

TAKSTAR®

DG-U100

Software Configuration
Handbook



Takstar DG-U100 Software Configuration Handbook

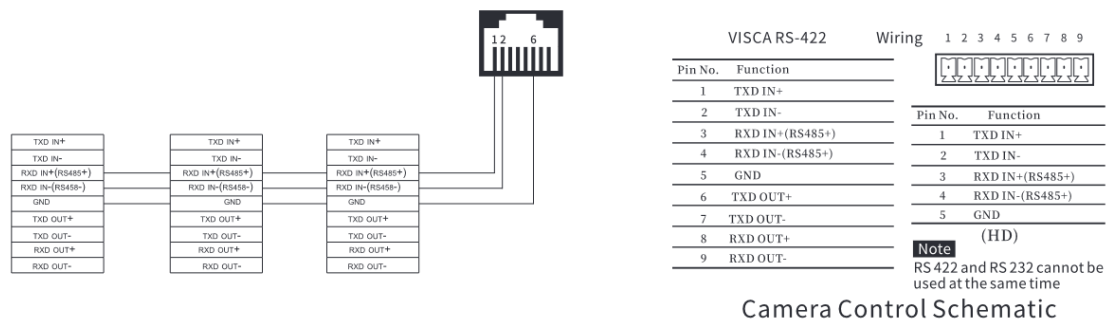
List of Acronyms, Abbreviations, and Definitions

Term	Definition
CU	Control Unit – the receiver/control device in a conference system.
DU	Discussion Unit – the transmitter/microphone device in a conference system.
Unit	Unless otherwise specified, refers to the discussion unit, aka, microphone units in a conference system.

1. Before Starting

1.1. Prepare the following

- 1 * Router
- 1 * Ethernet cable (or 2 if configured via wired connection)
- 1 * Computer
- Camera(s) (RS-485 compatible)
- Signal cable(s) between camera(s) and control unit (the crystal head on the control unit side uses Pins 1,2,6, refer to your camera manual in regards to the camera pinouts)



Wiring Diagram

- 1.2. Power up the router and DG-U100 control unit. Configure the channel frequencies, address code, and 315 antenna communication frequency.

2. Software Installation

- 2.1. Copy the Takstar DG-U100 software package to your computer or download it via our website at:

<https://icn.takstar.com/upload/downloadFile/DG-U100%E5%B1%80%E5%9F%9F%E7%BD%91%E8%BD%AF%E4%BB%B6.ZIP>

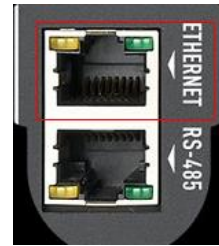
- 2.2. Extract the zip file, find the setup.exe inside extracted folder, double-click it to install.

Name	Date modified	Type	Size
DotNetFX40Client	7/25/2022 10:22 AM	File folder	
WindowsInstaller3_1	7/25/2022 10:22 AM	File folder	
setup.exe	7/23/2022 10:30 PM	Application	418 KB
wireless conference Setup(ENG).msi	7/23/2022 10:30 PM	Windows Installer ...	1,478 KB

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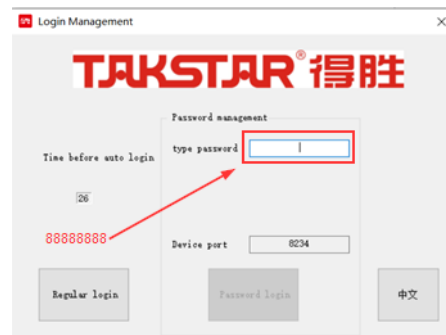
3. Network Connection

- 3.1. Connect the ETHERNET port on the CU to the LAN port on the router using an ethernet cable. And if the LINK LED on the CU glows red, it means that both devices are connected successfully.
- 3.2. Connect your computer to the router via Wi-Fi network or wired connection (via router LAN port), and enable the network interface.

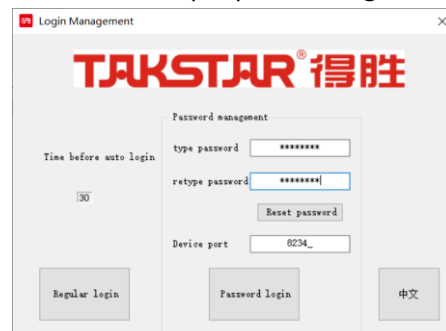


4. Software Login

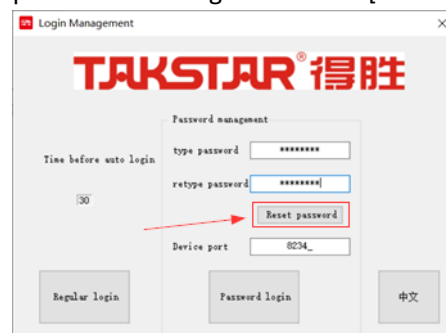
- 4.1. Once the connection is ready, open the Takstar DG-U100 wireless conference system app. Here you will see two login methods.
 - a. Regular login: for regular users (see Section 7); usable only after registering the control unit through Password login.
 - b. Password login: for engineering installation. Password is required (default: 88888888)



Hit Enter and input password again to confirm. (Default: 88888888)

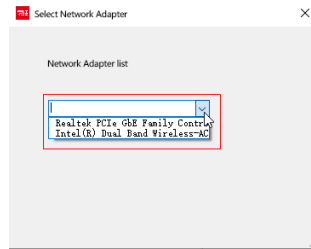


To change password, click [Reset password] to change. (Need to input the new password twice again and click [Reset password] to change.)



Note: After clicking [Password login], the below screen will appear if your

computer has multiple network interfaces. Please choose the correct network interface in use so that you can discover the control unit IP after login.



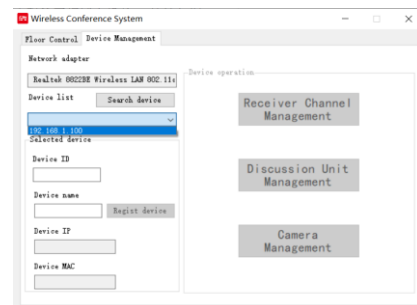
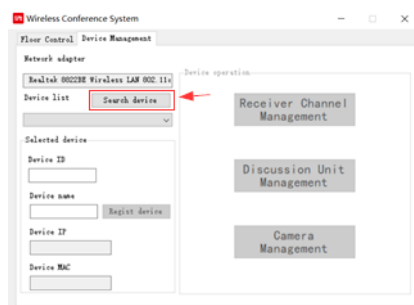
- 4.2. Device port number is automatically generated by computer and does not have to be changed. Click [Password login] to start configuration.

5. Device Management

After logging in with password, you will enter the Device Management page where the selected network interface name is shown. The device list, device information, receiver channel management, discussion unit management and camera management are only available after choosing a relevant control unit IP.

5.1. Search Device

Click [Search device] and select the IP of the control unit to be configured from the Device list.



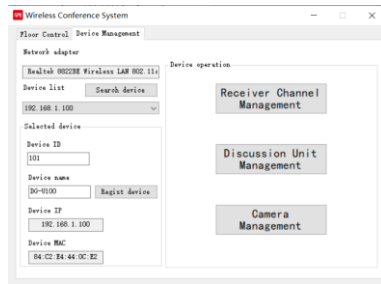
Note:

- If the drop-down list does not show any control unit IP after clicking [Search device], it is likely that the correct network interface is not chosen after login. Please exit the software, log in again by password and select the correct network interface.
- If multiple control units are used, there will be multiple IP addresses. The control unit IP can be set on CU in two methods:
 - Static IP (uncheck DHCP): manually set unique IP on each control unit.
 - Dynamic IP (check DHCP): allow control unit to automatically assign IP when multiple CUs are used in the same LAN.

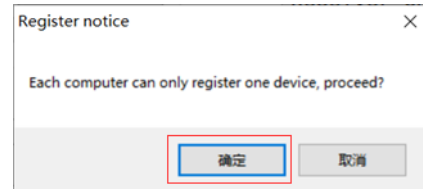
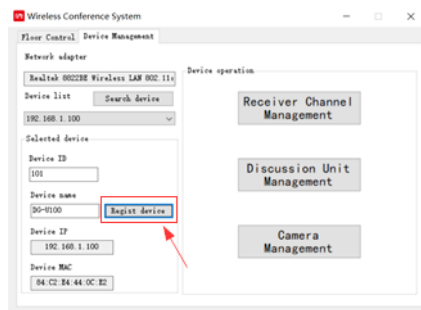
5.2. Register Device

Select the CU IP for configuration, and the below screen will appear, showing the device ID, device name, IP address and MAC address. Now you can also perform receiver channel/discussion unit/camera management functions which are no longer greyed out.

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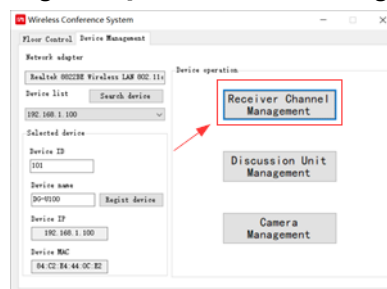
Change the Device ID (if necessary), click [Register device] and click [OK] to register.



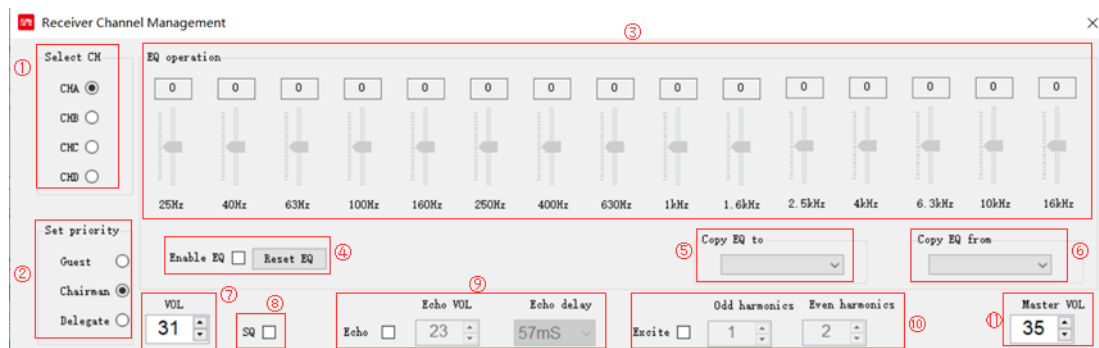
Note: Verify registration by doing a Regular login. A successful Regular login indicates that the device is successfully registered.

5.3. Receiver Channel Management

Click [Receiver Channel Management] to enter the following page.



Select [Receiver Channel Management]



Channel Management Interface

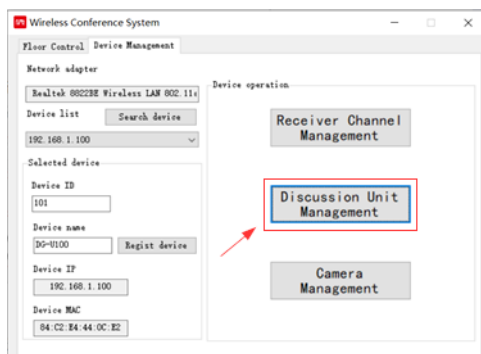
- ① Select CH: select any of the four channels (A, B, C, D) for configuration.
- ② Select priority: set the priority of the currently selected channel, including Chairman, Guest, and Delegate.
- ③ EQ settings: a total of 15 EQ points adjustable, adjustment range: -12dB~12dB.

- ④ Enable EQ: check/uncheck the checkbox to enable/disable EQ; used to compare before-and-after sound effects. [Reset EQ] to set all EQ settings to default zeros.
- ⑤ Copy EQ to: copy the EQ settings of the current channel to one of the other three channels.
- ⑥ Copy EQ from: copy the EQ settings from one of the other three channels to the current channel.
- ⑦ VOL: controls the input volume level of the currently selected channel, range: 0~31.
- ⑧ SQ: check/uncheck to enable/disable squelch function which prevents feedback.
- ⑨ Echo: check to enable and adjust Echo VOL and Echo delay. Echo VOL: 0~25; Echo delay: 22ms~197ms.
- ⑩ Excite: check/uncheck to enable/disable exciter, which is mainly used to beautify sound and improve clarity. Odd harmonics: 0~6; Even harmonics: 0~6.
- ⑪ Master VOL: the master output volume of all four channels, A, B, C, D.

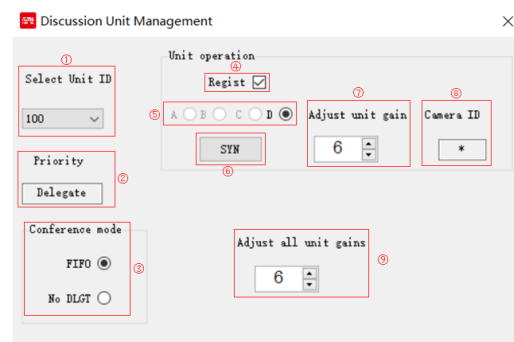
Note: In this step, we only have to select a corresponding channel and set its priority, and the other settings such as EQ, input/output volume can be adjusted later as required by live test after syncing discussion units. Close this page to proceed to the next step.

5.4. Discussion Unit Management

Click [Discussion Unit Management] to enter respective page where you can manage and sync discussion units.



Select [Discussion Unit Management]



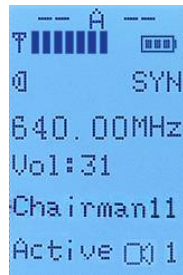
Discussion Unit Management Interface

- ① Select unit ID: select the ID of the unit that requires syncing.
- ② Priority: displays the priority level of the currently selected unit.
- ③ Conference mode: check to enable FIFO (First-In-First-Out) or No DLGT (No Delegate) mode.
- ④ Register: check/uncheck to enable/disable the selected unit.
- ⑤ Sync channel for selected unit: cannot be selected if the current DU is chairman/guest; subject to receiver channel priority setting.
- ⑥ Sync: follow below steps for syncing.

After selecting the Unit ID and Conference mode, power up the DU, and click [Sync] to start pairing. At this time, the indicator of the CU IR window flashes. Align the IR windows between the DU and CU until the LED indicator stops flashing and the signal

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meter on CU channel is full, while the audio signal meter, 315 signal meter and effective signal meter are full on DU, as shown below.



CU LCD Channel Display



DU LCD Display

After syncing, adjust unit gain as appropriate and go back to Receiver Channel Management page to adjust EQ settings if necessary. Once finished, it's recommended to shut down the unit before syncing another.

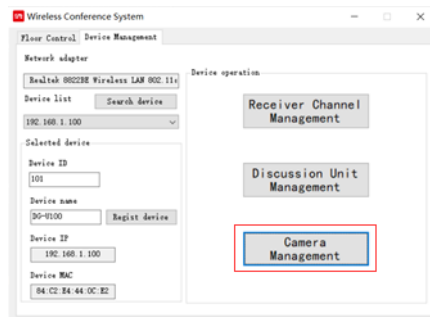
Note:

- A. All delegate units can be synced on the same channel. Subject to FIFO conference mode influence, delegate units will not be fixed to one channel, but will use the spare channels other than Chairman and Guest channels alternately.
- B. Channels that are set to Chairman or Guest priority will have their channel IDs automatically generated and will be totally occupied. By system default, the ABCD channel corresponds to Chairman #11~14 or Guest #1~4.
- C. The Register checkbox determines whether the unit ID is enabled. You cannot perform syncing if it is disabled. For Delegate #21~100, it needs to be manually selected and checked, while for Chairman #11~14 and Guest #1~4, it is checked by default.

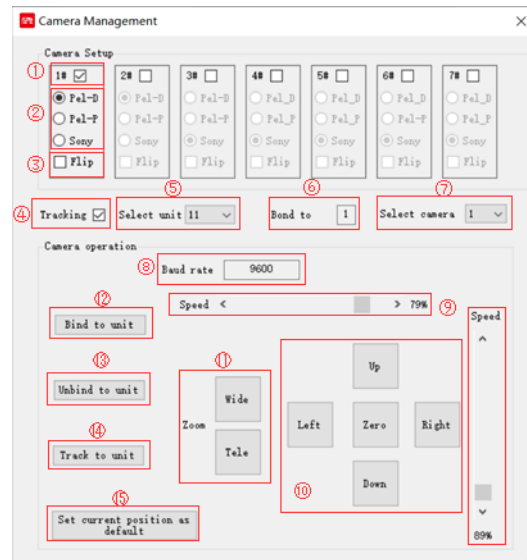
- ⑦ Adjust unit gain: controls the gain of the currently selected unit; range: 0~15.
- ⑧ Cam ID: shows the ID of the camera that's linked to the currently selected unit. If not linked to any, * is shown instead.
- ⑨ Adjust all unit gains: controls the gains of all numbered units centrally, which should be adjusted appropriately based on application. Range: 0~15

5.5. Camera Management

Click [Camera Management] to start linking cameras to discussion units.



Select [Camera Management]

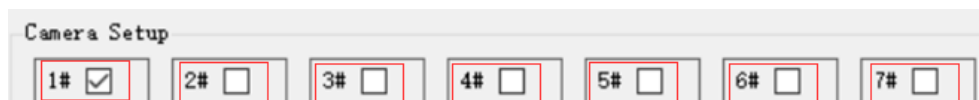


Camera Management Interface

5.5.1. Camera Settings

- ① Camera ID: check/uncheck to enable/disable the corresponding camera.
- ② Camera protocol: this device supports three camera protocols, namely Pel-D, Pel-P, Sony; choose the protocol appropriate to your camera specifications.
- ③ Flip: check/uncheck to enable/disable flipped camera image. Depends on the placement of the camera.
- ④ Tracking: check/uncheck to enable/disable camera tracking; when linking a camera, the first step is to enable this function, otherwise other operations cannot be performed.
- ⑤ Select unit: select the unit that needs to link to a camera.
- ⑥ Bond to: this shows the ID of the camera (1~7) currently linked to the selected unit at ⑤. If not linked to any, * is shown instead.
- ⑦ Select camera: select the ID of the camera you need to link to, optional among 1~7.

Note:



- A. #1~7 under Camera settings correspond to the ID number set on the camera. Takstar wireless conference system supports linking up to 7 cameras at the same time (including multi-CU system)
- B. When camera tracking is enabled, only one delegate unit is allowed to speak. Therefore, please turn off the tracking function when the camera is not in use. Please restart the CU after the above operations are completed.

5.5.2. Camera Operation

- ⑧ Baud rate 9600: system default.

⑨ Speed: the horizontal and vertical speed percentage of camera rotation; range: 0%-91%.

⑩ Camera direction adjustment and zeroing button:

Long-press [Up/Down/Left/Right] to adjust the camera angle; short-press [Zero] to return the camera to 0 coordinates.

⑪ Zoom (Out/In): controls the focal length of the camera.

⑫ Bind to unit: press this button to link the camera to the selected unit and synchronize the position information to CU.

The specific operations are as follows:

A. According to the operating instructions at the bottom of the purchased camera, flip the dial switch to correct position (with the baud rate set to 9600, and the interface protocol set to support RS-485).

Notice: Flip the dial switch when the camera is not powered on.

B. Power up the camera, check the protocols supported by the camera through the camera output screen, and set the camera ID number and baud rate (9600).

C. Connect the camera and CU, insert one end of the signal cable into the RS-485 port of the CU, and connect the other end to the camera (see picture on the right)



D. In management software, check and enable [Tracking] and the camera ID (the same camera ID set above), select the corresponding protocol of the camera, the baud rate (9600, software default), and then select the unit ID and the camera ID to be linked together.

E. Based on image output, adjust the angle of the camera (long-press [Up/Down/Left/Right]) and focal length, as well as the camera rotation speed if necessary.

F. After the camera orientation is set, click [Bind to unit] to store the position information into the CU. At this time, the POWER LED of the camera will flash. Try rotating the camera to another direction and press the TALK button on the DU, the camera should rotate to its initial set position, indicating that the camera is successfully linked.

⑬ Unbind to unit

This function can only be used when a unit with a linked camera is selected. Otherwise, this button is greyed out and cannot be used. Click to unbind the unit from the camera.

⑭ Track to unit

Applicable only when a unit with a linked camera is selected. Click to rotate the camera towards the position of the selected unit.

⑮ Set current position as default

Applicable only after a camera is selected, this function sets the initial position of the camera after the CU is turned on.

6. Floor Control

Floor Control Interface

- ① Frequency: displays the channel and the frequency set by the channel.
- ② RSSI/Battery: displays the signal strength and battery power of the unit occupying the channel.
- ③ Priority: displays the priority of the unit occupying the channel.
- ④ Active: displays the ID of the unit occupying the channel.
- ⑤ Camera ID: displays the camera linked to the active unit, and displays * if no camera is linked.
- ⑥ Interrupt: applicable only if the priority of the channel is set as Delegate.
- ⑦ ID: displays the ID of the CU selected in Device list under Device Management (if you want to monitor other CU in a multi-CU system, please select the target CU IP address in the Device list under Device Management, and then return to this page).
- ⑧ Name: displays the name of the monitored CU.
- ⑨ IP: displays the IP address of the monitored CU.
- ⑩ Tracking: shows whether camera tracking function of the CU is enabled. Checked means enabled.
- ⑪ Search: refresh ABCD channel information.

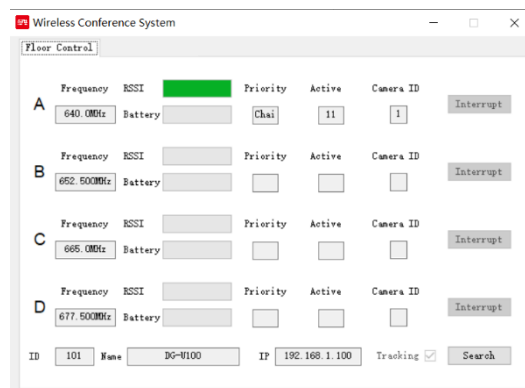
7. Regular Login

Regular login can only be used after device registration. Refer to *Section 5.2* for details.

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Regular login



Floor Control Interface

Users can perform regular login by directly clicking the [Regular login] button or by waiting 30s to be automatically logged in. Regular login only provides Floor Control function. If the CU is not registered, the software will exit in 30s.