Interpreter unit

Simultaneous interpretation function of HCS-8600 series congress unit is designed for the requirements of large scale multilingual international congresses: it can provide up to 64 language channels (64 CHs). HCS-8685 interpreter unit is equipped with a 6.8" TFT LCD, a 64-channel selector, a built-in loudspeaker, a pluggable microphone, headset sockets, etc. LCD can display channel number, language name, input language, quality indication and short message, etc. It can display a) the audience status of the output channel, including how many people are listening to the output channel from wired language distribution system, b) if the output channel is monitored by the infrared language distribution system (HCS-5100 system), and c) if the output channel is recording. In addition, the signal level of the input channel can be displayed in real time. Multi input/output language channels, which can be preset with corresponding shortcut key, make it convenient for the interpreter to operate. The Interpreter unit can be connected directly to the trunk-link and be added easily to an existing system.

The Interpreter unit supports direct and relay interpretation function. In direct interpretation mode, the interpreter translates from the floor language to a preset language directly. In case the interpreter does not understand the floor language he/she uses relay interpretation mode (with auto-relay facility) listening to another interpreter's language as source language to execute interpretation into his/her target language.

Product type:

HCS-8685

Fully Digital Congress System Interpreter Unit (64 CHs, 6.8" TFT LCD, microphone, loudspeaker)
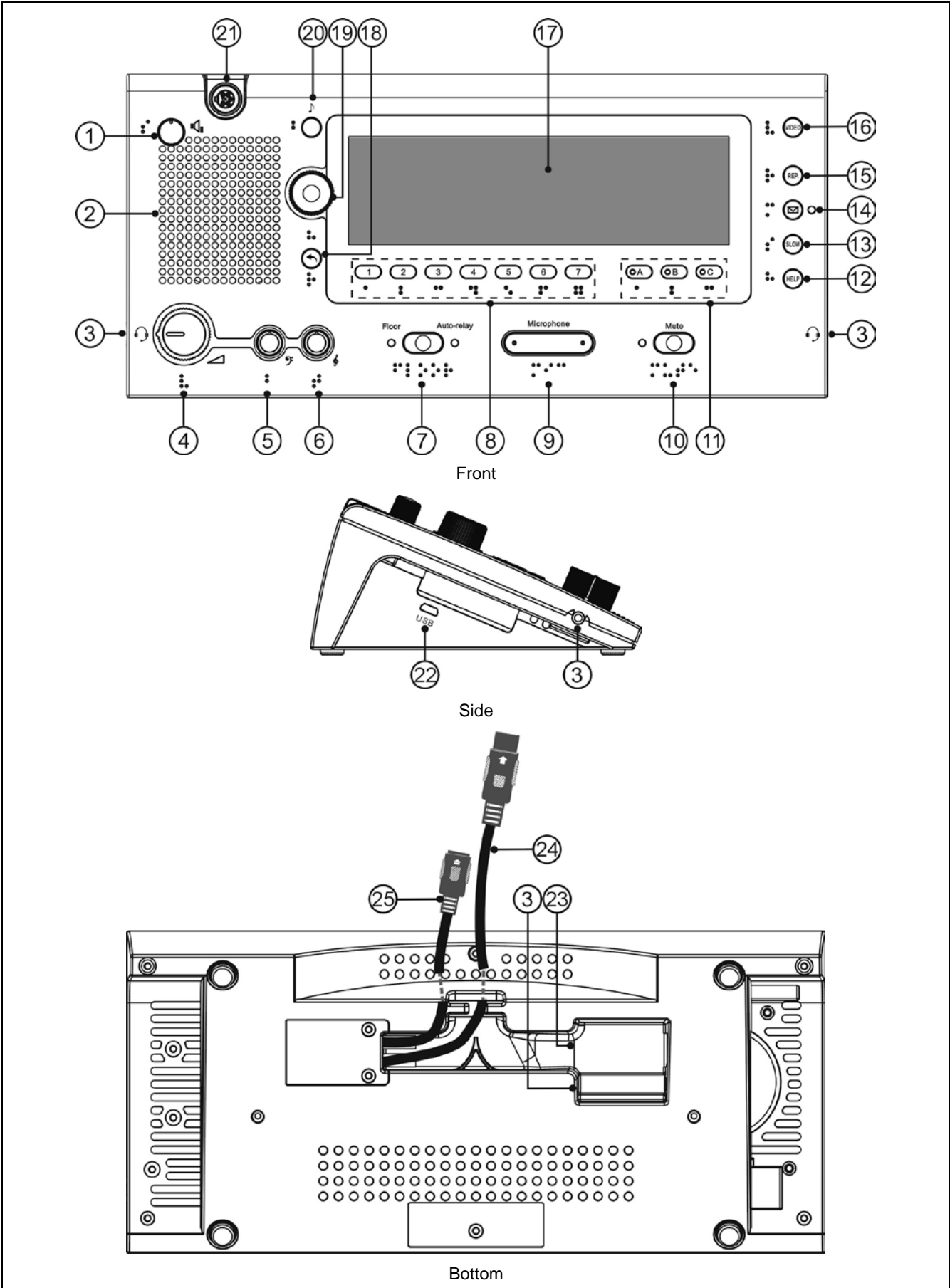
4.1 Functions and indications

Front

Side

Bottom

Figure 4.1   HCS-8685 Interpreter unit

◇ **Listening area:**
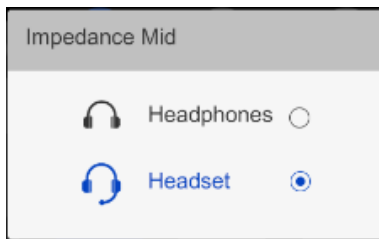
Loudspeaker/earphone control:

1. Loudspeaker volume control knob

2. Built-in Hi-Fi loudspeaker

♦ When the microphones of all interpreter units in the booth are disabled, you can listen to the loudspeaker of the interpreter unit. Push the function knob to go to the floor channel. Turn the function knob to select a different channel.

4. Earphone volume control knob

♦ When headphones are plugged in, impedance is automatically recognized and audio level is adjusted accordingly;

♦ When headset connected, you can select headset function or headphone function through pop-up dialog;

♦ When headphones level exceeds a preset value, a floating window will be triggered to alert.

5. Earphone bass control knob

6. Earphone treble control knob

Input channel control:

7. Floor channel ON/OFF switch

♦ Press this button to access the floor language and the Floor indicating light will be activated.

♦ Switch between floor channel and auto-relay channel.

8. Monitor channel switch button
   (1/2/3/4/5/6/7)

♦ Switch to preset the input channel

18. Back (↰) button

♦ Press the button to activate LCD menu, if no operation in 5 s, menu exits; and if press any other buttons, menu exits too;

♦ Press the button again to return to the upper level menu.

19. Function knob

♦ Push the function knob to go to the floor channel for loudspeaker, turn the function knob to select a different channel;

♦ When the monitor channel shortcut switch button (1/2/3/4/5/6/7) was pressed, push the function knob to go to channel 1, turn the function knob to select the interpretation channel;

♦ When the Output channel B/C switch button (B C) was pressed, push the function knob to go to channel 1, turn the function knob to select the output channel;

♦ When operate the LCD menu, press the function knob to confirm.

◇ **Speaking area:**

9. Microphone ON/OFF switch

♦ Press this button to turn on the microphone and the red indicating light will be activated, press this button again to turn off the microphone.

♦ When microphone is active, booth number of the microphone will be displayed on LCD of all the interpreter units which set the language channel as output;

♦ If the interpreter booth is off, the green indicating light will be activated.

♦ If one interpreter unit is activated, the green indicating lights for others in the same booth will be off, when the interlock mode in a booth is set to Interlock.

10. Microphone mute key (MUTE)

♦ Push and hold the Mute button to temporarily disable the microphone and the Mute indicating light will be activated. The speech timer does not stop. Release this button on voice recovery.

11. Output channel A/B/C switch with indicating lights

♦ Switch to preset the output channel;

♦ Indicating light will be on when the channel is engaged;

♦ Indicating light of its own will be on when the microphone is active;

♦ "Allow switching output channel when microphone is active" can be set by application software (Control – Booth Manage. – Param. Setup).

12. HELP

♦ If selected "Allow Help" by application software (Control – Booth Manage. – Param. Setup), press this key to ask the operator for help and help information will be displayed on the status bar of the application software; at the same time,

"Booth: ✶✶ asks for help" will be displayed on the LCD of operator unit.

13. Slow key (SLOW)

- If selected "Allow Slow" and set the requisite number by application software (Control – Booth Manage. – Param. Setup), when the delegate is speaking too fast, interpreter on speaking press this button to remind him/her to slow down. If the discussion unit is equipped with an LCD, the message "Please speak slower!" will be displayed (activated when reached requisite number in given time).

14. Message key（✉）

- If selected "Allow Send Message" by application software (Control – Booth Manage. – Param. Setup), when unread message exist, this indicating light will be activated, press this button to check message;
- You can check the message again by pressing the same button within 1 minute;
- A new incoming message arriving within the 1 minute interval shall replace the previous one.

15. Input channel audio playback (REP.)

- If selected "Allow Repeat" and set the repeat time by application software (Control – Booth Manage. – Param. Setup), push the REP. button to playback input channel audio;
- Push the REP. button again to cancel playback.

16. Video button

- Reserved

20. Beep button (♪)

- You can disable and enable the beeps of the interpreter unit with the Beep button. When beeps are enabled, the display shows a musical note. The interpreter unit can generate beeps for notification of special events to support blind interpreters on the headphones.

◇ **Display:**

17. 7.2" TFT LCD

- Displays the unit configuration information, Incoming/outgoing channel number and language name, Channel number and language name of loudspeaker output, Incoming language quality indication, The audio stream status (IR receive, Record, Network Live) of the output channel, How many people are listening to the output channel, short message, etc.

Special configuration:

Braille

- Ergonomic design with features for visually impaired.

◇ **Interface:**

3. TRRS jack (Ø 3.5 mm)
21. Stem microphone socket
22. USB socket
23. Reserved
24. 1.5-meter 8P-DIN cable with standard plug (male x 1)
25. 0.6-meter 8P-DIN cable with standard plug (female x 1)

4.2 Connection

4.2.1 Connecting to the CMU or the EMU

HCS-8685 interpreter unit is equipped with a cable with a standard 8P-DIN male connector. When connecting the CMU to the contribution units, just connect the male connector of the first unit to the socket of the CMU.
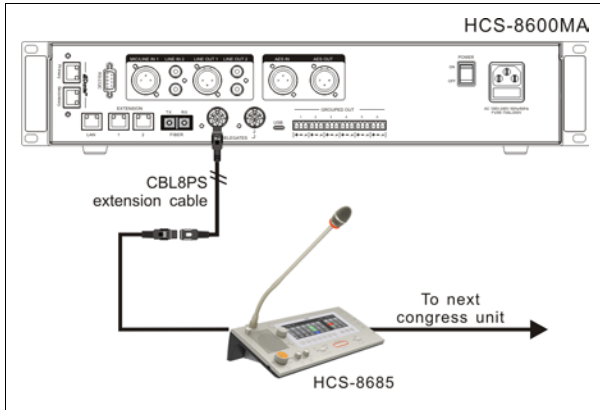

Figure 4.3   HCS-8685 Interpreter unit connected to the CMU or the EMU

For a longer distance between the interpreter unit and the CMU/EMU, a CBL8PS extension cable can be used. One end of this cable is equipped with a 8P-DIN male connector, the opposite end is equipped with a female connector. Just connect the female connector of the cable to the interpreter unit, and connect the male connector to the output of the main unit. The Cat5e cable can also be used as an extension cable, one end of the Cat5e cable is connected to output of the main unit via the CBL8P2RJ45S converter cable; the other end of the Cat5e cable is connected to the 8P-DIN male connector of the interpreter unit via the CBL8S2RJ45S converter cable.
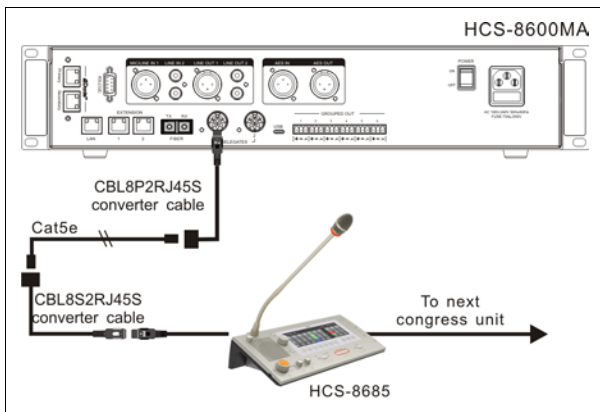

Figure 4.4   HCS-8685 Interpreter unit connected to the CMU or the EMU

For "Closed Loop - Daisy Chain" ring connection, HCS-8600MCLS Loop switcher is needed. The "TO MU" port of HCS-8600MCLS is connected to the output of the main unit via CBL8P2RJ45 converter cable; the other port of HCS-8600MCLS is connected to the interpreter unit via CBL8P2RJ45 converter cable; at last, connect the last interpreter unit back to the CMU via a CBL8PS extension cable.
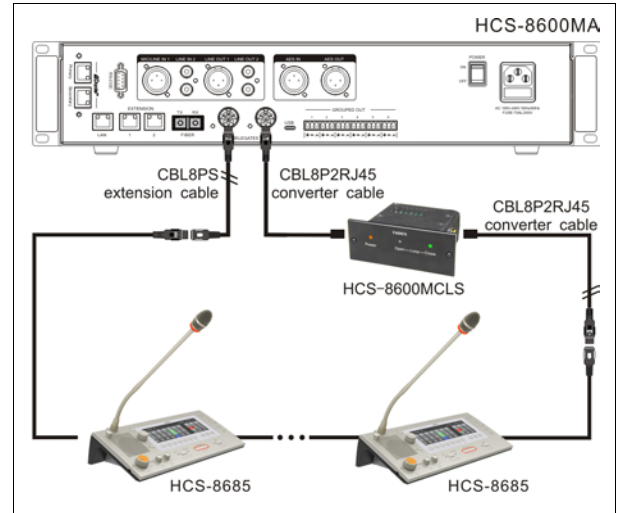

Figure 4.5   "Closed Loop - Daisy Chain" connection topology

4.2.2 Connection between Interpreter units

All HCS-8685 units are daisy-chained easily and conveniently by dedicated 8-pin cables.

When connecting to another unit, just connect the 8P-DIN standard female connector on the cable of the unit to the 8P-DIN standard male connector on the cable of the next unit.
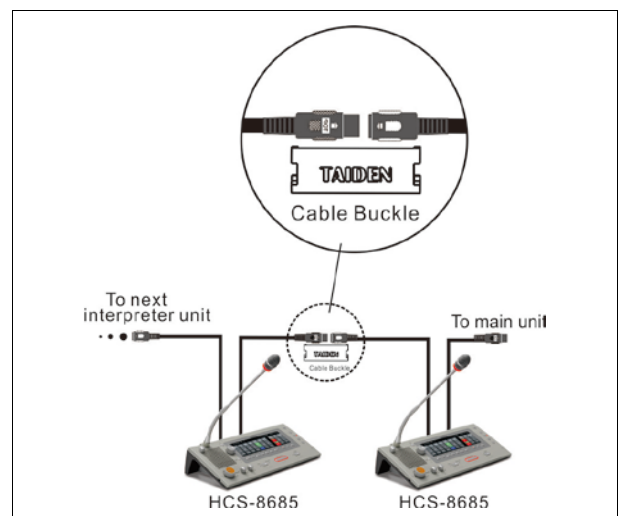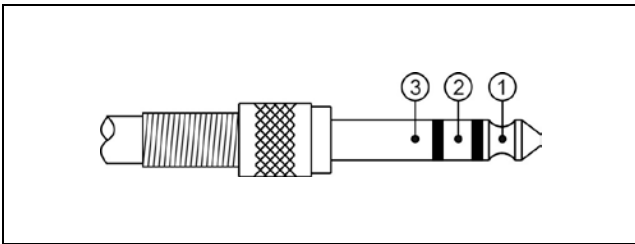

Figure 4.6   "Daisy-chain" connection between HCS-8685 Interpreter units

4.2.3 External earphone

An external headphone can be connected to the TRRS jack at the lateral side of the Interpreter unit. Its volume can be adjusted by the earphone volume control knob. The external headphone shall have a Ø 3.5 mm plug according to the following figure:
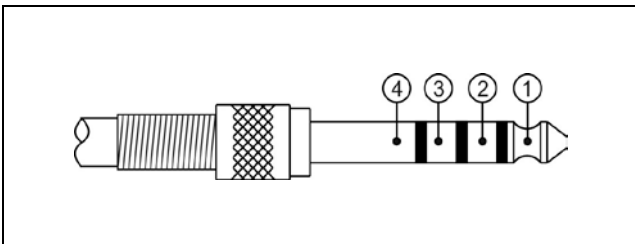

Functions and indications:

    1............................Left stereo channel signal
    2............................Right stereo channel signal
    3............................Power ground/Shield

4.2.4 External microphone

An external headset can be connected to the TRRS jack at the lateral side of the Interpreter unit. The external headset shall have a Ø 3.5 mm plug, as in the following figure:

Functions and indications:

    1............................Left stereo channel signal
    2............................Right stereo channel signal
    3............................Power ground/Shield
    4............................External microphone signal

4.3 Setup

To realize the simultaneous interpretation function, the interpreter unit should be incorporated in the congress system and they should be setup before the meeting. Any operating status of the interpreter unit will be displayed on the LCD. Setup can be done via dialog menu and the buttons on its panel. We will introduce the configuration and operation of the HCS-8685 interpreter unit in detail.

4.3.1 Direct interpretation, relay interpretation and auto relay interpretation

Before the setup of the interpreter unit, you should arrange booths according to the actual requirements of the meeting. Assure yourself on the correct allocation of all the interpretation channels.

■ Direct interpretation

Usually, if all interpreters can understand the speaker's language, they just listen to the floor language and are doing simultaneous interpretation. The interpretation languages are distributed to different channels, as shown in figure 4.7. This is called direct interpretation.

■ Relay interpretation

In the second case, if an interpreter is not familiar with the floor language, he/she cannot proceed to direct interpretation. He/she needs to listen to the translation of another interpreter and has to do "secondhand" translation, as shown in figure 4.8. This is called relay interpretation.

■ Auto relay interpretation

When relay interpretation is needed, the interpreter can select a language by the monitor channel shortcut switch button (1/2/3/4/5/6/7) and the Primary knob. Due to the fact that the output language of each booth is arranged beforehand, the relay booth must be setup before the meeting. If the interpreter cannot understand the speaker's language, he/she does not need to select the input language manually. His/her interpreter unit can switch to his/her familiar language automatically. This is called auto relay interpretation.

Example:

Booth 1 is for translation between English/Chinese. Output channel A is English, output channel B is Chinese, and output channel C is "None". Booth 2 is for translation between French/Chinese. Output channel A is French, output channel B is Chinese, and output channel C is "None". We configure now booth 1 as relay booth for booth 2.

When the speaker is speaking Chinese and if all the interpreters of booth 1 and booth 2 are familiar with Chinese, they can do direct interpretation. As shown in figure 4.7.

When the speaker is speaking English, the interpreters in booth 1 setup output channel B (Chinese) as interpretation language. The interpreter units in booth 2 will take Chinese as their input channel. When the microphone ON/OFF switch in booth 1 is pressed, the floor channel indicating light in booth 2 will be turned off and its Auto-relay indicating light will be activated. It indicates that auto relay interpretation function is working. The interpreters in booth 2 can do relay interpretation. As shown in figure 4.8.
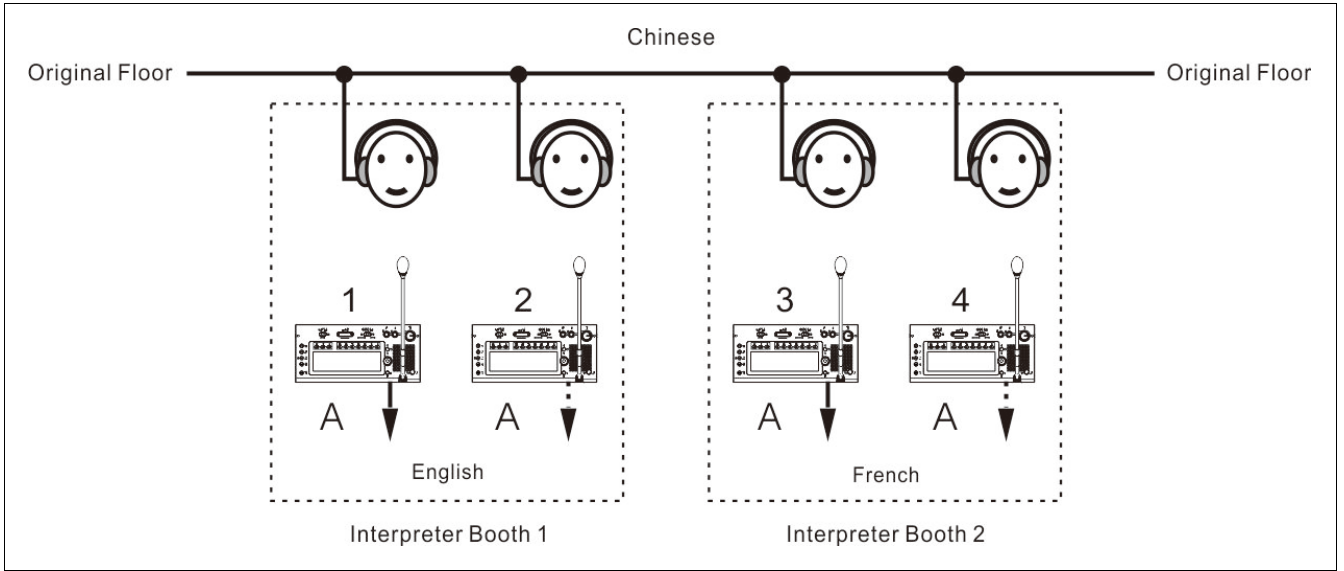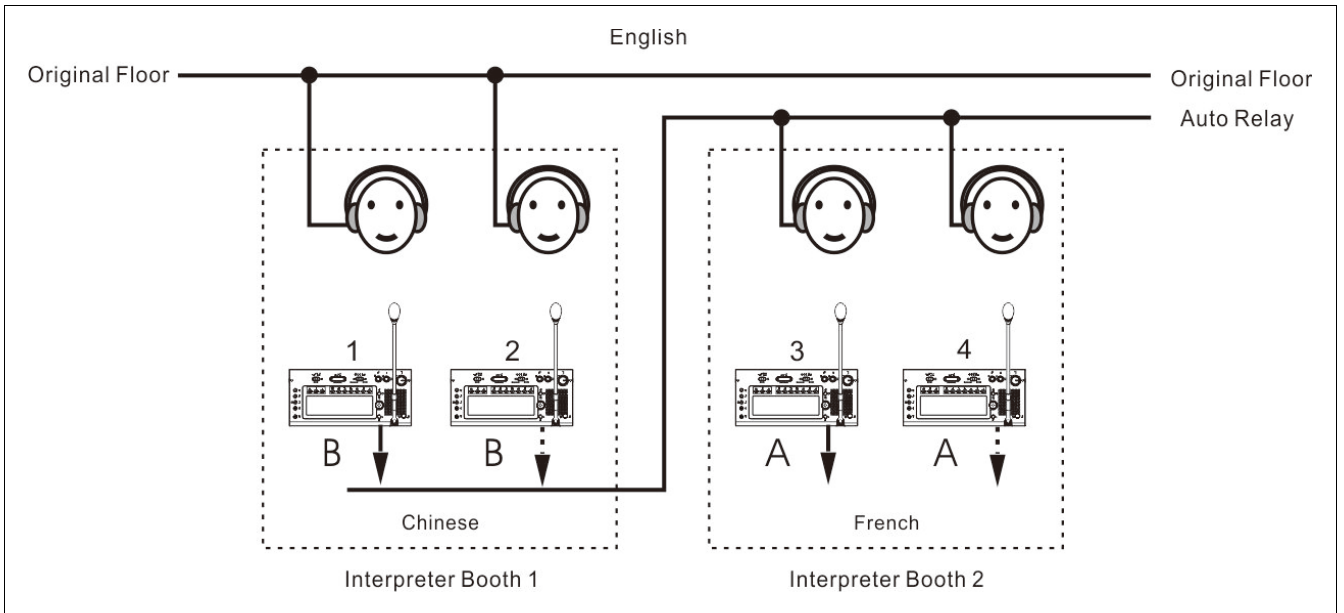
Figure 4.7   Direct interpretation

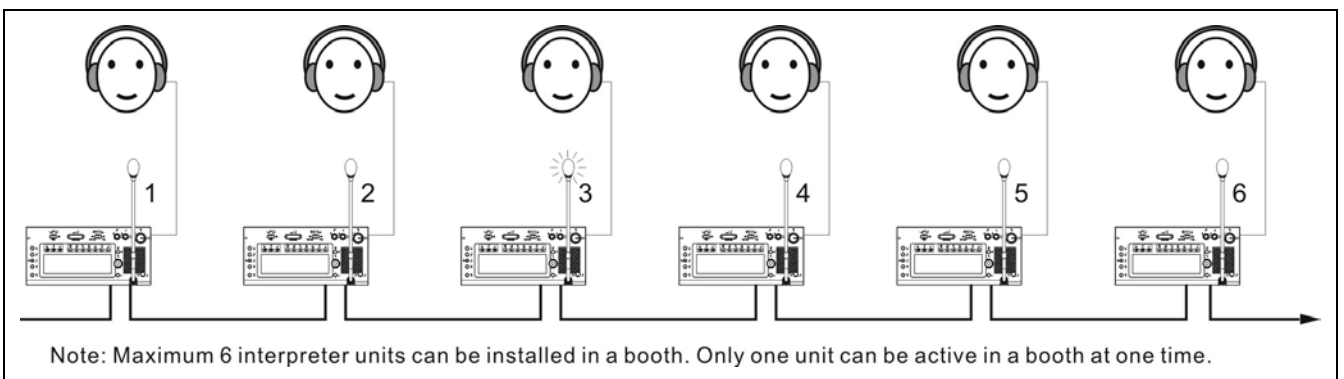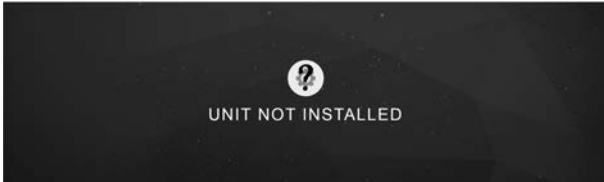Figure 4.8   Relay interpretation

Figure 4.9   Schematic diagram of the connection of interpreter units

4.3.2 LCD configuration menu

When the "Interpretation setup" has been configured in the CMU, and then the interpreter unit must be configured:

- If the interpreter unit has not been configured, the LCD will display "UNIT NOT INSTALLED";

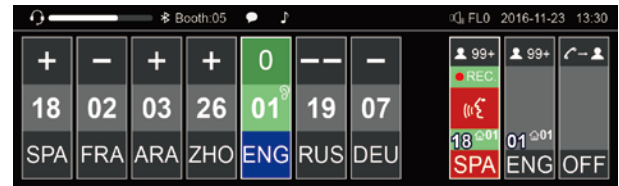- If the interpreter unit has been configured, the LCD will display the standby interface.

Icon on LCD:

Icon	Indicating
🎧	Headset inserted
🎧	Headphone inserted
✳ Booth:05	Bluetooth: On
✳ Booth:05	Bluetooth: Connected
💬	Message received
♪	Audio feedback: On
REP:8s	Repeat function and repeat time
00:00:05	Speech time
🔊 05:ENG	Loudspeaker channel
2016-01-21 09:00	System current time
🏠06	Output channel is interpreting
☎→👤	Call operator
👥99+	Quantity of listeners
● REC	Audio stream is in use
🔇	Monitor channel is muted
🔇	Output channel is muted

A）Accessing menu

In the menu operation of the interpreter unit:

- If unit not installed, press the function knob to enter the setting menu;
- Press the return (↰) button to activate the LCD menu, if no operation in 5 s, menu exits; and if press any other buttons, menu exits too.

In the following operation:

- Turn the function knob to select LCD menu or adjust parameters value;
- Press the function knob to confirm/go to submenu;
- Press the "↰" button to return/exit.
- Press any other buttons, menu exits to standby interfaces

B）Menu configuration

The LCD menu includes:

- ✳ Brightness
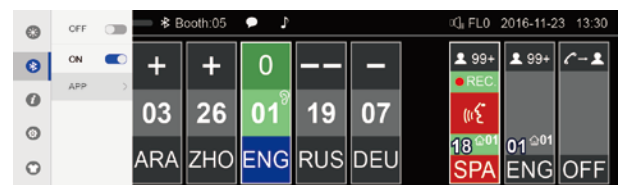- ✳ Bluetooth
- ⚙ Setting
- ℹ About
- 🔷 Skin

✳ Brightness

Turn the Function knob to adjust screen brightness, then press the Function knob to confirm or press the "↰" button to return.

✳ Bluetooth

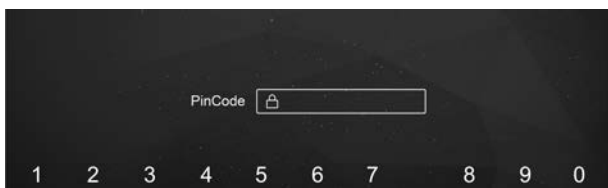Turn the Function knob to select among On, Off or App, the selected item becomes highlighted, then press the Function knob to confirm or press the "↰" button to return. The default Bluetooth status is **Off**, If Bluetooth is **On** but cannot connect after 3 minutes, it will be off automatically.

If you select **App**, press the Function button to open QR code interface, scan the QR code according to you phone or pad to download Taiden SI tool App. After installation, you can send message to all or part booths via Bluetooth.
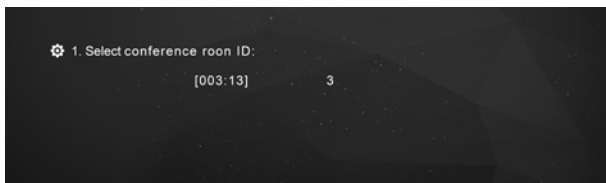
⚙ Setting

Input Pincode first before enter setting interface, system manager set the password for authorization of changing interpreter unit setting, so as to avoid random alteration. The password is **838550** or **6666**, press the button under the number to input.
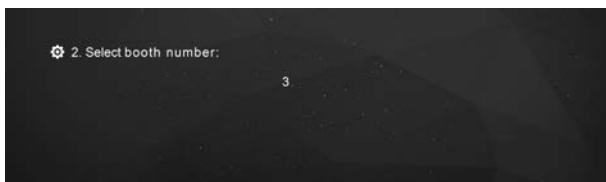

◆ **Select conference room ID**

1). Select the conference room ID by rotating the Function knob, the interpreter unit and the main unit must set the same ID;
2). Press the Function knob to confirm and go to the next step or press "↰" button to return.

◆ **Select booth number**

Setup the interpreter unit with the number of the booth within which the interpreter unit is located, according to the configuration in the CMU.

1). Select the booth number by rotating the Function knob, the range is limited by the configuration in the CMU (refer to section 2.1.3);
2). Press the Function knob to confirm and go to the next step or press the "↰" button to return.
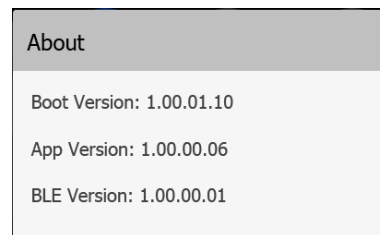
◆ **Compressor**

On or Off compressor.

1). Select On/Off by rotating the Function knob, default is On, when strong signal inputs, the distortion will be controlled well;
2). Press the Function knob to confirm or press the "↰" button to return.
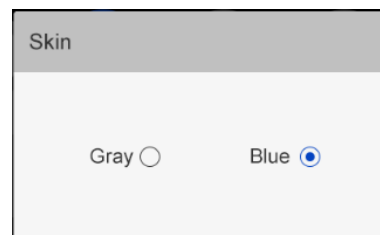
ℹ About

Press the Function knob to view HCS-8685 version, include Boot version, App version and Bluetooth version.
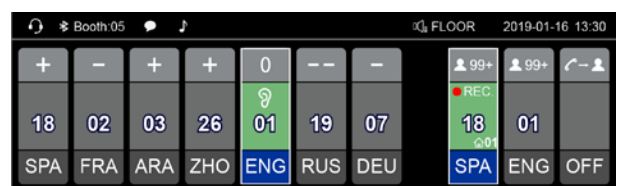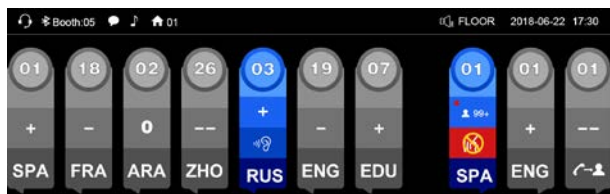

♟ Skin

The HCS-8685 interpreter unit has two built-in skin styles for choice (Gray/Blue). After switching the skin style, restart the machine to take effect.

Gray:

Blue:

4.3.3 Other configuration

4.2.4.3.1 Input channel configuration

The HCS-8685 equipped with 7 pre-select buttons (1/2/3/4/5/6/7) for relay languages with activation indication on the LCD. When the monitor channel switch button (1/2/3/4/5/6/7) was pressed, push the Function knob to go to channel 1, turn the Function knob to select the interpretation channel.

4.2.4.3.2 Output channel configuration

To distribute the interpretation languages separately, A/B/C channels are provided in the interpreter unit. When the interpreter unit menu configuration is finished, the output channel of every interpreter unit must be setup before the meeting and according to the actual requirements.

■ Output channel A is setup at the CMU, and its output language is a fixed language as the output of the booth;

■ Output channel C is used to output a non-conventional language. Output channel C can be setup as "None" or "All" from the CMU menu configuration (refer to section <u>2.1.3</u>).

♦ If output channel C is set as "All", the interpreter can select the output language by pressing the output channel C switch and by rotating the Function knob at the same time. If the output channel C is activated, the output of this interpreter unit will be distributed to all booths which set this booth as their auto relay booth, and other interpreters can do relay interpretation. Now, the output language of the output channel B is a fixed language as the output of the booth at the CMU menu configuration (refer to section <u>2.1.3</u>);

♦ If the output channel C is set as "None", the output channel B is used to output a non-conventional language. Output channel B can be setup as "None" or "All" from the CMU menu configuration. If the output channel B is set as "All", the interpreter can select the output language by pressing the output channel B switch and by rotating the Function knob at the same time. If the output channel B is activated, the output of this interpreter unit will be distributed to all booths which set this booth as their auto relay booth, and other interpreters can do relay interpretation.

4.2.4.3.3 Interlock mode

Interpretation mode can be setup by menu operation on the main unit (refer to section <u>2.1.3</u>):

Interlock mode between booths:

♦ Override: allows an interpreter to override another interpreter in another interpreter booth supplying the same interpretation channel.

♦ OVERRIDE-BC: enables A channel of an interpreter in another booth to override an occupied B/C channel in another booth, but supplying the same channel; when an interpreter in another booth to override an occupied A channel in another booth, the "Microphone ON" indicators the occupied A channel will flash on the control panel for about 5 seconds.

♦ Interlock: blocks another interpreter from using the same channel in another interpreter booth. As a warning that another microphone is active on a given channel, when a second one is activated on the same channel, the "Microphone ON" indicators will flash on the control panel for about 5 seconds.

Interlock mode in a booth:

♦ OVERRIDE: enables an interpreter in a booth to override an occupied channel in the same booth, but supplying the same channel;

♦ INTERLOCK: prevents that two interpreters engage the same channel in the same booth.

4.4 Operation

4.4.1 Operation of listening area

The listening area, on the left side of the unit, is the area used to monitor the floor or the interpretation channels. It includes a built-in loudspeaker, a headset socket and the corresponding control buttons and knobs. This intuitive layout is helpful for the interpreters to familiarize with the interpreter unit quickly.

1. Channel language is the language arranged for a channel in the CMU configuration. For example, 10 languages are configured and we setup channel 1 as Chinese, channel 2 as English, etc. This setting is to simplify the work of the interpreters and to make labels for all selectable languages for all participators.

2. If the microphone of every interpreter unit in this booth is turned off, he/she can monitor any language from the built-in loudspeaker ② and adjust the volume with the "Loudspeaker volume control knob" ①. When a microphone in this booth is activated, the loudspeaker of every interpreter unit in this booth will mute automatically. Now the interpreter can listen with the earphone and adjust the volume, treble and bass with the "Earphone volume control knob" ④, "Earphone bass control knob" ⑤ and "Earphone treble control knob" ⑥ which are located on the left lower side.

3. If the interpreter wants to listen to another channel language, he/she can select the preset channel language with the "Monitor channel switch button (1/2/3/4/5/6/7)". If the channel language is not preset, he/she can select the channel language by pressing the button (1/2/3/4/5/6/7) and turning the Function knob ⑲.

4. If the speaker speaks too fast and if the interpreter cannot follow him/her, the interpreter can press the "SLOW" button to remind the speaker to slow down. If the discussion unit is equipped with an LCD, the message "Please speak slower!" will be displayed (activated when reached requisite number in given time).

5. If the interpreter missed the speaker's speech, he/she can press the input channel audio playback key (REP) to playback missed words and "REP:6S" will be displayed on the LCD. The playback time ranges between 2 s - 8 s.

6. Quality indication: The second line of the display shows the qualities of the interpretations on the channels that are assigned to the pre-select buttons of the interpreter unit. This logo is used to remind the interpreter to avoid using the relay translation if direct translation is available.

Quality	Description
0	The channel contains the floor language.
+	The channel contains a direct interpretation of the floor language.
-	The channel contains an indirect interpretation of the floor language.
--	The channel contains an indirect interpretation of an interpretation language.
X	The channel contains the output interpretation of current interpreter unit.

When beeps are enabled, the interpreter unit plays a beep when the channel that you selected contains an indirect interpretation of the floor language.

4.4.2 Operation of speaking area

The speaking area, on the right side of the unit, is the area which is used to distribute the interpretation languages to the corresponding channels. It includes functional buttons and channel selectors, etc.

1. Press the microphone ON/OFF button, and distribute the interpretation language to the output channel.
   At most 6 interpreter units can be set in one booth for 6 interpreters. Only one microphone can be activated in one booth. When one microphone in the booth is activated, the loudspeaker of every interpreter unit in the booth will mute.

2. Output channel select:
   ♦ Use the "A", "B" or "C" button to switch the output channel quickly. If the auto relay interpretation is activated and the output channel B/C activated, the output will be automatically distributed to all booths which set this booth as their auto relay booth and other interpreters can now do relay interpretation.
   ♦ If selected "Allow switching output channel when microphone is active" by application software (Control – Booth Manage. – Param. Setup), interpreter can switch output channel freely, or else, he/she can only switch output channel when microphone is turn off;
   ♦ Both the "A", "B" and "C" buttons have an ENGAGED indicating light each. If the selected output channel is already engaged by another interpreter unit, this indicating light will be activated;
   ♦ ENGAGE indicating light of its own will be on when the microphone is active.

3. Press and hold the "MUTE" button to close the microphone temporarily and the Mute indicating light will be turned on. Releasing the button will activate the microphone automatically.

4. The "MESSAGE"（✉) button is used to check short message.

5. Intercom button: if output channel C is "No Output", and If selected "Allow Call" by application software (Control – Booth Manage. – Param. Setup), press and hold C button to call the operator (PTT mode).

6. "HELP" button: If selected "Allow Help" by application software (Control – Booth Manage. – Param. Setup), used by the interpreter requesting for help. Help information will be displayed on the status bar of the application software; at the same time, "Booth: xx asks for help" will be displayed on the LCD of operator unit.

7. Beeps
   The audio beeps can be toggled on and off with the Beep button. If this function is enabled, the display shows a musical note, the audio beeps can also be toggled on and off with the Mic. ON/OFF button. When beeps are enabled, the interpreter unit plays a beep when the channel that you selected contains an indirect interpretation of the floor language.