

# Remote Control Unit User Manual

## Foreword

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

## Applicable products

This manual applies to the following products:

Product name	Product model	Software version
Remote Control Unit	RCU-MN01	R001

## Audience

- Users of the Mobile Digital Medical X-ray Imaging System.
- 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.

Shanghai United Imaging Healthcare Co., Ltd.

Telephone: 0086 400-686-6088

E-mail: [services@united-imaging.com](mailto:services@united-imaging.com)

Website: [www.united-imaging.com](http://www.united-imaging.com)

Address: 2258 Chengbei Rd., Jiading District, Shanghai, 201807

# 1 Laws and regulations

This medical equipment complies with relevant regulations regarding the marketing of medical equipment.

If there are regulations relevant to the use and operation of this equipment, operators are obliged to comply with such regulations.

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.

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.

## 2 Safety Information

The remote control unit can control the exposure operation of the machine, to avoid unnecessary radiation, please do not use multiple devices within the maximum range of communication distance between the wireless remote control unit and the VMU (Another equipment of the system) .

## 3 Remote Control Unit

### 3.1 Introduction to the remote control unit

The optional remote control unit of this equipment is used to start exposure and switch on or off the collimator lights.

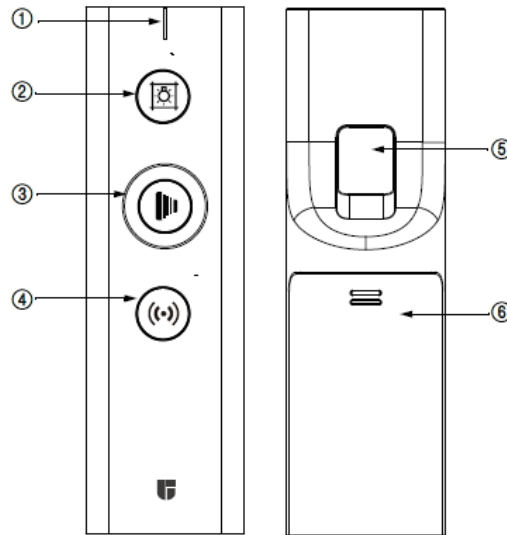


Figure 1 Remote Control Unit

No.	Name	Description
1	Status indicator	Indicating the status of exposure <ul style="list-style-type: none"> <li>■ Green: Exposure preparation</li> <li>■ Yellow: In exposure</li> <li>■ Green and yellow: The communication between the remote control unit and the equipment is normal</li> </ul>
2	Collimator Lights button	Switching on or off the collimator lights
3	Exposure button	Triggering system exposure, there is exposure sound during exposure
4	Communication status button	<ul style="list-style-type: none"> <li>■ The status indicator shows green and yellow at the same time after the communication status button is pressed: The communication between the remote control unit and the equipment is normal</li> <li>■ The status indicator is off after the communication status button is pressed: The remote control unit is not within the signal range</li> </ul>
5	Safety operation switch	Preventing false triggering of exposure
6	Battery cover	The battery can be replaced after the battery cover is removed

### 3.2 Pairing the Remote Control Unit to the system

In factory, the remote control unit has been paired to the system in one-to-one manner. If the remote control unit is replaced, you need to pair the new remote control unit to the system.

1. Start up the system and log on to the system software.
2. Click Remote Switch Pairing in GCS interface.

3. Click Pairing in the pop-up window.
4. Press the Collimator Lights button, exposure button, and safety operation switch at the same time in 10 s for more than 3 s.
  - Wait for the remote control unit to be paired. When the status indicator lights up (green) for about 1 s, pairing is complete.

**The remote control unit ensures effective control within 10 meters from the system in the open and unobstructed space.**

### **3.3 Operating the remote control unit**

#### **3.3.1 Exposure**

1. Press the safety operation switch at the back of the remote control unit.
2. When the status indicator on the remote control unit lights up green, press the exposure button to start exposure.
  - During exposure, the yellow status indicator stays on. It goes off after exposure ends.

**Notice:** Do not perform intermittent loading by keeping pressing the safety operation switch. After an exposure, you must release the exposure button and the safety operation switch at the same time before you perform the next exposure.

#### **3.3.2 Collimator Lights button**

1. Press the Collimator Lights button to turn on the collimator lights.
2. Press the Collimator Lights button again to turn off the collimator lights.

### **3.4 Battery replacement**

The remote control unit is powered by batteries. The batteries must be replaced regularly.

Power supply mode: Two triple A batteries (AAA).

**Notice :**Take out the batteries if the remote control unit will not be used for a period of time.

### **3.5 Technical data**

- Communication Distance:  $\geq 10$  meters
- Baud rate: 7.49969Kbps
- Transmission power: -3dBm
- Receiving sensitivity: -80dbm
- Radio frequency: 433.17MHz

- Frequency band: 200KHz
- Modulation mode: GFSK
- Temperature: 0°~ 50°