uVision Remote Console User Manual

Foreword

This manual provides instructions on the functions, operation methods, and daily maintenance methods of uVision Remote Console.

Applicable products

This manual applies to the following products:

Product name	Product model	Software version
uVision Remote Console	VMU-N3	R001

Audience

- UIH training and customer service engineers.
- UIH marketing personnel.
- Authorized distributors of UIH.

Contact information

In case of any problem, please contact UIH Service Center.

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1. Introduction

In order to protect the operators from the radiation, we develop two methods to carry remote exposure. They are the Remote Control Unit and uVision Remote Console.

The collimator light and exposure can be controlled remotely. The workflow can be synchronized through the uVision Remote Console. Remote exposure could be performed while watching patients' video. It brings users a safer and more efficient exposure experience. The uVision Remote Console should be placed on the collimator for charging. The suction between them is strong and it will not fall down even if the device moves at the maximum speed.

The uVision Remote Console is a component of the Mobile Digital Medical X-ray Imaging System for indoor use. Mobile Digital Medical X-ray Imaging System is usually used in the examination room or ward. Mobile Digital Medical X-ray Imaging System provides 12V DC power supply for uVision Remote Console with PogoPin charging connector.



2. Components of uVision Remote Console

Figure 1 uVision Remote Console

No.	Component	Description	
1	Collimator lights button	Switching on or off the light localizer/linear laser localizer.	
2	Exposure button	Triggering exposure.	
3	Power button	Switching the uVision on or off.	
4	uVision indicator	 Purple: Successful uVision pairing White: Communication established Green: Exposure preparation Yellow: Exposure started 	
5	uVision screen	A touchscreen. It is used to display equipment state and system software interface.	
6	uVision charging port	Used to charge the uVision when the uVision is placed in the uVision hold.	

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3. System Power Supply

The internal battery can provide 7.7V DC power to the uVision Remote Console. At the same time, an external PogoPin charging connector can provide 12V DC power to the uVision Remote Console. When the user holds the VMU, the charging interface definition from left to right is shown in the following figure.



Figure 2 Charging interface definition

4. Switching the uVision Remote Console on or off

4.1 Switching the uVision Remote Console on

Hold down the power button on the uVision for 3 s. The startup process takes less than 30 s. Enter the 4-digit password to log on.

4.2 Switching the uVision Remote Console off

Hold down the power button on the uVision for 3 s. Click the shutdown button, and the VMU will shut down

4.3 Switching the uVision Remote Console off forcibly

The uVision can be forcibly switched off when the uVision software does not respond. Hold down the power button on the uVision for 6 s.

5. Connecting the uVision Remote Console

The uVision Remote Console is connected to the equipment through Wi-Fi. If the uVision cannot be connected to the Wi-Fi, contact UIH Customer Service Center.

In factory, the uVision has been paired to the system through Wi-Fi. The uVision will automatically connect to the equipment once it detects the Wi-Fi network of the equipment.

6. System status monitoring

When the uVision Remote Console is placed in uVision Remote Console holder, you can monitor the system status (motorized motion state, positioning state, and stand-by state via the uVision Remote Console).

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7. Remote exposure

You can start the X-ray exposure when the OK ring in the System Status area is green. During remote exposure, no operation can be performed in the uVision interface.

- 1) Press the exposure button on the uVision Remote Console. When the uVision Remote Console indicator turns white, release the exposure button.
- 2) Hold down the exposure button for the second time within 2 s. The uVision Remote Console indicator turns green. At the beginning of and during exposure, the uVision Remote Console indicator is yellow and an expo- sure prompt tone is played.
- 3) After you hear the exposure prompt tone and see that the uVision Remote Console indicator is off, release the exposure button. The exposure is completed.
- 4) The exposure will be stopped if any button is released midway.

8. Video monitoring

In the Exam interface, you can monitor the patient's position in real time by Wi-Fi Module. The radiation pre-warning bar displays the distance from the uVision remote console to the equipment. Red indicates the hazardous area and green indicates the safe area.



Figure 3 Video monitoring interface of the uVision remote console

9. uVision Remote Console Settings

Click the settings button in the upper right corner of the uVision remote console to open the uVision remote console setting interface.

- 1) You can adjust the sleep time of the uVision and set the automatic screen-off time to any of the following values: 30s、1mins、2mins、5mins、never。
- 2) You can set SSID and PSK in the Wifi settings interface to connect the AP of mobile DR.
- 3) You can adjust the screen brightness or turn on the automatic brightness adjustment function.

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10. FCC Conformity Statement

Please take attention that changes or modification not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.

This device complies with Part 15 of the FCC Rules. Operation is subject to the following two conditions:

(1) This device may not cause harmful interference, and

(2) This device must accept any interference received, including interference that may cause undesired operation.

UWB devices may not be employed for the operation of toys. Operation onboard an aircraft, a ship or a satellite is prohibited.

This equipment has been tested and meets applicable limits for radio frequency (RF) exposure. The highest SAR value reported under this standard during product certification is 0.99 W/kg.

Antennas mounted on outdoor structures such, as antennas mounted on the outside of a building or on a telephone pole, or any fixed outdoors infrastructure are prohibited for use with this device.