

PH GPS Bracket System

Product Overview

The PH GPS Bracket is comprised of Radlink proprietary software and hardware to duplicate Radlink user interface onto Philips reference monitor of the MVS utilizing a switch box that shifts the video signal between Philips and Radlink on the reference monitor. Not only does Radlink solution expand the field of view of Philips C-Arms utilizing Pano function, but it also facilitates intra-operative image analysis by assisting surgeons to evaluate acetabular cup position, limb length discrepancy, and femoral offset during Total Hip Arthroplasty.

The PH GPS Bracket comes with software features such as image stitching and Surgeon's Checklist™ software that provides surgeons with real-time feedback on orthopedic implant component positioning. Pre-operative images can be viewed on the device during surgery, which surgeons can use to reference against the intra-operative images captured during the procedure.

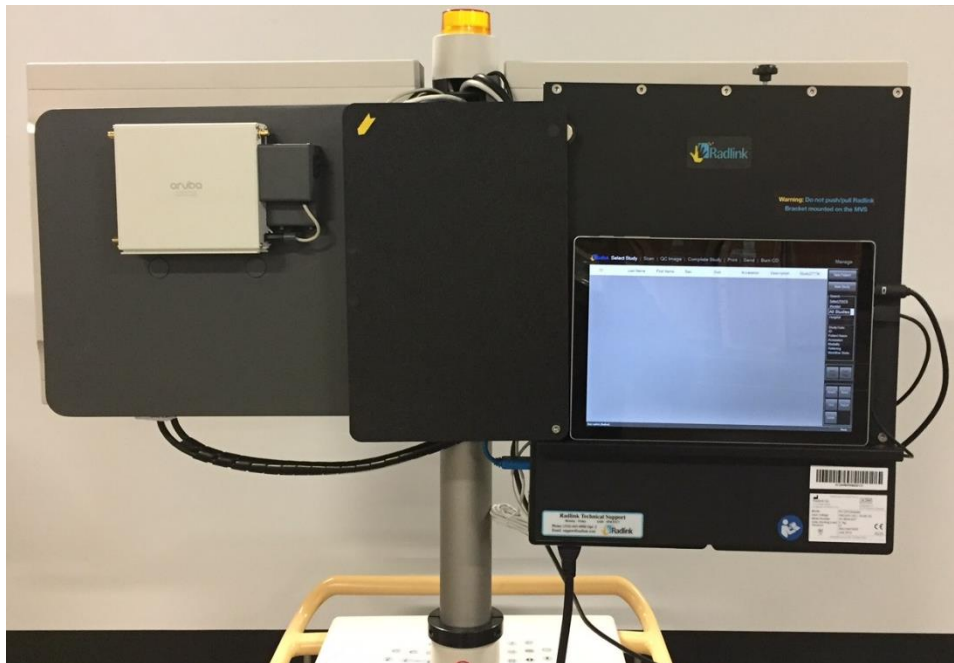


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PH GPS Bracket Technical Specifications

Basic Information

Market name:	PH GPS Bracket
Model:	PH GPS Bracket
Software Revision Level:	3.8
Dimensions:	19.3" X 16.5" X 5.5"
Safe Working Load:	5.8 kg (6.8 kg including power cable)
Body Type:	Tablet PC on Bracket
Operating System:	Windows 10 Professional
Integrated Software:	Radlink Pro Imaging Software Suite & PACS Includes: ViewPro Application, Preview Images, Image Acquisition, Image Processing, Image Manipulation, Overlay Templating, Overlay Line/Angle Measurements
Regulatory Certifications:	Radlink FDA 510(k) #: K142718, CE Marked
Radio Frequency Compliance:	U.S.A. FCC Part 15 Subpart B & Subpart C
Expected Device Lifetime:	5-7 Years
Accuracy of measurements:	0.2mm (<i>Dependent on image-capture precision</i>)
Device Classifications:	<ul style="list-style-type: none">- Class II ME Equipment. Suitable for continuous operation mode- No Sterile Parts, Applied Parts, Detachable Parts, Disposables- Not intended for use in oxygen rich environment. No oil lubrication systems- No High Voltage Terminals, multiple socket outlets, cooling liquids- Contains no PEMS required for basic safety or essential performance

Overall Electrical Configuration:

Power Consumption:	Average of 35 Watts
Input Voltage & Current:	100-240 V (50/60 Hz), 1.0 Amps (AC) [No Fuses]
Operating Temperature Range:	41 – 104 °F (5 – 40 °C)
Humidity Range:	8-85% non-condensing
Atmospheric Pressure Range:	80 kPa – 106 kPa
Maximum Altitude of Operation:	2000 meters (or less)
Ingress Water Protection Rating:	IP20 – No Liquid Protection, Solids protection 12.5mm
Power Cord:	NEMA 5-15P to NEMA 5-15R hospital grade, 25 feet

Transport & Storage Atmospheric Conditions:

Temperature Range:	-104 – 140 °F (-76 – 60 °C)
Humidity Range:	8-95% non-condensing
Atmospheric Pressure Range:	80 kPa – 106 kPa

Warnings for PH GPS Bracket System



Radlink Technical Support & Philips FSE are the only approved Service Personnel



Recommended that user reads PH GPS Bracket user manual prior to operating unit



Do not touch the PH GPS Bracket and the patient at the same time



The PH GPS Bracket has no “Applied Parts”, or parts meant for direct patient contact



WARNING - No modification of the PH GPS Bracket is allowed



WARNING - Do not modify the PH GPS Bracket without authorization of the manufacturer



WARNING - If the equipment is modified, appropriate inspection and testing must be conducted to ensure continued safe use of the equipment



Contraindications: Do not use the PH GPS Bracket for mammography



No parts of the PH GPS Bracket shall be serviced or maintained while in use with a patient



No parts of the PH GPS Bracket are suitable for use within the patient environment



Do not use near water/liquid - unit does not have Ingress Protection Rating for liquid



To maintain wireless signal strength, do not use near source of EMC or RF interference



The full list of notices and warnings for the PH GPS Tablet (15-14-001) can be found at www.surface.com/support for the Microsoft SurfacePro



PH GPS Bracket and Philips C-Arm can be used fully independently.



Installation is not required by the user for the PH GPS Bracket



Position the PH GPS Bracket so the mains plug is readily accessible for quick disconnection from the power supply



The PH GPS Bracket does not create any “waste products” during standard use. The device owner should properly dispose of the PH GPS Bracket tablet PC hardware in accordance with government regulations at the end of the device life

Warnings for PH GPS Bracket System (cont'd)



The PH GPS Bracket uses batteries. The device owner should properly dispose of the GPS Bracket's batteries in accordance with government regulations at the end of the device life.



WARNING - The PH GPS Bracket is not configurable (or reconfigurable)



An additional multiple socket-outlet or extension cord shall not be connected to the PH GPS Bracket while plugged in and charging



Only connect items that have been specified as part of the PH GPS Bracket or have been specified as being compatible with the unit.



Do not push/pull the PH GPS Bracket mounted on the MVS



If a cleaning agent is being used which is supported by the MVS but not by the PH GPS Bracket, the PH GPS Bracket shall be dismounted prior to cleaning the MVS



Power cable can become a tripping hazard when plugged into a power source



Keep wireless mouse and clicker in storage on the PH GPS Bracket when not in use

Intended Use(s) of the Radlink GPS Product Family (PH GPS Bracket)

FDA 510(k) Indications for use

The Radlink GPS is intended for digital image capture use in general radiographic examinations, whenever conventional screen-film systems may be used. The Radlink GPS allows imaging of the pelvis, knee, skull, chest, shoulder, spine, abdomen and extremities. The digital images are transmitted from the panel or from a connection to PACS via computer networks or from a video input port to a personal computer (PC) where they may be displayed, processed, altered, overlaid with templates, and compressed for archiving or transmission via computer networks to other medical facility sites. The Radlink GPS is not for mammography.

CE Mark (European Union) Intended Use

The Radlink GPS is a computer-based Picture Archival Communication System (PACS) that receives digital images (processed or raw/unprocessed) from various sources and displays them to the user for preliminary review. These sources include, but are not limited to, video signal inputs, wired or wireless transfer of image files from other acquisition systems (e.g. X-Ray Flat Panel Detector Systems), or images transmitted to the Radlink GPS from other PACS systems. Using the Radlink GPS, you can manipulate/post-process images, overlay lines/measurements/templates, store images, and transmit images to other PACS destinations.

Installation Instructions



PH GPS Bracket

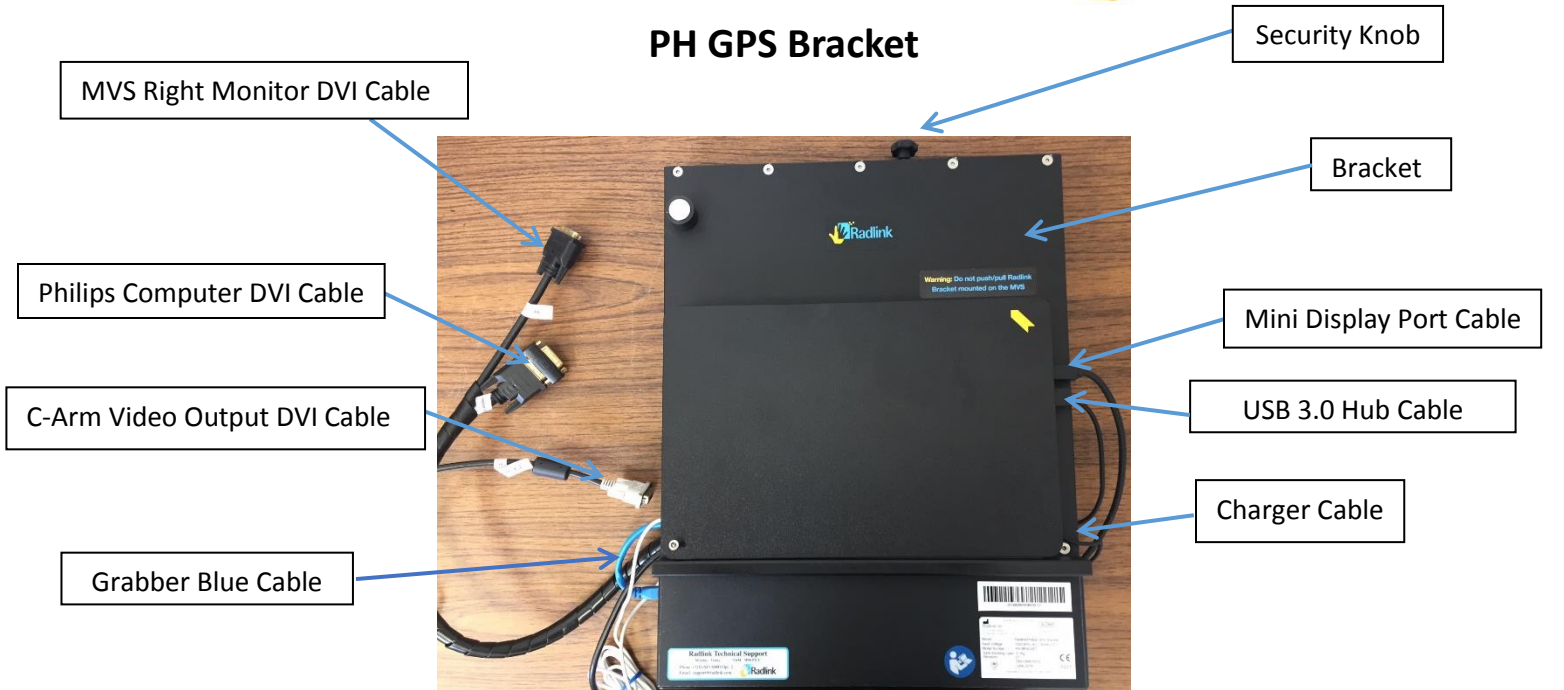


Figure1. front view of the bracket

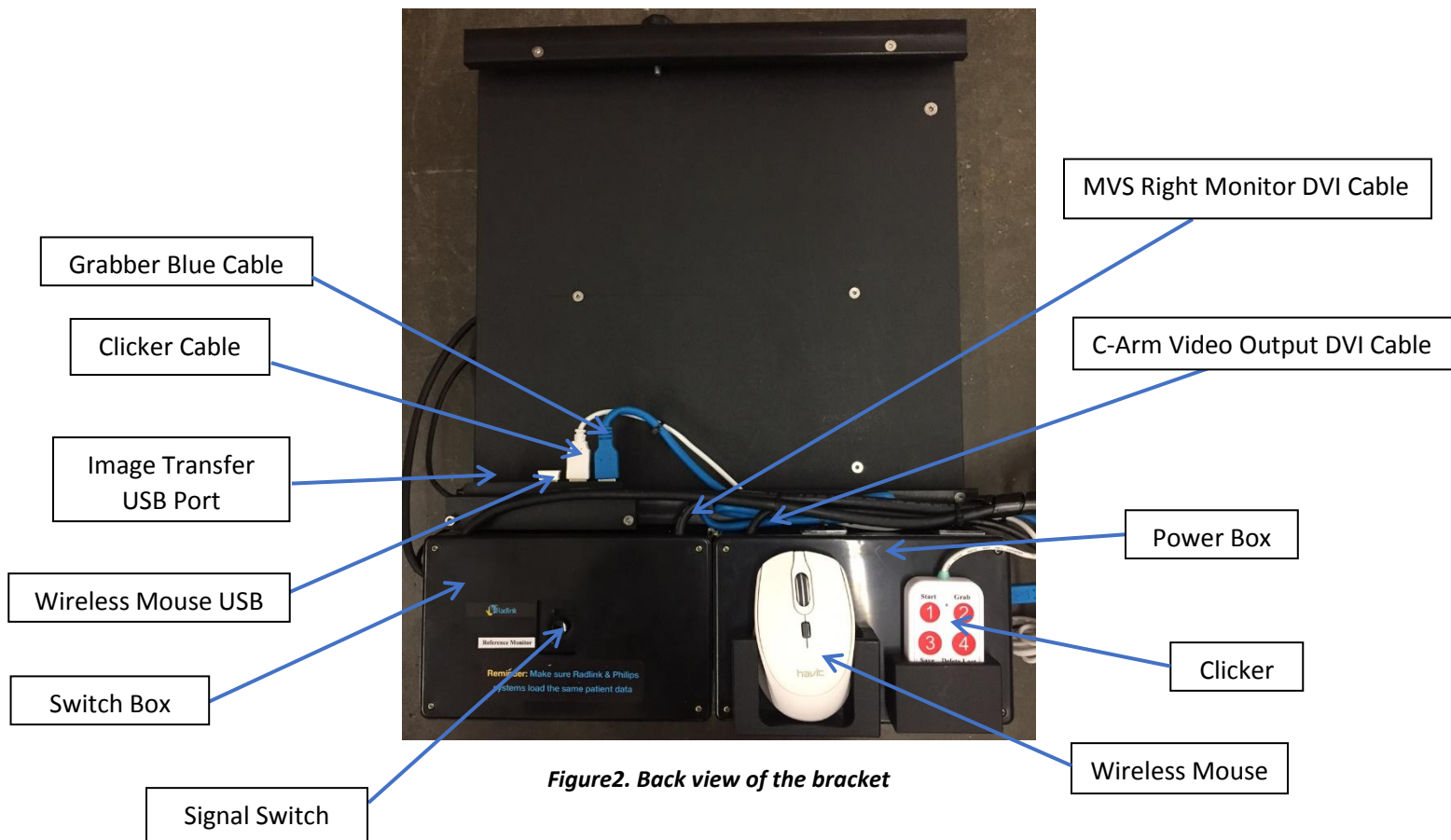


Figure2. Back view of the bracket

Installation Instructions



Tools & Accessories



Note: Compatible power adapter for customer's country will be included.

Installation Instructions



Installation Procedure

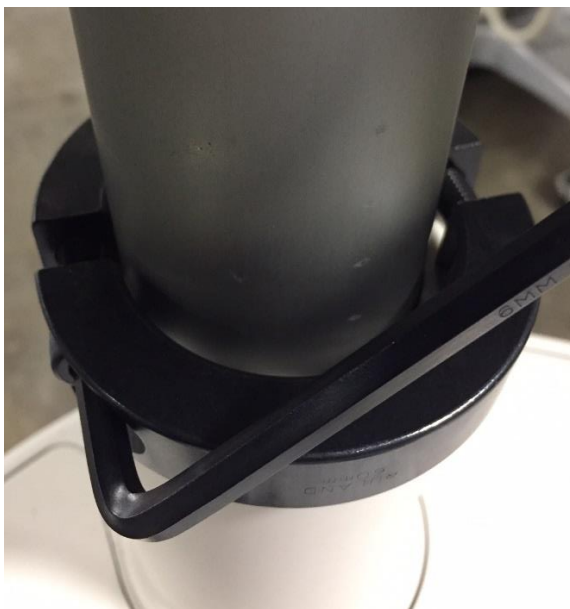
Note: If the Bracket must be placed down on a surface, lay it down gently with the tablet cover side face down.

Note: Check the DVI cables to make sure they are not damaged prior to installing the Bracket.

1. Raise the monitors of the MVS to the highest position.



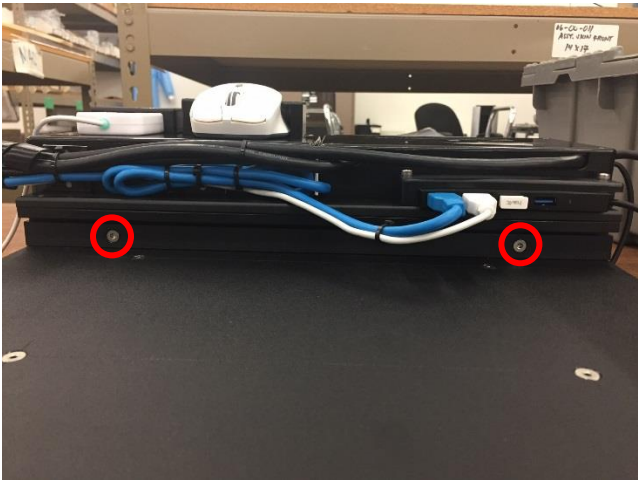
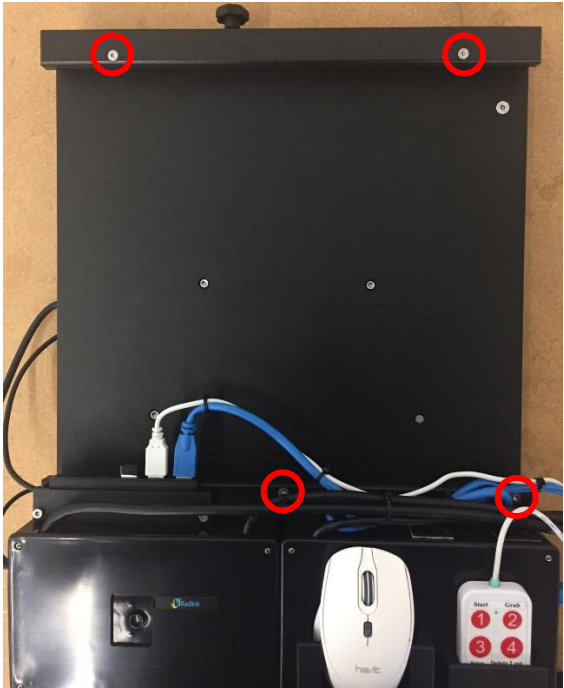
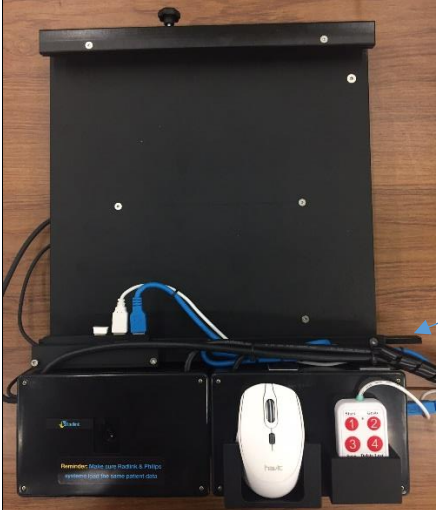
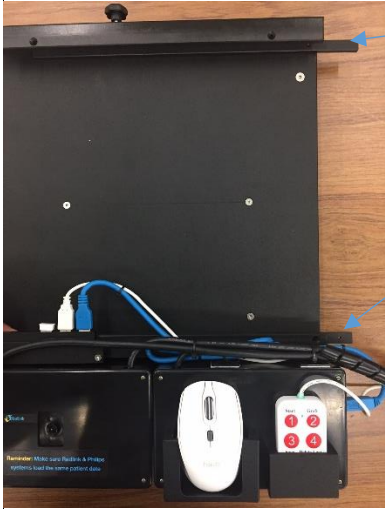
2. Place the two pieces of the Clamping Ring around the base of the MVS height pole and tighten the two screws using the M6 Allen key.



Installation Instructions



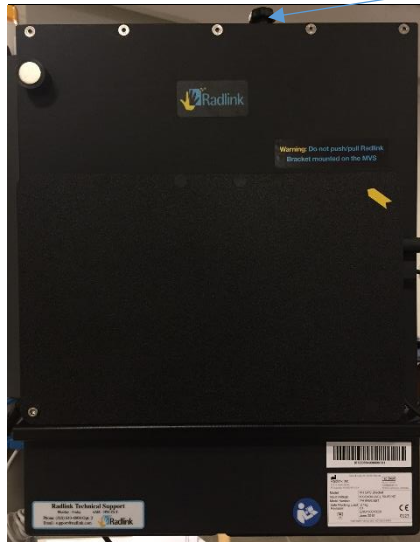
3. Remove the adjustment bars based on the type of the MVS:

Type Z (15mm monitor flap thickness)	Type P (22mm monitor flap thickness)
<p>Remove the Height Bar from the Bottom Rail by unscrewing the two screws with the M2.5 Allen key.</p> 	<p>Remove the two Width Bars by unscrewing the four screws with the M2.5 Allen key</p> 
<p>Slide the Height Bar off of the Bracket.</p> 	<p>Slide the Width Bars off of the Bracket.</p> 

Installation Instructions



- Slide the Radlink Bracket onto the back of the Live Monitor until it stops and tighten the knob to secure it.



- Loosen the two securing screws on the DVI cable connected to the Reference Monitor with the provided flat-head screwdriver. Unplug the Philips DVI cable from the Reference Monitor.



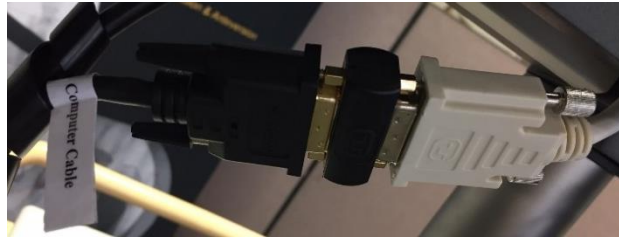
- Plug the Radlink setup DVI cable labeled "Monitor Cable" into the Reference Monitor. Tighten the two securing screws on the cable head with the provided flat-head screwdriver.



Installation Instructions



7. Connect the DVI cable that was unplugged from the Reference Monitor and connect it to the DVI cable labeled "Computer Cable". Tighten the securing screws on the two cable heads with the provided flat-head screwdriver.



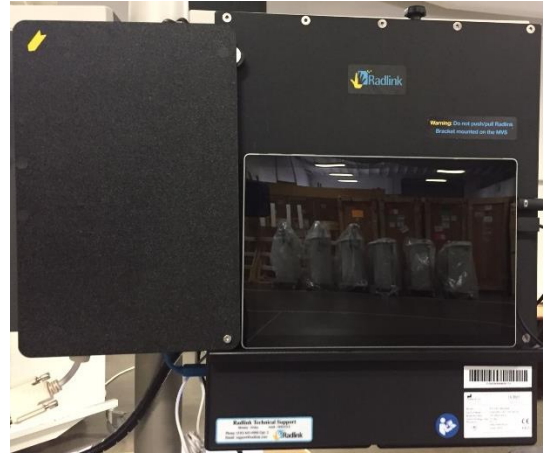
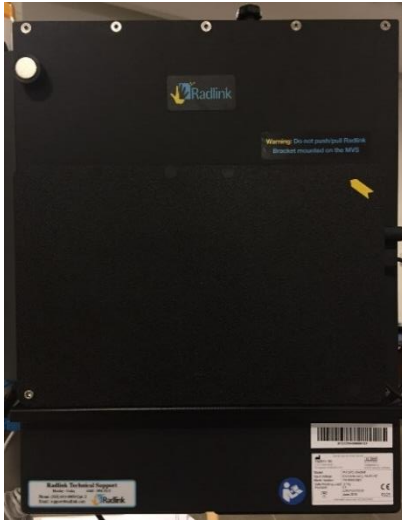
8. Plug in the DVI cable labeled "C-Arm Output" into the "DVI left" port on the front panel of the MVS. Tighten the two securing screws on the cable head with the provided flat-head screwdriver.



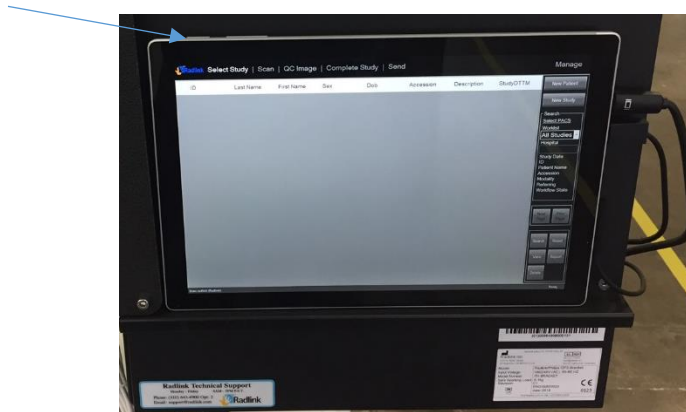
Installation Instructions



9. Open the screen cover by rotating it counter-clockwise as indicated by the yellow arrow. Make sure when the cover is open it is secured vertically by the magnet.



10. Turn on the Radlink tablet by pressing the power button on the far left of the tablet. The Radlink Pro Imaging software will start automatically after a few seconds. If the software is ever closed, it can be launched by clicking on the Radlink Pro Imaging shortcut on the desktop.



11. Turn on the mouse by flipping the switch on the bottom of the mouse to the "On" position.



Installation Instructions

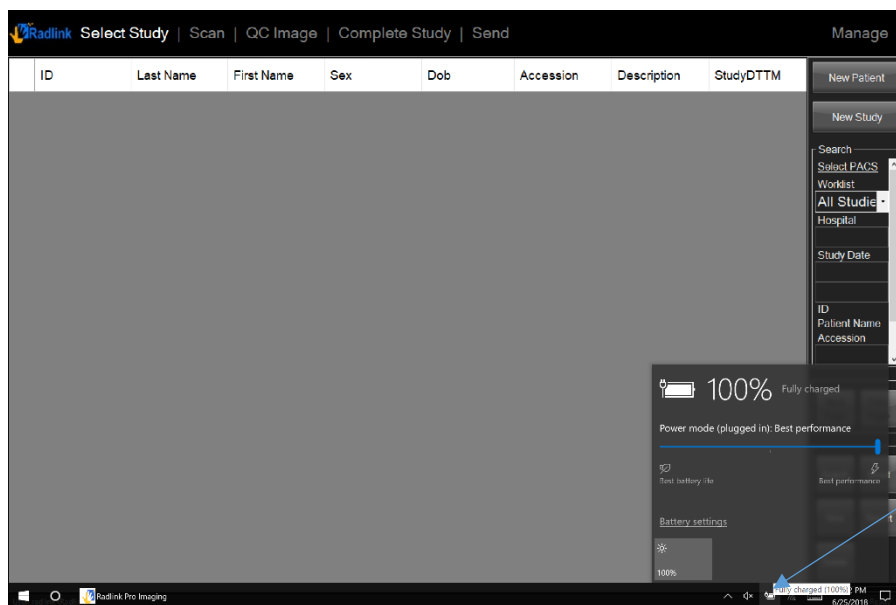


12. Plug in the NEMA 5-15R end of the extension power cable into the Power Box with the green power label and the other end (NEMA 5-15P) into a power outlet. The hole for the power is on the bottom side of the box. Check that the LED above the power label is solid blue. Refer to the table for color descriptions.



Connection type/LED color	USB 3.0 connection
Solid red	Firmware update in progress AV.io HD initializing
Blinking red	Adjustment to VGA input in progress
Solid green	N/A
Blinking green	N/A
Solid blue	USB 3.0 connection active
Blinking blue	Video and/or audio transferring successfully

13. Check the power percentage by clicking the battery icon in the bottom right of the tablet to make sure it is charging.



Installation Instructions



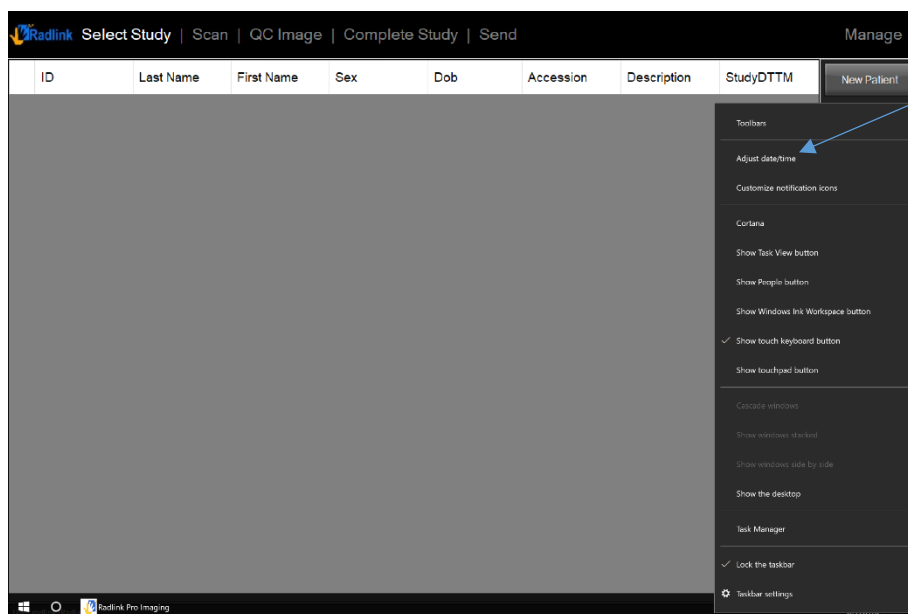
14. The Signal Switch will display the Radlink tablet on the Reference Monitor when the blue LED labeled “Radlink” above the button is lit up. The display on the Reference Monitor can be toggled by pressing the button on the Switch Box.



15. The Signal Switch will display the Philips Reference Monitor when the blue LED beneath the button is lit up. Verify that pressing the button on the switch box indeed toggles between the Radlink and Philips reference display.



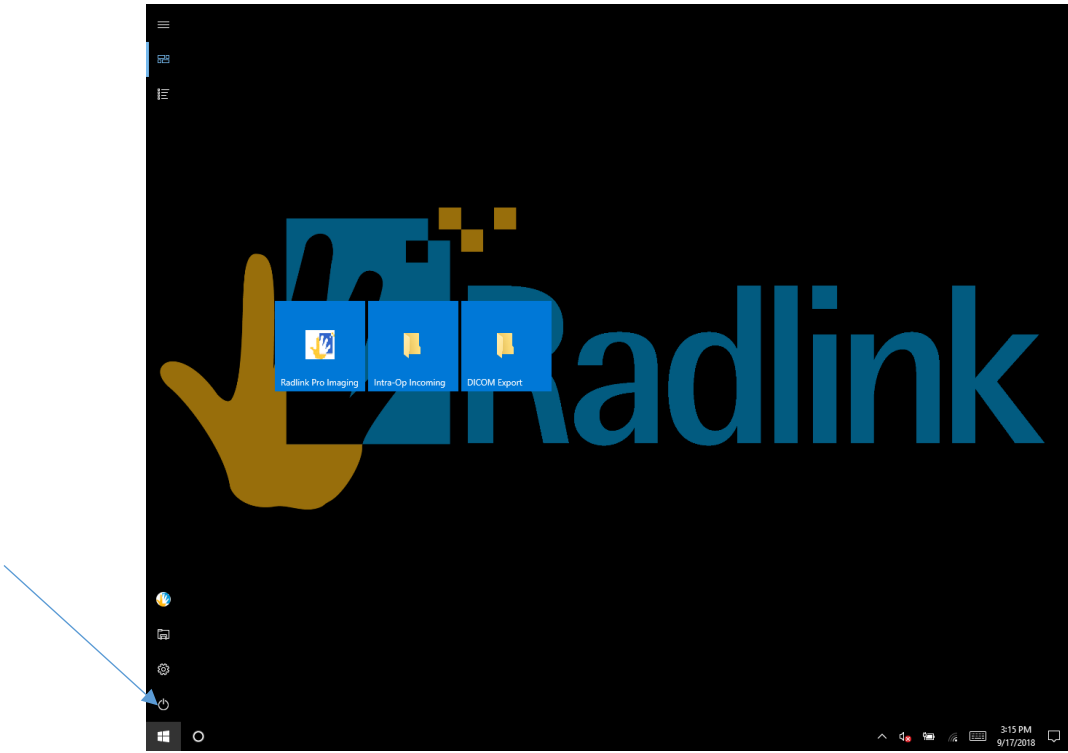
16. Make sure the date and time match the Philips system. If they need to be changed, then right click on the time in the bottom right corner and click “Adjust date/time”.



Installation Instructions



17. To turn off the Radlink tablet, shut it down with the Power settings in the Start menu at the bottom left corner of the screen.



Installation Instructions



IT/PACS SET UP

Note: Refer to the Hospital PACS Form on pages 19-20 for IP address and PACS information.

Note: Wired network configuration is not supported.

Static IP Address: (If needed)

1. Open up the Control Panel. Click on "Network and Internet" and then "Network and Sharing Center". Click on "Change adapter settings" on the left.
2. Right click on the wireless network and then click "Properties".
3. Select "Internet Protocol Version 4" and then click "Properties".
4. Select "Use the following IP address" and input the static IP information that was provided on the Hospital PACS Form filled out by your facility. Click "OK" once all the information is correct.

Note: For DHCP, no settings need to be changed.

Software PACS Settings:

1. Click the Wifi icon in the bottom right corner of the desktop. Connect to the wireless network that was provided on the Hospital PACS Form.
2. Open the Radlink Pro Imaging Software. Click on Manage at the top right corner of the software.
3. Click on PACS/RIS. Under PACS Server Settings, click New. Fill in the fields on the right with the information in the PACS Form under the section "Hospital PACS DICOM Query/Retrieve Server"

The screenshot displays the Radlink Pro Imaging Software interface. At the top, a navigation bar includes the Radlink logo and menu items: "Select Study", "Scan", "QC Image", "Complete Study", and "Send". On the far right of this bar is a "Manage" button. Below the navigation bar, the main window is divided into two sections. The top section, titled "PACS Servers Settings", contains a large empty box on the left and a series of input fields on the right for "Name", "IP", "DICOM Port", "Source AET", "PACS AET", and "WEB Port". Below these fields are buttons for "Delete", "New", "Ping", and "Copy to". The bottom section, titled "Modality Worklist Setting", contains input fields for "Name", "IP", "DICOM Port", "Source AET", and "Destination AET", along with a checkbox labeled "Ignore Study Instance UID". On the right side of the interface, a vertical sidebar contains a "Logout" button at the top, followed by a list of menu items: "System Mode", "PACS/RIS", "Destinations", "Send Status", "DICOM Printers", "Performance", "Hot Buttons", "Worklist", "Preferences", "CR Setup", "Required Fields", and "Help". At the bottom of this sidebar is a "Save Settings" button.

Installation Instructions



4. Under Modality Worklist Setting, fill in the fields with the information in the PACS under the section "Hospital Modality Worklist Server". Click Save Settings at the bottom right corner.
5. Click on Destinations. Under Destination Settings, click New. Fill in the fields on the right with the information in the PACS Form under the section "Hospital PACS StoreSCP". Check the Active box and click Save Settings at the bottom right corner.

A screenshot of the Radlink software interface. At the top, a navigation bar includes the Radlink logo and buttons for "Select Study", "Scan", "QC Image", "Complete Study", and "Send". On the right, a "Manage" sidebar contains buttons for "Logout", "System Mode", "PACS/RIS", "Destinations", "Send Status", "DICOM Printers", "Performance", "Hot Buttons", "Worklist", "Preferences", "CR Setup", "Required Fields", "Help", and "Save Settings". The main area is titled "Destination Settings" and contains a list box on the left with "PACS" and "NewHost" (highlighted in blue). Below the list box are "Delete", "New", and "Ping" buttons. To the right of the list box are input fields for "Name", "IP", "DICOM Port", "Source AET", and "Dest AET". Below these fields are two checkboxes: "Active" and "Include".

6. Provide a copy of the Hospital PACS Form (Pages 19-20) to Radlink. Please email to installationteam@radlink.com.

Installation Instructions



HOSPITAL PACS FORM

Location Name:

Radlink GPS S/N:

Philips C-Arm S/N:

Philips FSE:

Wireless MAC Address:

The following information is required to integrate the Radlink GPS with hospital/clinic PACS and allow our Technical Support Team to assist end users with any issues.

Wireless Network

This unit needs a set IP address. How will this unit be configured?

- ☐ Static IP address
- ☐ DHCP Reservation

Please fill in the following information for Static IP address

1. SSID of Wi-Fi Network:
2. IP address:
3. Subnet mask:
4. Default gateway:
5. Preferred DNS server:
6. Alternate DNS server:

PACS Information

A. For patients' pre-op images that are stored in the hospital/clinic PACS, the GPS can directly retrieve the images from the hospital/clinic PACS. In order to do this Radlink will need the following info from the PACS administrator.

Hospital PACS DICOM Query/Retrieve Server:

1. Name:
2. PACS AET:
3. Port:
4. IP:

B. Radlink will also need the Modality Worklist Server info from their PACS administrator in order to retrieve X-Ray orders from their RIS/PACS:

Hospital Modality Worklist Server:

1. IP:
2. AET:
3. Port:

Installation Instructions



C. To push images into the hospital PACS, Radlink will need their PACS StoreSCP Server info as well:

Hospital PACS StoreSCP:

1. Name:
2. IP:
3. Destination AET:
4. Port:

Radlink GPS System Information

The hospital/clinic PACS administrator will need the Radlink GPS node info to configure it into the PACS:

1. AET: Pro_Imaging (Radlink's default)
2. Port: 104 (Radlink's default)
3. IP address: This will be assigned by the Hospital's IT Department

NOTE: Radlink will need to be informed if the hospital wants or needs to change this system's AET or Port.

For questions, contact Radlink Technical Support:

support@radlink.com

+1(310)643-6900, ext. 2

Mon-Fri, 6:00 a.m. – 5:00 p.m. PST

PH GPS Bracket User Manual

Patient Set Up



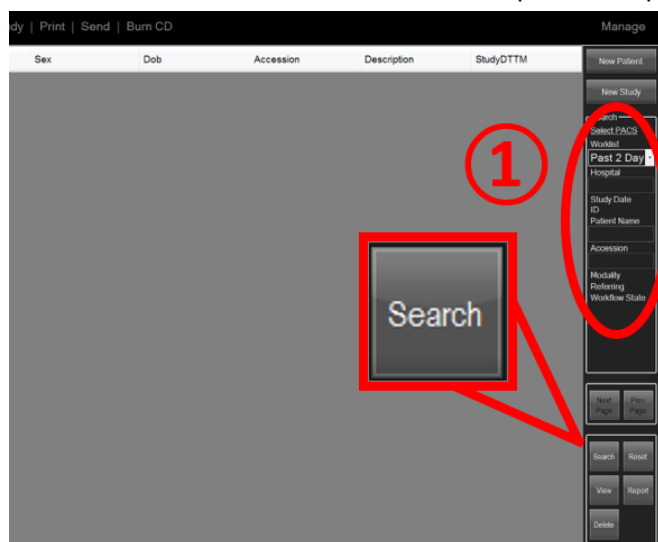
Reminder: Make sure Radlink and Philips systems load the same patient data

1. Software will automatically launch into Radlink Pro Imaging Software:

Option 1: Query patient information; if not then

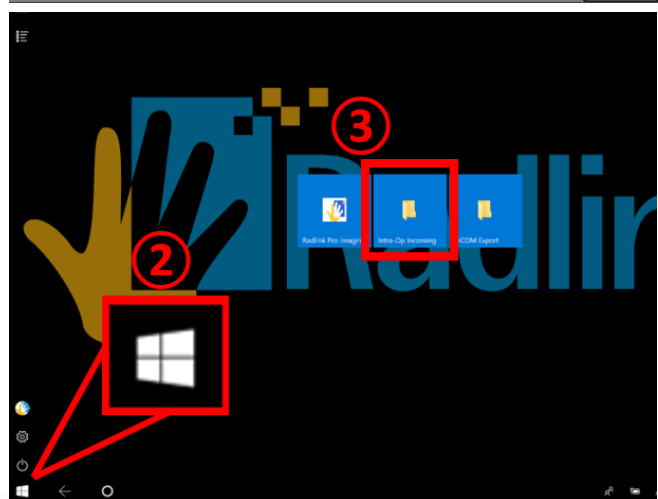
Option 2: Import patient image via USB; if not then

Option 3: Capture pre-op image via Panoramic Software



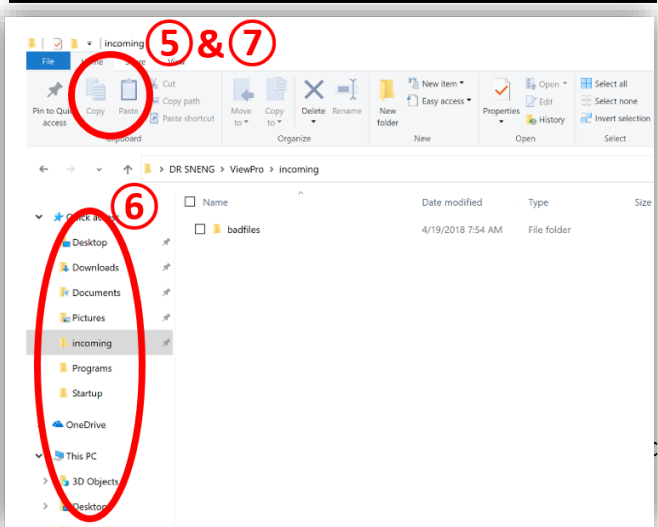
Option 1:

1. Enter Patient information on the right side of the software, then click “Search”.
2. Results should appear, click on the desired study.

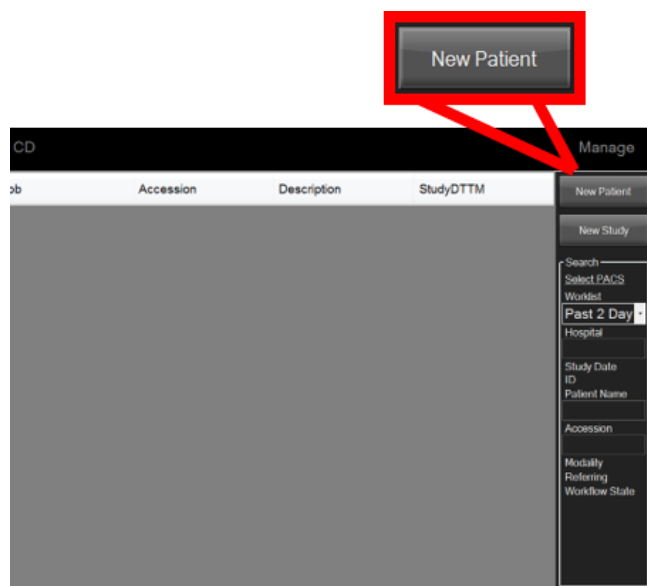


Option 2:

1. Place finger on the far-left side of the screen, swipe right.
2. Click Windows Icon on the bottom left corner.
3. Click “Intra-op Incoming” folder.
4. On the left side of the folder window, click the USB folder.



5. Select desired **DICOM** (image) file, click “Copy” (on top left).
6. On the left side of the folder window, click “Incoming” folder (under Quick Access).
7. Click “Paste” (on top left).
8. Click Windows Icon on the bottom left corner, click “Radlink Pro Imaging” software.
9. The patient’s study should appear on the screen, click on the study.



Option 3:

1. Create new patient.
2. Enter patient information, click “Next”.

Panoramic Software

IMAGE ACQUISITION

1. Center scout shot with arm at 10cm to verify rotation.
2. Extend/ Shorten the arm to take 3 shots:



1. AP **right hip** center shot



2. AP **pubic symphysis** centered shot



3. AP **left hip** center shot

PH GPS Bracket User Manual



IMAGE TRANSFER AND STITCHING USING CLICKER

1. Click button “1” to launch Panoramic feature.
2. On left Philips monitor, select image of **right hip**. Click button “2” to grab frame.
3. On left Philips monitor, select image of **pubic symphysis**. Click button “2” to grab frame.
4. On left Philips monitor, select image of **left hip**. Click button “2” to grab frame.
5. Click button “3” to save the image once stitching has completed. The progress bar in the Pano window will indicate when stitching is complete.
6. **IF NEEDED:** Click button “4” to **Delete last image grabbed**.



Anterior Approach
Total Hip Arthroplasty

Surgeon's Checklist 2 software

PRE-OP ANTERIOR



1. Obtain image via options 1,2, or 3 listed above.
2. Launch **Surgeon's Checklist 2**.
3. Select “**Pre-Op Hip Anterior Approach**”. Select operative side.

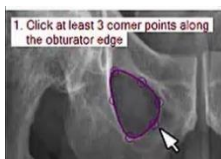
SURGEON'S CHECKLIST SOFTWARE



1. Click and drag to draw **teardrop line** as instructed.



2. Click and drag to draw **teardrop brim line** as instructed.



3. Select the operative side of the obturator, **outline the obturator** as instructed. Click "**Click here when done**".
4. Click "**Proceed to checklist for Cup**".

Anterior Approach Total Hip Arthroplasty

Surgeon's Checklist 2 software

INTRA-OP ANTERIOR



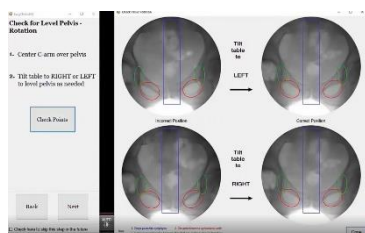
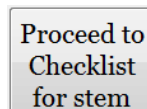
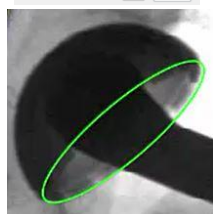
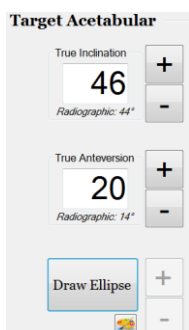
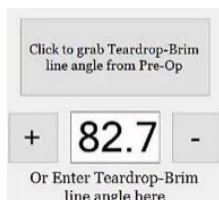
1. **C-Arm:** Take an AP Hip of operative side. Make sure teardrop is visible.

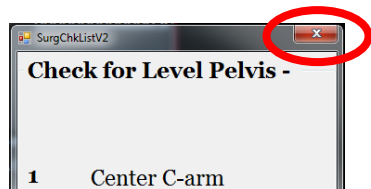


2. Launch **Surgeon's Checklist 2**.
3. Select "**Intra-op Anterior Approach (Cup)**". Select operative side.

SURGEON'S CHECKLIST SOFTWARE

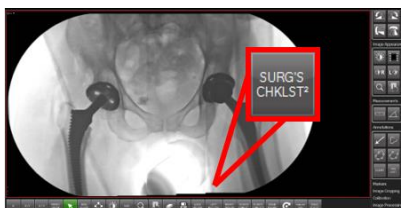
1. **Position patient.** Verify patient's position as instructed. Click "**Next**".
2. If adjustment is needed, adjust patient's position or C-Arm, shoot an X-ray, click "**Grab X-ray**", repeat the step until an ideal image is captured.
3. **Click and drag** to draw a line from **teardrop to pelvic brim** as instructed.
4. The **Pre-Op Teardrop-Brim line angle** should automatically be applied to the image. If the angle DID NOT automatically apply, enter the Pre-Op Teardrop-Brim line angle manually in the white box.
5. Click "**Overlay Obturator**", then click on the center of the obturator as instructed. Verify whether the shape of the obturator matches.
6. If adjustment is needed, adjust patient's position or C-Arm, shoot an X-ray, then Click "**Grab X-ray**", repeat the step until the shape of the obturator matches.
7. Set **True Inclination** and **True Anteversion** goal.
8. Click "**Draw Ellipse**", align Ellipse to match the cup or utilize "**+**" and "**-**" tools for inclination, anteversion and size adjustment.
9. Click "**Proceed to Checklist for Stem**".
10. Verify patient's current position matches the information listed on the page. Click "**Check Points**" for illustration.



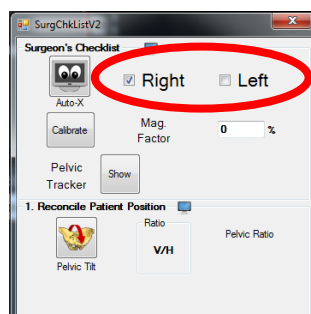


11. Close **Surgeon's Checklist 2**.

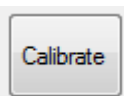
12. Create panoramic pelvis (Please refer to "**PANORAMIC SOFTWARE**" on page 2).



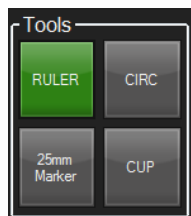
13. Click **Surgeon's Checklist 2: – "Intra-Op Hip Posterior Approach"**.



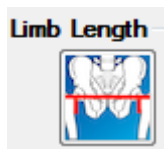
14. Make sure the operative side is selected.



15. If a known size object is in the image, select "**Calibrate**".



16. Select a tool on the right top screen to measure the object. Enter known size by millimeter. Click "**Ok**", the image is now calibrated.



17. Select "**Limb Length**", follow the prompt. Click and drag the end of the line to fine tune the measurement if needed.

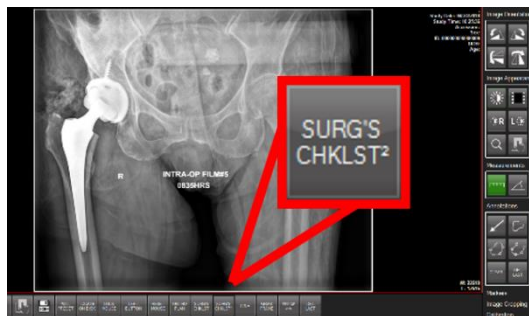


18. Select "**Offset**", follow the prompt. Click and drag the end of the line to fine tune the measurement if needed.

Posterior Approach Total Hip Arthroplasty

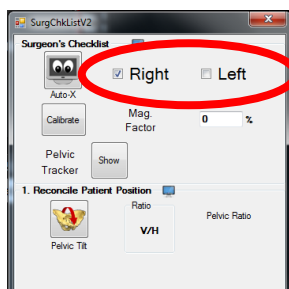
Surgeon's Checklist 2 software

PRE-OP POSTERIOR

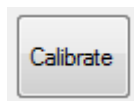


1. Obtain image via options 1,2, or 3 listed above.
2. Launch **Surgeon's Checklist 2**.
3. Select **"Pre-op Posterior Approach"**.

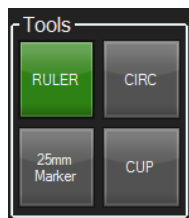
SURGEON'S CHECKLIST SOFTWARE



1. Make sure the operative side is selected.



2. If a known size object is in the image, click **"Calibrate"**.



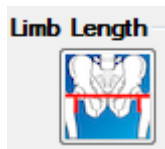
3. Select a tool on the right top screen to measure the object. Enter known size by millimeter. Click **"Ok"**, the image is now calibrated.



4. Select **"Auto-X"**, follow the prompt, then wait for software to analyze the image, automatically.



5. Select **"Pelvic Tilt"**, the measurement should appear. **Click and drag** the end of the line to fine tune the measurement if needed.



6. Select “**Limb Length**”, the measurement should appear. **Click and drag** the end of the line to fine tune the measurement if needed.



7. Select “**Offset**”, the measurement should appear. **Click and drag** the end of the line to fine tune the measurement if needed.

Posterior Approach

Surgeon's Checklist 2 software

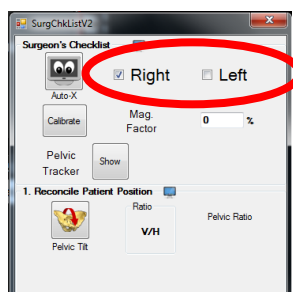
Total Hip Arthroplasty

INTRA-OP POSTERIOR

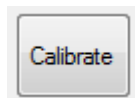


1. Create panoramic pelvis (Please refer to “**PANORAMIC SOFTWARE**” on page 2).
2. Launch **Surgeon's Checklist 2**.
3. Select “**Intra-Op Hip Posterior Approach**”.

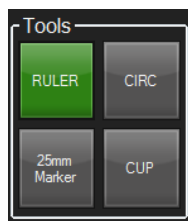
SURGEON'S CHECKLIST SOFTWARE



1. Make sure the operative side is selected.



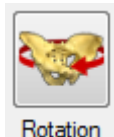
2. If a known size object is in the image. Click “**Calibrate**”.



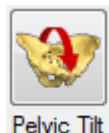
3. Select a tool on the right top screen. Measure the object. Enter known size by millimeter. Click “**OK**”, the image is now calibrated.



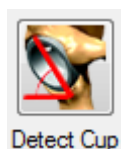
8. Select “**Auto-X**”, follow the prompt, then wait for software to analyze the image, automatically.



4. Select “**Rotation**”, the measurement should appear. **Click and drag** the end of the line to fine tune the measurement if needed.



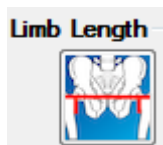
5. Select “**Pelvic Tilt**”, the measurement should appear. **Click and drag** the end of the line to fine tune the measurement if needed.



6. Select “**Detect Cup**”, the measurement should appear. **Click and drag** the ellipse to align with the cup if needed.



7. Click “**+**” or “**-**” next to **Anteversion** and **Abduction** to fine tune the measurement if needed.






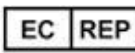










8. Select “**Limb Length**”, the measurement should appear. **Click and drag** the end of the line to fine tune the measurement if needed.



9. Select “**Offset**”, the measurement should appear. **Click and drag** the end of the line to fine tune the measurement if needed.

10. If any measurements did not appear after clicking, follow the prompt on the software.

Safety Signs and Symbols

	General Warning Sign
	Conformité Européenne (CE Mark Clearance)
	Radlink's CE Mark Clearance from Notified Body 0123 Notified Body: TÜV SÜD Product Service GmbH, Ridlerstr. 65. 80339, Munich, Germany
	Radlink European Union Representative
	Name and Address of Manufacturer
	Date of Manufacture
	Serial Number
	Refer to instruction manual
	Input voltage is alternating current (AC)
	Temperature limit to which this equipment can be safely exposed
	Indicates the range of humidity to which this equipment can be safely exposed
	Indicates the range of atmospheric pressure to which this equipment can be safely exposed
	Fragile, handle with care
	Keep this equipment dry

Preventative Maintenance

The PH GPS Bracket is designed to require little preventative maintenance over an extended period of use. The main features that will require attention over time and extended use are as follows:

1. Disinfection & Decontamination periodically with isopropyl alcohol.

This is the most important and regularly required service to the PH GPS Bracket. As the equipment is frequently taken in and out of high-exposure environments inside of hospitals (e.g. the operating room), it is critical to control the potential spread of infectious disease by thoroughly cleaning the surfaces of the Bracket which have come into contact with any equipment from those environments.

- Never spray or pour any liquid directly onto the unit
- To clean the screen use a clean, soft, lint-free cloth and a small amount of non-ammonia, non-alcohol based glass cleaner
- Soap solution, ethanol (70%), and hydrogen peroxide (25%) can be applied **only** when the tablet cover is closed

2. Scratches, finger grease, dust, chemicals, and ultraviolet light can affect the performance of your touchscreen. Here are a few things you can do to help protect the screen:

- **Clean frequently.** The touchscreen has been coated to make it easier to clean. You don't need to rub hard to remove fingerprints or oily spots. To avoid scratches, use a soft, lint-free cloth to gently wipe the screen. You can dampen the cloth with water or an eyeglass cleaner, but don't apply liquids directly. Don't use window cleaner or other chemical cleaners.
- **Keep it protected.** Protect the tablet PC screen while in transit or not in use by keeping the screen cover closed.
- **Keep it out of the sun.** Don't leave in direct sunlight for a long time. Ultraviolet light and excessive heat can damage the display.

3. Power cords, like any other metal wire or cable, can be weakened or damaged if repeatedly twisted or bent in the same spot. Here are a few things you can do to keep your power cord from being damaged:

- Avoid twisting or pinching your power cord.
- Don't wrap your power cord too tightly. Instead, wrap it using loose coils rather than tight angles.
- Inspect your power cord regularly.
- If you find any damage on any part of the power cord, stop using the cord and contact Radlink Technical support.

4. Check the AA battery for the wireless mouse periodically and replace if necessary.

5. Updates for Windows OS are tested and verified monthly by Radlink and a correspondence is sent to all sites. Customers can then install the updates or contact Radlink for support.

Troubleshooting Guide

Problem	Reason	Solution
Images cannot be pulled from Philips MVS to Tablet	DVI Cable labelled “C-Arm Output” is not connected properly to front of MVS	Check connection between “C-Arm Output” DVI Cable and “DVI left” port on MVS
	Frame Grabber 2.0 is not selected in System Mode of Radlink Pro Imaging software	In the Radlink Pro Imaging software, click “Manage”. Make sure Frame Grabber 2.0 is selected
	USB connection to Tablet is not secure	Check the blue USB cable connection to the Power Box and the USB hub behind on the back of the PH GPS Bracket
Mouse is not responding	Mouse is turned off	Check that the switch is set to ON at the bottom of the mouse.
	Wireless receiver is not connected properly	Unplug the receiver from the USB hub and plug it back in
	Mouse is out of batteries	Replace the one AA battery in the mouse.
Tablet is not charging	Extension Power Cable is not connected properly	Check connection to power source and to PH GPS Bracket Power Box
	Tablet charger is not connected properly	Check connection of the charger to the side of the Tablet.
No video feed to MVS reference monitor	Video cables are not connected properly	Check connection of the Mini DisplayPort cable to the Tablet, the “Monitor Cable” DVI cable to the reference monitor input, and the “Computer Cable” DVI cable to the MVS DVI cable
	Signal Switch is not functioning	Check that the blue LED is lit up on the Signal Switch.
Clicker is not responding	Clicker Is not connected properly	Check the connection to the USB hub.

For questions, contact Radlink Technical Support:

support@radlink.com

+1(310)643-6900, ext. 2

Mon-Fri, 6:00 a.m. – 5:00 p.m. PST