MXCIC

Microflex Complete Interpreter Console (MX-CIC)

Table of Contents

MXCIC
Microflex Complete Interpreter Console (MXCIC)

Safety Information

IMPORTANT SAFETY INSTRUCTIONS

1. READ these instructions.
2. KEEP these instructions.
3. HEED all warnings.
4. FOLLOW all instructions.
5. DO NOT use this apparatus near water.
6. CLEAN ONLY with dry cloth.
7. DO NOT block any ventilation openings. Allow sufficient distances for adequate ventilation and install in accordance with the manufacturer's instructions.
8. DO NOT install near any heat sources such as open flames, radiators, heat registers, stoves, or other apparatus (including amplifiers) that produce heat. Do not place any open flame sources on the product.
9. DO NOT defeat the safety purpose of the polarized or grounding type plug. A polarized plug has two blades with one wider than the other. A grounding type plug has two blades and a third grounding prong. The wider blade or the third prong are provided for your safety. If the provided plug does not fit into your outlet, consult an electrician for replacement of the obsolete outlet.
10. PROTECT the power cord from being walked on or pinched, particularly at plugs, convenience receptacles, and the point where they exit from the apparatus.
11. ONLY USE attachments/accessories specified by the manufacturer.
12. USE only with a cart, stand, tripod, bracket, or table specified by the manufacturer, or sold with the apparatus. When a cart is used, use caution when moving the cart/apparatus combination to avoid injury from tip-over.

13. UNPLUG this apparatus during lightning storms or when unused for long periods of time.
14. REFER all servicing to qualified service personnel. Servicing is required when the apparatus has been damaged in any way, such as power supply cord or plug is damaged, liquid has been spilled or objects have fallen into the apparatus, the apparatus has been exposed to rain or moisture, does not operate normally, or has been dropped.
15. DO NOT expose the apparatus to dripping and splashing. DO NOT put objects filled with liquids, such as vases, on the apparatus.
16. The MAINS plug or an appliance coupler shall remain readily operable.
17. The airborne noise of the Apparatus does not exceed 70dB (A).
18. Apparatus with CLASS I construction shall be connected to a MAINS socket outlet with a protective earthing connection.
19. To reduce the risk of fire or electric shock, do not expose this apparatus to rain or moisture.
20. Do not attempt to modify this product. Doing so could result in personal injury and/or product failure.
21. Operate this product within its specified operating temperature range.

⚠	This symbol indicates that dangerous voltage constituting a risk of electric shock is present within this unit.
⚠	This symbol indicates that there are important operating and maintenance instructions in the literature accompanying this unit.

WARNING: Voltages in this equipment are hazardous to life. No user-serviceable parts inside. Refer all servicing to qualified service personnel. The safety certifications do not apply when the operating voltage is changed from the factory setting.

SAFETY PRECAUTIONS

The possible results of incorrect use are marked by one of the two symbols—"WARNING" and "CAUTION"—depending on the imminence of the danger and the severity of the damage.

⚠	WARNING: Ignoring these warnings may cause severe injury or death as a result of incorrect operation.
⚠	CAUTION: Ignoring these cautions may cause moderate injury or property damage as a result of incorrect operation.

WARNING

LISTENING TO AUDIO AT EXCESSIVE VOLUMES CAN CAUSE PERMANENT HEARING DAMAGE. USE AS LOW A VOLUME AS POSSIBLE. Over exposure to excessive sound levels can damage your ears resulting in permanent noise-induced hearing loss (NIHL). Please use the following guidelines established by the Occupational Safety Health Administration (OSHA) on maximum time exposure to sound pressure levels before hearing damage occurs.

90 dB SPL at 8 hours	95 dB SPL at 4 hours	100 dB SPL at 2 hours	105 dB SPL at 1 hour
110 dB SPL at ½ hour	115 dB SPL at 15 minutes	120 dB SPL Avoid or damage may occur	

Note: Use this product only with an agency approved power supply which meets local regulatory requirements (e.g., UL, CSA, VDE, CCC, INMETRO).

1. 經審驗合格之射頻電信終端設備，非經許可，公司、商號或使用者均不得擅自變更頻率、加大功率或變更原設計之特性及功能。
2. 射頻電信終端設備之使用不得影響飛航安全及干擾合法通信；經發現有干擾現象時，應立即停用，並改善至無干擾時方得繼續使用。所謂合法通信，係指依電信法規定作業之無線電信。
3. 輸入、製造射頻電信終端設備之公司、商號或其使用者違反本辦法規定，擅自使用或變更無線電頻率、電功率者，除依電信法規定處罰外，國家通訊傳播委員會並得撤銷其審驗合格證明。
4. 減少電磁波影響，請妥適使用

Description

The MXCIC provides comprehensive facilities for professional interpretation in the Microflex® Complete Conference System. It is a portable, multi-channel console for simultaneous interpretation during a conference. Up to 31 interpretation channels can be used simultaneously by connecting multiple MXCIC consoles.

The console provides consistent, high-quality audio performance, irrespective of the individual interpreter's speech level. The digital design virtually eliminates background noise, distortion and crosstalk. Participants simply select the channel from their conference unit and use headphones to monitor the conference in their language.

The MXCIC connects to any unit in the DCS-LAN chain, transporting power, audio, and control data over a single Cat5e cable. Translation channels are carried alongside the floor channel and are accessible at any conference unit with a channel selector. The integrated loudspeaker allows the interpreter to listen to the floor during operation.

A large backlit display is provided for easy identification of the language used to monitor, and the outgoing languages from the interpreter. The relay level of each pre-selected language is shown, indicating if the monitored language is original from the talker, a direct interpretation, or an interpretation with two relays.
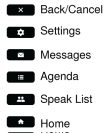
Features

- Fully digital audio transmission
- DCS-LAN connection with built-in data refresh and cable redundancy
- Up to 150 interpreter consoles per system
- Support for up to 31 interpretation channels
- Three outgoing channels
- Eight incoming language channels + floor audio
- Support for multiple interlocking modes
- Audible cues for visually-impaired interpreters
- Independent volume and tone controls
- "Slow" button
- Light indication in buttons
- Lockable gooseneck microphone input
- Dedicated "mute" button
- Integrated loudspeaker
- Multiple jacks for headphones, headsets, or external headphone interfaces
- Remotely controllable from the SW6000 Conference Management Software
- ISO 20109 compliant

Hardware

(Bottom)
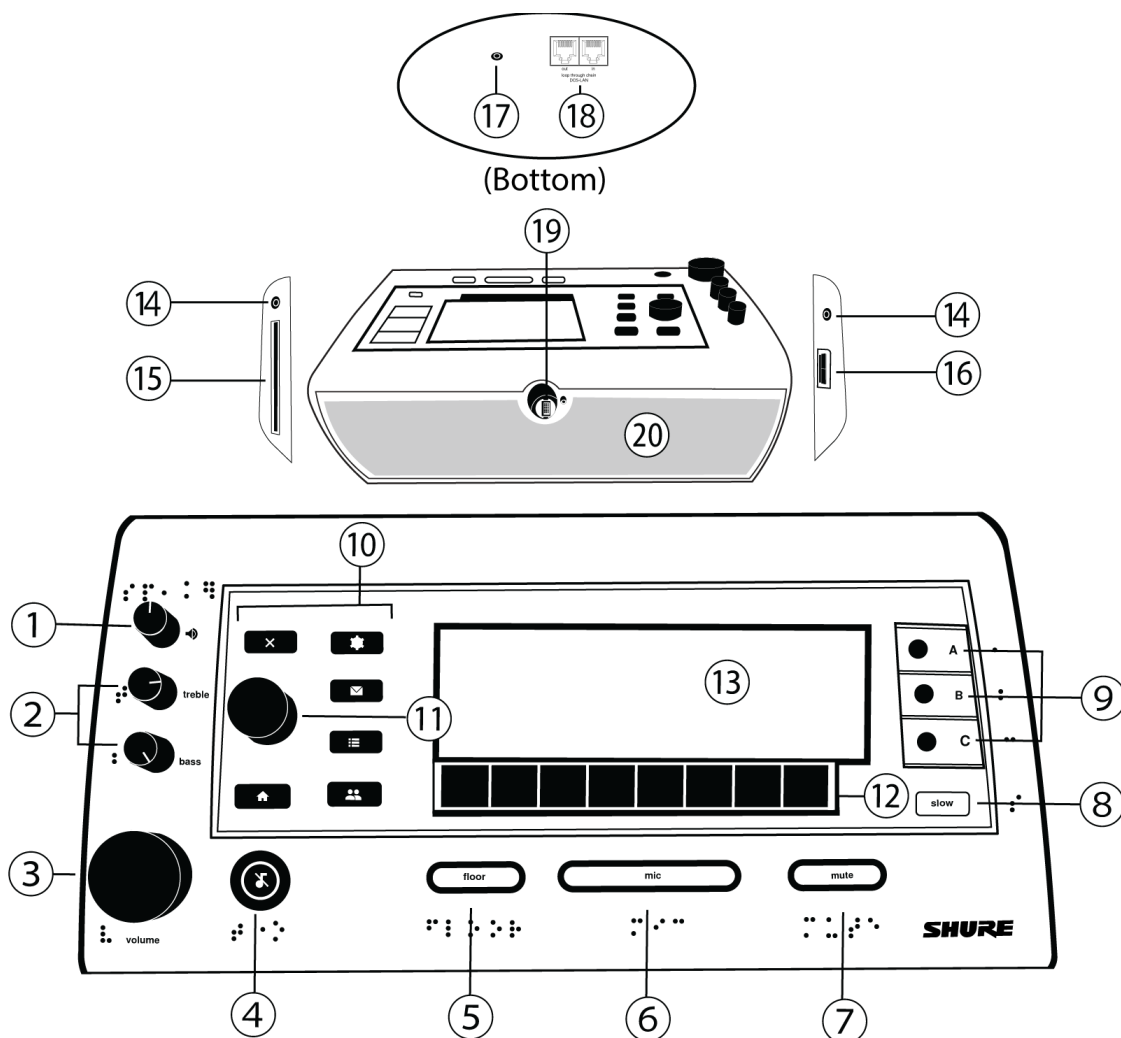
① **Loudspeaker Volume**	Controls loudspeaker output level
② **EQ**	Treble/Bass control for headphone audio
③ **Volume Knob**	Controls the headphone output level
④ **Audible Cues**	Toggles headphone audible cues for visually-impaired interpreters
⑤ **Floor Audio**	Selects floor as headphone audio source
⑥ **Microphone**	Turns microphone on/off
⑦ **Mute**	Momentary button mutes microphone audio
⑧ **Slow**	Sends a message to SW6000 that the speaker is talking too fast
⑨ **Outgoing Channel Selectors**	Determines outgoing channel for audio ◦ **A:** Primary (booth) language

	◦ **B:** Secondary interpreter language ◦ **C:** Tertiary interpreter language
⑩ **Navigation**	Back/Cancel Settings Messages Agenda Speak List Home
⑪ **Selector Knob**	Rotate to highlight menu options, push to select
⑫ **Incoming Channel Selectors**	Programmable buttons for direct selection of incoming audio (relay) channels
⑬ **Display**	Backlit LCD screen
⑭ **Headphone/Headset Jack**	TRRS jack for interpreter listening
⑮ **NFC Slot**	Slot for utilizing NFC-card features (for future use)
⑯ **USB Port**	Alternate method of loading preferences (for future use)
⑰ **Audio Jack**	TRS output to external headphone interface
⑱ **DCS-LAN Ports**	In/out ports for connecting Cat5E shielded cables
⑲ **Microphone Connector**	Lockable connector for Shure MXC gooseneck microphone
⑳ **Integrated Loudspeaker**	For audio playback (automatically mutes when any booth microphone is activated)

Connections

Microphone connector

Allows a Shure Microflex gooseneck microphone to connect to the unit.

TRS/TRRS connectors

A mini jack is located on each side of the interpreter unit for connecting a headset or headphones (connecting a headset will automatically disconnect the audio from a connected gooseneck microphone). A single mini jack is also located on the bottom of the unit, for connecting to an external headphone interface.

DCS-LAN connector

Two RJ45 sockets are located at the bottom of the console for connecting to the DIS-CCU and other units in the DCS-LAN network.

Interpreter Navigation and Menu Screens

Use the dedicated buttons to the left of the display to navigate the menus on the MXCIC. Where applicable, rotate the selector knob to highlight the desired function and press to select the highlighted option.

Back/Cancel

Returns to the previous step or menu screen.

Settings

From the Settings menu, interpreters can interact with the following options:

- **Brightness:** Adjust the backlight on the LCD display
- **Headphone Sensitivity:** Adjust the overall volume range to account for differences in individual headphones

  For safety reasons, sensitivity defaults to Low
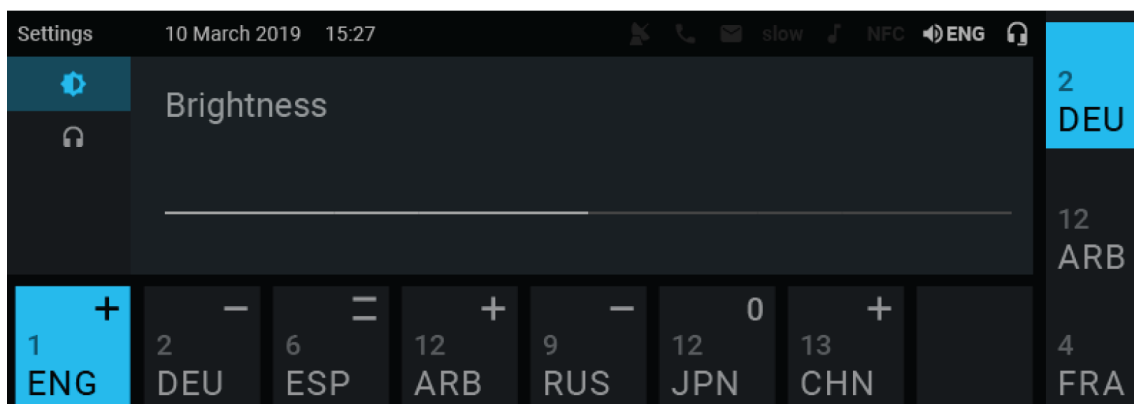
Agenda

If SW6000 is in use, the Agenda screen displays the agenda for an active meeting. Selecting an item displays full details. The agenda is created in SW6000.

Messages

This buttons are reserved for future use.

Speak List

View the Speak, Request, and Reply lists.

Note: Interpreter units are always active and do not impact the speaker list.

The Speak list settings can be modified through the DIS-CCU web interface.

Home

The Home screen contains the following interface elements:

① Basic Information	Identifies the current screen.
② Incoming Channel Selector Indicators	Displays the channel number, language, and interpretation quality (see below) of selected relay channels
③ Outgoing Channel Selector Indicators	Displays the channel number and language for outgoing audio channels
④ Loudspeaker Channel Indicator	Shows the channel the integrated loudspeaker is set to
⑤ Notifications	Indicates incoming messages, hardware connections, etc.
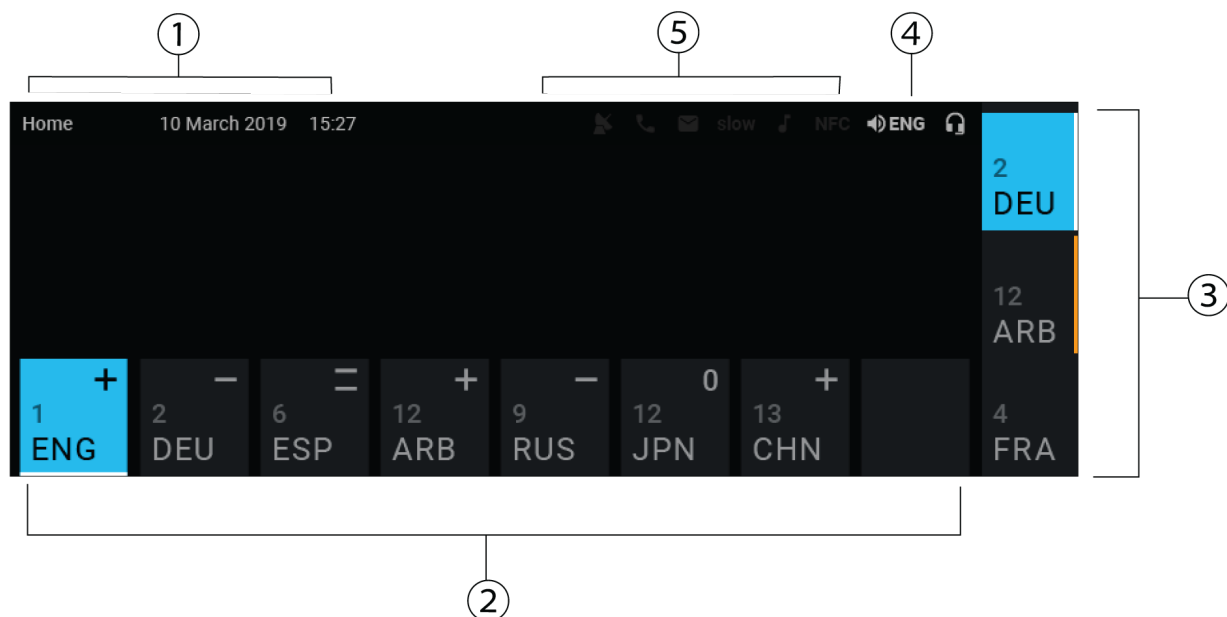
Interpretation Setup

Multi-language interpretation can be set up through the CCU web interface in standalone systems, or in SW6000. If more than 4 languages are needed, purchase and install an additional feature license before setting up interpretation.

Interpretation Channels

Assign the number of interpretation channels needed (0 to 31) at `Interpretation` > `Interpretation channels`.

Note: When 0 is selected, only Floor audio (Channel 0) is available.

The Channel display setting determines whether the channel selectors on participant conference units display channel number or language abbreviation.

Language Setup

The Language setup list shows the channels defined in the Interpreter channels settings. Assign a language from the drop-down menu for each language.

Booth Channel Setup

To simplify managing multiple languages, interpreter consoles are grouped into Booths.

By default, Booth 1 is assigned to Channel 1, Booth 2 to Channel 2 etc., but languages can be manually assigned to booths at `Interpretation` > `Booth channel setup`. Multiple booths can be assigned to the same interpretation channel.

Normal Operation

- **Incoming Channel Selector Assignment**

  To display available channel sources, press and hold an incoming channel selector button (below the screen). Rotate the selector to highlight the desired language source, and confirm the selection by releasing the selector. This workflow also applies to outgoing channels B and C, if permission is granted by the system administrator.

  Note: Interpreters can only select from languages programmed into the system from the DIS-CCU or SW6000.

- **Volume Control**

  Headphone and loudspeaker volume controls are adjusted using their respective volume knobs. Headphone sensitivity can be adjusted in the Settings menu.

  Note: A double-beep in the headphones indicates the volume has exceeded safe levels for over a minute. Reduce headphone volume to safe listening levels to dismiss this audible warning.

Selection of Incoming Languages

When interpreting, the interpreter will listen to either the floor audio, or to one of the other interpreted language channels. The Floor button will select the floor language, and the relay buttons select the predetermined languages, as shown on the display. The two first characters in the display show the channel number and the following three characters show the corresponding language in short (see language list). When the Floor button is pressed, the Floor channel is selected and the Floor LED is lit.

When one of the relay channels is selected, the Floor LED goes out, the relay button indicator is lit, and the incoming audio from the selected channel replaces the floor audio.

Only the number of channels set at the Channel Set-up menu at the DIS-CCU can be selected and shown.

A complete list of supported languages is available at the end of this manual.

Showing Quality of Incoming Language

To the right of the relay language display, the quality of the source interpretation is indicated:

- **O :** Floor audio (no interpretation)
- **+ :** Direct interpretation of floor audio
- **- :** Single relay interpretation
- **= :** Two or more relays

Actual quality of interpretation channels is displayed at all times.

An **S** (Self) is shown as the quality indication when an incoming channel is set to the same language as an active outgoing channel on the unit.

Selection of Outgoing Channels

The A, B and C buttons select the outgoing channel. Pressing a button overrides the previously-selected outgoing channel. The A channel is configured in the system settings as the primary language for that interpretation booth; B and C channels can be selected as secondary interpretation languages.

The highlight and icon on the display screen next to each button shows the status of the respective interpretation channel.

- Yellow indicates that the corresponding outgoing channel is occupied.
- Red highlight indicates that the microphone in the interpreter console is active on the selected channel.
- Blue indicates that the channel is selected and there is no interpretation activity on the channel.

Note: If the status is changed temporarily, such as the microphone on an active channel being muted, the icon will reflect the temporary state while the highlight color indicates the normal behavior.

Language Interpretation

Up to 31 channels are available for simultaneous interpretation of the meeting. The interpretation unit connects to the DCS-LAN network from the CCU, transmitting audio to independent language channels. Participants listen to their language on headphones connected to their respective conference unit. See the MXCIC User Guide for more information.

Four languages are provided, and support for 8, 16, or 31 are available with additional licenses.
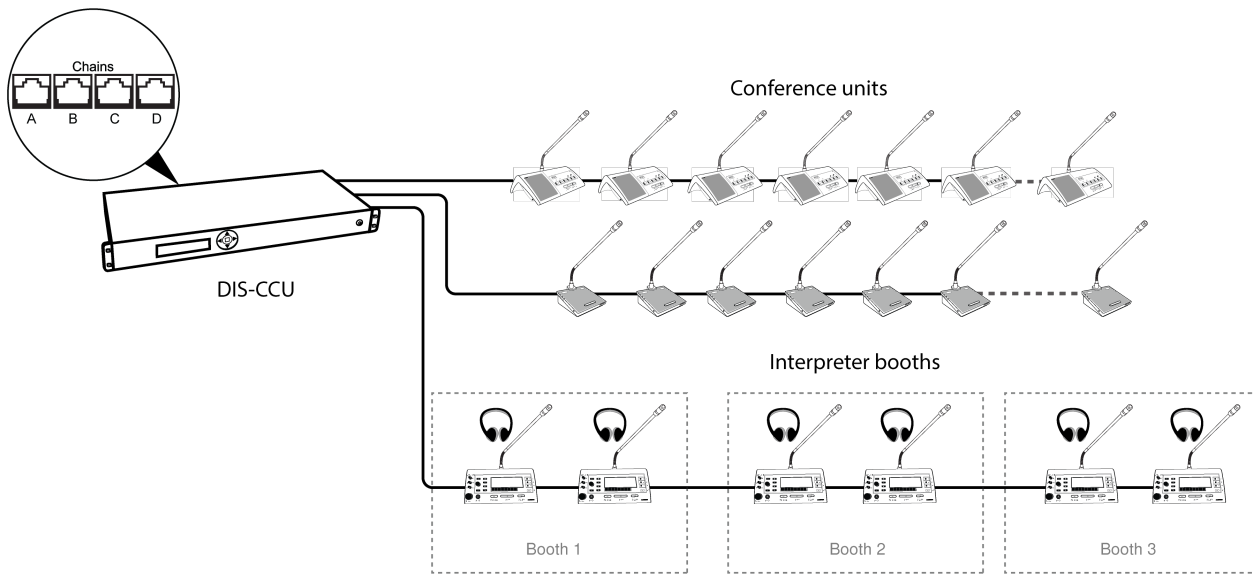
Wireless Language Distribution

Provide additional monitoring access by connecting a wireless language distribution system to the one of the CCU audio outputs. Use the browser interface to route the desired interpretation channels or a subset of microphones to that group output.

The DIR Digital Infrared Language System transmits this audio signal to a number of portable listening devices.
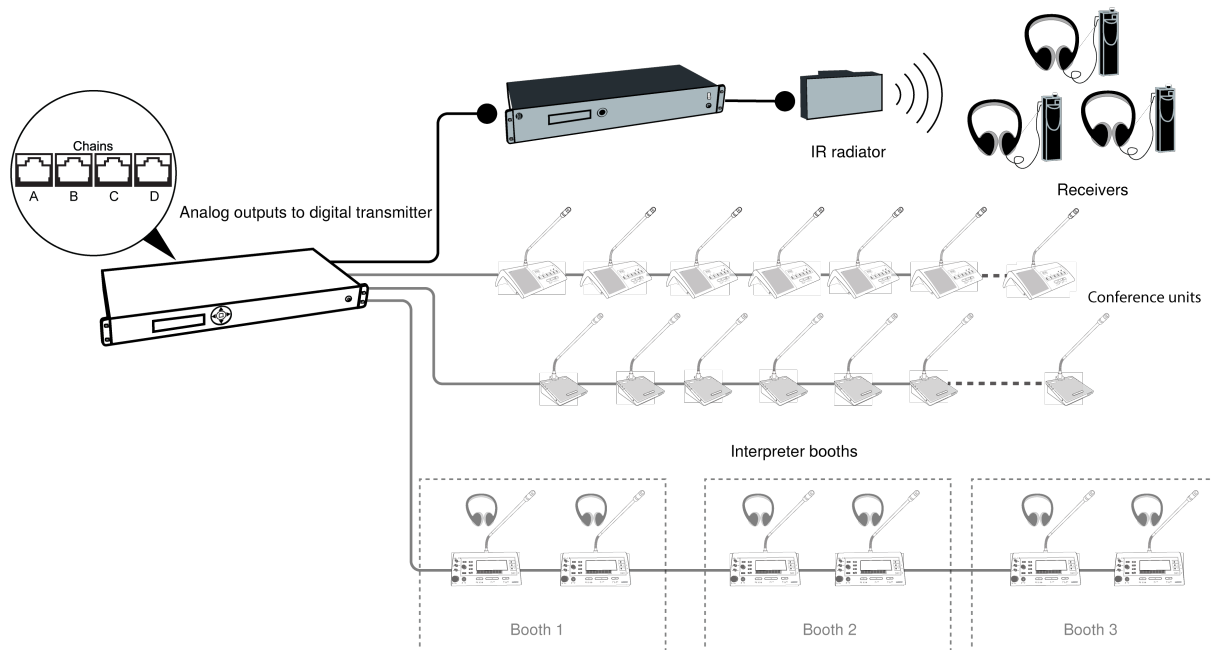
Wireless Language Distribution

Tech Menu

The unit settings in the Tech Menu can be accessed by pressing the second incoming channel selector and the B outgoing channel selector at the same time.

This menu should only be accessed by a technician or administrator, and access can be blocked from the DIS-CCU if desired.

The Unit menu is accessible from this screen.

- **Booth Number:** Determines which booth the console is assigned to
- **Desk Number:** Determines which desk the console is assigned to
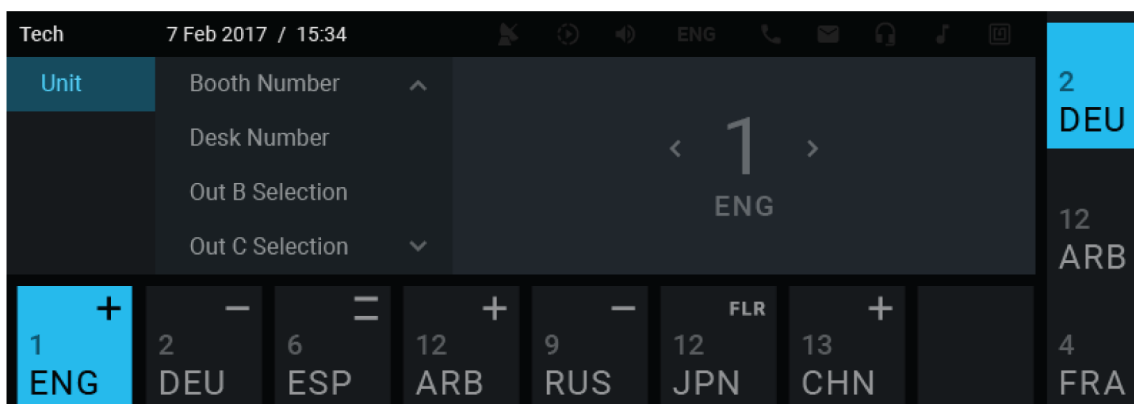- **Out B/C Language:** Option to make the following selections:
  - Not allowed
  - Select from one
  - Select from all

    If Select from one is chosen, that language has to be selected first for the outgoing channel

- **Floor Toggle:** Floor button can be set to toggle between floor audio and last selected relay channel
- **Out A/B/C Switch:** Choose if interpreters can switch between outgoing channels while the microphone is active
- **Unit Stats:** Displays the error log and gives option to reset
- **Unit Info:** Displays version, serial number and IP address

Error Indication

Communication errors between the MXCIC and DIS-CCU are indicated in the MXCIC. The first error threshold is reached when audio data from the DIS-CCU contains too many errors for the sound to be reproduced correctly, which is indicated by a black matrix in the normal operation display, and by the communication display when the set is uninitialised.

The second threshold is reached when the frame error rate reaches a predefined upper value. When this happens, the unit will enter the communication status display regardless of the state the console was in before errors occurred.

The error status is checked every 5 seconds. If no errors have occurred since the last check, the MXCIC enters the operation mode it was in before errors were detected.

Power and Configuration Requirements

Connect the IN socket on the MXCIC to the OUT port on the previous unit or DIS-CCU using Cat5e FTP or STP cables, and the OUT port on MXCIC to the IN on the next unit in the network.

For cable length and power requirements, please refer to the MXC Power Calculator, available at https://dcslan.shure.com.

Specifications

Audio Output Type
3.5mm female socket (x2, dual mono, TRRS) 6.35mm female socket (x1, stereo, TRS)

Dimensions
198 x 324 x 96 mm (7.8 x 12.8 x 3.8 in.) H x W x D

Weight
2250 g (79.4 oz.)

Screen Type
Color TFT Display

Screen Size
160 mm (6.3 in.)

Display Resolution
800 x 240 (134 PPI)

Power Consumption

Typical	5.5 W
Maximum	7.0W

Number of Incoming Channels
Up to 32 (31 + Floor)

Number of Outgoing Channels
3 (A/B)

Maximum Units Per Booth
32

Maximum Number of Booths
150

Maximum Number of Units (total)
128

Audio Input

Nominal Input Level
−60 dBV

Maximum Audio Input Level

Microphone	−1.5 dBV at 1% THD
Headset	−5.5 dBV at 1% THD

Audio Frequency Response
20 Hz - 16 kHz (+0.5/-10 dB)

THD+N

Microphone Input	0.04%
Headset Input	0.07%

Dynamic Range

Microphone Input , Unweighted	110 dB
Microphone Input , A-Weighted	112 dB
Headset Input , Unweighted	92 dB
Headset Input , A-Weighted	94 dB

Preamplifier Equivalent Input Noise (EIN)
−115.8 dBV

Input Impedance

Microphone	26 kΩ
Headset	2.2 kΩ

Audio Output

Nominal Output Level
70 dB SPL at 0.5m

Maximum Audio Output Level

Loudspeaker Output	82 dB SPL-A at 0.5m
Headphone Output	1.7 dBV

Audio Frequency Response

Speaker Output	200 Hz - 16 kHz (+0.5/-10 dB)
Headphone Output	110 Hz - 16 kHz (+0.5/-3 dB)

THD+N

Loudspeaker Output	<1%
Headphone Output	<0.2%

Dynamic Range

Speaker Output , Unweighted	92 dB
Speaker Output , A-Weighted	MXCIC = 95 dB
Headphone Output , Unweighted	MXCIC = 91 dB
Headphone Output , A-Weighted	MXCIC = 93 dB

Load Impedance

>8 Ω

Language List

Language	ISO 639-2/B-abbreviation
Floor language	FLO
Afrikaans	AFR
Albanian	ALB
Arabic	ARA
Armenian	ARM
Azerbaijani	AZE
Basque	BAQ
Belarusian	BEL
Bengali	BEN
Bulgarian	BUL
Burmese	BUR
Cantonese	CAN
Catalan	CAT
Chinese	CHI
Corsican	COR
Croatian	SCR
Czech	CZE

Danish	DAN
Dutch	DUT
English	ENG
Estonian	EST
Finnish	FIN
French	FRE
Gallegan	GLG
Georgian	GEO
German	GER
Greek	GRE
Hausa	HAU
Hebrew	HEB
Hindi	HIN
Hungarian	HUN
Icelandic	ICE
Indonesian	IND
Irish	GLE
Italian	ITA
Japanese	JAP
Javanese	JAV
Kazakh	KAZ
Khmer	KHA
Kirghiz	KIR
Korean	KOR
Kurdish	KUR
Lao	LAO
Latvian	LAV
Lithuanian	LIT
Macedonian	MAC
Malay	MAY

Maltese	MAL
Marathi	MAR
Mongolian	MON
Nepali	NEP
Norwegian	NOR
Panjabi	PAN
Persian	PER
Polish	POL
Portuguese	POR
Raetoroman	ROH
Romanian	RUM
Russian	RUS
Serbian	SCC
Sinhalese	SIN
Slovak	SLO
Slovenian	SLV
Spanish	SPA
Swahili	SWA
Swedish	SWE
Tagalog	TGL
Tajik	TGK
Tamil	TAM
Telugu	TEL
Thai	THA
Tibetan	TIB
Turkish	TUR
Turkmen	TUK
Ukrainian	UKR
Urdu	URD
Uzbek	UZB

Vietnamese	VIE
Welsh	WEL
Yoruba	YOR
Other no 1	N 1
Other no 2	N 2
Other no 3	N 3
Other no 4	N 4
Other no 5	N 5
Other no 6	N 6
Other no 7	N 7
Other no 8	N 8
Other no 9	N 9
Other no 10	N10
Other no 11	N11
Other no 12	N12

Important Product Information

The equipment is intended to be used in professional audio applications.

Changes or modifications not expressly approved by Shure Incorporated could void your authority to operate this equipment.

Note: This device is not intended to be connected directly to a public internet network.

EMC conformance to Environment E2: Commercial and Light Industrial. Testing is based on the use of supplied and recommended cable types. The use of other than shielded (screened) cable types may degrade EMC performance.

This device complies with part 15 of the FCC Rules. Operation is subject to the following two conditions: (1) This device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.

Information to the user

This device complies with part 15 of the FCC Rules. Operation is subject to the following two conditions:

1. This device may not cause harmful interference.
2. This device must accept any interference received, including interference that may cause undesired operation.

Note: This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which

can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and the receiver.
- Connect the equipment to an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician for help.

This Class B digital apparatus complies with Canadian ICES-003. Cet appareil numérique de la classe B est conforme à la norme NMB-003 du Canada.

This device contains licence-exempt transmitter(s)/receiver(s) that comply with Innovation, Science and Economic Development Canada's licence-exempt RSS(s). Operation is subject to the following two conditions:

1. This device may not cause interference.
2. This device must accept any interference, including interference that may cause undesired operation of the device.

L'émetteur/récepteur exempt de licence contenu dans le présent appareil est conforme aux CNR d'Innovation, Sciences et Développement économique Canada applicables aux appareils radio exempts de licence. L'exploitation est autorisée aux deux conditions suivantes :

1. L'appareil ne doit pas produire de brouillage;
2. L'appareil doit accepter tout brouillage radioélectrique subi, même si le brouillage est susceptible d'en compromettre le fonctionnement.

Warning:

Operation of this device is subject to the following two conditions: (1) this device may not cause interference, and (2) this device must accept any interference, including interference that may cause undesired operation of the device.

Le présent appareil est conforme aux CNR d'Industrie Canada applicables aux appareils radio exempts de licence. L'exploitation est autorisée aux deux conditions suivantes : (1) l'appareil ne doit pas produire de brouillage, et (2) l'utilisateur de l'appareil doit accepter tout brouillage radioélectrique subi, même si le brouillage est susceptible d'en compromettre le fonctionnement.

These limits are designed to provide reasonable protection against harmful interference when the equipment is operated in residential, commercial or light industrial environments. The equipment generates, uses, and can radiate radio frequency energy and if not installed and used in accordance with the user manual it may cause harmful interference to radio communications.

Operation of this equipment in residential areas is likely to cause harmful interference in which case the user will be required to correct the interference at his or her own expense. Intentional or unintentional changes or modifications not expressly approved by the party responsible for compliance shall not be made. Any such changes or modifications could void the user's authority to operate the equipment.

If necessary, the user should consult a dealer or an experienced radio/ television technician for corrective action. The user may find the following booklet prepared by the Federal Communications Commission helpful: "How to identify and Resolve Radio-TV Interference Problems". This booklet is available from the U.S. Government Printing Office, Washington, DC 20402, Stock No. 004-000-00345-4.

Warning: This is a Class A product. In a domestic environment this product may cause radio interference in which case the user may be required to take adequate measures.

Compliance

This equipment has been tested and found to comply with the limits of the following for a Class A digital device:

- EN55103-1 (Emission)
- EN55103-2 (Immunity)
- FCC rules part 15, class A (Emission)
- ICES-003 of Industry Canada
- IEC 60065
- ISO 20109

Certifications

This product meets the Essential Requirements of all relevant European directives and is eligible for CE marking.

The CE Declaration of Conformity can be obtained from: www.shure.com/europe/compliance

Authorized European representative:
Shure Europe GmbH
Headquarters Europe, Middle East & Africa
Department: EMEA Approval
Jakob-Dieffenbacher-Str. 12
75031 Eppingen, Germany
Phone: +49-7262-92 49 0
Fax: +49-7262-92 49 11 4
Email: info@shure.de