

OPERATION MANUAL HD2.9

October 2012



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This manual describes the iTero HD2.9 Optical Impression Device.

English language version. Updated October 2012

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CLASS 1 LASER COMPLIANCE**Class 1 Laser Product**

This device complies with:
"21 CFR 1040.10" and "EN 60825-1".

CSA COMPLIANCE

This device complies with the following CSA standard for Canada and the USA:
"UL Std No. 60601-1 Second Edition – Medical Electrical Equipment Part 1: General Requirements for Safety"

FCC COMPLIANCE

This device complies with Part 15 of FCC Rules and its operation is subject to the following two conditions:

- 1) This device may not cause harmful interference.
- 2) This device must accept any interference received, including interference that may cause undesired operation.

FCC Warning

Modifications to the device that are not expressly approved by the manufacturer may void your authority to operate the device under FCC Rules.

EMC COMPLIANCE

This device complies with the following EMC standard:

"IEC 60601-1-2 Medical electrical equipment - Part 1-2: General requirements for basic safety and essential performance - Collateral standard: Electromagnetic phenomena - Requirements and tests"

CE COMPLIANCE

This device complies with Council Directive 93/42/EEC for Medical Devices.

SYMBOLS

The following symbols may appear on iTero HD2.9 hardware components, and may also appear within this manual and other iTero literature.



Wherever this symbol appears on the device, it is recommended to refer to this manual for information on proper usage of the device.



Applied part type B. Any component on which this symbol appears is electric isolation type B.



Separate collection of waste electrical and electronic equipment is required.



Attention: This symbol is used to highlight the fact that there are specific warnings or precautions associated with the device. Wherever this symbol appears on the device, it is mandatory to refer to safety-related information within this manual.



Parts or accessories on which this symbol occurs should not be reused.

“Rx only”

CAUTION: US Federal Law restricts this device to sale by or on the order of a licensed Dentist, Orthodontist or Dental Professional. The system serves as a prescription medical device and should be operated by qualified health-care providers only.



Surfaces of the ME Equipment where a RISK of overbalancing the ME Equipment exists from pushing, leaning, resting etc., permanently marked with a CLEARLY LEGIBLE warning of this RISK by use of safety sign ISO 7010-P017.

SHIPPING REGULATIONS

According to the US Department of Transportation (DOT) regulations, the internal UPS battery must be disconnected before shipping. Please contact an Align technician for assistance before shipping.

SAFETY INSTRUCTIONS	
Before beginning to work with the system, all users are required to read these safety instructions.	
Power Supply	⇒ Power is supplied to the system via an internal medical grade isolation transformer. When connecting the power supply, ensure that the provided voltage is in the allowed range as specified in the Hardware Specifications.
Electric Warning	⇒ Electric shock hazard!! Only authorized Align technicians can remove external panels and covers. There are no user-serviceable parts inside. ⇒ To avoid risk of electric shock, iTero HD2.9 must only be connected to a supply mains with protective grounding.
Wireless LAN	⇒ The system comes equipped with a Wireless LAN unit. Using standard wired communications will violate the AC mains power isolation.
Safety Classifications	⇒ Type of protection against electrical shock: Class 1 ⇒ Degree of protection against electrical shock: Type B ⇒ Degree of protection against harmful ingress of water: Ordinary ⇒ Equipment not suitable for use in presence of flammable anesthetic mixtures. ⇒ Mode of operation: Continuous
Recycling of Batteries	⇒ Follow local governing ordinances and instructions regarding disposal or recycling of batteries.
Prescription Health Device	⇒ The system serves as a prescription medical device and should be operated by qualified health-care providers only.
Scanner Warnings	⇒ The scanner emits red laser light (660 nm Class 1) as well as multi-colored light emissions. Normal usage of the scanner does not present any danger to the human eye. However, doctors should refrain from shining the scanner directly into the patient's eyes. ⇒ Avoid twisting cable, knotting cable, pulling on cable, stepping on cable, or running over cable with cart wheels.
Cleaning & Disinfection	⇒ To avoid cross contamination, it is mandatory that after each patient session the disposable plastic sleeve be replaced and the scanning unit be disinfected. ⇒ Dispose of scanner sleeves according to standard operating procedures or local regulations for the disposal of contaminated medical waste.
Unpacking & Installing	⇒ The system should be unpacked and installed by Align authorized personnel only. No attempt should be made by the user to unpack or install the device. ⇒ Due to its weight and delicate components, it is recommended that the system be lifted using a power lift or mechanical lift (and not by hand).
Work Environment	⇒ The system should be wheeled between rooms by at least two people, using maximum care to avoid bumping and jolting the cart. ⇒ Do not block either of the two air vents on the sides of the cart. ⇒ System is intended for indoor use only. It should not be exposed to direct sunlight, excessive heat or humidity.
Electro Magnetic Interference	⇒ WARNING: This device has been tested and found to comply with the requirements for medical devices according to standard EN60601-1-2. This standard is designed to provide reasonable protection against harmful interference in a typical medical installation. However, because of the proliferation of radio-frequency transmitting equipment and other sources of electrical noise in the healthcare environments (e.g., cellular phones, mobile two-way radios, electrical appliances), it is possible that high levels of such interference due to close proximity or strength of source, may result in disruption of performance of this device.
General	⇒ WARNING: No modification of this equipment is allowed.

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Chapter 1: Introduction

About this Operation Manual




The iTero HD2.9 system is delivered as a proprietary, PC-based workstation for performing intra-oral scans in the doctor's office. This Operation Manual describes how to boot and shut down the system, how to correctly handle the scanning unit/wand and cable, how to clean the scanning unit and replace its sleeves between patients, and how to perform basic maintenance tasks such as mouse and foot pedal battery replacement.

Intended Use

The system is an intra-oral optical impression system for computer assisted design and manufacturing (CAD/CAM) used to record topographical characteristic of teeth, dental impressions, or stone models by analog or digital methods for use in computer-assisted design and manufacturing of dental restorative prosthetic devices.

The iTero Applications

The following iTero applications operate on the iTero HD2.9 system.

	<p>The iTero HD2.9 system provides an intuitive user interface for performing digital scans of preparation teeth. The doctor is guided through the scanning sequence by means of visual, text and/or voice assistance. The mouse and foot pedals are used to respond to screen instructions during the scanning process. For more information, open the application and press F1 to display the iTero HD2.9 system help.</p>
	<p>The iTero Case Manager works interactively with iTero HD2.9 system and handles file communications between the doctor's office, partnered labs, and the Align Centers. The Case Manager also allows doctors to track the progress of their cases at all stages. For more information, open the application and press F1 to display the iTero Case Manager help.</p>
	<p>The Align Support icon enables the Align Help Desk to provide remote training and support to your system.</p>

Benefits of the iTero HD2.9 system

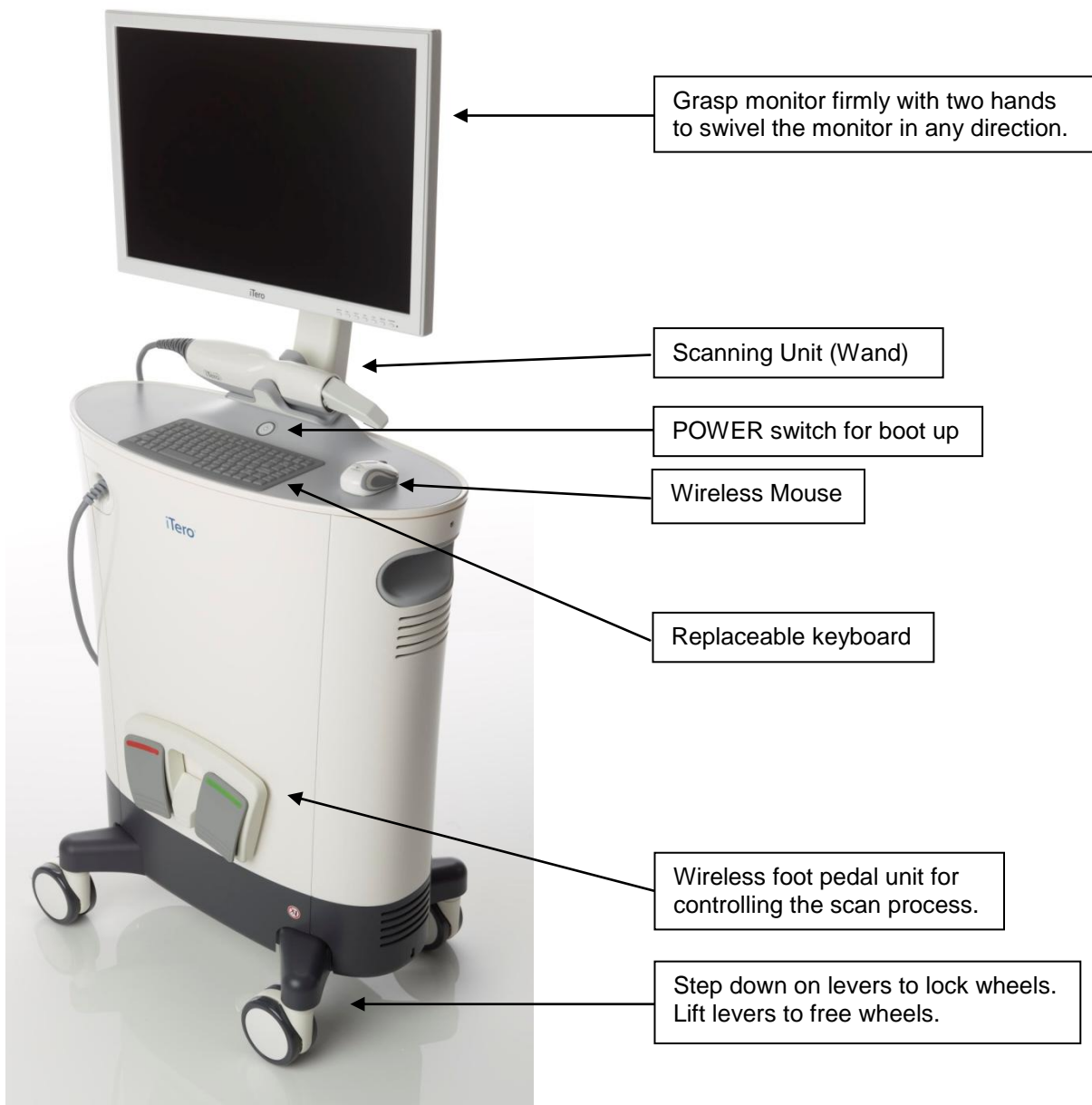
iTero HD2.9 system provides important advantages over existing crown-production methods, including powder-free scanning, greater crown-production accuracy, and immediate feedback during the scanning process.

Refer to our website <http://www.itero.com/> to learn how the iTero Service can enhance your business by increasing patient satisfaction, improving clinical outcomes, and enhancing office efficiency.

Chapter 2: Basic Hardware Features

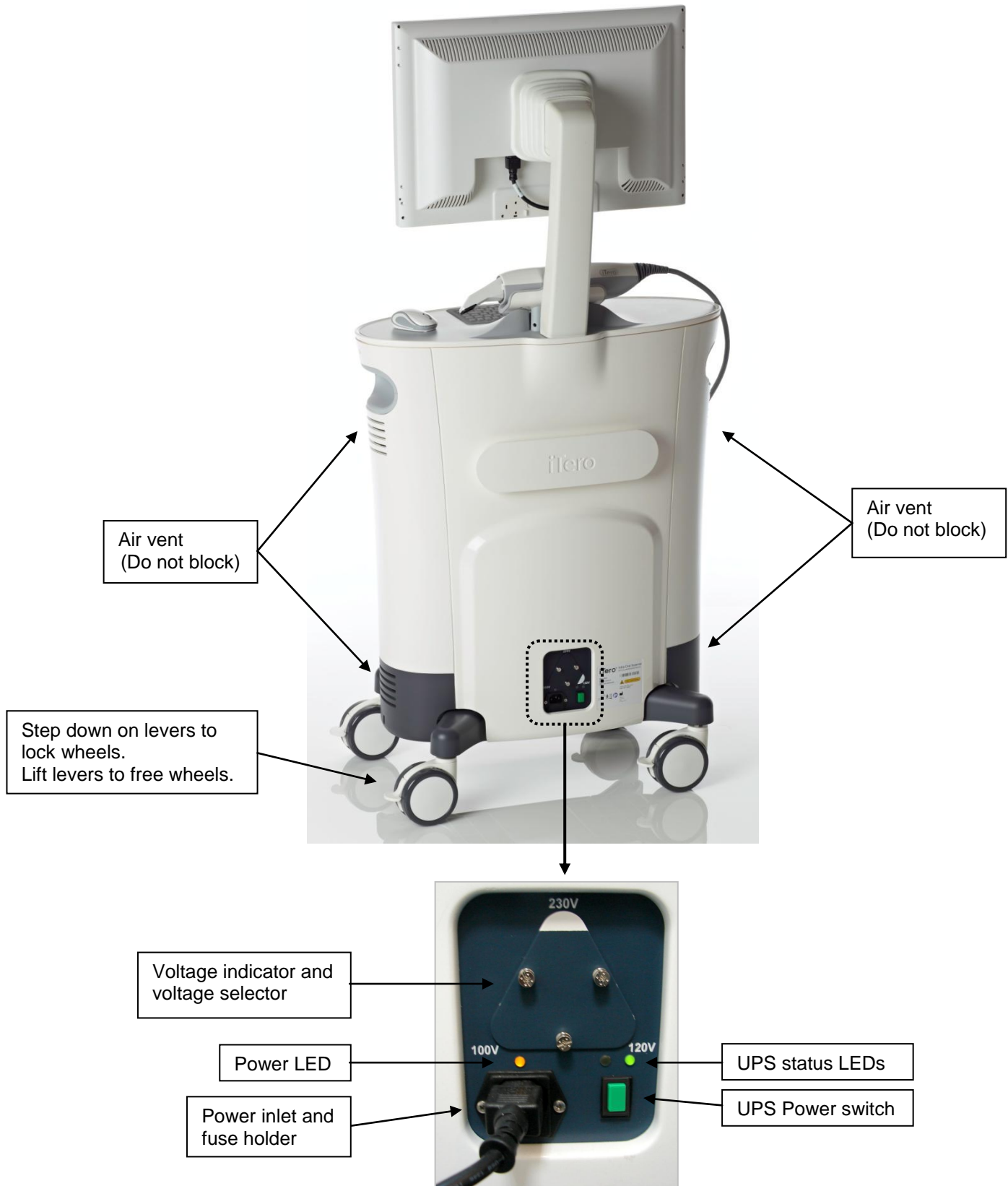
Front View of Cart

The basic hardware features of the cart front are listed below.






Back View of Cart

The basic hardware features of the cart back are listed below.



Chapter 3: Operating Instructions

Initial Power-Up and Boot

<p>STEP 1 Plug mains cable into cart and other end into wall outlet. The yellow LED will light up to indicate presence of power.</p>	
<p>STEP 2 TURN ON the UPS power switch on the back side of the cart (the green button on the picture to the right) by pressing it for <u>4 seconds until a short beep is heard</u>, and then release the button. The green LED should light up.</p>	
<p>STEP 3 Press the POWER switch to start the system and run MS Windows™.</p>	

It is recommended to keep the system in operation during office hours to allow background file transfers between the doctor's office, the doctor's partnered labs, and the Align Center. It is recommended to shut down the system at the end of the day, and to reboot in the morning.

End-of-Day Shut down

<p>STEP 1 Close all files and applications.</p>
<p>STEP 2 Use the Windows START Menu → Shut down. Do not do a forced shut down.</p>

Start-of-Day Boot

<p>STEP 1 Press the POWER switch to start system and run MS Windows™.</p>
--

About the Internal Uninterruptible Power Supply (UPS)

The cart may be unplugged from the wall outlet and wheeled to another room without performing a shut down. During that time, the system is powered by an internal UPS. The system will shut down after 5 minutes.

For first-time usage or when the UPS has been drained, an 8-hour period is necessary to achieve full charge. To ensure the UPS remains fully charged, it is recommended to leave the system connected to the wall outlet at all times without turning off the UPS Power Switch button on the rear of the cart.

For more information on the UPS, see the “Internal UPS” specifications at the end of this manual.

Moving Cart within Office

To ensure maximum cart protection, it is recommended to have two people move the cart. Follow these instructions for relocating the cart:

- (1) Save current case in iTero Scanner application.
- (2) Attach foot pedal to front of cart.
- (3) Free all four wheels by lifting wheel locks.
- (4) Unplug cart from the wall outlet. System beeps indicating that UPS backup power is being utilized.
- (5) Move the cart slowly and carefully with two people to avoid any bumps or scrapes.
- (6) Place the cart at its new location and plug into wall outlet. System stops beeping.
- (7) Lock all four wheels by stepping down on wheel locks.
- (8) Resume work.

NOTE: If you are moving the cart over rough or bumpy surfaces, it is recommended to shut down the system beforehand to avoid possible damage. Use the cart handles when moving the cart.

Automatic Shut down

When the cart is unplugged or a power outage occurs, a warning beep indicates that UPS backup power is being utilized. If the system is left unplugged, warning messages begin to appear on the screen and the status of the internal UPS battery will be displayed. After 5 minutes the system will automatically shut down. After the cart is plugged back into a wall outlet, it may be necessary to press the POWER switch to reboot the system.

Chapter 4: AC Power Problems - Troubleshooting

SYMPTOM: System Begins to Beep Unexpectedly

REASON:

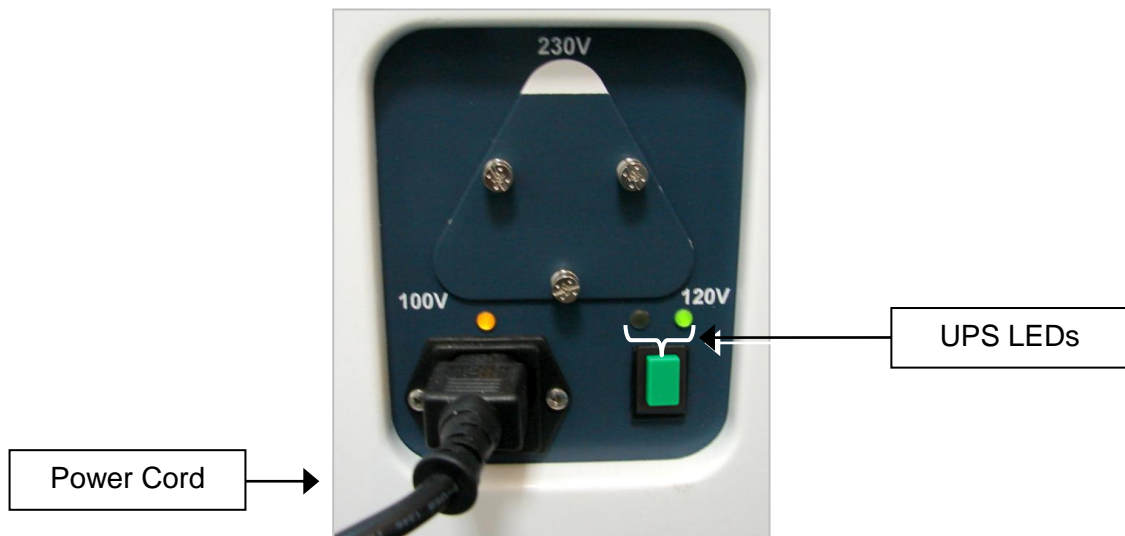
The system is not receiving AC power and therefore the system is using UPS backup power.

NOTE:

When relocating the cart between rooms, beeping is normal. The cart should be reconnected as soon as possible.

TROUBLESHOOTING INSTRUCTIONS:

1. Ensure that the power cord is attached firmly at both ends (the wall socket and the cart input socket).
2. Check the yellow power LED above the cart input socket.

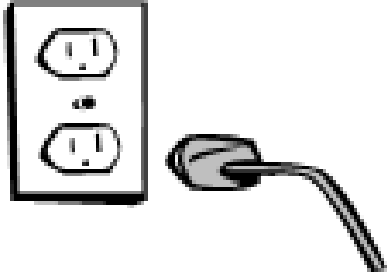


3. If the left of the two UPS LEDs is ON, the internal UPS may be faulty. Contact Align support.
4. If both UPS LEDs are OFF, follow these steps:
 - 4a) If the system is running, shut down the system as follows:
 - ⇒ Close all files and applications.
 - ⇒ Shut down system using Windows Start Menu → Shut down.
 - ⇒ TURN OFF the UPS power by pressing the switch on the back side of the cart (the green button on the picture above) for 3 seconds.
 - 4b) If a power outage has occurred, wait for power to return.
 - 4c) If a power outage has not occurred, check the fuses as described in “Checking & Replacing Mains Fuses” on the next page.

Checking & Replacing Main Fuses

STEP 1: Unplug Cord from Wall

Unplug the power cord from the wall socket.



STEP 2: System Access

Move cart away from any wall to allow easy access to the power cord and fuse tray.



STEP 3: Disconnect Cord from Cart

Unplug the power cord from the back of the cart.



STEP 4: View Fuse Tray

The fuse tray is located below the power socket.



STEP 5: Open Fuse Tray

Pull the fuse tray to open it.



STEP 6: Remove & Check Fuses

Carefully remove each fuse from the tray. Check fuses visually (and with tester if available).



STEP 7: Replace Fuse

If either fuse is blown or suspect, replace both fuses (See "Fuse Type" specifications at the end of the manual.)



STEP 8: Close Fuse Tray

Close the fuse tray and insert cord firmly.



Chapter 5: Proper Handling of Scanner

Handling of the Scanning Unit

- ⇒ The scanning unit contains delicate components and should be handled with care.
- ⇒ Maximum effort should be made to keep the scanner cable off the floor at all times.

Handling of the Scanner Cable

- ⇒ The scanner cable contains delicate components and should be treated with care to avoid possible damage.
- ⇒ Avoid twisting cable, knotting cable, pulling on cable, stepping on cable, or running over cable with cart wheels.
- ⇒ Between patient sessions, it is recommended to undo any twists and knots in order to relieve all tension from the scanner cable.

Chapter 6: Changing Sleeves between Patients

Cleaning the Scanning Unit

To avoid cross contamination, it is essential that **after each patient** you fully disinfect the Scanning Unit and replace the disposable plastic sleeve. First use disinfectant wipes to clean the Scanning Unit, cradle, keyboard and mouse. Then proceed with the steps below to remove the used sleeve and attach a new sleeve.

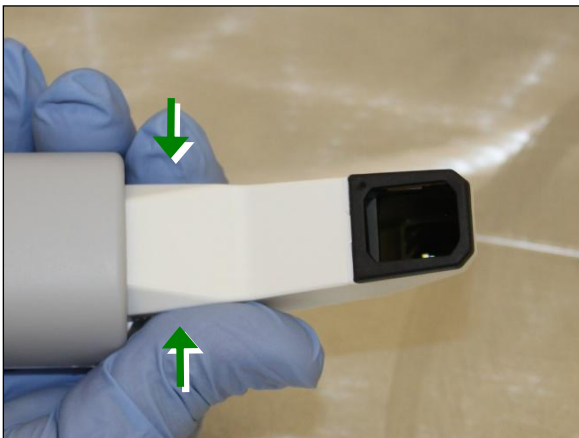


CAUTION: Dispose of scanner sleeves according to standard operating procedures or local regulations for the disposal of contaminated medical waste.

Replacing Disposable Sleeve

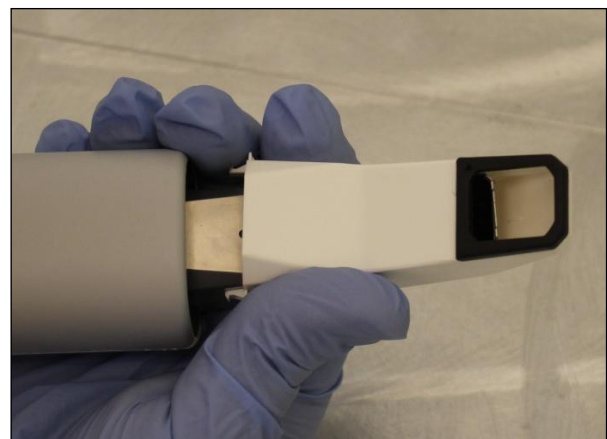
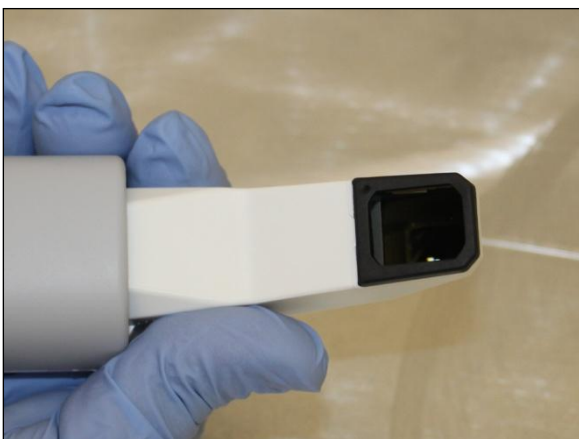
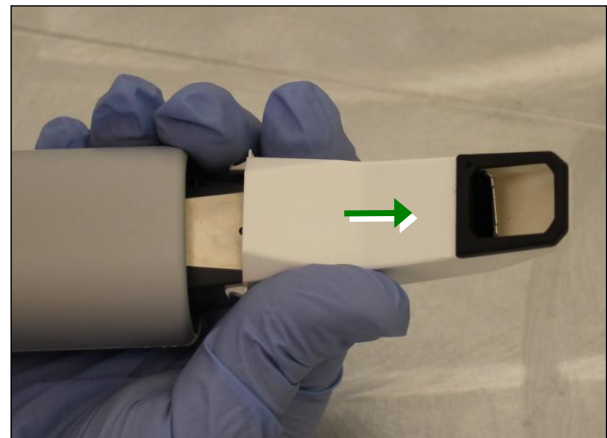
STEP 1

Press firmly on both sides of disposable sleeve to release it.



STEP 2

Pull disposable sleeve slowly off Scanning Unit and **discard**.



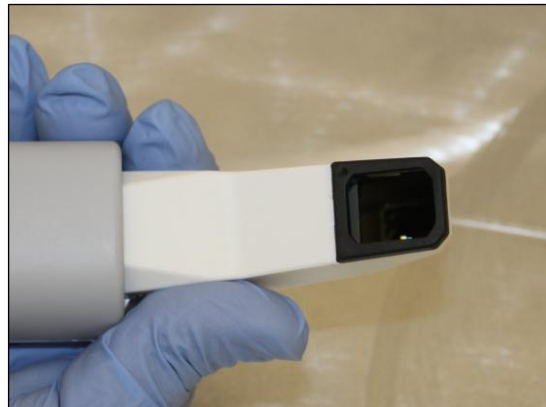
WARNING - OPTICAL SURFACE!

Do not touch the optical surface. Contact may cause damage. If cleaning is necessary, refer to directions in the scanner sleeves box.



STEP 3

Continue to slide sleeve slowly onto Scanning Unit until it clicks into place.



Scanner Sleeves

We recommend that you maintain a full stock of scanner sleeves in your office.

SCANNER SLEEVES BOX

Boxes containing 25 Scanner Sleeves may be ordered by contacting Customer Support.



PATIENT SCANNING SLEEVE



HARDWARE DIAGNOSTIC & PROTECTIVE SLEEVE

A special gray protective sleeve is used to protect the Scanning Unit's head during shipping and between patients. This sleeve may be used by Customer Support for troubleshooting the system.



Chapter 7: Basic Maintenance Tasks

Checking Foot Pedal Battery

The foot pedal unit contains two AA 1.5V batteries. It is recommended to keep back-up batteries of this type in your office.



Replacing Foot Pedal Batteries

To change the foot pedal battery, follow the instructions below:

1. Open the battery cover on the bottom of the foot pedal.
2. Replace batteries with new ones and close the cover.



CAUTION: Be sure to follow local governing ordinances and recycling instructions regarding disposal or recycling of batteries.

Replacing Mouse Battery

The wireless mouse contains a single AAA battery. It is recommended to keep back-up batteries of this type in your office. When the battery is low, the mouse may not respond properly and a screen message will appear requesting replacement of the battery.

To replace battery, follow these instructions:

- (1) Slide the battery compartment lid on back of mouse to open it.
- (2) Remove old battery, insert new AAA battery and close lid.
- (3) If mouse does not function, verify the switch on the back is turned ON.



CAUTION: Be sure to follow local governing ordinances and recycling instructions regarding disposal or recycling of batteries.

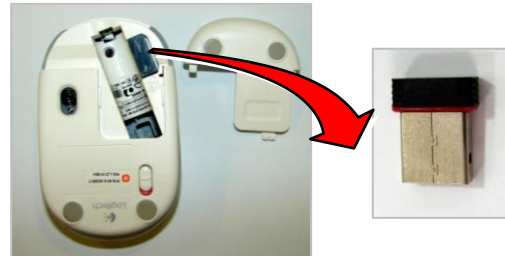
Wireless Dongles Replacement

When the iTero Wireless Mouse or the iTero Wireless Foot Pedal require replacement, their respective dongles must also be replaced. The new Mouse and Dongle **MUST BE** supplied by Cadent.

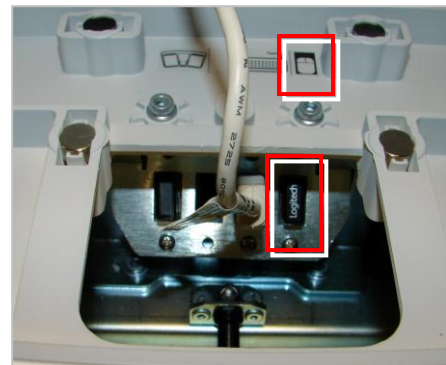
Wireless Mouse Dongle Replacement

Follow these instructions to replace the Wireless Mouse dongle.

- (1) Slide open the battery compartment lid on the bottom side of the Mouse.
- (2) Extract the Wireless Dongle, and close the lid.



- (3) Use a small flat-tipped screwdriver to lift the edge of the keyboard and then move the keyboard to the side to reveal the Wireless Dongles below. Note the labels above the opening: the Mouse Wireless Dongle is the on the right side.
- (4) Extract the old dongle and insert the new one in its place.



- (5) Put the keyboard back into place.

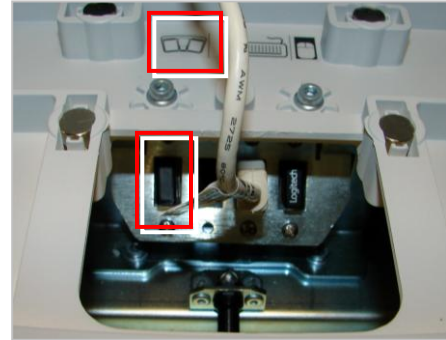
Wireless Foot Pedal Dongle Replacement

Follow these instructions to replace the Wireless Foot Pedal dongle.

- (1) Extract the Wireless Dongle from the slot on the bottom side of the Foot Pedal.



- (2) Use a small flat-tipped screwdriver to lift the edge of the keyboard, and then move the keyboard to the side to reveal the Wireless Dongles below. Note the labels above the opening: the Wireless Foot Pedal Dongle is on the left side.
- (3) Extract the old dongle and insert the new one in its place.



- (4) Put the keyboard back into place.

Cleaning Monitor

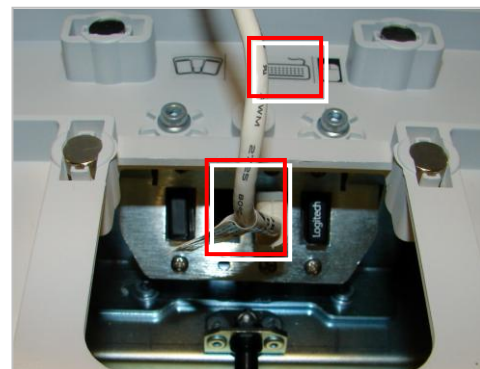
Follow these instructions to clean the LCD monitor.

- (1) Turn OFF the monitor switch on the monitor's back side.
- (2) Lightly dampen a clean white cotton cloth with water and wipe monitor clean.
- (3) Dry the monitor immediately using another clean white cotton cloth.
- (4) If further cleaning is necessary, use another clean white cotton cloth to wipe off the monitor with a small amount of alcohol.

- ⇒ Do not use liquid cleaners, chemicals or aerosol sprays to clean monitor.
- ⇒ Do not use abrasive cleaning materials such as newspaper or plastics to clean monitor.

Replacing the Keyboard

- (1) Use a small flat-tipped screwdriver to lift the edge of the keyboard and then move the keyboard to the side to reveal the Wireless Dongles below. Note the labels above the opening: the Keyboard connector is in the center.
- (2) Extract the USB cable from its socket, and remove the old keyboard. Get the new keyboard, and insert its connector into the socket.



Appendix A: EMC Declaration

Cadent Ltd. iTero HD2.9 EMC Declaration

Cadent Ltd. Declaration – Electromagnetic Emissions		
iTero HD2.9 is intended for use in the electromagnetic environment specified below. The customer or the user of the iTero HD2.9 should assure that it is used in such environment.		
Emissions Test	Compliance	Electromagnetic Environment – Guidance
RF emissions CISPR 11	Group 1	iTero HD2.9 uses RF energy only for its internal function. Therefore, its RF emissions are very low and are not likely to cause any interference in nearby electronic equipment.
RF emissions CISPR 11	Class B	
Harmonic emissions IEC 61000-3-2	Complies, class A	
Voltage fluctuations/ flicker emissions IEC 61000-3-3	Complies	iTero HD2.9 is suitable for use in all establishments, including domestic establishments and those directly connected to the public low-voltage power supply network that supplies buildings used for domestic purposes.


Cadent Ltd. Declaration – Electromagnetic Immunity

The iTero HD2.9 is intended for use in the electromagnetic environment specified below. The customer or the user of the iTero HD2.9 should assure that it is used in such an environment.

Immunity Test	IEC 60601 Test Level	Compliance Level	Electromagnetic Environment – Guidance
Electrostatic discharge (ESD) IEC 61000-4-2	±6kV contact ± 8kV air	±6kV contact ±8kV air	Floors should be wood, concrete or ceramic tile. If floors are covered with synthetic material, the relative humidity should be at least 30%.
	<p>⇒ The system may be affected (in very rare and extreme situations) when an Electro Static Discharge occurs.</p> <p>⇒ In these situations the live video viewfinder window may fail to display a clear image, and display “Snow” instead. Close the iTero application and restart it.</p>		
Electrical fast transient/burst IEC 61000-4-4	± 2kV for power supply lines ±1kV for input/output lines	±2 kV for power supply lines NA	Mains power quality should be that of a typical commercial or hospital environment.
Surge IEC 61000-4-5	±1kV line(s) to line(s) ±2kV line(s) to earth	±1kV line(s) to line(s) ±2kV line(s) to earth	Mains power quality should be that of a typical commercial or hospital environment.
Voltage dips, short interruptions and voltage variations on power supply input lines IEC 61000-4-11	<5 % UT (>95 % dip in UT) for 0,5 cycle 40 % UT (60 % dip in UT) for 5 cycles 70 % UT (30 % dip in UT) for 25 cycles <5 % UT (>95 % dip in UT) for 5 s	<5 % UT (>95 % dip in UT) for 0,5 cycle 40 % UT (60 % dip in UT) for 5 cycles 70 % UT (30 % dip in UT) for 25 cycles <5 % UT (>95 % dip in UT) for 5 s	Mains power quality should be that of a typical commercial or hospital environment. If the user of the iTero HD2.9 requires continued operation during power mains interruptions, it is recommended that the iTero HD2.9 be powered from an uninterruptible power supply or a battery.
Power frequency (50/60 Hz) magnetic field IEC 61000-4-8	3 A/m	3 A/m	Power frequency magnetic fields should be at levels characteristic of a typical location in a typical commercial or hospital environment.
NOTE <i>UT is the AC mains voltage prior to application of the test level.</i>			

**Cadent Ltd. Declaration – Electromagnetic Immunity
(iTero HD2.9 is not a Life-Supporting device)**

The iTero HD2.9 is intended for use in the electromagnetic environment specified below. The customer or the user of the iTero HD2.9 should assure that it is used in such an environment.

Immunity Test	IEC 60601 Test Level	Compliance Level	Electromagnetic Environment – Guidance
Conducted RF IEC 61000-4-6	3 Vrms 150 kHz to 80 MHz	3 Vrms 150 kHz to 80 MHz	Portable and mobile RF communications equipment should be used no closer to any part of the iTero HD2.9, including cables, than the recommended separation distance calculated from the equation applicable to the frequency of the transmitter. Recommended separation distance $d = \left[\frac{3,5}{V_1} \right] \sqrt{P}$ $d = \left[\frac{3,5}{E_1} \right] \sqrt{P} \quad 80 \text{ MHz to } 800 \text{ MHz}$ $d = \left[\frac{7}{E_1} \right] \sqrt{P} \quad 800 \text{ MHz to } 2,5 \text{ GHz}$ Where P is the maximum output power rating of the transmitter in watts (W) according to the transmitter manufacturer and d is the recommended separation distance in meters (m).
Radiated RF IEC 61000-4-3	3 V/m 80 MHz to 2,5 GHz	3 V/m 80 MHz to 2,5 GHz	Field strengths from fixed RF transmitters, as determined by an electromagnetic site survey, should be less than the compliance level in each frequency range. Interference may occur in the vicinity of equipment marked with the following symbol: 

NOTE 1: At 80 MHz and 800 MHz, the higher frequency range applies.
NOTE 2: These guidelines may not apply in all situations. Electromagnetic propagation is affected by absorption and reflection from structures, objects and people.

Field strengths from fixed transmitters, such as base stations for radio (cellular/cordless) telephones and land mobile radios, amateur radio, AM and FM radio broadcast and TV broadcast cannot be predicted theoretically with accuracy. To assess the electromagnetic environment due to fixed RF transmitters, an electromagnetic site survey should be considered. If the measured field strength in the location in which the iTero HD2.9 is used exceeds the applicable RF compliance level above, the iTero HD2.9 should be observed to verify normal operation. If abnormal performance is observed, additional measures may be necessary, such as re-orienting or relocating the iTero HD2.9. b Over the frequency range 150 kHz to 80 MHz, field strengths should be less than 3 V/m.

Recommended Separation Distances Between Portable and Mobile RF Communications Equipment and iTero HD2.9

iTero HD2.9 is intended for use in an electromagnetic environment in which radiated RF disturbances are controlled. The customer or the user of the iTero HD2.9 can help prevent electromagnetic interference by maintaining a minimum distance between portable and mobile RF communications equipment (transmitters) and the iTero HD2.9 as recommended below, according to the maximum output power of the communications equipment.

Rated Maximum Output Power of Transmitter (W)	Separation Distance According to Frequency of Transmitter (m)		
	150 kHz to 80 MHz $d = \left[\frac{3,5}{V_1}\right]\sqrt{P}$	80 MHz to 800 MHz $d = \left[\frac{3,5}{E_1}\right]\sqrt{P}$	800 MHz to 2,5 GHz $d = \left[\frac{7}{E_1}\right]\sqrt{P}$
0.01	0.12	0.12	0.23
0.1	0.38	0.38	0.73
1	1.2	1.2	2.3
10	3.8	3.8	7.3
100	12	12	23

For transmitters rated at a maximum output power not listed above, the recommended separation distance d in

Meters (m) can be estimated using the equation applicable to the frequency of the transmitter, where P is the

Maximum output power rating of the transmitter in watts (W) according to the transmitter manufacturer.

NOTE 1: At 80 MHz and 800 MHz, the separation distance for the higher frequency range applies.

NOTE 2: These guidelines may not apply in all situations. Electromagnetic propagation is affected by absorption and

Reflection from structures, objects and people.

Appendix B: Hardware Specifications

ITEM	DESCRIPTION
Monitor	LCD monitor
Scanner	Scanner emits red laser light (660 nm Class 1) as well as multi-colored light emissions.
Internal UPS	An internal UPS provides power backup for moving the cart between rooms and for power failure situations. Under typical operating circumstances, the UPS provides approximately 5 minutes of backup time. The UPS requires approximately 8 hours for full recharge (for first time usage or when depleted). To ensure that the UPS remains fully charged, it is recommended to leave the system connected to the wall outlet at all times.
Wireless LAN	LAN card provides local network communications with wireless connectivity.
Keyboard	Built-in replaceable keyboard.
Mouse	Wireless optical mouse.
Mouse Battery	1.5V alkaline LR03 battery (size AAA).
Foot Pedal Battery	Two 1.5V alkaline LR6 batteries (size AA).
Mains Fuses	Two types: T5AL (5A, slow-blow) 250V glass tube fuses (5 x 20 mm). Recommend Part: Littelfuse® 218.005.P or equivalent.
Operating Power	100/120/230VAC - 50/60 Hz – 720VA (max)
Operating Temperature	18° to 28° C / 64.4° to 82.4° F
Storage/Transportation Temperature	-5° to 50° C 23° to 122° F
Operating Pressure & Altitude	Pressure: 520 mmHg to 760 mmHg Altitude: 0 feet to 10,000 feet
Storage/Transportation Pressure & Altitude	Pressure: 430 mmHg to 760 mmHg Altitude: 0 feet to 15,000 feet
Relative Humidity	30-90%
Dimensions	Height: 135 cm (53.1 inches) Width: 65.5 cm (25.8 inches) Depth: 38 cm (15 inches)
Net Weight	53 kg (116.85 lbs)
Shipping Weight (including box and packaging)	76 kg (160.9 lbs)

