TAKSTAR®得胜

DG-U100 无线会议麦克风系统

Wireless Conference Microphone System

使用说明

User's Manual

DG-U100 Wireless Conference Microphone System

■ Preface

Dear Customer,

Thank you for purchasing Takstar DG-U100 Wireless Conference Microphone System. In order to better understand and use the product, please read this manual carefully.

If you have any questions or suggestions, please contact our local dealer.

■ Features

Features of Control Unit

- Connects up to 83 mic units within signal coverage, allowing simultaneous speech from 1~4 persons
- Real-time tracking of speakers by connecting to cameras; controls up to 7 cameras at the same time
- Supports multiple PTZ camera control protocols such as Sony Visca, Pelco-P and Pelco-D
- Smart LAN control software for managing all units in one integrated interface, easy to deploy
- Infrared sync for greater ease on setting up conference
- Built-in 15-band EQ for each channel, adjustable as required
- Remote gain control on discussion units, catering to different speaker requirements
- SUBG band data scheduling technology, wireless digital audio/control signal processing, farther transmission and better anti-interference
- Intelligent power management lowers battery consumption by auto shutdown of discussion units when control unit is powered off
- Remote frequency changer allows synchronizing frequency changes remotely between control unit and discussion units
- Supports two discussion modes: FIFO (First-in-First-out) or No-Delegate mode
- XLR/TRS/TRS-Isolated outputs for connection with various audio equipment
- 2U rack unit size installs into a standard 19" rack mount

Features of Discussion Units

- 12864 pixel matrix screen, with clear and intuitive indication of device status
- Discussion unit priority is set freely via IR Sync; no more physical distinction among chairman/guest/delegate units
- Condenser capsule offers high fidelity, long pickup distance, high sensitivity, low distortion and clear sound
- Chairman units are prioritized, unrestricted and able to interrupt speech of delegate units
- Guest units can speak independently, uninterrupted by chairman units or FIFO rules
- Delegate units are controlled by chairman units for conference management
- Delegate units display the speaking duration which serves as reference for speech speed adjustment
- Built-in antennas, elegant in looks, also provide strong stability and anti-interference
- Adjustable gain for each discussion unit, configurable on control unit, adaptable to various speakers

DG-U100 Wireless Conference Microphone System

■ Applications

Suitable for meetings, classrooms, multi-function halls

■ Specifications

Control Unit (CU) Parameters

- Power Supply: DC 12V/1A
- Frequency: call frequency: 640-692MHz, scheduling frequency: 315-316MHz
- Receiving Sensitivity: -105dBm
- S/N Ratio: > 80dB
- T.H.D: < 0.5%dB @ 1KHz
- Effective Range: ⩾ 30m (in open area)
- Number of Discussion Channels: 4 X 83
- Network Communication Protocol: UDP
- Camera Control Mode: RS-485, 9600 baud
- Power Consumption: 6W
- Product Dimensions: 430×100×220mm
- Net Weight: 3.5Kg

Discussion Unit Parameters

- Power Supply: DC 3V, AA 1.5V * 2
- Transmit Power (antenna port): ⩾ 10mW
- Mic Capsule: condenser, unidirectional
- Continuous Use Time: 8hrs (subject to battery capacity)

Note: The above data is measured by Takstar laboratory, and Takstar has the final interpretation right!

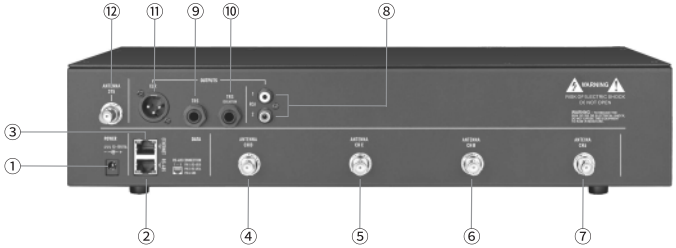
■ Function Descriptions

Control Unit Diagram

Front Panel

① Channel 1~4 scheduling parameters
② LCD display
③ Communication status
④ Edit button: rotate to move the cursor or edit parameters, push to select or edit parameters
⑤ Power button
⑥ Infrared sync window

Back Panel



① Power input socket
② RS485 interface for high-speed PTZ camera
③ Network RJ45 socket
④ Channel 4 antenna socket
⑤ Channel 3 antenna socket
⑥ Channel 2 antenna socket
⑦ Channel 1 antenna socket
⑧ RCA output socket
⑨ TRS isolated output
⑩ TRS non-isolated output
⑪ XLR balanced output
⑫ 315 antenna socket

Note: Antenna frequency for Channel 1~4 is 640~690MHz

Discussion Unit Diagram

① Power-on/power-off/speak button
② Infrared receiving window
③ Interrupt function button
④ LCD display

Operation Instructions

1. Adjust Channel Frequency

Turn the CURSOR knob to move the cursor onto the box in below figure ①, press and rotate the knob to adjust the frequency, then press the knob again to set the desired frequency.

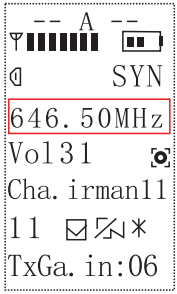


Figure ①

2. Select & Set Channel Priority

Rotate the CURSOR knob to move the cursor onto the box in Figure ②, and press the knob to switch priority among "Chairman", "Guest", or "Delegate". For Chairman (11-14) and Guest (01-04) units, their IDs will be automatically generated; while for Delegate units, you need to manually set their IDs. This can be done by moving the cursor onto the box in Figure ③, press the knob, then rotate to set the Delegate ID (21-100 optional) as shown in Figure ④.

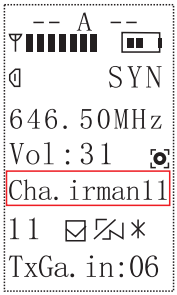


Figure ②

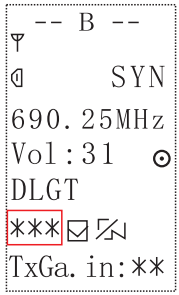


Figure ③

Figure ④

3. Sync Units

Set the required frequency and priority before syncing frequency. Press and hold the SPEAK button on the mic unit, and align the IR windows on both the mic unit and the CU; rotate the CURSOR knob on CU to select "SYN" , then press the knob to start automatic sync, in which case the CU IR window will flash red until the syncing is over. Once synced successfully, the CU screen will display the Signal Meter and Mic Battery Status, as shown in Figure ⑤:

Figure ⑤

4. Channel Input/Output Volume, Unit Gain Control

When the channel frequency pairing is complete, you can adjust the input/output volume and unit microphone gain to a desired level.

Rotate the CURSOR knob to move the cursor onto the boxes in Figure ⑥, and start adjusting the input/output volume or gain level respectively, following similar steps in Adjust Frequency. When the gain level is changed successfully, the gain level will briefly appear in the red box area on the mic unit screen, as shown in Figure ⑦.

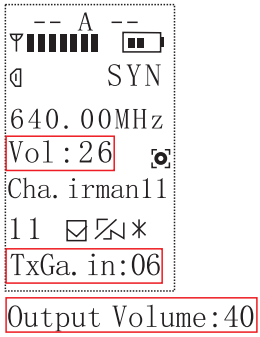


Figure ⑥

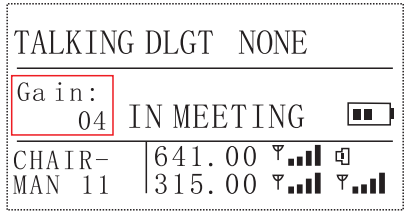
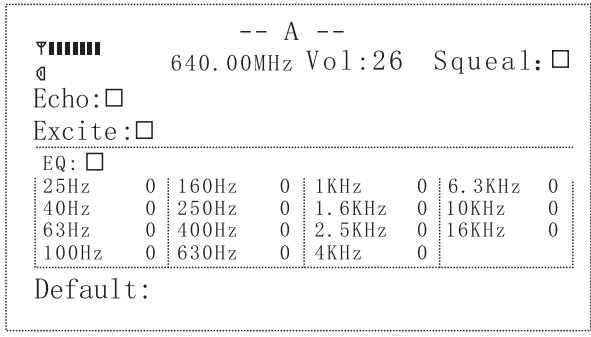


Figure ⑦

5. Channel EQ, Effects, Feedback Suppression

After the above steps, you can set the corresponding EQ, effect and feedback suppression according to actual needs. Rotate the knob so that the cursor falls on the box in Figure ⑧, press the knob to enter the setting interface:

Figure ⑧



Note: Press the rotary button to check and enable the corresponding function

6. Conference Mode

Rotate the knob to enter the conference mode settings, move the cursor to the box area in Figure ⑨, press the knob to switch the conference mode between "FIFO" or "No DLGT".

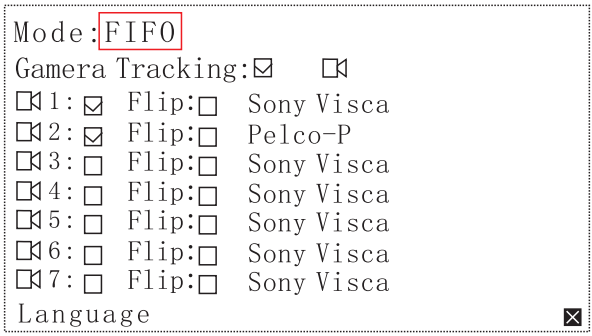
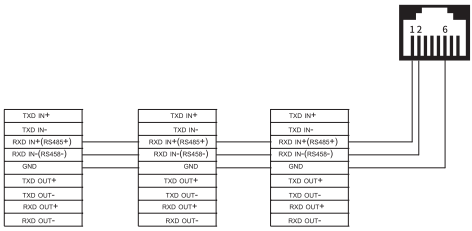


Figure ⑨

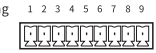
7. PTZ Camera Connection

7.1 The CU supports PTZ camera control protocols including Sony Visca, Pelco-P and Pelco-D. The following figure is the pin connection diagram for an original SONY D70 camera



VISCA RS-422 Wiring

Pin No.	Function
1	TXD IN+
2	TXD IN-
3	RXD IN+(RS485+)
4	RXD IN-(RS485+)
5	GND
6	TXD OUT+
7	TXD OUT-
8	RXD OUT+
9	RXD OUT-



Pin No.	Function
1	TXD IN+
2	TXD IN-
3	RXD IN+(RS485+)
4	RXD IN-(RS485+)
5	GND

(HD)

Note

RS 422 and RS 232 cannot be used at the same time

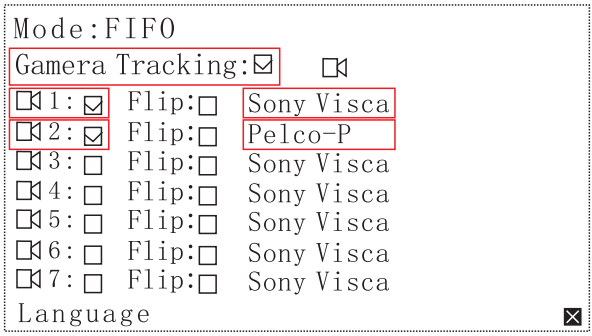
Camera Control Schematic

The above connection diagram is for reference only. Please see the pin definition of the PTZ camera used for actual application.

7.2 Camera Tracking Settings

After the CU and the camera are connected, output the camera video to a monitor, use a remote to enter the camera settings, configure Camera ID and Baud. You can also view the Camera Protocol in the settings. Set the Baud value to 9600, and ID to desired (supporting up to 7 cameras, optional ID 1~7), and leave other parameters unchanged.

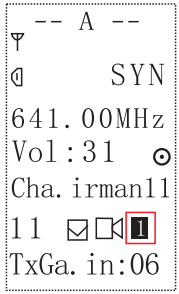
Once the camera parameters are set, rotate the CU CURSOR to enter camera tracking interface, as shown below:



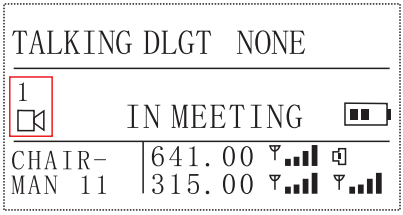
Move the cursor to the checkbox beside the camera icon, and press the CURSOR knob to check tracking function. Then based on the configuration, check the corresponding camera ID, and modify its respective Camera Protocol (by moving the cursor to the protocol, and press the knob to switch protocol). Check " Flip" to flip around the camera footage if necessary.

Next, proceed to binding and positioning the camera:

Adjust the camera angle based on your capturing footage on the monitor (via camera remote), rotate the CU knob to move the cursor to below framed area:



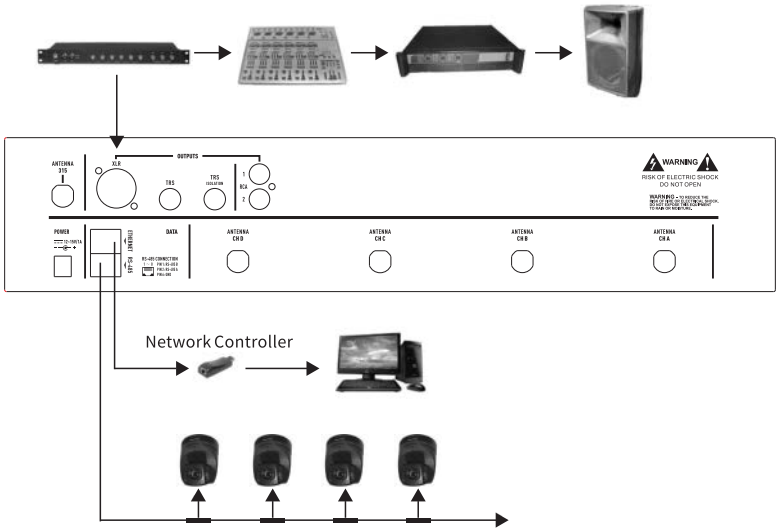
Press and rotate the knob to select the camera ID for use, then double-tap to issue the instruction to camera. There will be an upward arrow appearing briefly after issuing the ID, and the camera signal LED will flash to indicate successful binding and positioning. The mic unit screen will also show the linked camera ID, as shown below:



Cautions:

1) Check if the CU and the camera are wired correctly.
2) Check if the ID No. and Baud of the camera is set properly.
3) Whether the camera tracking function is enabled on the CU, and whether corresponding ID and Camera Protocol are selected.
4) Whether the ID on the discussion unit is set correctly and issued to the camera.
5) It' s suggested to turn off the configured delegate unit before setting up a new one.

8. System Wiring Diagram for Reference



Safety Instructions

To avoid electric shock, overheat, fire, radiation, explosion, mechanical risk and injury or property loss due to improper use, please read and observe the following items before use:

1.Please check if the power of the connected equipment matches with that of this product before operation. Adjust the volume to proper level during operation. Do not operate at over-power or high-volume level for extended time to avoid product malfunction or hearing impairment.

2.If there is any abnormality during use (e.g., smoke, strange odor), please kill the power switch and unplug from power source, then send the product to the local dealer for repair.

3.Keep this product and its accessories in a dry and ventilated area. Do not store in a humid or dusty area for extended time. Keep away from fire, rain, liquid intrusion, bumping, throwing, vibrating, or from blocking any ventilation openings, to prevent malfunction.

4.The product must, when installed on walls or ceilings, be fixed firmly in place at adequate strength to prevent from falling.

5.Please abide by safety rules during operation. Do not use the product in places prohibited by laws or regulations to avoid accident.

6.Do not disassemble or repair the product by yourself to avoid injury. If you have any questions or require any services, please contact our local dealer.

Suitable only for altitudes below 2,000m

Suitable only for non-tropical climates

注意事项：

1. 本单为保修凭证，请用户妥善保管，如有遗失，恕不保修或退换。
2. 保修期限制：购买之日起十二个月内。
3. 除了不可抗力事件损坏外，由本公司负责，免费维修。
4. 如属保管不善或使用不当造成的损坏，维修点将酌情收费。
5. 擅自拆卸维修者，不予保修。
6. 以上保修条款仅限于中国市场适用（不包含港澳台地区）。

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商品：_____ 型号：_____ 购买日期：_____ 年___月___日

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◆广东得胜电子有限公司 ◆电话：400-6828-333 ◆地址：广东省惠州市博罗县龙溪街道富康一路2号

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广东省电声工程技术研究开发中心
广东得胜电子有限公司制造

地址：广东省惠州市博罗县龙溪街道富康一路2号
服务热线：400 6828 333　传真：0752-6383950
邮箱：xs@takstar.com
网址：www.takstar.com

Guangdong Takstar Electronic Co., Ltd.
Address: No. 2 Fu Kang YiRd., Longxi Boluo
Huizhou, Guangdong 516121 China
Tel: 86 752 6383644　Fax: 86 752 6383952
Email: sales@takstar.com
Website: www.takstar.com