

# User Guide

## UV-C LED Bore Disinfection System MRI Safe



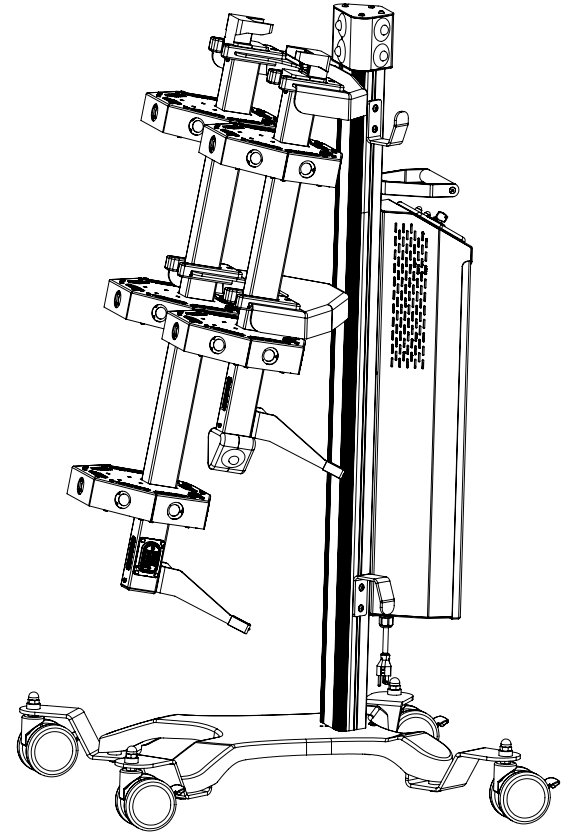
### Important Safety Instructions

When using electrical equipment, basic safety precautions should always be followed including the following:

Disinfection System 1-07-000351  
Spoke - 1-07-000347  
Cart - 5-07-000369

### Read And Follow All Safety Instructions

1. **Warning:** UV-C Risk Group 3. *Avertissement: UV-C Groupe Risque 3.*
2. **Warning:** UV emitted from this product. Eye or skin irritation may result from exposure. Use appropriate shielding. *Avertissement: UV émis par ce produit. Une irritation des yeux ou de la peau peut résulter de l'exposition. Utiliser un blindage approprié.*
3. **Warning:** This product must be operated in accordance with the NEC or your local electrical code. If you are not familiar with these codes and requirements, consult a qualified electrician. *Attention: Ce produit doit être installé conformément au NEC ou à votre code électrique local. Si vous n'êtes pas familier avec ces codes et exigences, consultez un électricien qualifié.*
4. **Warning:** This equipment is not for use in hazardous combustible atmospheres as defined by the National Electrical Code. *Avertissement: Cet équipement ne doit pas être utilisé dans des atmosphères combustibles dangereuses telles que définies par le National Electrical Code.*
5. **Danger:** Use of equipment not recommended by the manufacturer may result in a risk of shock or injury to persons. *Danger: L'utilisation d'équipements non recommandés par le fabricant peut entraîner un risque d'électrocution ou de blessure pour les personnes.*
6. Use only the provided handle to move the cart. *Utilisez uniquement les poignées fournies pour déplacer le chariot.*
7. Do not step or stand on the base of the cart. Doing so may cause injury and damage to the cart. *Ne pas marcher ou se tenir sur la base du chariot. Cela pourrait causer des blessures et endommager le chariot.*
8. Always lock caster wheels in place when not moving the cart. *Verrouillez toujours les roulettes lorsque vous ne déplacez pas le chariot.*



### General MRI Scan Room Safety Requirements

1. The ACR and JCAHO require all MRI scan room doors to be clearly marked and restrict access
2. The MRI scan room is a highly restricted area because of the inherent dangers of the MRI system
3. ACR requires four (4) zones be established and clearly marked in all MRI installations.
4. Zone IV is control room and scan room for the MRI suite
5. Untrained personnel are not allowed in the MRI control room or scan room known as zone IV
6. All MRI scanners are in zone IV per ACR design requirements which means the MRI scan room is in a locked-off area
7. All MRI scan room doors are closed, locked and secured when not in use for scanning
8. All MRI scan room doors are closed and locked when trained staff is not present in zone IV
9. Maintenance and cleaning personnel are specifically trained and have special access to the MRI area
10. The likelihood of public traffic or untrained personnel in zone IV near the MRI is very low
11. Highly trained MRI personnel, skilled in the practice of restricting access to zone IV and the MRI suite will be using the UV-C Disinfection System in the MRI scan room
12. There is no public traffic in the area where the UV-C Disinfection System will be used.



Screened MRI Patients Under Constant Direct  
Supervision of Trained MRI Personnel Only

**Save These Instructions For Future Reference**

## Installation:

Diagram 1 - Installing and Moving the UV-C

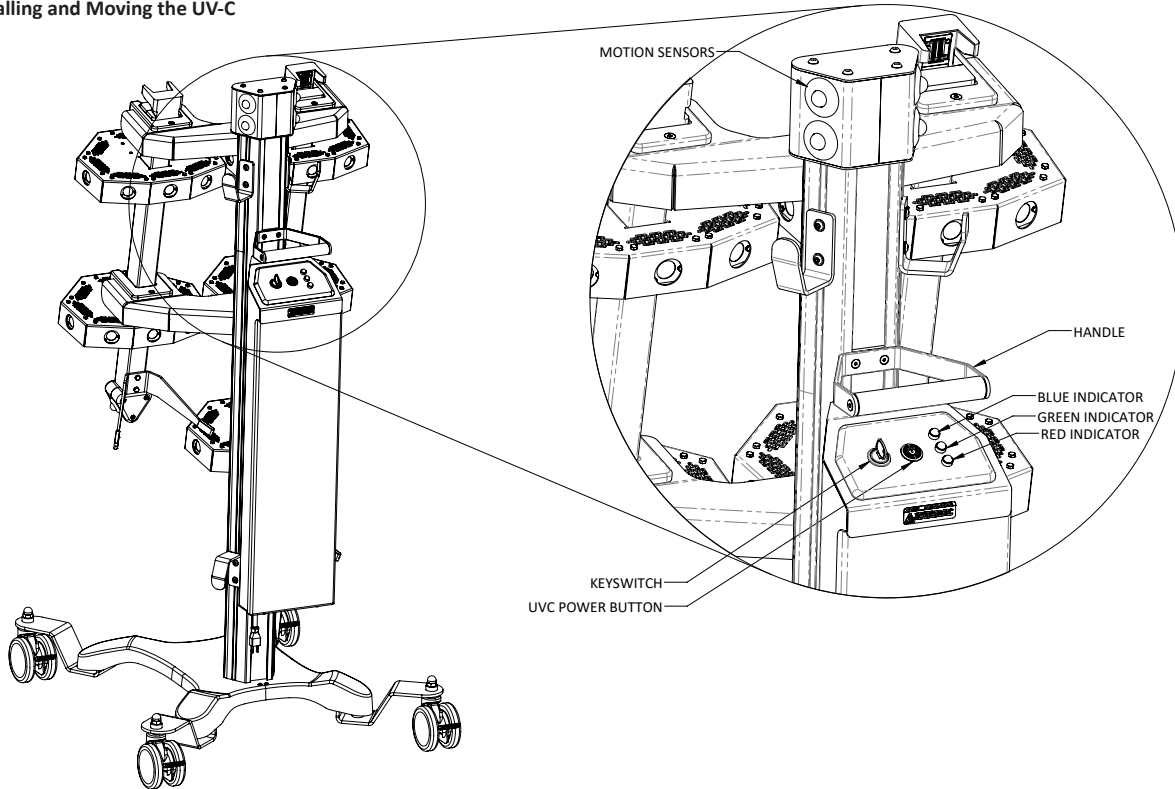
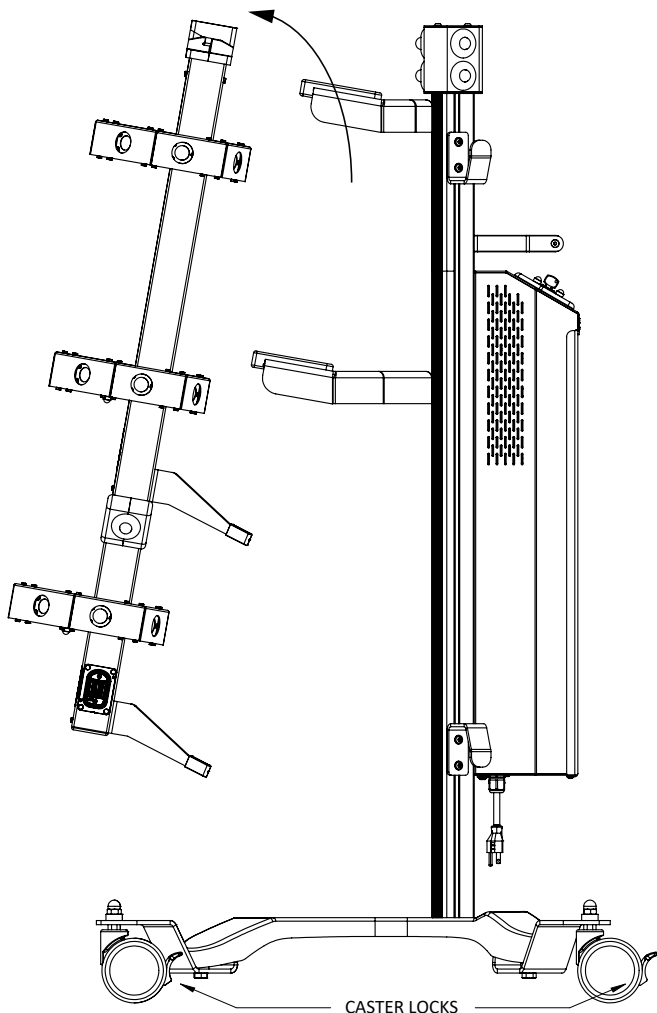


Diagram 2 - Installing and Moving the UV-C



### Step 1:

The UV-C ships fully assembled. Remove from the packaging using caution in regard to the wheels located on the base of the cart.

### Step 2:

To move the UV-C, use the handle located on the back of the cart. Unlock the caster wheels by raising the tab located on the back of each wheel with your foot.

### Step 3:

Begin by wheeling the UV-C Cart into the room close to the end of the patient table, a minimum of 5ft. from the magnet. (The magnetic field within 5 ft. of the magnet can saturate the inductors in the power supply which will potentially damage the power supply. To preserve the long-term life of your power supply, place the cart at the end of the MR table, facing the RF window when power supply is on.)

### Step 4:

When in place, re-lock the caster wheels by pressing the tab located on the back of each wheel with your foot.

### Step 5:

To assemble the UV-C System on the MRI Table, begin by removing the 2-hub section from the cart as shown in **Diagram 2** and place it onto the rear side of the table with legs facing towards the bore as shown in **Diagram 3**.

### Step 6:

Next, remove the 3-hub section as shown in **Diagram 2** and place it onto the table with legs at the front of the MRI table as shown in **Diagram 3**.

### Step 7:

The two sections can be connected together by lifting the end of the 3-hub section and placing it in to the slot on the end of the 2-hub section and sliding the 2 pieces together. Lower the connected ends down towards the table to set them in place as shown in **Diagrams 4 and 5**.

**Step 8:**

Align the UV-C system onto the center of the table and slide the table into the bore. Be sure the UV-C is centered within the bore as shown in **Diagram 6**.

**Step 9:**

Connect the UV-C power cable from the cart to the UV-C System.

**Step 10:**

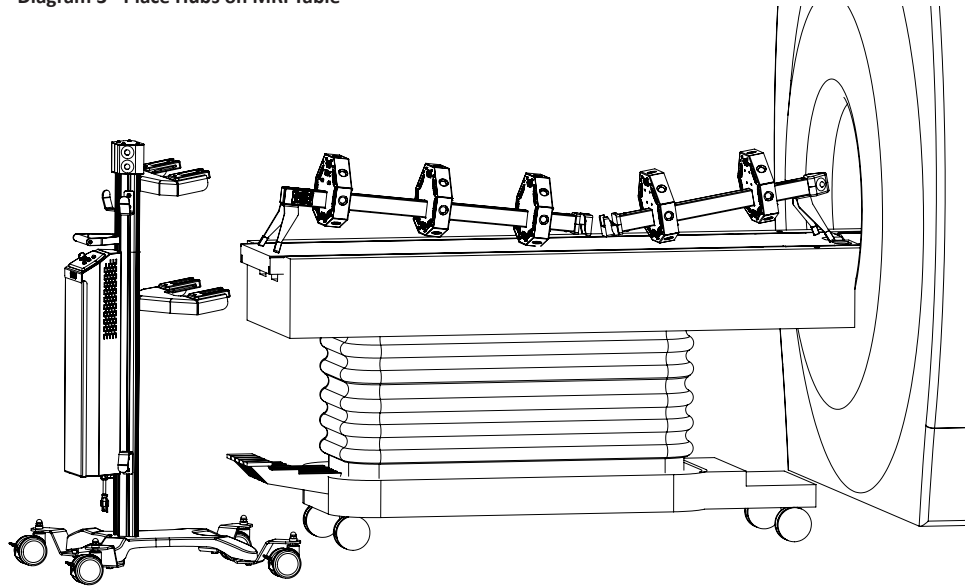
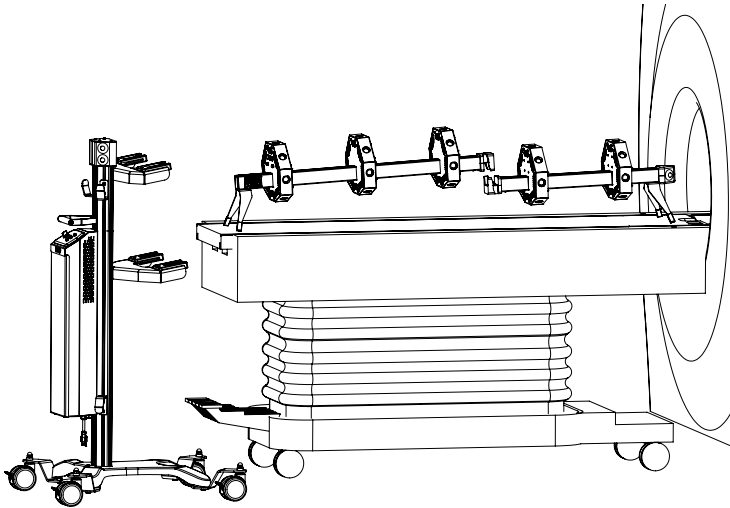
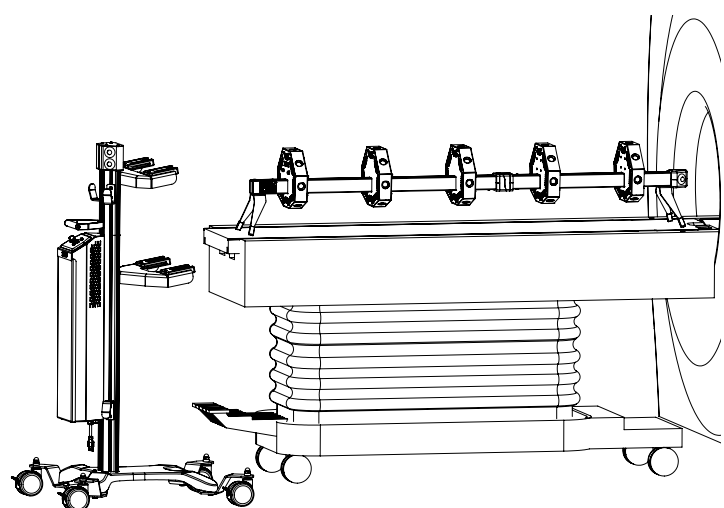
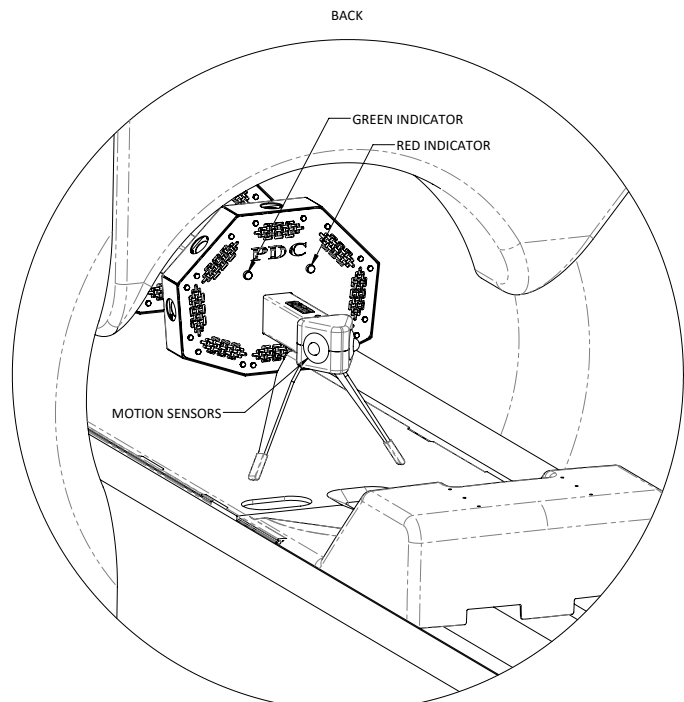
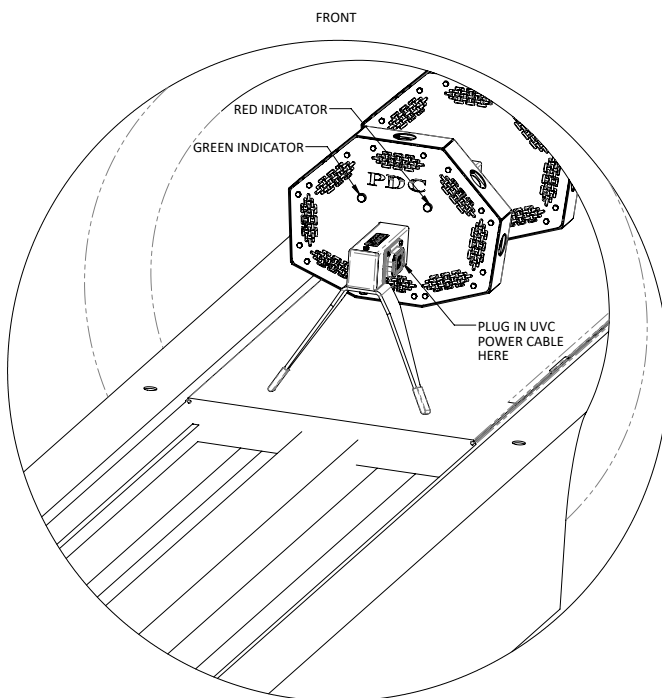
Plug the AC cord into a standard 110V wall outlet.

**Note:**

The Blue and Red indicators will flash on the cart while the UV-C cable is disconnected.

**Note:**

The Blue indicator will flash until system initializes, then will be solid as shown in **Diagram 1**.

**Diagram 3 - Place Hubs on MRI Table****Diagram 4 - Connect Hubs Together****Diagram 5 - Assembled Hubs****Diagram 6 - Assembled UV-C System in Bore / Connect UV-C Power Cable**

**Step 11:**  
Turn the key to the ON position while the **BLUE** indicator is flashing.

**Step 12:**  
Press the **POWER BUTTON** and exit the room ensuring the door closes.

- If motion is detected before the system starts, the **GREEN** LED will flash rapidly until no motion is detected for 30 seconds
- If cycle is interrupted, turn key off and go back to **Step 11**.

**Step 13:**  
Disinfection cycle takes 3 minutes to complete.

- While the cycle is running, the **BLUE** LED is ON and the **GREEN** LED flashes slowly.
- Once complete, all three indicators **RED GREEN** and **BLUE** will be ON solid
- If an error occurs, the **RED** indicator will flash an error code. See Error Code Chart below.

**Step 14:**  
Enter the room and turn the key to the **OFF** position.

**Step 15:**  
Unplug the Black AC power cord and hang the cord on the hooks located on the back of the cart.


**Step 16:**  
Unplug the UV-C Power Cable and hang the cable on the hooks located on the back of the cart.

**Step 17:**  
Remove the patient table from the bore to slide the UV-C out.

**Step 18:**  
Disconnect Sections 1 and 2 and hang each Section back on to the cart as they were removed in **Steps 5-8** ensuring the Sections are suspended by the Black aluminum joint cap. Make sure the UV-C support legs are pointing towards the cart when suspended as shown in **Diagram 2**.

Error Code per Flashing Sequence of Red Lights: (S = Slow F = Fast)		
Error Code	Error	Description
2F1S	Voltage Error	Turn Key <b>OFF</b> and return to <b>Step 10</b> . If condition repeats please contact PDC at 1 (262) 369-1929

Key - UV-C System Lights	
Light	Description
Flashing Blue	UV-C System Initializing
Solid Blue	UV-C System Ready
Solid Green	Disinfection Cycle Started
Fast Flashing Green	Motion Detected before UV-C Disinfection Cycle starts, UV-C Disinfection Cycle will start 30 seconds after last motion is detected
Slow Flashing Green	UV-C System Running
All 3 Solid	Disinfection Cycle Complete
Flashing Red	Error (refer to error code guide above)



**Directive 2012/19/EU (WEEE - Waste Electrical and Electronic Equipment): Information for Users**

This product complies with EU Directive 2012/19/EU. The crossed out wheeled bin symbol on the article means that at the end of its useful lifespan, this product must not be disposed of with your other household or municipal waste. This product has required the extraction and use of natural resources for its production. It may contain hazardous substances that could impact health and the environment if not properly disposed. In order to avoid dissemination of those substances in our environment and to diminish the pressure on the natural resources, the user is responsible for delivering the appliance to an appropriate collection facility at the end of its useful lifespan. The separate collection and recycling of your waste equipment at the time of disposal will help conserve natural resources and ensure that it is recycled in a manner that protects human health and the environment. For more information on available collection facilities contact your local waste collection service or the place of purchase.