HCS-48U9CFF Chairman Unit with Voting and Channel Selection

Features

- **Stylish and ergonomic design**
- **Hi-Fi loudspeaker**
- **Priority button**
- **Pluggable microphone**
- **5 voting keys**
- **"Closed Loop - Daisy Chain" connection topology**
- **Transmitting up to 64 CHs high quality digital audio signals on a dedicated 6-pin cable**
- **Supporting 48 kHz audio sampling rate, all 64 channels with a 30 Hz to 20 kHz frequency response**
- **Built-in channel selector consists of up/down channel select buttons**
- **Excellent immunity to RF interference from mobile phones**
- **Gain and EQ (5 band) of each microphone adjustable separately**
- **Supporting "PnP" (plug and play)**
- **Built-in multi-channel intercom facility**
- **Built-in contactless IC-Card reader**

The stylish and ergonomically designed chairman unit has all the necessary facilities to enable the user to chair a conference. It has excellent immunity to RF interference from mobile phones. Similar in appearance to HCS-48U9DFF Delegate Unit, the HCS-48U9CFF Chairman Unit includes a microphone priority button. When pressed, the priority button causes all currently active delegate microphones to be switched off temporarily or permanently, allowing the chairman to take control of the meeting. The chairman unit can also be used to start or stop voting, cancel a request-to-speak, turn off all active microphones and recall messages for display. A graphic LCD screen with permanent backlighting can display characters from complex European languages or icon-based scripts such as Chinese. Channel selection is automatically limited to the number of language channels available. The loudspeaker offers superior acoustics with minimal feedback for enhanced intelligibility.

Functions

- Compliant to IEC 60914
- "Closed Loop - Daisy Chain" connection topology for a high operational system reliability: breakdown or replacement of a congress unit and connection failure of a cable will not influence other congress units
- Based on TAIDEN originated MCA-STREAM digital audio processing and transmitting technologies
- Audio signals processed by high performance DSP: sound quality approaching CD quality
- Gain and EQ (5 band) of each microphone adjustable separately, fitting the individual orator's voice to achieve perfect speech pickup any time
- Transmitting up to 64 CHs high quality digital audio signals on a dedicated 6-pin cable (general Cat.5 cable substitutable)
- Supporting 48 kHz audio sampling rate, all 64 channels with a 30 Hz to 20 kHz frequency response
- Integrated high-pass filter (low-cut switch) to cut low frequency elements from the audio when needed
- Automatic recovery facility, supporting "PnP" (plug and play)
- Stem microphone can be unplugged during adjournment, easy to maintain
- Mini-microphone, with foam windshield
- Hi-Fi loudspeaker, minimal feedback, mutes automatically when microphone is active
- Excellent immunity to RF interference from mobile phones and comparable devices
- Microphone On/Off button, 5 voting keys
- Every delegate unit is assigned an individual ID for convenient setup and to avoid double ID forever
- Facilities in stand-alone operation:
  - Set the number of delegates permitted to speak at the same time
  - Speak mode: OPEN/OVERRIDE/VOICE/APPLY/PTT
    - "OPEN" mode, microphone On/Off button with request-to-speak registration (AUTO)
    - "OVERRIDE" mode, microphone On/Off button control with override of the active microphones (FIFO)
    - "VOICE" mode, acoustic active sensitivity and automatic switch-off time adjustable continuously, built-in "flash-on" technology, immediate microphone activation on speaking
    - "APPLY" mode, delegate applies to speak by pressing microphone On/Off button, delegate only speaks when operator or chairman approved his application
    - "PTT" mode, press microphone On/Off button to talk
  - Voting function (Yes/No/Abstain)
  - Simultaneous interpretation
- Multiform voting in combination with the corresponding software modules:
  - For/Against
  - Parliamentary: YES/NO/ABSTAIN
  - Questionnaire: 1/2/3/4/5
  - Audience response: --/-/0/+/++
  - Parliamentary (NPPV): YES/NO/ABSTAIN/NPPV

- ⏱ Appraisal:
    - ▪ Satisfied (Four keys voting:
        perfectly satisfied/satisfied/basically satisfied/unsatisfied)
            (Three keys voting:
            satisfied/basically satisfied/unsatisfied)
            (Two keys voting: satisfied/unsatisfied)
    - ▪ Qualified (four/three/two keys voting)
    - ▪ Competent (four/three/two keys voting)
- ■ Built-in contactless IC-Card reader
- ■ Key-press sign-in
- ■ Automatic video tracking implementation when cooperating with cameras & video switcher unit; preset positions on PC
- ■ Built-in multi-channel intercom facility
- ■ Activation at any time (if the amount of active microphones in the system is less than 6)
- ■ Priority button to switch off or to mute the speaking units according to preset (except VIP)
- ■ Approves/denies delegates' speaking request
- ■ Launches parliamentary voting (YES/NO/ABSTAIN) session without PC
- ■ Controls voting start, interruption, re-start and stop
- ■ Controls on-off switch for displaying voting results on delegate unit's LCD
- ■ System supports up to 100 chairman units, while only 1 chairman unit has the control facilities listed above (set by software)

Controls and Indicators

- ■ Graphic 256x32 LCD with back-lighting for displaying:
    - ⏱ Active microphone amount, request amount, delegates signed-in and voting results, etc.
    - ⏱ Messages (messages from system administrator to all or part of participants)
    - ⏱ Multilingual (simplified/traditional Chinese and English, etc.) menu
    - ⏱ Channel number and language name
- ■ Built-in channel selector with up/down channel select buttons
- ■ Uni-directional electret condenser microphone with two–color illuminated ring
- ■ Headphones volume up and down
- ■ Five voting keys with indicators
- ■ Microphone On/Off button with indicator
- ■ Priority button

Interconnections

- ■ Socket for pluggable microphone
- ■ Ø 3.5 mm stereo headphone jack
- ■ Ø 3.5 mm socket for external microphone or headset microphone
- ■ 1.5 m cable with 6P-DIN plug
- ■ 0.6 m cable with 6P-DIN socket

Technical Specifications

Electrical
Max. consumption..2.3 W
Headphone connection
Frequency response...30 Hz to 20 kHz
Earphone load impedance...>16 Ohm
Earphone output...10 mW
Recommended external microphone type (or headset microphone)
Transducer...Electret-condenser
Polar pattern...Uni-directional
Operating voltage..5 VDC
Sensitivity...-46 dBV/Pa
Frequency response...50 Hz to 20 kHz
Input impedance...2 kOhm
Directivity 0°/180°......................................> 20 dB (1 kHz)
Equivalent noise...20 dBA (SPL)
Maximum sound pressure level...................125 dB (THD<3%)
Interface data
Connector......................Ø 3.5 mm socket for external microphone
....Ø 3.5 mm stereo jack for headphone

Mechanical
Mounting..Flush-mounting
Dimensions (h x w x d) (w/o stem microphone).......38 x 318 x 80 mm
Weight (incl. stem microphone)..............................0.9 kg
Color...Black
Stem length.................................410 mm (standard version),
                                            240 mm, 330 mm, 470 mm

Ordering Information

HCS-48U9CFF...............Fully Digital Congress System Chairman Unit
(flush-mounting, 5 voting keys, contactless IC-Card reader, 64 CHs, 256x32 LCD, black)

HCS-48U9DFF Discussion Unit with Voting and Channel Selection

Features

- **Stylish and ergonomic design**
- **Hi-Fi loudspeaker**
- **Pluggable microphone**
- **5 voting keys**
- **"Closed Loop - Daisy Chain" connection topology**
- **Transmitting up to 64 CHs high quality digital audio signals on a dedicated 6-pin cable**
- **Supporting 48 kHz audio sampling rate, all 64 channels with a 30 Hz to 20 kHz frequency response**
- **Built-in channel selector consists of up/down channel select buttons**
- **Excellent immunity to RF interference from mobile phones**
- **Gain and EQ (5 band) of each microphone adjustable separately**
- **Supporting "PnP" (plug and play)**
- **Built-in multi-channel intercom facility**
- **Built-in contactless IC-Card reader**

The multi-functional delegate unit meets the demands of even the largest conferences. It provides facilities for speaking, registering a request-to-speak, registering a request-to-respond, listening, voting, selecting language channels, IC-Card reading and displaying conference and user-related information. Excellent immunity to RF interference from mobile phones. Channel selector, IC-Card reader and graphic display with backlighting. When the IC-Card approaches the card reader, the graphic LCD screen automatically displays user-related information in the language assigned to the delegate chip card. The graphic LCD is able to display characters from complex European languages or icon-based-scripts such as Chinese. Channel selection is automatically limited to the number of language channels available. The loudspeaker offers superior acoustics with minimal feedback for enhanced intelligibility.

Functions

- Compliant to IEC 60914
- "Closed Loop - Daisy Chain" connection topology for a high operational system reliability: breakdown or replacement of a congress unit and connection failure of a cable will not influence other congress units
- Based on TAIDEN originated MCA-STREAM digital audio processing and transmitting technologies
- Audio signals processed by high performance DSP: sound quality approaching CD quality
- Gain and EQ (5 band) of each microphone adjustable separately, fitting the individual orator's voice to achieve perfect speech pickup any time
- Transmitting up to 64 CHs high quality digital audio signals on a dedicated 6-pin cable (general Cat.5 cable substitutable)
- Supporting 48 kHz audio sampling rate, all 64 channels with a 30 Hz to 20 kHz frequency response
- Integrated high-pass filter (low-cut switch) to cut low frequency elements from the audio when needed
- Automatic recovery facility, supporting "PnP" (plug and play)
- Stem microphone can be unplugged during adjournment, easy to maintain
- Mini-microphone, with foam windshield
- Hi-Fi loudspeaker, minimal feedback, mutes automatically when microphone is active
- Excellent immunity to RF interference from mobile phones and comparable devices
- Microphone On/Off button, 5 voting keys
- Every delegate unit is assigned an individual ID for convenient setup and to avoid double ID forever
- Facilities in stand-alone operation:
  - ⏱ Set the number of delegates permitted to speak at the same time
  - ⏱ Speak mode: OPEN/OVERRIDE/VOICE/APPLY/PTT
    - ☞ "OPEN" mode, microphone On/Off button with request-to-speak registration (AUTO)
    - ☞ "OVERRIDE" mode, microphone On/Off button control with override of the active microphones (FIFO)
    - ☞ "VOICE" mode, acoustic active sensitivity and automatic switch-off time adjustable continuously, built-in "flash-on" technology, immediate microphone activation on speaking
    - ☞ "APPLY" mode, delegate applies to speak by pressing microphone On/Off button, delegate only speaks when operator or chairman approved his application
    - ☞ "PTT" mode, press microphone On/Off button to talk
  - ⏱ Voting function (Yes/No/Abstain)
  - ⏱ Simultaneous interpretation
- Multiform voting in combination with the corresponding software modules:
  - ⏱ For/Against
  - ⏱ Parliamentary: YES/NO/ABSTAIN
  - ⏱ Questionnaire: 1/2/3/4/5
  - ⏱ Audience response: --/-/0/+/++
  - ⏱ Parliamentary (NPPV): YES/NO/ABSTAIN/NPPV

🕐 Appraisal:
- Satisfied (Four keys voting:
  perfectly satisfied/satisfied/basically satisfied/unsatisfied)
  (Three keys voting:
  satisfied/basically satisfied/unsatisfied)
  (Two keys voting: satisfied/unsatisfied)
- Qualified (four/three/two keys voting)
- Competent (four/three/two keys voting)

■ Built-in contactless IC-Card reader
■ Key-press sign-in
■ Automatic video tracking implementation when cooperating with cameras & video switcher unit; preset positions on PC
■ Built-in multi-channel intercom facility
■ Set any delegate unit to be VIP unit
  🕐 Up to 32 units can be set as VIP in one system via application software
  🕐 VIP unit can be activated as long as the total of active microphones is not beyond 6 (incl. chairman/delegate/VIP unit)

Controls and Indicators

■ Graphic 256x32 LCD with back-lighting for displaying:
  🕐 Active microphone amount, request amount, delegates signed-in and voting results, etc.
  🕐 Messages (messages from system administrator to all or part of participants)
  🕐 Multilingual (simplified/traditional Chinese and English, etc.) menu
  🕐 Channel number and language name
■ Built-in channel selector with up/down channel select buttons
■ Uni-directional electret condenser microphone with two–color illuminated ring
■ Headphones volume up and down
■ Five voting keys with indicators
■ Microphone On/Off button with indicator

Interconnections

■ Socket for pluggable microphone
■ Ø 3.5 mm stereo headphone jack
■ Ø 3.5 mm socket for external microphone or headset microphone
■ 1.5 m cable with 6P-DIN plug
■ 0.6 m cable with 6P-DIN socket

Technical Specifications

Electrical
Max. consumption .... 2.3 W

Headphone connection
Frequency response .... 30 Hz to 20 kHz
Earphone load impedance .... >16 Ohm
Earphone output .... 10 mW

Recommended external microphone type (or headset microphone)
Transducer .... Electret-condenser
Polar pattern .... Uni-directional
Operating voltage .... 5 VDC
Sensitivity .... -46 dBV/Pa
Frequency response .... 50 Hz to 20 kHz
Input impedance .... 2 kOhm
Directivity 0°/180° .... > 20 dB (1 kHz)
Equivalent noise .... 20 dBA (SPL)
Maximum sound pressure level .... 125 dB (THD<3%)

Interface data
Connector .... Ø 3.5 mm socket for external microphone
.... Ø 3.5 mm stereo jack for headphone

Mechanical
Mounting .... Flush-mounting
Dimensions (h x w x d) (w/o stem microphone) .... 38 x 318 x 80 mm
Weight (incl. stem microphone) .... 0.9 kg
Color .... Black
Stem length .... 410 mm (standard version),
240 mm, 330 mm, 470 mm

Ordering Information

HCS-48U9DFF .... Fully Digital Congress System Delegate Unit (flush-mounting, 5 voting keys, contactless IC-Card reader, 64 CHs, 256x32 LCD, black)

HCS-48U9DFFF Discussion Unit with Voting and Channel Selection

Features

- **Stylish and ergonomic design**
- **Hi-Fi loudspeaker**
- **Pluggable microphone**
- **5 voting keys**
- **"Closed Loop - Daisy Chain" connection topology**
- **Transmitting up to 64 CHs high quality digital audio signals on a dedicated 6-pin cable**
- **Supporting 48 kHz audio sampling rate, all 64 channels with a 30 Hz to 20 kHz frequency response**
- **Built-in channel selector consists of up/down channel select buttons**
- **Excellent immunity to RF interference from mobile phones**
- **Gain and EQ (5 band) of each microphone adjustable separately**
- **Supporting "PnP" (plug and play)**
- **Built-in multi-channel intercom facility**
- **Built-in contactless IC-Card reader**
- **Built-in fingerprint identification module**

The multi-functional delegate unit meets the demands of even the largest conferences. It provides facilities for speaking, registering a request-to-speak, registering a request-to-respond, listening, voting, selecting language channels, IC-Card reading and displaying conference and user-related information. Excellent immunity to RF interference from mobile phones. Channel selector, IC-Card reader and graphic display with backlighting. When the IC-Card approaches the card reader, the graphic LCD screen automatically displays user-related information in the language assigned to the delegate chip card. The graphic LCD is able to display characters from complex European languages or icon-based-scripts such as Chinese. Channel selection is automatically limited to the number of language channels available. The loudspeaker offers superior acoustics with minimal feedback for enhanced intelligibility.

Functions

- Compliant to IEC 60914
- "Closed Loop - Daisy Chain" connection topology for a high operational system reliability: breakdown or replacement of a congress unit and connection failure of a cable will not influence other congress units
- Based on TAIDEN originated MCA-STREAM digital audio processing and transmitting technologies
- Audio signals processed by high performance DSP: sound quality approaching CD quality
- Gain and EQ (5 band) of each microphone adjustable separately, fitting the individual orator's voice to achieve perfect speech pickup any time
- Transmitting up to 64 CHs high quality digital audio signals on a dedicated 6-pin cable (general Cat.5 cable substitutable)
- Supporting 48 kHz audio sampling rate, all 64 channels with a 30 Hz to 20 kHz frequency response
- Integrated high-pass filter (low-cut switch) to cut low frequency elements from the audio when needed
- Automatic recovery facility, supporting "PnP" (plug and play)
- Stem microphone can be unplugged during adjournment, easy to maintain
- Mini-microphone, with foam windshield
- Hi-Fi loudspeaker, minimal feedback, mutes automatically when microphone is active
- Excellent immunity to RF interference from mobile phones and comparable devices
- Microphone On/Off button, 5 voting keys
- Every delegate unit is assigned an individual ID for convenient setup and to avoid double ID forever
- Facilities in stand-alone operation:
  - ⏱ Set the number of delegates permitted to speak at the same time
  - ⏱ Speak mode: OPEN/OVERRIDE/VOICE/APPLY/PTT
    - ☞ "OPEN" mode, microphone On/Off button with request-to-speak registration (AUTO)
    - ☞ "OVERRIDE" mode, microphone On/Off button control with override of the active microphones (FIFO)
    - ☞ "VOICE" mode, acoustic active sensitivity and automatic switch-off time adjustable continuously, built-in "flash-on" technology, immediate microphone activation on speaking
    - ☞ "APPLY" mode, delegate applies to speak by pressing microphone On/Off button, delegate only speaks when operator or chairman approved his application
    - ☞ "PTT" mode, press microphone On/Off button to talk
  - ⏱ Voting function (Yes/No/Abstain)
  - ⏱ Simultaneous interpretation
- Multiform voting in combination with the corresponding software modules:
  - ⏱ For/Against
  - ⏱ Parliamentary: YES/NO/ABSTAIN
  - ⏱ Questionnaire: 1/2/3/4/5
  - ⏱ Audience response: --/-/0/+/++
  - ⏱ Parliamentary (NPPV): YES/NO/ABSTAIN/NPPV

- ☺ Appraisal:
  - ▪ Satisfied (Four keys voting:
    perfectly satisfied/satisfied/basically satisfied/unsatisfied)
    (Three keys voting:
    satisfied/basically satisfied/unsatisfied)
    (Two keys voting: satisfied/unsatisfied)
  - ▪ Qualified (four/three/two keys voting)
  - ▪ Competent (four/three/two keys voting)
- ■ Built-in contactless IC-Card reader
- ■ Built-in fingerprint identification module
- ■ Key-press sign-in
- ■ Automatic video tracking implementation when cooperating with cameras & video switcher unit; preset positions on PC
- ■ Built-in multi-channel intercom facility
- ■ Set any delegate unit to be VIP unit
  - ☺ Up to 32 units can be set as VIP in one system via application software
  - ☺ VIP unit can be activated as long as the total of active microphones is not beyond 6 (incl. chairman/delegate/VIP unit)

Controls and Indicators

- ■ Graphic 256x32 LCD with back-lighting for displaying:
  - ☺ Active microphone amount, request amount, delegates signed-in and voting results, etc.
  - ☺ Messages (messages from system administrator to all or part of participants)
  - ☺ Multilingual (simplified/traditional Chinese and English, etc.) menu
  - ☺ Channel number and language name
- ■ Built-in channel selector with up/down channel select buttons
- ■ Uni-directional electret condenser microphone with two–color illuminated ring
- ■ Headphones volume up and down
- ■ Five voting keys with indicators
- ■ Microphone On/Off button with indicator

Interconnections

- ■ Socket for pluggable microphone
- ■ Ø 3.5 mm stereo headphone jack
- ■ Ø 3.5 mm socket for external microphone or headset microphone
- ■ 1.5 m cable with 6P-DIN plug
- ■ 0.6 m cable with 6P-DIN socket

Technical Specifications

Electrical

Max. consumption	2.3 W

Headphone connection

Frequency response	30 Hz to 20 kHz
Earphone load impedance	>16 Ohm
Earphone output	10 mW

Recommended external microphone type (or headset microphone)

Transducer	Electret-condenser
Polar pattern	Uni-directional
Operating voltage	5 VDC
Sensitivity	-46 dBV/Pa
Frequency response	50 Hz to 20 kHz
Input impedance	2 kOhm
Directivity 0°/180°	> 20 dB (1 kHz)
Equivalent noise	20 dBA (SPL)
Maximum sound pressure level	125 dB (THD<3%)

Interface data

Connector	Ø 3.5 mm socket for external microphone
	Ø 3.5 mm stereo jack for headphone

Mechanical

Mounting	Flush-mounting
Dimensions (h x w x d) (w/o stem microphone)	38 x 363 x 80 mm
Weight (incl. stem microphone)	1.0 kg
Color	Black
Stem length	410 mm (standard version), 240 mm, 330 mm, 470 mm

Ordering Information

HCS-48U9DFFF Fully Digital Congress System Delegate Unit (flush-mounting, 5 voting keys, contactless IC-Card reader, 64 CHs, 256x32 LCD, fingerprint identification module, black)

HCS-48U9DVP Discussion Unit with Voting and LCD Display

Features

- **Stylish and ergonomic design**
- **Hi-Fi loudspeaker**
- **Pluggable microphone**
- **5 voting keys**
- **"Closed Loop - Daisy Chain" connection topology**
- **Supporting 48 kHz audio sampling rate**
- **Excellent immunity to RF interference from mobile phones**
- **Gain and EQ (5 band) of each microphone adjustable separately**
- **Supporting "PnP" (plug and play)**
- **Built-in multi-channel intercom facility**
- **Built-in contactless IC-Card reader**

The multi-functional delegate unit meets the demands of even the largest conferences. It provides facilities for speaking, registering a request-to-speak, registering a request-to-respond, listening, voting, IC-Card reading and displaying conference and user-related information. Excellent immunity to RF interference from mobile phones. IC-Card reader and graphic display with backlighting. When the IC-Card approaches the card reader, the graphic LCD screen automatically displays user-related information in the language assigned to the delegate chip card. The graphic LCD is able to display characters from complex European languages or icon-based-scripts such as Chinese. The loudspeaker offers superior acoustics with minimal feedback for enhanced intelligibility.

Functions

- Compliant to IEC 60914
- "Closed Loop - Daisy Chain" connection topology for a high operational system reliability: breakdown or replacement of a congress unit and connection failure of a cable will not influence other congress units
- Based on TAIDEN originated MCA-STREAM digital audio processing and transmitting technologies
- Audio signals processed by high performance DSP: sound quality approaching CD quality
- Gain and EQ (5 band) of each microphone adjustable separately, fitting the individual orator's voice to achieve perfect speech pickup any time
- Supporting 48 kHz audio sampling rate
- Integrated high-pass filter (low-cut switch) to cut low frequency elements from the audio when needed
- Automatic recovery facility, supporting "PnP" (plug and play)
- Stem microphone can be unplugged during adjournment, easy to maintain
- Mini-microphone, with foam windshield
- Hi-Fi loudspeaker, minimal feedback, mutes automatically when microphone is active
- Excellent immunity to RF interference from mobile phones and comparable devices
- Microphone On/Off button, 5 voting keys
- Every delegate unit is assigned an individual ID for convenient setup and to avoid double ID forever
- Facilities in stand-alone operation:
  - Set the number of delegates permitted to speak at the same time
  - Speak mode: OPEN/OVERRIDE/VOICE/APPLY/PTT
    - "OPEN" mode, microphone On/Off button with request-to-speak registration (AUTO)
    - "OVERRIDE" mode, microphone On/Off button control with override of the active microphones (FIFO)
    - "VOICE" mode, acoustic active sensitivity and automatic switch-off time adjustable continuously, built-in "flash-on" technology, immediate microphone activation on speaking
    - "APPLY" mode, delegate applies to speak by pressing microphone On/Off button, delegate only speaks when operator or chairman approved his application
    - "PTT" mode, press microphone On/Off button to talk
  - Voting function (Yes/No/Abstain)
- Multiform voting in combination with the corresponding software modules:
  - For/Against
  - Parliamentary: YES/NO/ABSTAIN
  - Questionnaire: 1/2/3/4/5
  - Audience response: --/-/0/+/++
  - Parliamentary (NPPV): YES/NO/ABSTAIN/NPPV
  - Appraisal:
    - Satisfied (Four keys voting: perfectly satisfied/satisfied/basically satisfied/unsatisfied) (Three keys voting: satisfied/basically satisfied/unsatisfied) (Two keys voting: satisfied/unsatisfied)

- Qualified (four/three/two keys voting)
- Competent (four/three/two keys voting)

- ■ Built-in contactless IC-Card reader
- ■ Key-press sign-in
- ■ Automatic video tracking implementation when cooperating with cameras & video switcher unit; preset positions on PC
- ■ Built-in multi-channel intercom facility
- ■ Set any delegate unit to be VIP unit
  - ☉ Up to 32 units can be set as VIP in one system via application software
  - ☉ VIP unit can be activated as long as the total of active microphones is not beyond 6 (incl. chairman/delegate/VIP unit)

Controls and Indicators

- ■ Graphic 256x32 LCD with back-lighting for displaying:
  - ☉ Active microphone amount, request amount, delegates signed-in and voting results, etc.
  - ☉ Messages (messages from system administrator to all or part of participants)
  - ☉ Multilingual (simplified/traditional Chinese and English, etc.) menu
  - ☉ Channel number and language name
- ■ Uni-directional electret condenser microphone with two–color illuminated ring
- ■ Headphones volume up and down
- ■ Five voting keys with indicators
- ■ Microphone On/Off button with indicator

Interconnections

- ■ Socket for pluggable microphone
- ■ Ø 3.5 mm stereo headphone jack
- ■ Ø 3.5 mm socket for external microphone or headset microphone
- ■ 1.5 m cable with 6P-DIN plug
- ■ 0.6 m cable with 6P-DIN socket

Technical Specifications

Electrical

Max. consumption	2.3 W

Headphone connection

Frequency response	30 Hz to 20 kHz
Earphone load impedance	>16 Ohm
Earphone output	10 mW

Recommended external microphone type (or headset microphone)

Transducer	Electret-condenser
Polar pattern	Uni-directional
Operating voltage	5 VDC
Sensitivity	-46 dBV/Pa
Frequency response	50 Hz to 20 kHz
Input impedance	2 kOhm
Directivity 0°/180°	> 20 dB (1 kHz)
Equivalent noise	20 dBA (SPL)
Maximum sound pressure level	125 dB (THD<3%)

Interface data

Connector	Ø 3.5 mm socket for external microphone
	Ø 3.5 mm stereo jack for headphone

Mechanical

Mounting	Flush-mounting
Dimensions (h x w x d) (w/o stem microphone)	38 x 318 x 80 mm
Weight (incl. stem microphone)	0.9 kg
Color	Black
Stem length	410 mm (standard version), 240 mm, 330 mm, 470 mm

Ordering Information

HCS-48U9DVP — Fully Digital Congress System Delegate Unit (flush-mounting, 5 voting keys, contactless IC-Card reader, 256x32 LCD, black)

HCS-48U9DVE
Discussion Unit with Voting

Features

- **Stylish and ergonomic design**
- **Hi-Fi loudspeaker**
- **Pluggable microphone**
- **5 voting keys**
- **"Closed Loop - Daisy Chain" connection topology**
- **Transmitting up to 64 CHs high quality digital audio signals on a dedicated 6-pin cable**
- **Supporting 48 kHz audio sampling rate**
- **Built-in channel selector consists of up/down channel select buttons**
- **Excellent immunity to RF interference from mobile phones**
- **Gain and EQ (5 band) of each microphone adjustable separately**
- **Supporting "PnP" (plug and play)**
- **Built-in contactless IC-Card reader**

The multi-functional delegate unit meets the demands of even the largest conferences. It provides facilities for speaking, registering a request-to-speak, registering a request-to-respond, listening, voting and IC-Card reading. Excellent immunity to RF interference from mobile phones. IC-Card reader and graphic display with backlighting. The loudspeaker offers superior acoustics with minimal feedback for enhanced intelligibility.

Functions

- Compliant to IEC 60914
- "Closed Loop - Daisy Chain" connection topology for a high operational system reliability: breakdown or replacement of a congress unit and connection failure of a cable will not influence other congress units
- Based on TAIDEN originated MCA-STREAM digital audio processing and transmitting technologies
- Audio signals processed by high performance DSP: sound quality approaching CD quality

- Gain and EQ (5 band) of each microphone adjustable separately, fitting the individual orator's voice to achieve perfect speech pickup any time
- Supporting 48 kHz audio sampling rate
- Integrated high-pass filter (low-cut switch) to cut low frequency elements from the audio when needed
- Automatic recovery facility, supporting "PnP" (plug and play)
- Stem microphone can be unplugged during adjournment, easy to maintain
- Mini-microphone, with foam windshield
- Hi-Fi loudspeaker, minimal feedback, mutes automatically when microphone is active
- Excellent immunity to RF interference from mobile phones and comparable devices
- Microphone On/Off button, 5 voting keys
- Every delegate unit is assigned an individual ID for convenient setup and to avoid double ID forever
- Facilities in stand-alone operation:
  - Set the number of delegates permitted to speak at the same time
  - Speak mode: OPEN/OVERRIDE/VOICE/APPLY/PTT
    - "OPEN" mode, microphone On/Off button with request-to-speak registration (AUTO)
    - "OVERRIDE" mode, microphone On/Off button control with override of the active microphones (FIFO)
    - "VOICE" mode, acoustic active sensitivity and automatic switch-off time adjustable continuously, built-in "flash-on" technology, immediate microphone activation on speaking
    - "APPLY" mode, delegate applies to speak by pressing microphone On/Off button, delegate only speaks when operator or chairman approved his application
    - "PTT" mode, press microphone On/Off button to talk
  - Voting function (Yes/No/Abstain)
- Multiform voting in combination with the corresponding software modules:
  - For/Against
  - Parliamentary: YES/NO/ABSTAIN
  - Questionnaire: 1/2/3/4/5
  - Audience response: --/-/0/+/++
  - Parliamentary (NPPV): YES/NO/ABSTAIN/NPPV
  - Appraisal:
    - Satisfied (Four keys voting: perfectly satisfied/satisfied/basically satisfied/unsatisfied)
      (Three keys voting: satisfied/basically satisfied/unsatisfied)
      (Two keys voting: satisfied/unsatisfied)
    - Qualified (four/three/two keys voting)
    - Competent (four/three/two keys voting)
- Built-in contactless IC-Card reader
- Key-press sign-in
- Automatic video tracking implementation when cooperating with cameras & video switcher unit; preset positions on PC
- Set any delegate unit to be VIP unit
  - Up to 32 units can be set as VIP in one system via application software
  - VIP unit can be activated as long as the total of active microphones is not beyond 6 (incl. chairman/delegate/VIP unit)

Controls and Indicators

■ Uni-directional electret condenser microphone with two–color illuminated ring

■ Headphones volume up and down

■ Five voting keys with indicators

■ Microphone On/Off button with indicator

Interconnections

■ Socket for pluggable microphone

■ Ø 3.5 mm stereo headphone jack

■ Ø 3.5 mm socket for external microphone or headset microphone

■ 1.5 m cable with 6P-DIN plug

■ 0.6 m cable with 6P-DIN socket

Technical Specifications

Electrical
Max. consumption...1.8 W
Headphone connection
Frequency response...30 Hz to 20 kHz
Earphone load impedance...>16 Ohm
Earphone output...10 mW
Recommended external microphone type (or headset microphone)
Transducer..Electret-condenser
Polar pattern..Uni-directional
Operating voltage...5 VDC
Sensitivity...-46 dBV/Pa
Frequency response...50 Hz to 20 kHz
Input impedance...2 kOhm
Directivity 0°/180°...> 20 dB (1 kHz)
Equivalent noise...20 dBA (SPL)
Maximum sound pressure level.....................125 dB (THD<3%)
Interface data
Connector.........................Ø 3.5 mm socket for external microphone
....Ø 3.5 mm stereo jack for headphone

Mechanical
Mounting...Flush-mounting
Dimensions (h x w x d) (w/o stem microphone).....38 x 318 x 80 mm
Weight (incl. stem microphone)...............................0.9 kg
Color...Black
Stem length.................................410 mm (standard version),
240 mm, 330 mm, 470 mm

Ordering Information

HCS-48U9DVE............Fully Digital Congress System Delegate Unit (flush-mounting, 5 voting keys, contactless IC-Card reader, black)