-RF	Cardioid Tabletop Boundary Mic	19	CP 73	Ceiling Mounting Plate	32	S 750	Table Mic Base with Knuckle Joint	41
C 3 Series	Cardioid Condenser Gooseneck Mics	08	CPPW 01	Phantom Power Adaptors	29	S 133, S 135 & S 140	RF-Immune Mic Desk Bases	43
C 3 HALO Series	Cardioid Condenser Goosenecks incl. Halo	09	CA 700	Floor-standing Long Shafts	40	S 210	Mic Boom Floor Stand	41
C 3 Slimline Series	Cardioid Condenser Slimline Gooseneck Mics	08	CPS 100	Communicator System Power Supply	57	SA 3	Mic Holder & Stand Adaptor	41
C 3S Series	Suspended Cardioid Mics	32	CRM 102-RF	Retracta through-table Half-cardioid Mic	17	SA 5	Mic Holder & Stand Adaptor	41
C30H	Through chair/panel boundary Mic	22	CRM 202-RF	Dual element boundary layer through-table Mic	16	SEC 07	Security and Surveillance Mic	33
C 303-RF	Suspended Tri-element Mics	33	CRM S200 Series	Switched boundary layer through-table Mic	25	SM 10	Low Profile, Thru-table Shock Mount	42
C 420E	Twin Mount Mic	11	CRM 203RF	Dual element boundary layer through-table Mic	16	SM 110	Shock-absorbing Table Mic Stand	41
C 430E/C 440E	Twin Mount Mic	11	CRMF 100-RF/102-RF	Straight Cut Retracta Mics	16	SM 20-RF	Low Profile, Thru-table Shock Mount	42
C 600	Handheld Condenser Mic	38	CS-RF Series	Boundary Layer Professional Mics	18	SM 70	Thru-table Shock Mount	42
C 650E	Cardioid Condenser Handheld Mic	38	CS S-RF Series	Boundary Layer Professional Switched Mics	24	SM 75	Shock-absorbing Mic Base	42
C 800 Series	Gooseneck (Shotgun) Mics	10	CSU 100	Communicator Staff Unit	57	SM 80	Thru-table Shock Mount with flip cover	42
C 801 Series	Knuckle Joint (hotgun) Mics	10	CTH 100	Throat Microphone	48	SM 93	Low Profile, Shock Absorbing Mic Base	43
C 815E-RF	Gooseneck (Shotgun) Mic	10	CUI-2	USB interface	37	SM 95	Low Profile, Shock Absorbing Mic Base	43
C 816E-RF	Semi-rigid Gooseneck (Mini Shotgun) Mic	10	CW 7000	Wireless System	45	SM 155	Floor Mounting, Shock Absorbing Mic Base	43
C 850E	Shotgun Supercardioid Mic	38	CW 8000	Wireless System	44	SWP 2	Thru-table Touch Switch	27
C 8S Series	Suspended Hypercardioid Mini Shotgun Mics	32	D 33/D34	Dynamic Gooseneck Mics	13	TIM 1000	Ceiling mounted Tracking Intelligent Microphone	30
C 1000	Combination Series Mics	12	D 43/D44	Dynamic Gooseneck Mics	13	TS 003	Flush Mount Bi-Colour Halo Ring and Switch	26
C 1001E Series	Cardioid Condenser Mics – Knuckle Joint	09	D 5	Dynamic Microphone	13	TS 005	RGB colour Halo Ring & Touch Pad Switch	26



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 E: info@clockaudio.co.uk W: www.clockaudio.com

Clockaudio Ltd (corporate headquarters)

Unit C Wellington Gate Silverthorne Way Waterlooville Hampshire PO7 7XY UK

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

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

