



User Manual

GD-KB-AP1420P

EN

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GRUNDIG

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1 Getting Started

1.1 Introduction

Thank you for purchasing a GRUNDIG product. Before installing or connecting the product, please read first the documents:

- Legal Disclaimer
- Safety Instructions
- Installation Manual for the respective product model

Further information about the product like Data Sheets, CE Documents, etc. can be found on the web page www.grundig-security.com.

This User Guide is a user manual for the control of Recorders and PTZ-cameras.

Please read this User Guide carefully and retain it for future use.

1.2 Activate Your Device

Purpose:

For the first-time access, you need to activate the device by setting an admin password. No operation is allowed before activation.

Step 1 In the Device Activation interface, enter the admin password in the text field of **Admin Password** and **Confirm**.

Note:

In edit mode, you can press the FOCUS+/A button on the keyboard panel to switch the character input mode: numerals (123), upper case (ABC) and lower case (abc).



Figure 1-1 Activation Interface

Warning!

STRONG PASSWORD RECOMMENDED—We highly recommend that you create a strong password of your own choosing (8 to 16 characters, including upper case letters, lower case letters, numbers, and special characters) in order to increase the security of your product. And we recommend that you reset your password regularly, especially in the high security system, resetting the password monthly or weekly can better protect your product.

Step 2 Click **Confirm** to finish the device activation.

Note:

- After the device is activated, you need to adjust the date and time settings.
- If you have restored the device to default settings, you need to reactivate the device.

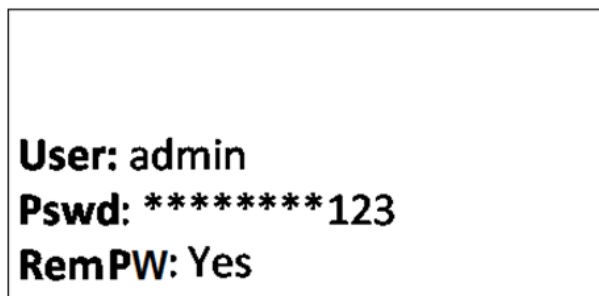
1.3 Login

Purpose:

You must log in to the device before configuring the keyboard, and operating the menu and other functions.

Step 1 In the Login interface, enter the user name in the User Name field.

Step 2 Enter the password in the Password field.



```
User: admin
Pswd: *****123
RemPW: Yes
```

Figure 1-2 Login Interface

Press the **OK** button to log in to the device.

Note:

- In the Login dialog box, if you enter the wrong password 7 times for admin user or 5 times for operators, the current user account will be locked for 30 minutes.
- If you select Remember Password, the system will remember the password for the current user without remembering the previous one.

2 Keyboard Operation

This section describes how to control devices using the keyboard.

On the keyboard, press the MODE button on the panel to enter the operation for different devices.

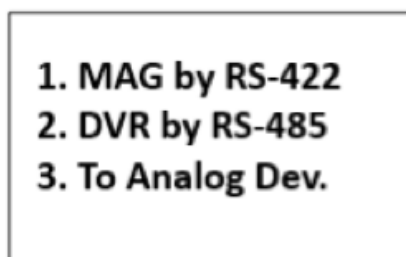


Figure 2-1 Operation Mode

See the following table for the description of each keyboard mode.

Table 2-1 Description of Keyboard Mode

SN	Operation Mode	Description
1	MAG by RS-422	The keyboard can connect with the matrix access gateway via RS-422 serial port, and realize the video wall control, PTZ control, etc.
2	DVR by RS-485	The keyboard can connect with the DVR/NVR via RS-485 serial port, and remotely call the device menu and realize PTZ control through the virtual panel.
3	To Analog Dev	The keyboard can connect with the analog dome or PTZ unit via RS-485 serial port, and realize PTZ control; or connect to analog matrix via RS-232 port.

2.1 MAG by RS-422

The keyboard can connect with the matrix access gateway via RS-422 serial port, and realize the video wall control, PTZ control, etc.

Before you start:

Check the connection between the MAG and the keyboard. Connect the **T+** and **T-** terminals of the RS-422 serial port of the keyboard with that of the MAG.

See the following figure:

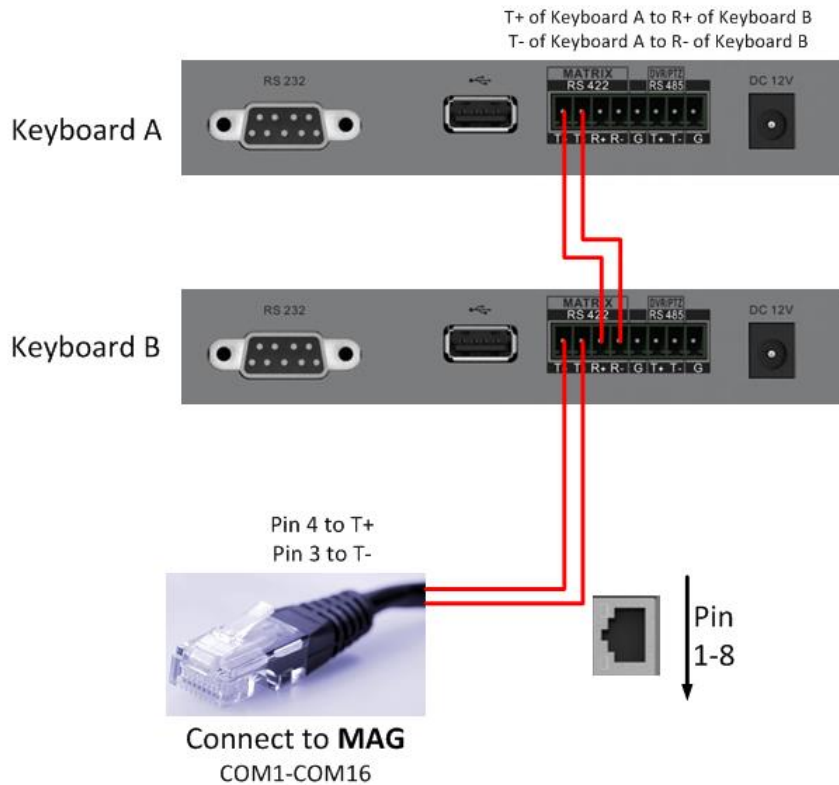


Figure 2-2 Connection between Cascaded Keyboards and MAG

See the following figure as an example for the network cable (568B). The pin 3 and pin 4 are colored in green-white and blue.

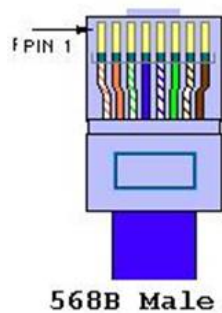


Figure 2-3 Network Cable

Step 1 Enter the **MAG by RS-422** operation mode on the keyboard.

Step 2 Press the *Num + MON* buttons to select the display window for the output channel.

Step 3 Press the *Num + WIN* buttons to set the window to play the decoded video.

Step 4 Press the *Num + CAM* buttons to select the input channel.

MON: 5 CAM: 2 WIN: 4

Figure 2-4 Matrix Operation

Step 5 You can operate the PTZ control on the video wall for the connected dome.

Note:

- You can also press the *Num* + CAM buttons to select the input channel, and operate the PTZ control.
- For the initial use of MAG, you must use the configuration kits software to configure the input/output channel ID of the MAG. Please see the related user manual for details. The input/output channel ID is used for switching on the video wall or PTZ control during keyboard operation.

2.2 DVR by RS-485

Warning!

In DVR by RS-485 mode, the keyboard screen will display a prompt message asking you to confirm your device version. If your NVR is of a 2.0.0 or later version, select **Yes**; otherwise, select **No**. If your DVR is of a 1.0.0 or later version, select **Yes**; otherwise, select **No**. Please note that selecting an incorrect device version may result in function unavailability.

If you encounter a camera control problem, try to change the device ID of your NVR or DVR to a digit from 1 to 16.

The keyboard can connect with the DVR/NVR via RS-485 serial port, and remotely call the device menu and realize PTZ control through the virtual panel.

Before you start:

Check the connection between the DVR/NVR and the keyboard. Connect the **T+** and **T-** terminals of the RS-485 serial port of the keyboard with the KB port on the DVR/NVR rear panel respectively.

Note:

Our keyboard supports DVR/NVR with KB ports only.

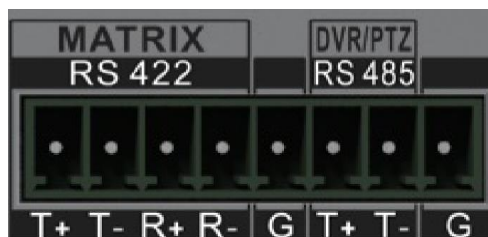


Figure 2-5 RS-485 Serial Port

Step 1 Enter the **DVR by RS-485** operation mode on the keyboard.

Step 2 Press the *Num + DEV* buttons on the keyboard panel to select the device ID (corresponding to the remote ID on Client Demo).

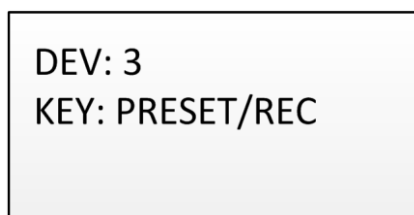


Figure 2-6 DVR by RS-485

Step 3 Move the joystick and operate the buttons on the keyboard panel to realize the corresponding functions. Refer to the Quick Start Guide to check the description of the DVR control buttons.

Note:

The baud rate, protocol and other parameters of RS-485 of the keyboard must be configured to 9600, 8, 1, and none parity.

2.3 To Analog Device

2.3.1 Dome by RS-485

The keyboard can connect with the analog dome or PTZ unit via RS-485 serial port, and realize PTZ control.

Before you start:

Check the connection between the dome and the Keyboard. Connect the **T+** and **T-** terminals of the keyboard's RS-485 serial port with the **RS485+** and **RS485-** terminals of the dome respectively.

Step 1 Enter the **To Analog Dev** operation mode on the keyboard.

Step 2 Press the *Num + CAM* buttons to select the dome site.

Step 3 Use the joystick and operate the buttons on the keyboard panel to realize the corresponding functions.

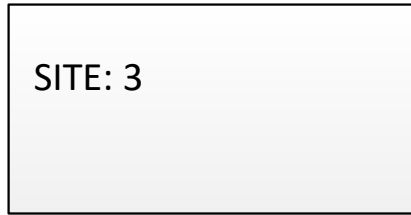


Figure 2-7 Dome by RS-485

Note:

The address, baud rate, protocol, and other parameters of RS-485 must be configured the same with those of the dome.

2.3.2 Dome by RS-232

The keyboard can connect with the analog dome via RS-232 serial port, and control the dome via VISCA protocol.

Step 1 Connect the analog dome to the RS-232 serial port of the keyboard.



To connect to analog dome.

Figure 2-8 Analog Dome Connection

Step 2 Set the RS-232 parameters. You can set via both the local keyboard and the web browser. Select **Protocol** as **VISCA**. Refer to *Fehler! Verweisquelle konnte nicht gefunden werden.Fehler! Verweisquelle konnte nicht gefunden werden.* for details.

Note:

The address, baud rate, protocol, and other parameters of RS-232 must be configured the same with those of the dome.

Step 3 Press **MODE** button on the keyboard, and select **To Analog Dev > RS232**.

Step 4 Press the *Num + CAM* buttons to select the dome site.

Step 5 Use the joystick and operate the buttons on the keyboard panel to realize the corresponding functions.

SITE: 3

Figure 2-9 Dome by RS-232

2.3.3 Analog Matrix by RS-232

Step 1 Connect analog matrix to the RS-232 interface of the keyboard using RS-232 cable as shown below.



Figure 2-10 Analog Matrix RS-232 Connection

Step 2 Log in to the keyboard, select **Mode > To Analog Dev** and enter *Num + DEV*, *Num + MON* and *Num + CAM* to select the camera to control.

DEV: 1
MON: 2
CAM: 1

Figure 2-11 Analog Matrix By RS-485

2.4 Shortcut Operation

The device control via keyboard can be realized by shortcut operation.

Step 1 On the login interface, enter the user name and password to log in to the device.

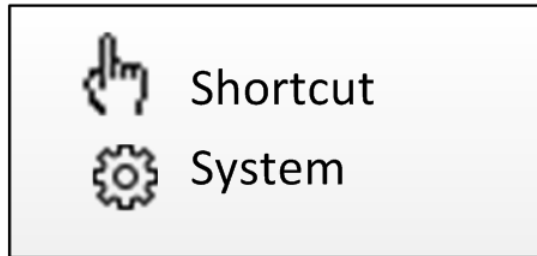


Figure 2-12 Menu

Step 2 Use the joystick to select the **Shortcut** to enter the shortcut operation mode.

Step 3 Press the *Num + DEV/MON/CAM/CAM-G/PRESET/PATROL/PATTERN/WIN/MULT/SCENE* on the keyboard buttons to realize the corresponding device operation and control.

3 System Menu Configuration

On the main menu after login, you can select **System** to check the version, and configure the system configuration, including network, user, RS-485, RS-422, hardware, time and maintenance.

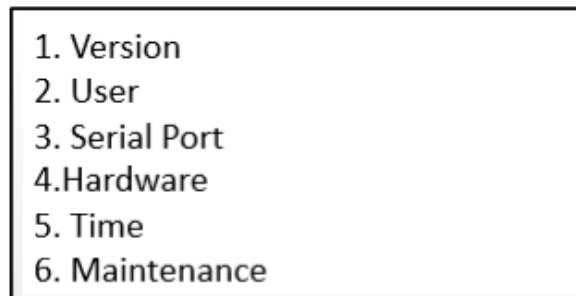


Figure 3-1 Menu overview

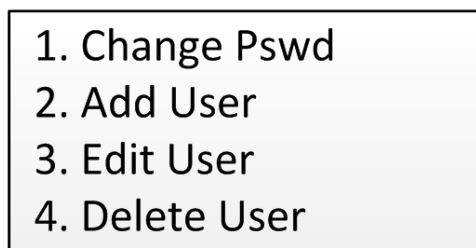
3.1 Version

Select **Version** to check the version information of the keyboard, including the firmware version, panel version, hardware version, core version, and serial No.

3.2 User Management

Select **User** to enter the user management interface. You can change the password (admin), add new user, edit user or delete the user.

Click **OK** button or the central button of joystick to save the settings.



a. User Management

Note:

Only the admin user is allowed to add/edit/user the user (operator).

3.3 Serial Port Settings

You can connect analog dome or DVR with the keyboard via RS-485 serial port, MVC/MAG via RS-422 serial port and analog matrix via RS-232 serial port.

Select **Serial Port** to enter the settings. You can configure the address bit (RS-485 only), baud rate, data bit, protocol, stop bit, parity, and copy all settings. When you set the Copy All to Yes for RS-485 serial port, the current settings will be copied to the connection of all other RS-485 devices.

Click the **OK** button or the central button of joystick to save the settings.

Add. Bit: 0 Baud Rate: 9600 Data Bit: 8 PROT: PELCO-P	123	Stop Bit: 0 Parity: None Copy All: No
--	-----	---

b. RS-485 Settings

Note:

The RS-485/RS-422/RS-232 parameters configured here must be the same with the connected dome/DVR or MAG.

3.4 Hardware

You can set the click sound, auto-logoff, and backlight feature of the keyboard.

Select **Hardware** to enter the following interface, and move (left/right) the joystick to set the function. Click **OK** button or the central button of joystick to save the settings.

If you enable **Click Sound**, there will be sound when you press the keyboard buttons. When the auto-logoff is set to ON, the system will automatically log off after the device is not operated for 30 minutes. The duration of backlight can be set as **Open** (always turned on), **5min**, **10min**, **30min**, and **60min**.

Click Sound: OFF A-Logoff: ON Backlight: Open

c. Hardware Settings

3.5 Time Settings

Select **Time** to enter the system time settings interface. You can set the value of year, month, date, time format, hour, minute and second. Click **OK** button or the central button of joystick to save the settings.

3.6 Maintenance

Select **Maintenance** to enter the system maintenance settings interface. You can upgrade the device, import and export the configuration files, and recover the device to the factory default settings.



d. Maintenance

Note:

- You should connect the U-flash disk to the keyboard before upgrading, and importing/exporting the files.
- The upgrade file and configuration file must be located in the root directory of the U-flash disk.
- The upgrade file must be in *digicap.dav*; and the configuration file in *kbCfg.bin*.

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