

## TABLE OF CONTENTS

<b>1 DEVICE DESCRIPTION</b>	<b>3</b>
1.1 Console	3
1.2 FiberLife	3
1.3 Vaporization	3
1.4 Coagulation	3
1.5 User Information	3
1.6 Contents	3
<b>2 INTENDED USE/INDICATIONS FOR USE</b>	<b>3</b>
<b>3 CONTRAINDICATIONS</b>	<b>4</b>
<b>4 WARNINGS</b>	<b>4</b>
<b>5 PRECAUTIONS</b>	<b>4</b>
<b>6 ADVERSE EVENTS</b>	<b>5</b>
6.1 Some Adverse Events Further Explained	6
6.2 Complications And Risks By Indication	7
<b>7 HOW SUPPLIED</b>	<b>8</b>
7.1 Handling and Storage	8
<b>8 SAFETY</b>	<b>8</b>
8.1 Eye Injury	8
8.2 Burns	9
8.3 Reflection of the Beam From Instruments	9
8.4 Ignition of Flammable Materials	9
8.5 Electrical	9
8.6 Operating Room Environment	9
8.7 Safety Features of the Laser System	10
<b>9 CONSOLE DESCRIPTION</b>	<b>11</b>
<b>10 ACCESSORIES</b>	<b>13</b>
10.1 Video Camera Insert	13
10.2 Laser Protective Eyewear	13
<b>11 INSTALLATION</b>	<b>13</b>
11.1 Responsibility of BSC	13
11.2 Responsibility of Customer	13
11.3 Positioning of the Console	13
11.4 Power Requirements	13
<b>12 INSTRUCTIONS FOR USE</b>	<b>14</b>
12.1 Touchscreen and Footswitch	14
12.2 Preparation	14

12.3 Procedure.....	17
12.4 After the Procedure.....	18
<b>13 TECHNICAL DATA .....</b>	<b>19</b>
13.1 Safety Classifications and Electromagnetic Compatibility .....	19
<b>14 MAINTENANCE.....</b>	<b>22</b>
14.1 Care of the Console .....	22
14.2 Preventative Maintenance.....	22
14.3 Coolant Refill Instructions .....	22
14.4 Instructions How to Refill Coolant .....	22
14.5 End of Useful Life .....	23
<b>15 TROUBLESHOOTING .....</b>	<b>23</b>
15.1 Courtesy Messages.....	23
15.2 Service Prompts.....	24
<b>16 WARRANTY .....</b>	<b>25</b>
16.1 Limitation of Warranty.....	25
16.2 Additional Terms of Warranty for Mobile Systems .....	25
16.3 Transport of the System.....	25

# Rx ONLY

**Caution:** Federal Law (USA) restricts this device to sale by or on the order of a physician.

**WARNING:** Users of the GreenLight XPS™ Laser System should read this manual thoroughly before attempting surgical procedure. Pay attention to all warnings, contraindications, precautions, and adverse events in this manual and other related material. Failure to thoroughly understand and follow all instructions may result in harm to the patient or the user of the laser system.

## 1 DEVICE DESCRIPTION

The GreenLight XPS Laser System is designed for the vaporization and coagulation of soft tissue using light. One example procedure is the endoscopic (transurethral) resection of the prostate for the treatment of Benign Prostatic Hyperplasia (BPH). The laser system consists of a console, which generates the green laser light and a fiber optic delivery device that transmits laser light from the console to the patient. This laser system is not intended to treat prostate cancer.

### 1.1 Console

The console is a diode-pumped solid-state laser utilizing Nd:YAG laser gain medium and Acousto-Optic Q Switch. The primary wavelength is 1064 nm. Frequency-doubling crystal is used to generate a 532 nm output beam. Quasi-CW pulse repetition rate is 23.6 kHz. Pulse duration is approximately 100 ns. Pulse energy is approximately 8 mJ at maximum power (180 W). The console generates visible green 532 nm laser light. In vaporization mode, the power settings range from 20 W to a maximum power determined by the fiber delivery device. In coagulation mode, the power settings range from 5 W to 40 W. The console features a plug and play capability that self-adjusts to the facility's supply voltage, eliminating the need for electrical modifications of the operating facility. The console includes internal cooling mechanisms ensuring safe operating temperatures with no external water connection. Laser energy emission and console status changes are activated through a surgeon-controlled, color-coded footswitch or console touchscreen feature.

### 1.2 FiberLife

The console is equipped with the FiberLife feature. The FiberLife feature continuously monitors the temperature of the tip of the fiber and momentarily stops the laser emission when the fiber gets too hot. In most cases, this will prevent damage to the fiber if tissue or vapor bubbles accumulate on the tip or there is excessive heating of the fiber.

In most cases, the laser will turn back on immediately and the procedure continues without interruption. There will be noticeable blinking of the working beam. If the FiberLife feature is activated continuously, vaporization efficiency will be significantly reduced. In this case, the fiber should be cleaned or replaced. The console will automatically detect this condition, put the laser in Standby mode, and display a message.

The FiberLife feature will stop laser emission if the laser is accidentally fired while inside the cystoscope. Generally, this will prevent serious damage to the cystoscope. Some discoloration of the metal may still occur, which can increase the possibility of corrosion.

### 1.3 Vaporization

The console uses photo-selective vaporization for the resection of soft tissue. The 532 nm green laser light emitted is strongly absorbed by oxyhemoglobin in red blood cells. Absorption of the laser light energy results in the generation of heat, which bursts cells, effectively vaporizing the targeted tissue. Additionally, the heat can coagulate blood vessels near the resected tissue, allowing for a clear surgical field. If bleeding occurs, the console also has a pulsed coagulation feature.

### 1.4 Coagulation

The console has a pulsed coagulation feature. In this mode, activated when the coagulation (coag) footswitch is pressed, laser emission is pulsed at a rate of ~12.5 Hz with a duty cycle of ~25 %. This pulse mode improves the coagulative effect.

### 1.5 User Information

Only persons trained in the use of the laser console and who have sufficient medical knowledge should use the GreenLight XPS Laser System. The user should have a demonstrated understanding of the laser console's operation and the risk associated with improper use.

### 1.6 Contents

- Laser Console
- Footswitch
- Fiber Pole
- Key Chain
- Laser In-Use Sign
- Physician Protective Eyewear
- Spectator Protective Eyewear

## 2 INTENDED USE/INDICATIONS FOR USE

The GreenLight XPS Laser System is intended for the surgical incision, excision, vaporization, ablation, hemostasis, and coagulation of soft tissue. All soft tissue is included, such as skin, cutaneous tissue, subcutaneous tissue, striated and smooth tissue, muscle, cartilage meniscus, mucous membrane, lymph vessels and nodes, organs, and glands.

Suggested applications include:

- **General Surgery:** Vaporizing, coagulating, incising, excising, debulking, and ablating of soft tissue as well as in endoscopic (for example, laparoscopic) or open surgeries.

- **Gastroenterology:** Tissue ablation and hemostasis in the gastrointestinal tract; esophageal neoplastic obstructions, including squamous cell carcinoma and adenocarcinoma; gastrointestinal hemostasis (including varices, esophagitis, esophageal ulcer, Mallory-Weiss tear, gastric ulcer, angiodysplasia, stomal ulcers, non-bleeding ulcers, gastric erosions); gastrointestinal tissue ablation (benign and malignant neoplasm, angiodysplasia, polyps, ulcers, colitis, hemorrhoids).
- **Gynecology:** Vaporizing, incising, or coagulating tissue associated with treatments of conditions such as endometriosis; cervical, vulvar, and vaginal intraepithelial neoplasia; condyloma acuminata; uterine septum; intrauterine adhesions; submucosal fibroids.
- **Head and Neck/Otorhinolaryngology (ENT):** Tissue incision, excision, ablation, and vessel hemostasis.
- **Neurosurgery:** Incising, excising, coagulating, and vaporizing neurological tumors of the firm textured type.
- **Ophthalmology:** Post-vitreotomy endophotocoagulation of the retina.
- **Plastic Surgery:** Vaporizing, coagulating, incising, excising, debulking, and ablating of soft tissue in endoscopic and open procedures.
- **Spinal Surgery:** Percutaneous lumbar discectomy.
- **Thoracic Surgery:** Vaporizing, coagulating, incising, excising, debulking, and ablating of soft tissue, including lung tissue in thoracoscopic or open procedures.
- **Urology:** Cutting, coagulating, or vaporizing urologic soft tissues. Open endoscopic minimally invasive urological surgery (ablation, vaporization, incision, excision, and coagulation of soft tissue) including treatment of bladder, urethral and ureteral tumors; condylomata; lesions of external genitalia; urethral and penile hemangioma; urethral strictures; bladder neck obstructions; and vaporization of prostate tissue for men suffering from Benign Prostatic Hyperplasia (BPH).

The GreenLight XPS™ Laser System is intended for the hospital, office, and outpatient surgery center markets.

### 3 CONTRAINDICATIONS

The laser system is contraindicated for patients with the following conditions:

- General medical condition that contraindicates surgical intervention
- When appropriate anesthesia is contraindicated by patient history
- Calcified tissue (especially tumors)
- Hemostasis of vessels over approximately two millimeters in diameter
- When laser therapy is not considered the treatment of choice
- Uncontrolled bleeding disorders and coagulopathy
- Prostate cancer
- Acute urinary tract infection (UTI)
- Severe urethral stricture

The GreenLight XPS Laser System is contraindicated in the presence of severe urethral strictures; however, the system can be used in the treatment of urethral strictures with proper cautions. A severe stricture shows visible narrowing on urethrography or ultrasonography, with near total obstruction that makes passage of instruments difficult or dangerous. Use caution to avoid injury to urethral tissue.

### 4 WARNINGS

- Everyone in the room is required to wear protective eyewear.
- Never use a clamp to secure the laser fiber to a drape. The use of a clamp to secure a fiber may cause the fiber to bend at sharp angles, which can damage the fiber, causing an unsafe condition. The fiber can break and release laser energy, causing a burn in the protective jacket. If undetected, this condition will result in a burn or ignition of flammable materials.
- Do not fire the laser unless the aiming beam is visible and directed at the targeted tissue.
- Never activate the laser energy unless the fiber tip extends visibly beyond the tip of the endoscope.
- Unauthorized use of internal controls, adjustments to the equipment, or performance of procedures other than those specified herein, may result in hazardous radiation exposure.
- Warning signs are not interchangeable. Select a sign that is appropriate for the wavelengths in use.
- When using anodized, black chrome finished, or ebonized instruments during a surgical procedure, additional care should be taken to prevent burns. These instruments will become extremely hot when they come in contact with a laser beam and are not able to dissipate heat quickly. When tissue is touched under these conditions, a burn may result.
- Unauthorized modification of this equipment is not allowed. Do not attempt to repair or alter any components/parts of the GreenLight XPS Laser System. All repairs and servicing are to be performed only by Boston Scientific Corporation (BSC) or personnel authorized by BSC.

### 5 PRECAUTIONS

- Before operating the laser system, surgeons and all staff operating the laser should carefully read and become familiar with the User's Manual.
- Do not attempt to turn on the laser system until it has been installed and tested by a BSC service engineer. Severe damage to the laser system may result.
- Alterations in surgical approach or technique may be required to accommodate laser use.
- The laser system is a surgical device used by surgeons who have been trained in laser surgery through courses, preceptorships, or under the guidance of other surgeons knowledgeable in laser use.
- The surgeon should become fully acquainted with the unique surgical effects produced with the laser system before clinical use. These effects include coagulation, depth of penetration, and cutting intensity.

- The risk of combustion, perforation, and laser-induced hemorrhage, all of which could cause serious or fatal complications, must be fully explained to the patient.
  - As with non-laser treatments, adverse reactions such as fever, chills, sepsis, edema, and hemorrhage may occur after laser treatment. In extreme cases, death may occur due to procedural complications, concurrent illness, or the application of the laser.
  - Caution should be taken when radiation therapy and laser therapy are to be used concurrently, including more stringent post-operative monitoring. Patients who have undergone radiation therapy may present a greater risk of perforation or tissue erosion. Use caution with patients who had previous esophageal/tracheal fistulae or episodes of aspiration.
  - Use caution when treating patients who had difficulty with previous endoscopic/cystoscopic procedures.
  - No claim is made that the laser system will cure the medical condition or eliminate the diseased entity. Repeated treatment or alternative therapies may be required.
  - BSC has no clinical information or experience concerning the use of the laser system on pregnant women or nursing mothers.
  - Before turning the laser system on, operating room personnel and the patient should be wearing protective eyewear suitable for the laser energy.
  - A basin of water should be available in case a fire should occur.
  - Do not press either footswitch while checking the aiming beam.
  - To avoid damage from the treatment beam or its backscatter, it is recommended the fiber be fully visible in the visual field. Do not fire the laser unless the aiming beam is visible and directed at the intended target. Aim and use the laser only on tissues that are in full view.
  - Avoid firing the laser if the fiber tip is in an air pocket.
  - Do not bury the fiber in tissue. Do not use the fiber as a probe.
  - Firing the working beam continuously at one location (not sweeping the beam) may result in difficult to control bleeding or perforation.
  - If extended contact between the fiber tip and tissue is unavoidable, use the lowest power at which acceptable vaporization can be achieved, but no more than 80 W.
  - If the working beam or aiming beam exits the fiber in an unusual direction, cease firing immediately, determine if there has been unintended tissue damage and take appropriate action. Replace the fiber before continuing with the procedure.
  - The surgeon should carefully assess the target and surrounding tissue, and then begin at the lowest appropriate power, with short duration exposures. Do not adjust the power of the laser until the effect of the laser on the tissue has been evaluated. Note the surgical effect and adjust the settings and sweeping speed until the desired effect is obtained.
  - Use of lower power levels and shorter exposure times are required to prevent thermal damage to underlying structures, for example, to thin-walled structures, such as the bladder.
  - Tissue perforation can occur if excessive laser energy is applied. This can occur using excessive laser power or the application of power for excessive periods of time, particularly on diseased tissue. Examples of diseased tissue include tissue that has undergone brachytherapy, tissue that is infected, or tissue that has thinned due to another underlying disease other than BPH.
  - Use caution when lasing tissue in close proximity to known arteries, nerves, and veins.
  - Use caution to protect endotracheal tubes from laser radiation. Ignition or perforation of endotracheal tubes by the laser beam could result in serious or fatal patient complications.
  - The laser may not be effective for coagulation in massive hemorrhage situations. The surgeon must be prepared to control hemorrhages with strident alternative non-laser techniques, such as ligature or electrocautery.
  - The surgeon should schedule follow-up visits in the same manner as for patients undergoing such surgery with other modalities.
  - Exercise care for special risks related to the disposal of the device. See End of Useful Life section.
  - The laser system must be kept dry during storage and transport with temperatures between:
    - 32 °F to 104 °F (0 °C to 40 °C) with all water drained from system
    - 39 °F to 104 °F (4 °C to 40 °C) with cooling system charged with distilled or deionized water
- Improper storage or transport of the laser system may result in damage to the cooling system, optical resonator, and other critical components.

## 6 ADVERSE EVENTS

Users should read and understand the specific indications, contraindications, warnings, precautions, and current adverse events included with the fiber used in conjunction with the GreenLight XPS™ Laser System. Potential adverse events associated with the GreenLight XPS Laser System are, but not limited to, the following:

- Abdominal bloating (intestinal gas)
- Acute renal failure
- Allergic reaction
- Aspiration
- Bladder neck contracture
- Bladder spasm
- Bleeding
- Burn
- Chills
- Clot retention

- Contamination of the device may lead to injury, illness, or death of the patient
- Deep venous thrombosis
- Delay in healing
- Dysuria
- Edema
- Embolism
- Epididymitis
- Erectile dysfunction (ED)
- Fatigue or weakness
- Fever
- Fluid overload/hyponatremia
- Gas over-distension
- Hematospermia
- Hematuria
- Infection
- Leukocytosis
- Malfunction of laser fiber or console resulting in an injury or prolonged procedure
- Nocturia
- Overactive bladder
- Pain:
  - Abdominal pain unresponsive to Nonsteroidal Anti-inflammatory Drugs (NSAIDs)
  - Arm or leg pain
  - Headache
  - Back/low back pain
  - Body aches
  - Pelvic
  - Penile
- Pelvic hematoma
- Penile urethral injury
- Perforation
- Pneumothorax
- Profuse perspiration (not fever-related)
- Prostatitis
- Pulmonary embolus
- Retrograde ejaculation
- Sepsis
- Stricture
- Tissue damage
- Tissue sloughing
- Ulceration
- Unretrieved device fragment
- Ureteral orifice injury
- Urethral stricture
- Urgency
- Urinary frequency
- Urinary incontinence
- Urinary retention
- Urinary tract infection

### 6.1 Some Adverse Events Further Explained

**Bleeding:** Patients may experience bleeding at the site of the laser therapy during or after laser therapy. Post-treatment hemoglobin and hematocrit are recommended lab tests to assess the severity of bleeding.

**Fever and Leukocytosis:** Immediately after laser therapy, the patient may experience fever and leukocytosis, which are commonly associated with tissue destruction. These generally resolve without treatment. Cultures may be indicated to exclude the possibility of infection.

**Pain:** Short-lived pain may occur immediately after endoscopic/cystoscopic laser therapy and may persist for 48 hours.

**Perforation:** Perforation can occur as a result of excessive exposure to laser radiation. Perforation can occur from tumor erosion, or as a result of endoscopic/cystoscopic procedure. To clinically diagnose perforations, patients must be closely monitored post-operatively through physical assessment of clinical symptoms, hematology studies as deemed appropriate, and radiography.

**Sepsis:** Laser-ablated tissue may become infected after therapy. If a question of sepsis exists, a culture should be taken and other appropriate evaluations made.

As with conventional endoscopic treatments, adverse reactions such as fever, chills, sepsis, edema, and hemorrhage are possible after laser treatment. In extreme cases, death may occur due to procedural complications, concurrent illness, or the application of the laser. Use caution when treating patients who had difficulty with previous endoscopic procedures.

## 6.2 Complications And Risks By Indication

For all indications, see Intended Use/Indications for Use section.

### General Surgery

Complications and Risks: See Adverse Events for general information. There is a potential risk of thermal damage at the site of the incision.

For endoscopic/laparoscopic procedures, there are no known complications and risks specific to general surgery other than those associated with laparoscopy procedures in general (that is, over-distension, subcutaneous emphysema).

See Contraindications for general information. There are no known contraindications specific to general surgery at this time. Endoscopic/laparoscopic procedure patients should be treated with alternative methods when laparoscopy is contraindicated.

### Gastroenterology

See Adverse Events for general information.

The risk of combustion, perforation and laser-induced hemorrhage, all of which could cause serious or fatal complications, must be fully explained to the patients.

Use caution when radiation therapy and laser therapy are to be used concurrently, including more stringent post-operative monitoring. Patients who have undergone radiation therapy may present a greater risk of perforation or tissue erosion. Use caution with patients who had previous esophageal/tracheal fistulae or episodes of aspiration.

Discontinue laser therapy immediately if the patient develops cardiopulmonary problems.

To avoid the potential risk of endoscope ignition or damage from the treatment beam or treatment beam backscatter, it is recommended that the fiber extend 1 to 2 cm beyond the distal port of the endoscope, so it is entirely in the visual field.

After esophageal procedures, swallowing may be paradoxically worsened, rather than immediately improved. This is caused by secondary tissue edema. Explain this potential problem to the patient before therapy.

See Contraindications for general information. There are no known contraindications specific to gastroenterological use at this time.

### Gynecology

See Adverse Events for general information. There are no known complications and risks specific to gynecology at this time.

See Contraindications for general information. These procedures may be contraindicated for women who are pregnant or have a suspected pregnancy, and for whom hysteroscopy or laparoscopy, or open abdominal surgery would not be appropriate. These procedures may be contraindicated for women with other medical or surgical conditions that would contraindicate laparoscopic or hysteroscopic surgery.

### Head and Neck/Otorhinolaryngology (ENT)

See Adverse Events for general information. For cosmetic purposes, it is recommended that initial incisions be performed with conventional scalpels or that skin edges incised with the laser be cut back by approximately 0.5 mm to 1.0 mm with a scalpel before closing the skin.

Use caution to protect the endotracheal tubes. Contact with the laser beam could result in serious or fatal patient complications. When using the laser for coagulation in ENT applications, it is essential to de-focus the laser beam spot to preclude tissue damage beyond the desired coagulation site. Unintended tissue damage could result from a focused treatment beam. While clinical experience to date has demonstrated that lasers can be safely used for hemostatic in ENT, there have been reports of serious complications when lasers are used inappropriately.

The main risk of laser use is thermal damage to the surrounding vital structures, which is risky for oval window surgery as energy applied directly to the open oval window will pass directly through the perilymph and be absorbed by the inner ear structures. Other complications related to laser surgery include, but are not limited to burns, scarring, hemorrhage, perforations, fires and explosions, eye injury, electrical shock, swelling, and obstruction.

Thermal damage caused by laser treatment has been related to adverse side effects and other risks. For example, where laser tissue welding is used, such as in laser-assisted myringoplasty, a low strength anastomosis or thermal damage to tissue are the main concerns. Delayed post-operative pain and slow healing are both thought to be related to thermal damage caused by the laser during tonsillectomy.

Compared to traditional scalpel cutting surgery, laser treatment has sometimes resulted in slower healing in procedures such as uvulopalatoplasty and tonsillectomy. Tissue necrosis, post-operative edema, or bleeding was rarely seen. Slow healing increases the risk of infection. The presence of necrosis could leave the tonsillar bed more vulnerable to infection.

See Contraindications for general information. There are no known contraindications unique to ENT.

### Neurosurgery

Particular care must be exercised in heating the brain stem area. Flushing with cool saline in such areas will reduce heat build-up and related bradycardia.

See Adverse Events for general information. There are no known specific complications and risks to neurosurgery use at this time.

See Contraindications for general information. These procedures are contraindicated for the treatment of necrotic or calcified tumors.

### Ophthalmology

See Adverse Events for general information. There are no known specific complications and risks to ophthalmology use at this time.

See Contraindications for general information. These procedures are contraindicated for the treatment of necrotic or calcified tumors.

## Spinal Surgery

See Adverse Events for general information. Some patients have reported an inflammatory response four to ten days post-operative at the site of surgery. This has occurred in patients who have reported a successful procedure post-operatively and are otherwise asymptomatic.

The occurrence of this adverse event has reportedly been significantly reduced by the administration of an anti-inflammatory agent, into the surgical site, at the completion of the procedure.

With surgical procedure in the spine, there is the potential risk of infection, inflammation and post-operative pain. The injection of antibiotics, anti-inflammatory drugs, and analgesics into the surgical area at the completion of the procedure has been reported to reduce the occurrence of these adverse events.

See Contraindications for general information. General anesthesia is specifically contraindicated for this procedure.

This procedure is contraindicated, if the following conditions exist:

- Non-contained disc herniation (leakage of dye into epidural space by discogram)
- Radiographic evidence of spinal stenosis > 50 %
- Progressive neurological loss
- Cauda Equina Syndrome
- Tumor
- Infection
- Fracture
- Spondylolisthesis
- Spinal instability
- Free fragments or other significant pathologies
- Significant (> 30 %) narrowing of disc space, possible facet damage
- Patients with previous surgery/chemonucleolysis at the indicated level may be a candidate for laser disc decompression.
- All other factors should be considered.

## Plastic Surgery

The laser is not intended for use for skin incision or liposuction. See Adverse Events for general information. Initial skin incision using the laser may result in undesirable scar formation.

See Contraindications for general information. There are no known contraindications unique to plastic surgery.

## Thoracic Surgery

The use of contact delivery devices (for example, sculptured fibers) on lung tissue, in conjunction with the wavelength, is considered investigational. When performing thoracoscopic surgery it is vital for the surgeon to appreciate that the view provided is monocular (not binocular) and that depth perception is decreased. Practice on the part of the surgeon to get the feel of operating through a monocular scope is strongly recommended before clinical use.

In surgery of a body cavity that is insufflated, the surgeon and the anesthesiologist must appreciate the risk of embolism, should a blood vessel be opened. Most surgeons prefer CO<sub>2</sub> as the pressurizing gas of choice, as it is readily absorbed and does not lead to embolism. The anesthesiologist should monitor the patient for unusually high CO<sub>2</sub> absorption, and adjust procedures, as necessary.

See Adverse Events for general information. There are no known specific complications and risks to thoracic surgery use at this time.

See Contraindications for general information. There are no known contraindications unique to thoracic surgery.

## Urology

See Adverse Events for general information.

## 7 HOW SUPPLIED

Do not use if the package is opened or damaged.

Do not use if labeling is incomplete or illegible.

### 7.1 Handling and Storage

- Storage and transport temperature with all water drained from the system: 32 °F to 104 °F (0 °C to 40 °C)
- Storage and transport temperature with cooling system charged with distilled or deionized water: 39 °F to 104 °F (4 °C to 40 °C)
- Store in a dry place

When in storage or transport outside of the recommended temperature ranges, damage may occur to the cooling system, optical resonator, and other critical components. The console should be drained using the field drain procedure. For complete draining procedure, contact BSC technical support. When the console is drained and in storage, the desiccant pack should be replaced on a six-month interval.

## 8 SAFETY

### 8.1 Eye Injury

Visible light laser energy passes through the transparent components of the eye (cornea, lens, aqueous, and vitreous humor), and is focused on the retina. This light can cause an accidental retinal burn. The degree of injury to the eye will depend upon the power of the beam, how focused the beam is, and how long the eye is exposed to the beam.

Protective eyewear for the operating room staff and patient should be provided. Laser eyewear may not be interchangeable between lasers of different wavelength, power, or divergence angle.



**WARNING:** It is required for everyone in the room to wear protective eyewear.

Eyewear has been designed to protect operating room personnel from the 532 nm laser energy. The eyewear has a minimum optical density (OD) of 6.0 at 532 nm. The eyewear requirements for EU are 532 D L6. These types of laser protective eyewear include:

- Nearly clear physician laser protective eyewear — The essentially clear lens material has high visible light transmission and minimal color distortion.
- Orange protective eyewear — Although it has good visible light transmission, the orange color of the plastic lens causes some color distortion.

### 8.2 Burns

Personnel using lasers should be knowledgeable of the fire hazards associated with laser use. Accidental irradiation of tissue other than the target tissue may result in a burn or vaporization. Surrounding the target area with moist drapes or saline-soaked sponges will keep it moist and greatly reduce this hazard.

Flammable or combustible items in the laser environment may include flammable liquids or combustible ointments, gases, plastics, paper or gauze materials, adhesive or plastic tapes, and endotracheal tubes.

Laser appropriate fire extinguishers and water should be available where lasers are used. Care and precision in aiming and applying laser energy are important.

**WARNING:** Never use a clamp to secure the laser fiber to a drape. The use of a clamp to secure a fiber may cause the fiber to bend at sharp angles and damage the fiber. To do so can result in an unsafe condition. The fiber can break and release laser energy causing a burn in the protective jacket. If undetected, this condition will result in a burn or ignition of flammable materials.

### 8.3 Reflection of the Beam From Instruments

Use caution when aiming the laser beam to prevent reflection of the beam off metallic surgical instruments. Mirror-finish instruments are especially dangerous as they have highly reflective surfaces. The laser light reflected from such instruments is intense and potentially harmful.

Matte, dull, satin-finished, or ebonized instruments have fewer glares, and those with curved surfaces do not reflect light as intensely. While these instruments usually produce a more diffused reflection that is less harmful, this reflection can still be damaging. Protective eyewear should be worn at all times to prevent eye damage.

**WARNING:** When using anodized, black chrome finished, or ebonized instruments during a surgical procedure, additional caution should be taken to prevent burns. These instruments will become extremely hot when they come in contact with a laser beam and are not able to quickly dissipate heat. When tissue is touched under these conditions, a burn may result.

### 8.4 Ignition of Flammable Materials

The laser can ignite many materials used during a surgical procedure. Use of non-flammable materials is strongly recommended.

### 8.5 Electrical

Electrical hazards with the laser are the same with any electrical device. Use caution when plugging the unit into the wall outlet. The area must be free of water and user's hands must be dry.

Always disconnect the laser by grasping the plug and not the power cord. Examine the electrical cord routinely, if signs of wear are noted, contact BSC technical support to have it repaired or replaced.

### 8.6 Operating Room Environment

This section describes specific safety measures for the operating room to aid in the safe operation of the laser system. Medical Electrical Equipment (MEE) is not intended to be used in an oxygen-rich environment.

#### Laser Warning Signs

The area where the laser system is operated should be labeled. Warning signs that specify the laser wavelength being used should be posted at all operating room and access door entrances. Figure 1 is an example of a sign suitable for use with the laser system.

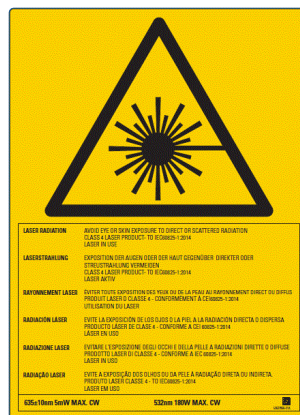


Figure 1. Laser Warning Sign

## Remote Door Interlock

Always limit personnel in the operating room to those essential to the procedure. To protect intruding personnel from exposure to the laser beam, an optional remote door interlock can be connected from the console to the operating room entrance door. This interlock will automatically put the console in Standby mode if the door is opened during a procedure. The console will remain in Standby mode until the door is closed and the interlock is reset. Once reset, the user can place the console back in Ready mode and reactivate the surgical beam. The console cannot be placed in Ready mode, unless the interlock is reset.

If the use of the remote door interlock is desired, the biomedical personnel at the user's facility can connect it. The user should test the remote interlock before each use. Access to the console's interlock function is made through a socket located on the back panel of the console (see Figure 3).

## Safety Recommendations

The following are general safety recommendations for the operating room and are not specific to the laser system:

- When using accessories, tools, disposables, or materials that were in contact with the patient, take protective measures to prevent cross-contamination.
- Keep drapes and towels moist to prevent their ignition and burning.
- Use non-flammable prepping solutions.
- Prevent combustion of methane gas by packing the rectum during perineal procedures.
- Do not use the laser in the presence of flammable anesthetic mixture with air or with oxygen or nitrous oxide.

---

**WARNING:** Do not fire the laser unless the aiming beam is visible and directed at the targeted tissue.

---

## 8.7 Safety Features of the Laser System

The GreenLight XPS™ Laser System incorporates the following safety features:

- The laser will stop firing when the pressure is removed from either footswitch pedal.
- An automatic circuit breaker shuts the console off in the event of an electrical overload.
- The laser provides an operating room door interlock connection, which must be set up by the biomedical personnel.
- The key can only be removed when the key-switch is in the OFF position.
- An onboard microprocessor continuously monitors the status of the console and displays messages on the screen along with appropriate user prompts.
- Laser energy cannot be emitted from the console unless a fiber has been connected.
- Console will go into ready mode when the Ready button is touched on the touchscreen, or when the button on top of the footswitch is pressed.
- A fiber pole lifts and positions the fiber in a safe and unobtrusive position.
- A continuous audible tone is heard when the surgical beam is activated (that is, foot pedal is pressed). A higher frequency tone is heard for vaporization and a lower tone for coagulation.
- When the laser is fired for the first time after entering Ready mode, and whenever switching between vaporization mode and coagulation mode, a voice will announce the current mode.
- A 2-second delay occurs before laser energy is emitted after the laser is placed in Ready mode.
- An Emergency Laser Stop switch is available to disable the console immediately, in the case of an emergency.
- When switching between Ready and Standby mode, a voice will announce the current mode.

---

**Note:** Do not attempt to remove any panel from the console. All panels are fitted with tamper-proof fastenings. Any attempt to remove the panels, unless instructed by authorized BSC personnel, can damage the console and will void the manufacturer's warranty.

---

**Note:** The laser system should be protected against unauthorized use. When the console is not in use, remove the key from the key switch and place in a secure location.

---

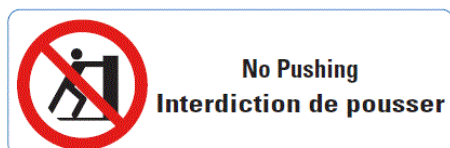
**WARNING:** Unauthorized use of internal controls, adjustments to the equipment, or performance of procedures other than those specified herein, may result in hazardous radiation exposure.

---

**WARNING:** No modification of this equipment is allowed.

---

## Tipping Hazard:



During transportation, pull or push the console carefully using the intended handle to prevent tipping.

---

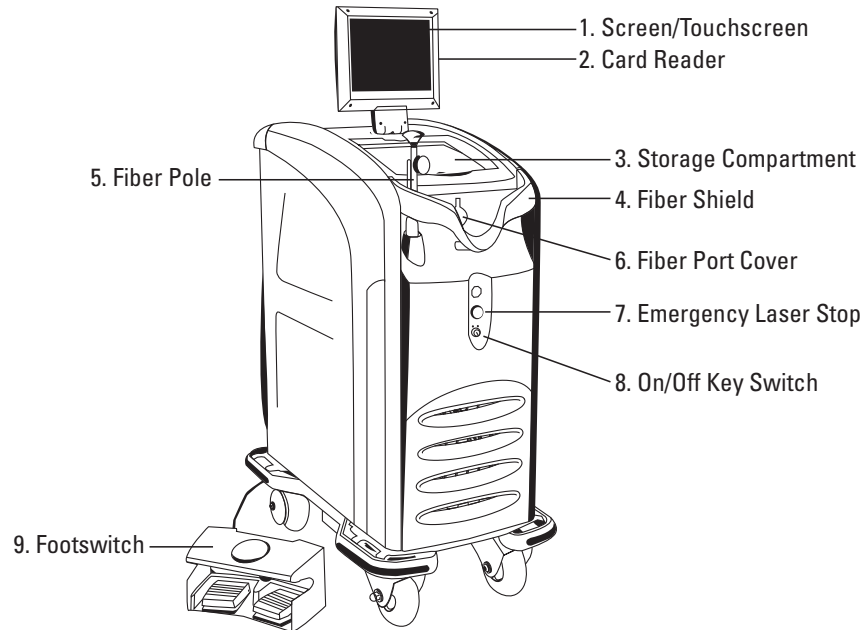
**WARNING:** Console may tip if inclined at an angle of greater than 5 degrees.

---

**Rolling Hazard:** Secure the console with the wheel locks to prevent the unit from inadvertently rolling.

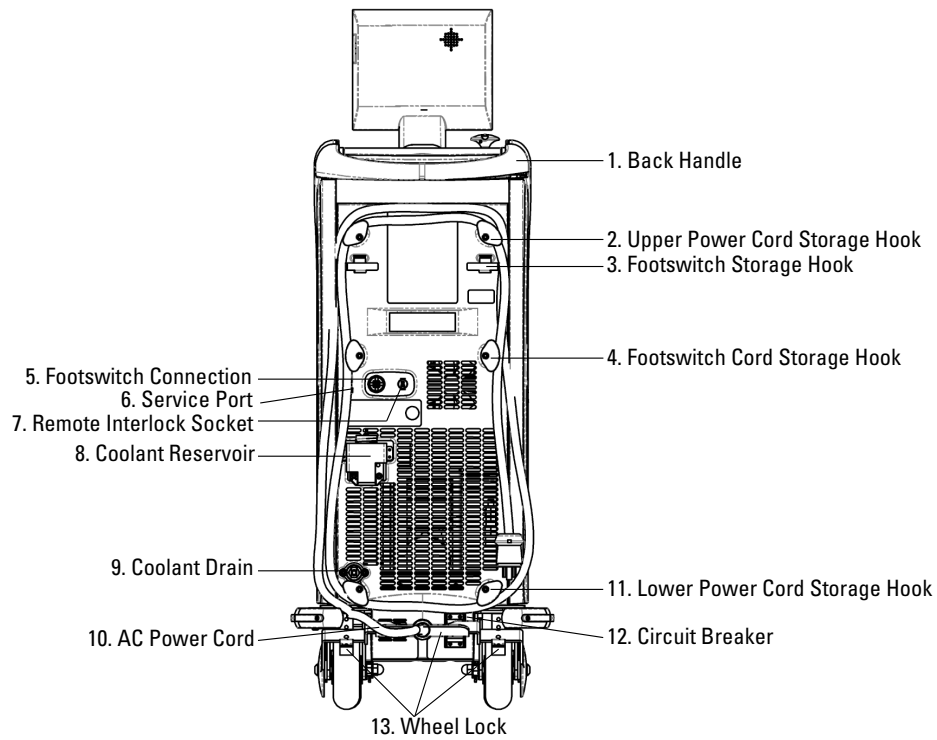
---

## 9 CONSOLE DESCRIPTION



**Figure 2. Front View of Console**

1. Screen/Touchscreen — Displays user information:
  - Console status (Standby, Ready)
  - Laser output (in watts), separate display for vaporization and coagulation
  - Aiming beam brightness level
  - Energy meter (displays total number of Joules delivered)
  - Exposure time (displays total time light is emitted)
  - Buttons on the screen, when pressed, place the laser in either Ready or Standby mode
  - Error codes and screen prompts
2. Card Reader — Reads fiber card
3. Storage Compartment
4. Fiber Shield — Protects the fiber hub from inadvertent damage
5. Fiber Pole — Secures and protects the fiber (retractable)
6. Fiber Port Cover — Connection for fiber
7. Emergency Laser Stop — Turns console off and terminates laser light emission in case of emergency
8. On/Off Key Switch — Switches the console on and off
9. Footswitch — For control of laser emission



**Figure 3. Back View of Console**

1. Back Handle
2. Upper Power Cord Storage Hook — 2 upper hooks for coiling footswitch cord
3. Footswitch Storage Hook — 2 hooks for footswitch storage
4. Footswitch Cord Storage Hook — 2 hooks for coiling footswitch cord
5. Footswitch Connection
6. Service Port — USB ports for factory service only
7. Remote Interlock Socket — Can be connected to the room door so the footswitch will be disabled in the event of entry
8. Coolant Reservoir — For refilling the internal cooling liquid (see Coolant Refill Instructions)
9. Coolant Drain — For draining the internal cooling liquid (see Coolant Refill Instructions)
10. AC Power Cord
11. Lower Power Cord Storage Hook — 2 lower hooks for coiling power cord
12. Circuit Breaker — Automatically trips in the event of a power overload, shutting off power to the console
13. Wheel Lock — For locking and unlocking back wheels

## 10 ACCESSORIES

The operator must use accessories/tools that were cleared by BSC for use with the laser system. BSC assumes no liability and warranty for damage and consequential damage when using the laser system with non-qualified accessories/tools. Contact BSC for an up-to-date list of accessories/tools for the GreenLight XPS™ Laser System.

### 10.1 Video Camera Insert

A video camera insert must be inserted between the telescope and the camera (unless a comparable camera insert is built into the telescope). The video camera inserts have an optical density (OD) of 5 at a wavelength of 532 nm. This blocks most of the laser light, preventing saturation of the video camera sensor. The optimum transmission at wavelengths other than 532 nm and the video camera insert diameter depends on the video camera and telescope model.

### 10.2 Laser Protective Eyewear

Eyewear has been designed to protect operating room personnel from the 532 nm laser energy. The eyewear has a minimum optical density (OD) of 6.0 at 532 nm. The eyewear requirements for EU are 532 D L6.

- Physician protective eyewear — The essentially clear lens material has high visible light transmission and minimal color distortion.
- Spectator protective eyewear — Although it has good visible light transmission, the orange color of the plastic lens causes some color distortion.

## 11 INSTALLATION

This section provides general guidelines for the installation of the laser system. This laser system has specific installation requirements. It is the user's responsibility to fulfill these requirements before the installation of the laser system. Improper installation can result in intermittent operation and even damage to the laser system. Please read the below information carefully.

### 11.1 Responsibility of BSC

A BSC service representative will install the laser system. Upon arrival at the installation site, the representative will perform the following:

1. Verify appropriate electrical power is available.
2. Remove the console from the crate and inspect for damage.
3. Perform all optical, electronic, and system checks necessary to bring the laser into operation.
4. Inventory all shipped accessories.

### 11.2 Responsibility of Customer

Provisions for proper power must be made before the receipt and installation of the laser system. Return visits by service personnel for installation will not be covered under warranty. The customer should complete the Installation Checklist and return it to BSC or distributor. Upon completion of the pre-installation site preparation, contact BSC or the distributor to check shipment date and schedule installation of the system.

The laser system uses standard electrical service and has built-in cooling systems; therefore, installation requires minimal site preparation.

### 11.3 Positioning of the Console

The console must be positioned not more than 5 ft (1.5 m) from the centerline of the treatment table to ensure proper handling of the fiber.

Position the console at least 1 ft (0.3 m) from the wall for proper ventilation during use.

### 11.4 Power Requirements

The power source for the GreenLight XPS Laser System must be a single-phase service with voltage between 200 to 240 VAC, 50/60 Hz, current  $\leq 20$  Amp\*. The laser will automatically adjust to the voltage and frequency within this range. The laser can function when some voltage change is present in the service line; however, the voltage may not vary by more than  $\pm 10$  %.

For BSC to provide the correct electrical plug, the customer must provide information about the installed receptacle in the facility to BSC before installation. Any 250 VAC, current  $\leq 20$  Amp\*, two poles, three wire receptacle can be used if it meets the system's electrical requirements; meets facility, city, county, state, and country ordinances; and complies with EN 60601 for leakage current.

It is recommended the GreenLight XPS Laser System use a dedicated circuit breaker with a minimum rating of 16 Amp or higher to ensure normal operation.

\* The 20 Amp rating indicates the current rating that the power source is expected to be capable of supplying to operate the laser at the maximum rated power output of 180 W. The 20 A rating is neither the minimum nor maximum operational main current requirement; it is a current in which internal circuitry protects the GreenLight XPS Laser System in an over-current condition.

## 12 INSTRUCTIONS FOR USE

### 12.1 Touchscreen and Footswitch

The touchscreen and footswitch are used to control the console. Laser parameters are selected and the console status is changed by using a touchscreen. Use the button on top of the footswitch to go between Ready and Standby laser status. The aiming beam is activated when the console is in the Ready mode or the surgical beam is activated. The surgical beam is activated by pressing a foot pedal. Press the yellow pedal for VAPOR and the blue pedal for COAG.

Power is set by touching the  or  buttons on the touchscreen. An audible tone will be heard when the buttons are pressed.

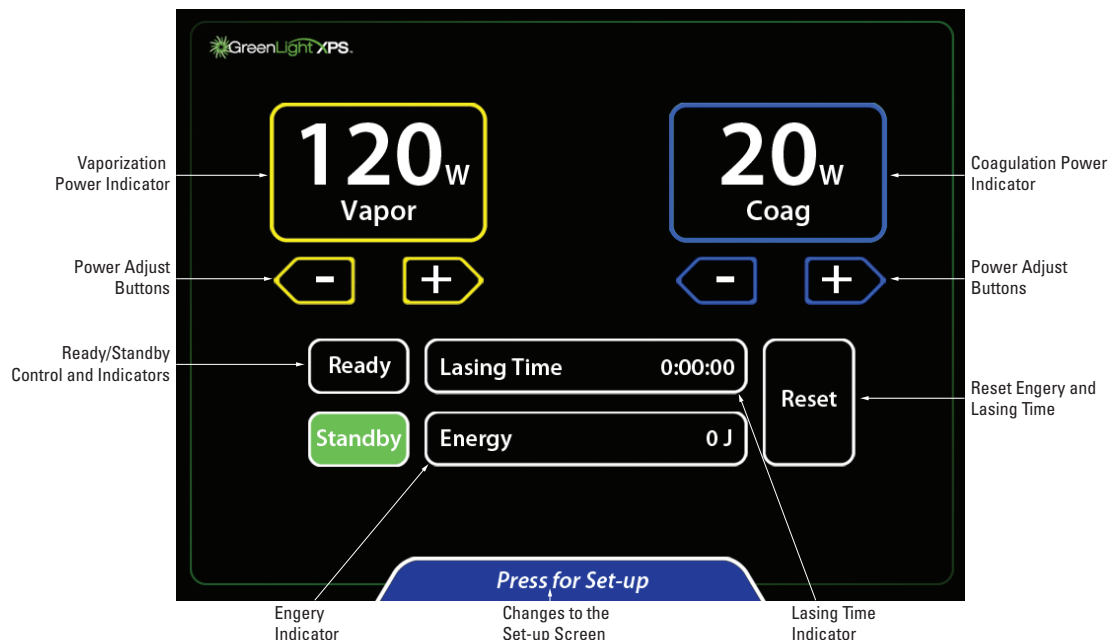


Figure 4. Touchscreen

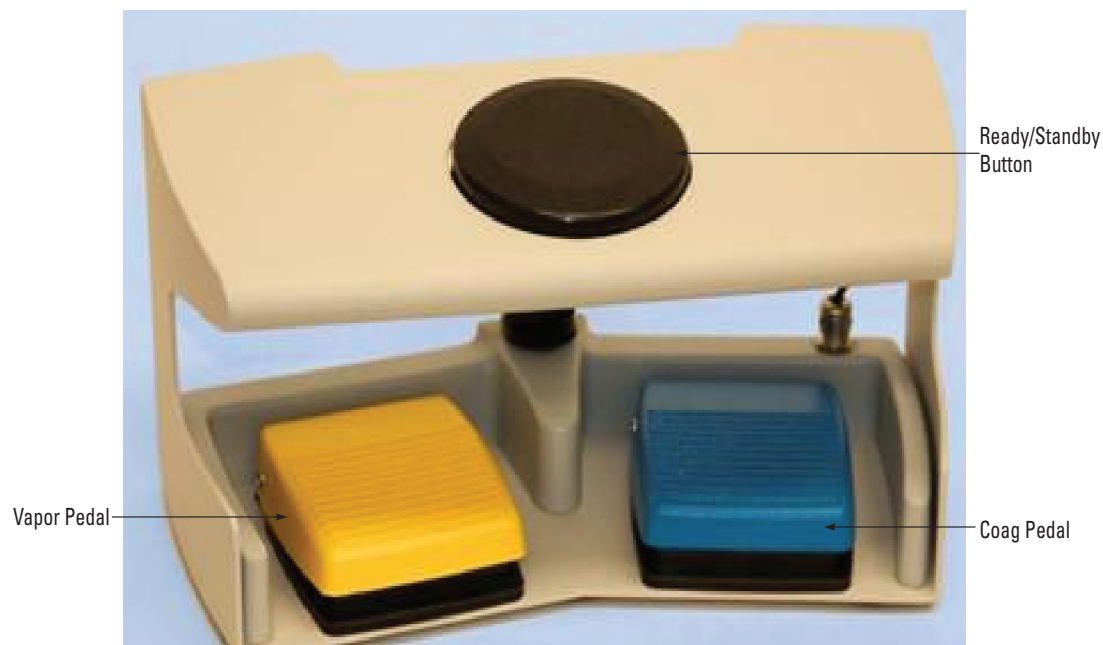


Figure 5. Footswitch

### 12.2 Preparation

1. Ensure protective eyewear is worn by all personnel including the patient.
2. Ensure the circuit breaker on the back of the console is OFF and connect the power cord to an appropriate electrical outlet.
3. Turn the circuit breaker to ON. On the front of the console, turn the key switch to ON.
4. The console's self-check mechanism detects most problems. A message will appear on the touchscreen to alert the user of problems. Courtesy messages alert the user of problems that the user can correct. Service prompts alert the user of a problem that requires a service call.

---

**Note:** It may take time (typically 5 to 15 minutes, but can be up to 40 minutes in rare cases such as extremely cold conditions) for the console to reach the proper operating temperature and pass all internal self-check tests before it is ready for operation.

---

5. The console will perform self-tests. When the tests are completed, a screen is displayed prompting to insert fiber card.



6. Prepare the patient for the procedure.
7. If the telescope does not include a built-in video camera insert, place a small or large video camera insert between the telescope and the camera. The video camera insert protects the camera from the high-intensity light.
- A. To insert the large video camera insert, hold the camera head pointing up. Place the video camera insert (labeled side facing towards camera) onto the camera head and depress the coupler. Attach the telescope to the camera.
  - B. To insert the small video camera insert, hold the telescope portion of the cystoscope with the eyepiece pointing up. Place the video camera insert (writing side facing outward) into the eyepiece. Attach the camera to the telescope.

---

**Note:** Some telescopes have a built-in video camera insert to prevent the transmission of green light. In this case, do not insert an additional video camera insert between the telescope and the camera.

---

**CAUTION:** Do not touch multiple areas on the touchscreen at one time. Contact in multiple areas of the screen will result in no response from the command buttons. Only touch the desired command button when making adjustments to parameters.

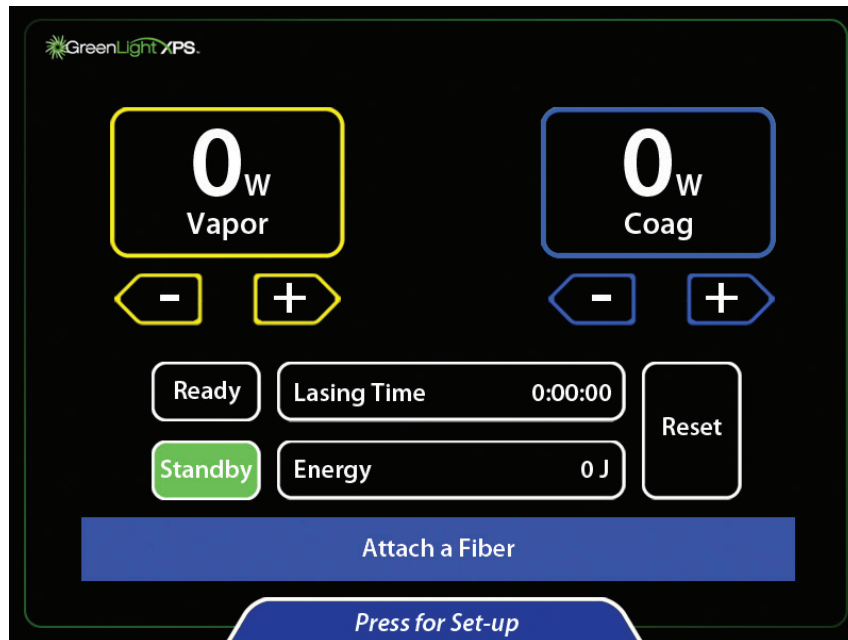
---

- Open the laser fiber box. Locate the fiber card attached to the outside of the pouch. Insert the fiber card into the card reader with the chip side facing operator. The touchscreen then prompts for fiber attachment.

---

**CAUTION:** Do not remove the fiber card until procedure is complete.

---



- Open the fiber pouch and remove the sterile fiber using aseptic technique.

---

**Note:** To protect the laser-fiber interface, the fiber connector must be kept free of lubricant, cleaners, and other contaminants.

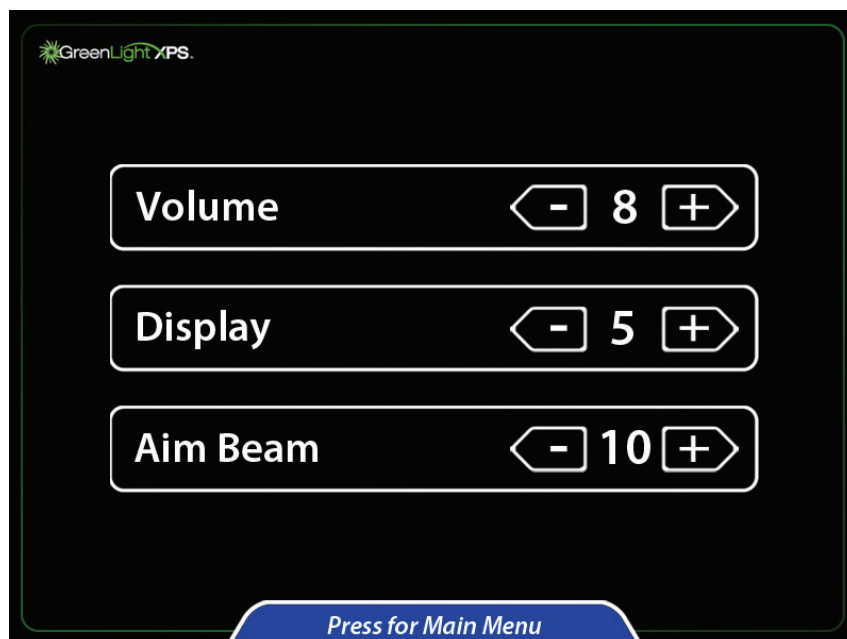
---

- Connect the fiber to the fiber port of the console by pushing the connector into the fiber port (arrow on connector facing up) and turning it ¼-turn clockwise until it locks.
- Follow additional instructions from the fiber package insert.
- On the console, select the desired vaporization and coagulation setting by pressing the arrow keys.





- To change the aiming beam intensity, display intensity, or audio volume, touch Press for Set-up at the bottom of the main screen.



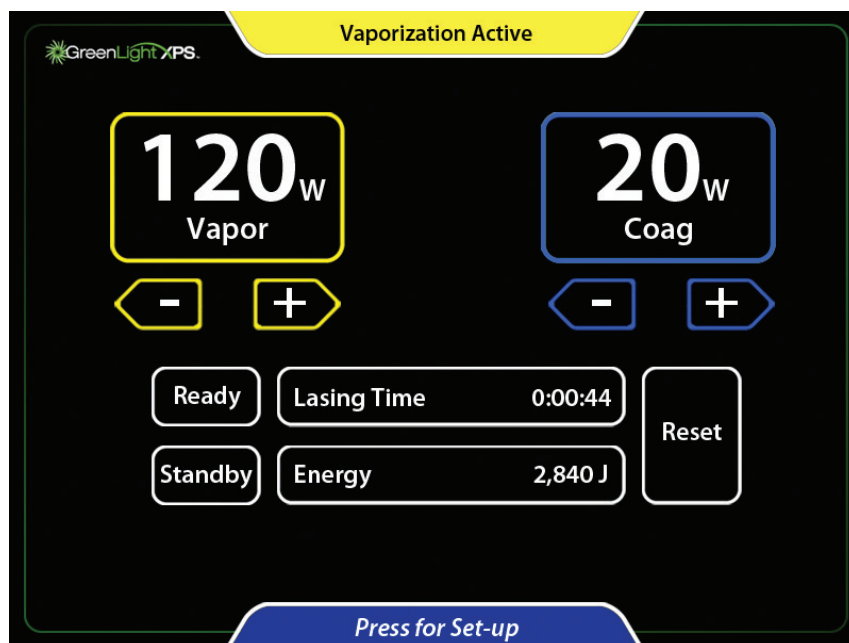
- Adjust the desired setting by touching the arrow keys.
- To return to the main screen, touch Press for Main Menu at the bottom of the screen.
- Press the Ready button to activate the aiming beam. When the Ready button turns orange, the laser system is ready for use in a procedure.



### 12.3 Procedure

- Advance the assembled cystoscope with the visual obturator through the urethra into the bladder using standard technique.
- Advance the fiber through the fiber port and into the visual field of view. A suction tube can be connected to the outflow port of the cystoscope to direct outflow irrigation.
- Rotate the control knob of the fiber to examine the fiber markings. The triangle is contralateral to where the laser beams fires. The triangle must be visible at all times while firing the beam. The red octagonal stop sign is aligned with the aiming beam of the fiber. Do not activate the working beam if the stop sign is centered in the field of view.
- Advance the fiber to the treatment site. The tip of the fiber should be in clear view and extended beyond the tip of the cystoscope. The output beam of the fiber is aligned with index of the knob on the distal portion of the fiber.
- Place the console in Ready mode to enable the footswitch.
- Observe that the aiming beam is on the tissue targeted for treatment before activating the laser.

23. Laser energy will be emitted when a footswitch is pressed. The Active mode (Vaporization Active or Coagulation Active) is displayed at the top of the screen, depending on the footswitch pressed. Audio tone sounds during emission. The first time a given footswitch is pressed, the word Vapor or Coag will be vocalized, depending on which footswitch is pressed.



24. To go back to Standby, press Standby or step on the black Ready/Standby footswitch.
25. The laser emission can be disabled and the aiming beam can be turned off by pressing the Standby button on the touchscreen or by stepping on the black Ready/Standby footswitch.
26. Begin the procedure. Treatment times may vary based on tissue, power settings, and other factors.
27. Steadily rotate (sweep) the laser beam across a 30 ° to 40 ° arc over the targeted tissue, continually moving the laser beam while maintaining a working distance (fiber-to-tissue distance) between 1 mm and 3 mm. Adjust the sweep speed to achieve the desired tissue effect. Adjusting the power level will affect the rate of tissue removal.
28. Bleeding can often be controlled by sweeping the working beam around (not directly at) the bleeder while pressing the Coag footswitch. In Coag mode the beam is modulated to increase coagulation effectiveness. This causes the beam to pulse (blink on and off). Adjust the sweep speed and Coag power to achieve the most effective coagulation. Do not fire the laser directly at the center of the source of the bleeding.
29. Once the desired tissue has been treated, turn off the inflow and outflow valves of the cystoscope, and check for bleeding. If bleeding is occurring, it may be necessary to treat the bleeding.
30. Once the laser treatment has ended, fill the bladder with saline, and remove the cystoscope. Slowly drain the bladder and check the flow and color of the outgoing fluid. The placement of a Foley catheter may be necessary at physician discretion.
31. Prescribe post-procedure medication at physician discretion.

#### 12.4 After the Procedure

32. When the procedure has ended, place the console in Standby mode.
33. Document the total lasing time and energy appropriately.
34. Remove the fiber from the cystoscope and discard per hospital procedures. Remove the cystoscope from the patient.
35. Remove the fiber card and discard.
36. Turn the key switch to the OFF position.
37. On the back panel, switch the circuit breaker to the OFF position and disconnect the AC power cable from the electric outlet.
38. To protect against unauthorized use, remove the key from the key switch and store in a secure location.
39. The footswitch can be stored on the back of the console.
40. Store the laser system per recommendations in Handling and Storage.

### 13 TECHNICAL DATA

**Table 1. Console Specifications**

Laser Type	Solid-state, frequency doubled
Wavelength	532 nm
Maximum Power Output at 532 nm	Limited by fiber delivery device, up to 180 W
Nominal Ocular Hazard Distance (NOHD)	67.1 meters (MPE = 10 W/m <sup>2</sup> )
Repetition Rate	Vaporization: Quasi-CW (23.6 kHz) Coagulation: Modulated at ~12.5 Hz, ~25 % duty cycle
Maximum Aiming Beam Power	5 mW
Output Beam Divergence	≥ 0.078 Radians
Electrical Requirements	200 to 240 VAC, 50/60 Hz, ≤ 20 Amp, single-phase
Operating Temperature	50 °F to 86 °F (10 °C to 30 °C)
Operating Humidity	10 % to 90 %, non-condensing
Dimensions	Width: Approximately 22 in (56 cm) Depth: Approximately 36 in (91 cm) Height (screen down): Approximately 48 in (122 cm) Height (screen up): Approximately 55 in (140 cm)
Weight	Approximately 475 lb (215 kg)
AC Power Cable	15 ft (457 cm) maximum length, model 321203 AC power cable is a trademark of OLFLEX.
Footswitch Cable	13 ft (396 cm) maximum length, Cordset #997-G27-1 Footswitch cable is a trademark of LINEMASTER Switch Corporation.
Standards and Regulations	<ul style="list-style-type: none"> <li>Safety Regulations conforms with EN/IEC 60825</li> <li>EMF output conforms with IEC 60601-1 General requirements for safety — Collateral standard: Electromagnetic compatibility — Requirements and tests</li> </ul>

#### 13.1 Safety Classifications and Electromagnetic Compatibility

Classification: Type of protection against electric shock: Class I equipment


**Table 2. Electromagnetic Emissions**

Guidance and Manufacturer's Declaration — Electromagnetic Emissions		
The GreenLight XPS™ Laser System is intended for use in the electromagnetic environment specified below. The customer or user of the GreenLight XPS Laser System should assure that it is used in such an environment.		
Emissions Test	Compliance	Electromagnetic Environment — Guidance
RF Emissions CISPR 11	Group 1	The GreenLight XPS Laser System uses RF energy only for its internal function. Therefore, its RF emissions are low and are not likely to cause interference in nearby electronic equipment.
RF Emissions CISPR 11	Class A	The GreenLight XPS Laser System is suitable for use in all establishments other than domestic and may be used in domestic establishments and those directly connected to the public low-voltage power supply network that supplies buildings used for domestic purposes.
Harmonic Emissions IEC 61000-3-2	Class A	
Voltage Fluctuations/Flicker Emissions IEC 61000-3-3	Section 5 of Standard	

**WARNING:** This equipment/system are intended for use by healthcare professionals only. This equipment/system may cause radio interference or may disrupt the operation of nearby equipment. It may be necessary to take mitigation measures, such as re-orienting or relocating the GreenLight XPS Laser System or shielding the location.

**Table 3. Electromagnetic Interference Resistance**

<b>Guidance and Manufacturer's Declaration — Electromagnetic Immunity</b>			
The GreenLight XPS™ Laser System is intended for use in the electromagnetic environment specified below. The customer or user of the GreenLight XPS Laser System should assure that it is used in such an environment.			
<b>Immunity Test</b>	<b>IEC 60601 Test Level</b>	<b>Compliance Level</b>	<b>Electromagnetic Environment — Guidance</b>
Electrostatic Discharge (ESD) IEC 61000-4-2	± 6 kV contact ± 8 kV air	± 6 kV contact ± 8 kV air	Floors should be wood, concrete or ceramic tile. If floors are covered with synthetic material, the relative humidity should be at least 30 %.
Electrical Fast Transient/Burst IEC 61000-4-4	± 2 kV for power supply lines	± 2 kV for power supply lines	Mains power quality should be that of a typical commercial or hospital environment.
Surge IEC 61000-4-5	± 1 kV line to line ±2 kV line(s) to ground	± 1 kV line(s) to line(s) ±2 kV line(s) to ground	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 % $U_T$ (> 95 % dip in $U_T$ for 0.5 cycle)  40 % $U_T$ (60 % dip in $U_T$ for 5 cycles)  70 % $U_T$ (30 % dip in $U_T$ for 25 cycles)  < 5 % $U_T$ (> 95 % dip in $U_T$ for 5 sec)	< 5 % $U_T$ (> 95 % dip in $U_T$ for 0.5 cycle)  40 % $U_T$ (60 % dip in $U_T$ for 5 cycles)  70 % $U_T$ (30 % dip in $U_T$ for 25 cycles) < 5 % $U_T$	Mains power quality should be that of a typical commercial or hospital environment. If the user of the GreenLight XPS Laser System requires continued operation during power mains interruptions, it is recommended that the GreenLight XPS Laser System be powered from an uninterruptible power supply or a battery.
Power Frequency (50/60 Hz) Magnetic Field IEC 61000-4-8	N/A	N/A	Power frequency magnetic fields should be at levels characteristic of a typical location in a typical commercial or hospital environment.
<b>Note:</b> $U_T$ is the AC mains voltage prior to application of the test level.			

Guidance and Manufacturer's Declaration — Electromagnetic Immunity			
The GreenLight XPS™ Laser System is intended for use in the electromagnetic environment specified below. The customer or user of the GreenLight XPS Laser System should assure that it is used in such an environment.			
Immunity Test	IEC 60601 Test Level	Compliance Level	Electromagnetic Environment — Guidance
<p>Conducted RF IEC 61000-4-6</p> <p>Radiated RF IEC 61000-4-3</p>	<p>3 Vrms 150 kHz to 80 MHz</p> <p>3 V/m 80 MHz to 2.5 GHz</p>	<p>3 Vrms</p> <p>3 V/m</p>	<p>Portable and mobile RF communications equipment should be used no closer to any part of the GreenLight XPS Laser System, including cables, than the recommended separation distance calculated from the equation applicable to the frequency of the transmitter. Recommended separation distance <math>d = 1.7 * P^{1/2}</math></p> <p><math>d = 1.7 * P^{1/2}</math> 80 MHz to 800 MHz</p> <p><math>d = 2.3 * P^{1/2}</math> 800 MHz to 2.5 GHz</p> <p>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). Field strengths from fixed RF transmitters, as determined by an electromagnetic site survey,<sup>a</sup> should be less than the compliance level in each frequency range.<sup>b</sup> Interference may occur in the vicinity of equipment marked with the following symbol:</p> 
<p><b>Note 1:</b> At 80 MHz and 800 MHz, the separation distance for the higher frequency range applies.</p> <p><b>Note 2:</b> These guidelines may not apply in all situations. Electromagnetic propagation is affected by absorption and reflection from structures, objects, and people.</p>			
<p><sup>a</sup> 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 GreenLight XPS Laser System is used exceeds the applicable RF compliance level above, the GreenLight XPS Laser System should be observed to verify normal operation. If abnormal performance is observed, additional measures may be necessary, such as re-orienting or relocating the GreenLight XPS Laser System.</p> <p><sup>b</sup> Over the frequency range 150 kHz to 80 MHz, field strengths should be less than 3 V/m.</p>			

**Table 4. Recommended Protective Distances**

Recommended separation distances between portable and mobile RF communications equipment and the equipment or system — for equipment and systems that are not life-supporting.

Guidance and Manufacturer's Declaration — Electromagnetic Immunity			
The GreenLight XPS™ Laser System is intended for use in the electromagnetic environment in which radiated RF disturbances are controlled. The customer or the user of the GreenLight XPS Laser System can help prevent electromagnetic interference by maintaining a minimum distance between portable and mobile RF communications equipment (transmitters) and the GreenLight XPS Laser System 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 $d = [3.5 / V1] * P^{1/2}$	80 MHz to 800 MHz $d = [3.5 / E1] * P^{1/2}$	800 MHz to 2.5 GHz $d = [7 / E1] * P^{1/2}$
0.01	0.12	0.12	0.23
0.1	0.37	0.37	0.74
1	1.17	1.17	2.33
10	3.69	3.69	7.38
100	11.67	11.67	23.33
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.			
<b>Note 1:</b> At 80 MHz and 800 MHz, the separation distance for the higher frequency range applies.			
<b>Note 2:</b> These guidelines may not apply in all situations. Electromagnetic propagation is affected by absorption and reflection from structures, objects, and people.			

## 14 MAINTENANCE

The console has been designed to provide trouble-free operation with minimal maintenance. This section provides information on the routine maintenance and care required for the console.

The laser, cooling system, and control electronics are enclosed in a tamper-resistant console. The console does not contain user serviceable components.

### 14.1 Care of the Console

The console may be wiped down periodically with a cloth dampened with a weak solution of water and mild detergent or a mild cleaning agent. When cleaning the console, do not use harsh or abrasive cleansers, especially on the LCD screen panel, and do not pour water or other liquid over the console. If liquid is spilled on the console and it is thought that some may have gone inside, turn the unit off and call BSC technical support.

### 14.2 Preventative Maintenance

Regular, routine preventative maintenance should be performed by an authorized BSC service representative. Preventative maintenance consists of replacing consumable components such as video camera inserts, adjusting the calibration, and other tasks designed to keep the laser operating reliably and within specification. Preventative maintenance should be scheduled every 6 months unless otherwise determined by the BSC Service organization.

### 14.3 Coolant Refill Instructions

The console uses a vented internal cooling system that uses distilled or deionized water. Over time, some evaporation can occur resulting in a 'Please fill chiller reservoir with deionized water' courtesy message. The below instructions describe the water filling process for restoring the proper coolant level.

### 14.4 Instructions How to Refill Coolant

**Note:** The console holds approximately 1,700 ml of distilled or deionized water.

The below procedure is to be used to top off the water level for the console only if a low water fault occurs.

1. Turn the circuit breaker off and unplug the console.
2. Remove the reservoir cap in the back of the console.
3. Pour water into the filler reservoir until its level stops falling. Fill the reservoir to just above the halfway point, stop, and repeat until the level stops falling.
4. Plug system in, turn on circuit breaker, and turn the laser key switch to on.
5. Make sure that the filler reservoir is still about half full. Add water if necessary. Do not over-fill the reservoir.
6. Replace the cap.
7. Continue with console startup. If a 'Please fill chiller reservoir with deionized water' message is still present, call BSC technical support or the local GreenLight XPS Laser System distributor.

The console's self-check mechanism will detect most problems with the console and alert the operating room staff. A message will appear on the screen at the time of system malfunction. Depending on the severity of the problem, the console will either maintain status or require a solution before reactivating. See Troubleshooting for the types of messages.

#### 14.5 End of Useful Life

When the laser system reaches the end of its useful life, dispose of all products, accessories, tools, and packaging materials in accordance with hospital, administrative, and/or local government policy. Used products should be collected separately and not disposed of as unsorted municipal waste.

### 15 TROUBLESHOOTING

The console's self-check mechanism will detect most problems with the console and alert the operating room staff. A message will appear on the screen at the time of system malfunction. Depending on the severity of the problem, the console will either maintain status or require a solution before reactivating.

Two types of messages are displayed:

- Courtesy Messages alert the user of problem conditions that the user can correct.
- Service Prompts alert the user of problem conditions that may require a service call.

#### 15.1 Courtesy Messages

When a condition requiring user action is detected, a blue box containing a message describing the condition is displayed on the screen. The messages require that corrective action is taken.

Courtesy messages may display numerical information that may vary depending on the circumstances. In the below table, examples of such additional information are shown in bold.

**Table 5. Courtesy Messages**

Message	Corrective Action
Attach a Fiber	Attach a fiber.
Insert Fiber Card	A fiber card should be inserted.
Please fill chiller reservoir with deionized water	Restore coolant level (see Coolant Refill Instructions). Turn system off and add distilled or deionized water.
Fiber Approaching Joule Limit Less than <b>50,000</b> joules remaining	The number of Joules remaining on the fiber is displayed. If the procedure requires treatment beyond the limit, use a new fiber.
Fiber Expired <b>400,000</b> Joules used	The fiber has exceeded its rated Joule limit. The actual number of Joules used is displayed. If the procedure requires treatment beyond the limit, use a new fiber.
Attach a Footswitch	Plug the footswitch into the appropriate socket on the back of the unit. If this fails to resolve the problem, contact BSC technical support.
Release Footswitch Only one footswitch may be pressed at a time	User should reposition his or her foot, to contact only one footswitch.
Vapor footswitch disabled when in Standby	Press the Ready/Standby button on the screen or on the footswitch.
Coag footswitch disabled when in Standby	Press the Ready/Standby button on the screen or on the footswitch.
Fiber Port Overheated, try another fiber. If problem persists, contact Customer Care Center	Wait for device port to cool off. If problem repeats, replace the fiber. Contact BSC technical support if problem persists.
Check Fiber Card Insertion Remove and then re-insert card	Remove and reinsert fiber card. If problem persists, contact BSC technical support.
Invalid Fiber Card <b>10-2079</b> not valid for this system	The fiber attached is not a valid GreenLight XPS™ Laser System device. The part number of the invalid fiber is displayed. Replace the fiber with one approved for use with GreenLight XPS Laser System.
Card Read Error Remove and then re-insert card	Remove and reinsert fiber card. If problem persists, contact BSC technical support.
Fiber type does not match card type Try another fiber or card	Fiber ID does not match Fiber ID on fiber card. Make sure that the fiber card being used is the one that was packaged with the fiber.
Fiber Connection Error Check fiber connection or try another fiber	Usually this is caused by a bad fiber connector. If a second fiber gives the same message, the fiber coupler or its cabling may be damaged. If problem persists, contact BSC technical support.
Remote Interlock Opened	If the remote interlock has been connected to the operating room door, make sure the door is closed. Otherwise, make sure the remote interlock bypass connector is inserted into the socket on the back panel of the system.
Excessive FiberLife Activity Please clean and inspect fiber tip	FiberLife can detect if the fiber tip is overheating. Usually this is due to a dirty or damaged fiber. If the problem persists after cleaning or if the fiber is damaged, replace the fiber with a new one.

Message	Corrective Action
Fiber Approaching Time Limit Less than 5:00 minutes remaining	The amount of time remaining on the fiber is displayed. If the procedure requires treatment beyond the limit, use a new fiber.
Fiber Expired Time-out limit reached	The fiber has exceeded one of the time-out limits: Maximum Fiber Time Limit Reached (150 minutes). Inactivity Time-out Surpassed (30 minutes). If the procedure requires treatment beyond the limit, use a new fiber.
Check Footswitch Connection	Double check the footswitch connector: reattach and/or tighten connection. If problem persists, contact BSC technical support.

### 15.2 Service Prompts

An error code will appear in a yellow box on the screen. When these error codes appear, the user should accurately record the complete problem number and contact BSC technical support or call the local GreenLight XPS™ Laser System distributor.

Error codes are three or four digit numbers. The right two digits identify a specific problem. The remaining digit(s) on the left indicate the error group. These groups are described in the below table.

**Table 6. Service Prompts**

Error Group	Description
100	Resonator
200	Laser Power Supply
300	Master Control Board
400	Data Log
500	Display Assembly
600	Chiller
700	Q-Switch Driver
800	System
900	Peripherals
1000	Software

---

**Note:** Courtesy Messages: Correct the problem as indicated in the Courtesy Message table above and continue the procedure.

---

**Note:** Service Prompts: The system can be reset when the message 'Press Here to Continue' is displayed. If the system cannot reset itself, then it will require servicing before it can be used again.

---



## 16 WARRANTY

Boston Scientific Corporation (BSC) warrants that reasonable care has been used in the design and manufacture of this instrument. **This warranty is in lieu of and excludes all other warranties not expressly set forth herein, whether express or implied by operation of law or otherwise, including, but not limited to, any implied warranties of merchantability or fitness for a particular purpose.** Handling, storage, cleaning and sterilization of this instrument as well as other factors relating to the patient, diagnosis, treatment, surgical procedures and other matters beyond BSC's control directly affect the instrument and the results obtained from its use. **BSC assumes no liability with respect to instruments reused, reprocessed or reesterilized and makes no warranties, express or implied, including but not limited to merchantability or fitness for a particular purpose, with respect to such instruments.**

If BSC receives timely notice of matters covered under warranty, BSC shall, at its option, either repair or replace instruments or parts that prove to be defective. Instruments or parts shipped under this warranty or used as replacements under this warranty may be either refurbished or new, at BSC option. BSC neither assumes nor authorizes any other person to assume for it, any other or additional liability or responsibility in connection with a BSC instrument.

THE REMEDIES PROVIDED HEREIN ARE BUYER'S SOLE AND EXCLUSIVE REMEDIES. IN NO EVENT SHALL BSC BE LIABLE FOR DIRECT, INDIRECT, SPECIAL OR CONSEQUENTIAL DAMAGES, (INCLUDING LOSS OF PROFITS) WHETHER BASED ON CONTRACT, TORT OR OTHER LEGAL THEORY.

Warranty service is performed either on-site or at a BSC facility at BSC option. Where warranty service is provided on-site, the work will be performed at the Buyer's facility or a location that is mutually agreed upon, at no charge. Where warranty work is performed at the Buyer's facility, such work will be performed during normal working hours. If Buyer requests work to be performed outside of normal working hours, then Buyer shall pay for the incremental cost of such work. Where warranty service is provided at BSC, instruments must be returned to a BSC service facility designated by BSC. Parts and labor provided under this Warranty are warranted for 90 days from completion of the service repair or shipment of the replacement instruments/part(s). Instruments may only be returned with the prior approval of BSC. A valid Return Goods Authorization (RGA) number must evidence such approval. Buyer shall prepay shipping charges (and shall pay all duties and taxes) for instruments returned to BSC. BSC shall pay for return of the instrument to Buyer.

---

**Note:** The warranty period begins on the date of installation or ninety days after the date of shipment, whichever is first, where installation is included in the purchase price and on the date of shipment where installation is not included in the purchase price. The duration of the warranty period and the extent of the warranty vary depending on the instrument. Every BSC instrument and component is assigned a warranty code that defines the nature and duration of the warranty provided for the particular instrument. Contact BSC for a copy of the Warranty Policy, which defines the warranty codes in detail and assigns a code to each instrument/component.

---

### 16.1 Limitation of Warranty

The foregoing warranty shall be voided where in BSC's sole judgment there has been:

1. Improper or inadequate maintenance by Buyer, or service performed by anyone other than BSC or a party authorized by BSC to perform service on the specific item covered under this warranty.
2. Unauthorized modification or misuse.
3. Operation outside of the environmental specifications for the GreenLight XPS™ Laser System.
4. Improper site preparation and maintenance, including but not limited to improper electrical utilities.
5. Use of delivery devices or accessories not manufactured by BSC or approved by BSC for use with the GreenLight XPS Laser System.

### 16.2 Additional Terms of Warranty for Mobile Systems

Due to the special situations surrounding GreenLight XPS Laser System that are moved to numerous sites of service, the following terms and conditions also apply to mobile systems:

1. Every mobile provider must have a clinical trainer on staff. This person must be certified by BSC to provide clinical support to physicians for their first cases and beyond.
2. Every mobile provider must have qualified technicians (as certified by BSC) on staff to transport, setup, and operate the GreenLight XPS Laser System in all cases. Annual recertification is required.

### 16.3 Transport of the System

1. Every mobile provider must have suitable transportation for moving the GreenLight XPS Laser System from site to site.
2. The vehicle must have a lift gate or ramp, depending on the height of the vehicle, to load and unload the GreenLight XPS Laser System.
3. Transport the laser system in the original shipping crate or other suitable method designed to absorb road shock (vertical and horizontal loads), to protect the GreenLight XPS Laser System during transport. To absorb vertical shock and vibration, the floater (plywood base supported by foam blocks) can be removed from the original shipping crate and installed in the transport vehicle.
4. The GreenLight XPS Laser System must be protected from temperatures below 32 °F (0 °C). Freezing temperatures can damage the laser system.

**REF**

Catalog Number  
Número de catálogo  
Número de catalogue  
Bestell-Nr.  
Numero di catalogo  
Catalogusnummer  
カタログ番号  
Katalognummer  
Αριθμός καταλόγου  
Referência  
Katalognummer  
Katalogszám  
Katalogové číslo  
Numer katalogowy  
Katalognummer  
目录编号  
카탈로그 번호  
Katalog Numarası  
Número de catálogo  
Katalognummer  
Număr de catalog  
Номер по каталогу  
Katalogové číslo  
Каталожен номер  
Kataloški broj  
Katalognummer  
Vorulistanúmer  
Katalogo numurs  
Katalogo numeris  
Kataloška številka



[blue safety sign]  
Follow Instructions For Use  
[símbolo azul de seguridad]  
Seguir las instrucciones de uso  
[symbole de sécurité bleu]  
Suivre les instructions du mode d'emploi  
[blaues Sicherheitszeichen]  
Gebrauchsanweisung befolgen  
[simbolo di sicurezza blu]  
Attenersi alle Istruzioni per l'uso  
[blauw veiligheidssteken]  
Volg de instructies voor gebruik  
[青の安全標識]  
取扱説明書に従うこと。  
[blåt sikkerhedsstik]  
Følg brugsanvisningen  
[μπλε σήμα ασφαλείας]  
Ακολουθήστε τις οδηγίες χρήσης  
[sinal de segurança azul]  
Siga as Instruções de Utilização  
[blå säkerhetsymbol]  
Följ bruksanvisningen  
[kék biztonossági jel]  
Használat során az utasításoknak  
megfelelően járjon el  
[modrý bezpečnostní symbol]  
Dodržujte návod k použití.  
[niebieski znak bezpieczeństwa]  
Postępować zgodnie z instrukcją obsługi  
[blått sikkerhetssymbol]  
Følg bruksanvisningen  
[蓝色安全标志]  
请遵照使用说明  
[청색 안전 표지]  
사용 지침을 따르십시오  
[mavi güvenlik işareti]  
Kullanım Talimatlarını İzleyin  
[símbolo de segurança azul]  
Siga as instruções de uso  
[sininen turvallisuusmerkintä]  
Noudata käyttöohjeita  
[símbol de siguranță albastru]  
Urmați instrucțiunile de utilizare  
[синий знак безопасности]  
Соблюдайте инструкции по  
применению  
[modré bezpečnostné označenie]  
Dodržiavajte pokyny na používanie  
[предупредительный знак в синьом]  
Следуйте инструкциям за употреба  
[plavi znak sigurnosti] Slijedite upute za  
upotrebu  
[sinine ohutusmärk] Järgige  
kasutusjuhiseid  
[blå öryggismerking] Fylgje  
notkunarfleiðbeiningum  
[zilas krāsas drošības simbols] Ievērot  
lietošanas instrukcijas  
[mėlynas saugos ženklas] Vadovaukites  
naudojimo instrukcijomis  
[Moder varnostni znak] Upoštevajte  
navodila za uporabo



CAUTION. Attention: Consult  
ACCOMPANYING DOCUMENTS.  
PRECAUCIÓN. Atención: consulte los  
DOCUMENTOS ADJUNTOS.  
AVERTISSEMENT. Attention : Lire les  
documents joints.  
VORSICHT. Achtung:  
BEGLEITDOKUMENTE beachten.  
ATTENZIONE. Attenzione: consultare i  
DOCUMENTI ALLEGATI.  
LET OP. Attentie: Raadpleeg BIJGAANDE  
DOCUMENTEN.  
注意. 注意：附属の説明書を参照のこ  
と。  
FORSIGTIG. Obs! Se MEDFØLGENDE  
DOKUMENTER.  
ΠΡΟΣΟΧΗ. Προσοχή: Συμβουλευτείτε τα  
ΣΥΝΔΕΥΤΙΚΑ ΕΓΓΡΑΦΑ.  
CUIDADO. Atenção: Consulte os  
DOCUMENTOS INCLUSOS.  
FÖRSIKTIGHETSÅTGÄRD. Obs! Se  
MEDFÖLJANDE DOKUMENTATION.  
FIGYELEM! Figyelem! Nézze át a KÍSÉRŐ  
DOKUMENTUMOKAT.  
UPOZORNĚNÍ. Upozornění: Nahlédněte  
DO PŘILOŽENÝCH DOKUMENTŮ.  
OSTRZEŽENIE. Uwaga: proszę zapoznać  
się z ZAŁĄCZONĄ DOKUMENTACJĄ.  
FORSIKTIG. Vikti! Les MEDFØLGENDE  
DOKUMENTER.  
警告. 注意: 请参阅随附文档。  
조심. 주의: 관련 문서를 참조하십시오.  
İKAZ. Dikkat: BİRLİKTE VERİLEN  
BELGELERE başvurun.  
CUIDADO. Atenção: Consulte os  
DOCUMENTOS INCLUSOS.  
VAROITUS. Huomio: tutustuu OHEISIIN  
ASIAKIRJoihin.  
AVERTIZARE. Atenție: Consultați  
DOCUMENTAȚIA ÎNSOȚITOARE.  
ПРЕДОСТЕРЕЖЕНИЕ. Внимание!  
Обратитесь к СОПРОВОДИТЕЛЬНОЙ  
ДОКУМЕНТАЦИИ.  
UPOZORNENIE. Pozor: Pozri SPRIEVODNÉ  
DOKUMENTY.  
ВНИМАНИЕ. Правете справки в  
ПРИДРУЖАВАЩИТЕ ДОКУМЕНТИ.  
OPREZ. Pažnja: pročítajte POPRATNE  
DOKUMENTE.  
ETTEVAATUST. Tähelepanu: vaadake  
KAASASOLEVAID DOKUMENTE.  
VARÚÐ. Athugið: Farið eftir upplýsingum  
í FYLGISKJÖLUM.  
BRIDNĀJUMS. Uzmanību! Skatīt  
PAVADDOKUMENTUS!  
PERSPĒJĪMAS. Dēmesiol! Žr. PRIDĒTUS  
DOKUMENTUS.  
POZOR. Pazite: glejte PRILOŽENO  
DOKUMENTACIJO.



Contents  
Contenido  
Contenu  
Inhalt  
Contenuto  
Inhoud  
Inhoud  
Indhold  
Περιεχόμενα  
Conteúdo  
Innehåll  
Tartalom  
Obsah  
Zawartość  
Innhald  
Inhalt  
내용물  
İçindekiler  
Conteúdo  
Sisältö  
Conținut  
Состав  
Obsah  
Съдържание  
Sadržaj  
Sisu  
Innihald  
Saturis  
Turinys  
Vsebina



Legal Manufacturer  
Fabricante legal  
Fabricant légal  
Berechtigter Hersteller  
Fabricante legale  
Wettelijke fabrikant  
法定製造元  
Lovmessig producent  
Νόμιμος κατασκευαστής  
Fabricate Legal  
Laglig tilverkarer  
Hivatalos gyártó  
Oprávněný výrobce  
Produsent upravitelny  
Lovmessig produsent  
合法製造商  
법적 제조사  
Yasal Üretici  
Fabricate Legal  
Laiilinen valmistaja  
Producător legal  
Законный изготовитель  
Уробца  
Официален производител  
Zakonski proizvođač  
Seaduslik tootja  
Löglegur framleiðandi  
Likumgais ražotājs  
Teisėtas gamintojas  
Zakoniti proizvajalec

**EC REP**

EU Authorized Representative  
Representante autorizado en la UE  
Représentant agréé UE  
Autorisierter Vertreter in der EU  
Rappresentante autorizzato per l'UE  
Erkend vertegenwoordiger in EU  
EU認定代理店  
Autoriseret repræsentant i EU  
Εξουσιοδοτημένος αντιπρόσωπος στην ΕΕ  
Representante Autorizado na U.E.  
Auktoriserad EU-representant  
Hivatalos képviselő az EU-ban  
Autorizovaný zástupce pro EU  
Autoryzowany przedstawiciel w UE  
Autorisert representant i EU  
歐盟授權代表  
EU 공인 대리점  
AB Yetkilil Temsilcisi  
Representante Autorizado na UE  
EU-valtuutettu edustaja  
Reprezentantul Autorizat UE  
Уполномоченный представитель в ЕС  
Autorizovaný zástupca pre EÚ  
Упълномощен представител за ЕС  
Ovlašteni predstavnik za EU  
ELI autoriseritud esindaja  
Viðurkenndur fulltrúi í ESB  
Pilnvarotais pārstāvis ES  
Įgaliojatis atstovas ES  
Pooblašteni predstavnik v EU

**SN**

Serial Number  
Número de serie  
Numéro de série  
Seriennummer  
Numero di serie  
Seriennummer  
シリアル番号  
Seriennummer  
Σειριακός αριθμός  
Número de série  
Seriennummer  
Gyári szám  
Sériové číslo  
Numer seryjny  
Seriennummer  
Serialnummer  
일련 번호  
Serij Numarası  
Número serial  
Sarjanumero  
Număr de serie  
Серийный номер  
Sériové číslo  
Serrien nomer  
Serijski broj  
Sarjanumber  
Raðnúmer  
Sérijas numurs  
Serijos numeris  
Serjska številka



Recyclable Package  
Envase reciclable  
Emballage recyclable  
Wiederverwertbare Verpackung  
Confezione riciclabile  
Recyclebare verpakking  
リサイクル可能包装  
Genanvendelig pakning  
Ανακυκλώσιμη συσκευασία  
Embalagem Reciclável  
Återvinningsbar förpackning  
Újrahasznosítható csomagolás  
Recyklovateľný obal  
Opakowanie przeznaczane do  
recyklingu  
Emballasjen kan resirkuleres  
可回收再利用包装  
재활용 포장재  
Gerí Dönüsmüli Ambalaj  
Embalagem Reciclável  
Kierrätettävä pakkaus  
Ambalaj reciclabil  
Упаковка, подлежащая вторичной  
переработке  
Recyklovateľný obal  
Рециркуруема опаковка  
Ambalaža za recikliranje  
Taaskasutatav pakend  
Endurvinnanlegar umbúðir  
Átkærtoti þástráðjams iepakojums  
Perdirbama pakuoatė  
Reciclažna embalaža



Date of Manufacture  
Fecha de fabricación  
Date de fabrication  
Herstellungsdatum  
Data di fabbricazione  
Fabricagedatum  
製造日  
Fremstillingsdato  
Ημερομηνία κατασκευής  
Data de Fabrico  
Tillverkningsdatum  
A gyártás időpontja  
Datum výroby  
Data produkції  
Produktsjonsdato  
生产日期  
제조일  
Üretim Tarihi  
Data de Fabricação  
Valmistuspäivämäärä  
Data fabricației  
Дата изготовления  
Datum výroby  
Дата на производство  
Datum proizvodnje  
Tootmiskuupäev  
Framleiðsludagsetning  
Razošanas datums  
Pagaminimo data  
Datum izdelave

**LOT**

Lot  
Lote  
Lot  
Charge  
Lotto  
Partij  
ロット  
Parti  
Παρτίδα  
Lote  
Sats  
Tételszám  
Sarže  
Seria  
Parti  
批号  
로트  
Parti  
Lote  
Era  
Lot  
Партия  
Sarža  
Partija  
Serija  
Lot

AUS

Australian Sponsor Address  
 Dirección del patrocinador australiano  
 Adresse du promoteur australien  
 Adresse des australischen Sponsors  
 Indirizzo sponsor australiano  
 Adres Australische sponsor  
 オーストラリア認定代理店住所  
 Australisk sponsoradresse  
 Διεύθυνση χορηγού στην Αυστραλία  
 Endereço do Patrocinador Australiano  
 Adress till australisk sponsor  
 Az ausztrál szponzor címe  
 Adresa australského zadavatele  
 Adres sponsora australijskiego  
 Australisk sponsors adresse  
 澳大利亚赞助商地址  
 호주 후원인 주소  
 Avustralyalı Sponsor Adresi  
 Endereço do Patrocinador Australiano  
 Australialaisen toimeskiantajan osoite  
 Adresa sponsoruili australian  
 Адрес австралийского спонсора  
 Adresa australskeho zadavateľa  
 Адрес на възложителя за Австралия  
 Adresa sponzora za Australiju  
 Australia sponsor address  
 Heimilisfang ábyrgðaraðila í Ástralíu  
 Sponsora adresse Austrálijá  
 Australijos emėjės adresas  
 Naslov avstralskega sponzora

TUR

Turkey Local Contact  
 Contacto local en Turquía  
 Contact local en Turquie  
 Lokaler Kontakt Türkei  
 Contatto locale per la Turchia  
 Contactpersoon Turkije  
 トルコ現地連絡先  
 Lokal kontakt i Tyrkiet  
 Υπεύθυνος επικοινωνίας στην Τουρκία  
 Contacto local na Turquia  
 Lokal kontakt, Turkiet  
 Helyi kapcsolattartó (Törökország)  
 Mistri kontaktni osoba v Turecku  
 Miejscowy przedstawiciel w Turcji  
 Lokal kontakt for Tyrkia  
 土耳其当地联络人  
 타키 현지 문의처  
 Türkiye Yerel İletişim  
 Contato local na Turquia  
 Turkki – paikalliset yhteystiedot  
 Reprezentant local Turcia  
 Представительство в Турции  
 Мiestny zástupca v Turecku  
 Местно лице за контакт за Турция  
 Lokalni kontakt u Turskoj  
 Türgi kohalik kontakt  
 Tengiliður i Tyrklandi  
 Vietējā pārstāvniecība Turcijā  
 Vietos kontaktinis asmuo Turkijoje  
 Lokalni stik v Turčiji



Separate Collection  
 Recogida independiente  
 Élimination séparée  
 Sonderabfall  
 Raccolta differenziata  
 Gescheiden inzameling  
 別途回収  
 Indsamles separat  
 Ξεχωριστή συλλογή  
 Recolha Separada  
 Separat avfallsantering  
 Elkülönített gyűjtés  
 Shromadžovav oddelené  
 Usuwać do odpadów segregowanych  
 Spezialavfall  
 分類回収  
 분리 수집  
 Ayrılmış Gereken Atık  
 Coleta separada  
 Erilliskeräys  
 Colectare separată  
 Раздельный сбор  
 Separovaný zber  
 Раздельно събиране  
 Zasebna kolekcija  
 Eraldi kogumine  
 Sérstök söfnun  
 Atseviška savākšana  
 Atskiras rinkinys  
 Ločeno zbiranje



Keep Dry  
 Mantener seco  
 Tenir au sec  
 Trocken halten  
 Tenere asciutto  
 Droog houden  
 湿気厳禁  
 Holdes tor  
 Φυλάσσετε σε ξηρό περιβάλλον  
 Manter seco  
 Förrvara torr  
 Tartsa szárazon  
 Uchovávejte v suchu  
 Przechowywać w suchym miejscu  
 Orpbævars tart  
 保持干燥  
 건조한 장소에 보관하십시오  
 Kuru Yerde Tutun  
 Manterha seco  
 Pidiä kuivana  
 Mentintei uscat  
 Хранить в сухом месте  
 Uchovávať v suchu  
 Пазаце на сухо  
 Držite na suhom  
 Hoida kuivas  
 Haldið þurru  
 Glabāt sausumā  
 Laikyti sausoje vietoje  
 Pazite, da bo izdelek suh

ARG

Argentina Local Contact  
 Contacto local en Argentina  
 Contact local en Argentine  
 Lokaler Kontakt Argentinien  
 Contatto locale per l'Argentina  
 Contactpersoon Argentinië  
 アルゼンチン現地連絡先  
 Lokal kontakt i Argentina  
 Υπεύθυνος επικοινωνίας στην Αργεντινή  
 Contacto local na Argentina  
 Lokal kontakt, Argentina  
 Helyi kapcsolattartó (Argentina)  
 Mistri kontaktni osoba v Argentini  
 Miejscowy przedstawiciel w Argentynie  
 Lokal kontakt for Argentina  
 阿根廷当地联络人  
 아르헨티나 현지 문의처  
 Arjantin Yerel İletişim  
 Contato local na Argentina  
 Argentina – paikalliset yhteystiedot  
 Reprezentant local Argentina  
 Представительство в Аргентине  
 Мiestny zástupca v Argentini  
 Местно лице за контакт за Аргентина  
 Lokalni kontakt u Argentini  
 Argentina kohalik kontakt  
 Tengiliður i Argentínu  
 Vietējā pārstāvniecība Argentīnā  
 Vietos kontaktinis asmuo Argentinoje  
 Lokalni stik v Argentini



Do not use if package is damaged.  
 No usar si el envase está dañado.  
 Ne pas utiliser si l'emballage est endommagé.  
 Bei beschädigter Verpackung nicht verwenden.  
 Non usare il prodotto se la confezione è danneggiata.  
 Niet gebruiken als de verpakking is beschadigd.  
 包装が破損している場合は使用しないこと。  
 Må ikke anvendes, hvis pakken er beskadiget.  
 Μη χρησιμοποιείτε αν η συσκευασία έχει υποστεί ζημιό.  
 Nao utilize se a embalagem estiver danificada.  
 Använd inte om förpackningen är skadad.  
 Ne használja, ha a csomagolás sérült.  
 Nepoužívejte, pokud je obal poškozen.  
 Nie używać, jeśli opakowanie jest uszkodzone.  
 Skal ikke brukes hvis emballasjen er skadet.  
 包装如有损坏，请勿使用。  
 패키지가 손상된 경우 사용하지 마십시오.  
 Eger paket zarar görmüşse kullanmayın.  
 Nao utilize se a embalagem estiver danificada.  
 Ei saa käyttää, jos pakkaus on vaurioitunut.  
 A nu se utiliza dacă ambalajul este deteriorat.  
 Не использовать, если упаковка повреждена.  
 Nepoužívajte, ak je balenie poškodené.  
 Да не се използва, ако опаковката е увредена.  
 Nemojte upotrebljavati ako je pakiranje oštećeno.  
 Ärge kasutage, kui pakend on kahjustatud.  
 Notið ekki ef umbúðir eru skemmdar.  
 Nelietot, ja iepakojuoms ir bojāts.  
 Nenaudoti, jei pakuočių yra pažeista.  
 Ne uporabite, če je embalaža poškodovana.



Type BF Applied Part  
 Pieza tipo BF aplicada  
 Pièce appliquée de type BF  
 Angelegtes Teil vom Typ BF  
 Parte applicata di tipo BF  
 Patiëntverbinding type BF  
 タイプBF装着部  
 Type BF anvendt del  
 Εφαρμοζόμενο εξάρτημα τύπου BF  
 Peça aplicada Tipo BF  
 Typ BF ansluten enhet  
 BF típusú alkalmazott alkatrész  
 Aplikovaný díl typu BF  
 Zastosowana część typu BF  
 Anvendt del av type BF  
 BF类应用部件  
 유형 BF 적용 부품  
 Uygulama Parçası Tip BF  
 Peça aplicada tipo BF  
 BF-typin sovellettu osa  
 Parte aplicată de tip BF  
 Рабочая часть типа BF  
 Aplikovaný díel typu BF  
 Контактующа с пациента част от тип BF  
 Primijenjeni dio tipa BF  
 BF-tüüpi rakendusosa  
 Hluttur af BF gerð  
 BF kategorijas detaļa saskarē ar pacientu  
 BF tipo su pacientu besileičianti dalis  
 Aplicirani del tipa BF



Fragile  
 Frágl  
 Fragile  
 Zerbrechlich  
 Fragile  
 Breekbaar  
 割れものの注意  
 Skrobelig  
 Ευθραστο  
 Frágl  
 Ömtåligt  
 Törékeny  
 Křehké  
 Produkt delikatny  
 Skjört gods  
 易碎品  
 깨지기 쉬운  
 Kirilabilir  
 Frágl  
 Herkásti särkvá  
 Fragil  
 Хрупкое изделие  
 Křehké  
 Чупливо  
 Lomljivo  
 Habras  
 Brothætt  
 Trausls  
 Dužus  
 Lomljivo

BRA

Brazil Local Contact  
 Contacto local en Brasil  
 Contact local au Brésil  
 Lokaler Kontakt Brasilien  
 Contatto locale per il Brasile  
 Contactpersoon Brazilië  
 ブラジル現地連絡先  
 Lokal kontakt i Brasilien  
 Υπεύθυνος επικοινωνίας στη Βραζιλία  
 Contacto local no Brasil  
 Lokal kontakt, Brasilien  
 Helyi kapcsolattartó (Brazília)  
 Mistri kontaktni osoba v Brazilii  
 Miejscowy przedstawiciel w Brazylii  
 Lokal kontakt for Brasil  
 巴西当地联络人  
 브라질 현지 문의처  
 Brazilya Yerel İletişim  
 Contato local no Brasil  
 Brasilia – paikalliset yhteystiedot  
 Reprezentant local Brazilia  
 Представительство в Бразилии  
 Мiestny zástupca v Brazilii  
 Местно лице за контакт за Бразилия  
 Lokalni kontakt u Braziliu  
 Brasilia kohalik kontakt  
 Tengiliður i Brasilíu  
 Vietējā pārstāvniecība Brazīlijā  
 Vietos kontaktinis asmuo Brazilijoje  
 Lokalni stik v Braziliji




Non-Sterile  
 No estéril  
 Non stérile  
 Nicht steril  
 Non sterile  
 Niet-steriel  
 未滅菌  
 Ikke-steril  
 Μη αποστειρωμένο  
 Icke-steril  
 Nem steril  
 Nesterilni  
 Niejałowy  
 Ikke-steril  
 非无菌  
 비멸균  
 Steril Degildir  
 Nao estéril  
 Epästeriili  
 Non-steril  
 He sterilnyo  
 Nesterilny  
 Нестерильно  
 Nesterilno  
 Mittesteriine  
 Ekki Ósæft  
 Nesterils  
 Nesterilus  
 Nesterilno




Non-Ionizing Electromagnetic Radiation  
 Radiación electromagnética no ionizante  
 Rayonnement électromagnétique non ionisant  
 Nichtionisierende elektromagnetische Strahlung  
 Radiazione elettromagnetica non ionizzante  
 Niet-ioniserende elektromagnetische straling  
 非電離性電磁放射線  
 Ikke-ioniserende elektromagnetisk stråling  
 Μη ιονίζουσα ηλεκτρομαγνητική ακτινοβολία  
 Radiação Electromagnética Não Ionizante  
 Icke-ioniserande elektromagnetisk strålning  
 Nem ionizáló elektromágneses sugárzás  
 Neionizující elektromagnetické záření  
 Promieniowanie elektromagnetyczne niejonizujące  
 Ikke-ioniserende elektromagnetisk stråling  
 Μη ιονίζουσα ηλεκτρομαγνητική ακτινοβολία  
 Radiação Electromagnética Não Ionizante  
 Icke-ioniserande elektromagnetisk strålning  
 Nem ionizáló elektromágneses sugárzás  
 Neionizující elektromagnetické záření  
 Promieniowanie elektromagnetyczne niejonizujące  
 Ikke-ioniserende elektromagnetisk stråling  
 非電離性電磁放射線  
 비이온화 전자기 방사선  
 Ijonlaşmayan Elektromanyetik Radyasyon  
 Radiação eletromagnética não ionizante  
 Ei-ionisoiva sähkömagneettinen säteily  
 Radiație electromagnetică non-ionizantă  
 Неионизирующее электромагнитное излучение  
 Neionizujúce magnetické žiarenie  
 Неіонізуючо електромагнітно лччєнє  
 Neionizirajuće elektromagnetsko zračenje  
 Mitteliõniseeriv elektromagnetiline kiirgus  
 Rafsegulgeislun sem er ekki jónandi  
 Nejonizėjaisis elektromagnetiskais starojums  
 Nejonizující elektromagnetinė radiacija  
 Neionizirajoće elektromagnetno sevanje





This Way Up  
 Esta parte hacia arriba  
 Haut  
 Diese Seite oben  
 Alto  
 Deze kant boven  
 この面が上  
 Denne side op  
 Εδώ επάνω  
 Este lado para cima  
 Denna sidan upp  
 Ez a teteje  
 Tímto směrem nahoru  
 Góra  
 Denne siden opp  
 此面朝上  
 이쪽을 위로 향할 것  
 Yukarı  
 Este lado para cima  
 Tämä puoli ylöspäin  
 A se orienta in sus  
 Bepx  
 Touto stranou nahor  
 Тази страна нагоре  
 Ova strana prema gore  
 See pool üleval  
 Þessi hlíð upp  
 Virzies uz augšu  
 Šia puse į viršų  
 Ta stran navzgor


 Temperature limitation.  
 Limite de temperatura.  
 Limite de température  
 Temperaturbegrenzung  
 Limite di temperatura.  
 Temperaturgrens  
 温度制限。  
 Temperaturgrænse.  
 Περιορισμός θερμοκρασίας.  
 Limites de temperatura.  
 Temperaturgräns.  
 Hőmérsékleti korlátozás.  
 Teplotní omezení  
 Graniczne wartości temperatur.  
 Temperaturbegrensning.  
 温度限制。  
 온도 제한.  
 Sıcaklık sınırlaması.  
 Limitação de temperatura.  
 Lämpötilarajoitus.  
 Limitare de temperatură.  
 Ограничение температуры.  
 Teplotné obmedzenie.  
 Ограничение на температурата.  
 Ograniczenie temperature.  
 Temperaturuppiirang.  
 Hitatákmörk.  
 Temperatūras ierobežojums.  
 Temperatūros apribojimas.  
 Omejitvev temperature.

 Do Not Stack  
 No apilar  
 Ne pas empiler  
 Nicht stapeln  
 Non sovrapporre  
 Niet stapelen  
 上積厳禁  
 Må ikke stables  
 Μη στοιβάσετε  
 Não empilhar  
 Får ej staplas  
 Ne pakoljon rá  
 Nepokládat na sebe  
 Nie układać w stos  
 Må ikke stables  
 禁止堆疊  
 적재 금지  
 Istiflemeyin  
 Não empilhar  
 Ei saa pinota  
 A nu se aseza în stivă  
 Не складировать  
 Neukladať na seba  
 Да не се поставя едно върху друго  
 Nemojte stavljati jedno na drugo  
 Ärge virnastage  
 Stafflið ekki  
 Nekraut kaudzē  
 Nedēkite vieno ant kito  
 Ne nalagajte enega na drugaga

 Filling  
 Ulenado  
 Remplissage  
 Füllen  
 Rabbocco  
 Vullen  
 充填中  
 Fyllder  
 Πλήρωση  
 Enchimento  
 Fyllning  
 Töltés  
 Plnění  
 Napelnianie  
 Fylling  
 注入/注満  
 채우기  
 Doldurma  
 Abastecimento  
 Täyttyminen  
 Umplere  
 Наполнение  
 Plnienie  
 Пълнене  
 Punjenje  
 Täitmine  
 Fylling  
 Uzplilde  
 Pildymas  
 Polnjenje

 Laser Emergency Stop Button  
 Botón de parada de emergencia del láser  
 Bouton d'arrêt d'urgence du laser  
 Laser-Notstopptaste  
 Pulsante di arresto di emergenza del laser  
 Lasernoodstopknop  
 レーザー緊急停止ボタン  
 Lasernadstopknapp  
 Κομμιό διακομής Laser λόγω έκτακτης ανάγκης  
 Botão de paragem de emergência do laser  
 Laserns nödstoppsknapp  
 A lézer vészmegállító gombja  
 Tlačítko nouzového vypnutí laseru  
 Przycisk awaryjnego wyłączenia lasera  
 Nødstopknapp for laser  
 激光緊急停止按钮  
 레이저 비상 정지 버튼  
 Lazer Acil Durdurma Düğmesi  
 Botão de emergência do laser  
 Laserin hätäpysäytyspainike  
 Button öppire urgență laser  
 Кнопка аварийного отключения лазера  
 Tlačidlo núdzového vypnutia lasera  
 Бутон за аварийно спиране на лазера  
 Gumb za zaustavljanje lasera u slučaju nužde  
 Laseri hādaseiskamispnupp  
 Hnappur fyrir neyðarstöðvun laser-geisla  
 Lāzera izslēgšanas poga traukmes gadījumos  
 Lazero skubaus sustabdyimo mygtukas  
 Gumb za izklop laserja v nujnih primerih


 Mass with Safe Working Load  
 Masa con carga de trabajo segura  
 Masse avec charge utile maximale  
 Masse mit sicherer Arbeitslast  
 Peso con carico di esercizio sicuro  
 Massa met veilige werkbelasting  
 定格荷重での質量  
 Masse med sikker arbeidsbelastning  
 Μάζα με ασφαλές φορτίο εργασίας  
 Massa com carga de trabalho segura  
 Vikt vid säker arbetsbelastning  
 A tömeg biztonságos üzemi terheléssel  
 Hmotnost s bezpečnou pracovní zátěží  
 Masa z bezpiecznym obciążeniem roboczym  
 Masse med sikker arbeidsbelastning  
 帶安全工作負載的質量  
 안전사용하중을 포함한 질량  
 Güvenli Çalışma Yüklü ile Kütle  
 Massa com carga de trabalho segura  
 Massa ja turvallinen työkuormitus  
 Masā cu sarcină de lucru sigură  
 Маса с безопасной рабочей нагрузкой  
 Hmotnost zariadenia s bezpečnou pracovnou záťažou  
 Телно с безопасно работно натоварване  
 Masa sa sigurnim radnim opterećenjem  
 Mass ohutu töökoormuse juures  
 Hámarks örugg vinnuþyngd  
 Masa ar drożu eksploatacyjną sloadzi  
 Masé su saugiu darbinio krūviu  
 Masa z varno delovno obremenitvijo


 Foot Switch  
 Pedal  
 Pédale  
 Fußschalter  
 Interruttore a pedale  
 Voetschakelaar  
 フットスイッチ  
 Fodpedal  
 Ποδοδιακομής  
 Pedal Interrupor  
 Fotbrytare  
 Lábkapcsoló  
 Nožní spínač  
 Przelącznik nożny  
 Fotbryter  
 脚踏开关  
 발 스위치  
 Ayak Pedalı  
 Pedal  
 Jalkakytkin  
 Pedală  
 Ножная педаль  
 Nožný spínač  
 Крачен преклчвател  
 Nožni prekidač  
 Jalgliiliti  
 Fótrofi  
 Ar kaju darbināms pedālis  
 Kojinis jungiklis  
 Nožno stikalo


 Draining  
 Drenaje  
 Purge  
 Entleeren  
 Scarico  
 Legen  
 排液中  
 Tømmer  
 Αποστράγγιση  
 Drenagem  
 Tömnung  
 Leengedés  
 Vypouštění  
 Drenaż  
 Tømning  
 排出/排放  
 배출  
 Boşaltma  
 Drenagem  
 Tyhjeneminen  
 Scurgere  
 Слив  
 Vyrúšťanie  
 Дренiranje  
 Pražnjenje  
 Árávoöl  
 Tæming  
 Notecināšana  
 Išleidimas  
 Drenaža

 Power Off  
 Apagar  
 Mettre hors tension  
 Netz AUS  
 Spegnere  
 Voeding uit  
 電源オフ  
 Slukker  
 Ανεργοποίηση  
 Desligar  
 Ström av  
 Kikapcsolás  
 Vypnout  
 Zasilanie Wyt.  
 Slå av  
 关闭电源  
 전원 끄기  
 Kapat  
 Desligar  
 Virta pois päältä  
 Oprire  
 Выключение питания  
 Vyrnúť  
 Изключване на захранването  
 Napajanje isključeno  
 Toide väljas  
 Slökkt  
 Strāvas padeve atslēgta  
 Išjungti  
 Izklop

 Power On  
 Encender  
 Mettre sous tension  
 Netz EIN  
 Accendere  
 Voeding aan  
 電源オン  
 Tændere  
 Ενεργοποίηση  
 Ligar  
 Ström på  
 Bekapcsolás  
 Zapnout  
 Zasilanie Wł.  
 Slå på  
 打开电源  
 전원 켜기  
 Aç  
 Ligar  
 Virta päälle  
 Pornire  
 Включение питания  
 Zapnúť  
 Изключване на захранването  
 Napajanje uključeno  
 Toide sees  
 Kveikt  
 Strāvas padeve ieslēgta  
 Įjungti  
 Vkllop

 Laser Warning  
 Advertencia sobre el láser  
 Mise en garde relative au laser  
 Laser-Warnhinweis  
 Avvertenza laser  
 Laserwaarschuwing  
 レーザー警告  
 Laseradvarsel  
 Προειδοποίηση Laser  
 Advertência sobre o laser  
 Laservarning  
 Lézerfigyelmeztetés  
 Varování: laser  
 Ostrzeżenie przed promieniami laserowymi  
 Laseradvarsel  
 激光警告  
 레이저 경고  
 Lazer Uyarısı  
 Advertência: Laser  
 Laservaroiutus  
 Avertisment cu privire la laser  
 Предупреждение о лазерном излучении  
 Výstraha: laser  
 Предупреждение относительно лазера  
 Urozoreenje za laser  
 Laseri hiatus  
 Varūð - laser  
 Bridinājums par lāzera  
 Perspėjimas dėl lazerio  
 Opozorilo za laser

 Laser Exit Aperture  
 Apertura de salida del láser  
 Ouverture de sortie du laser  
 Laseraustrittsöffnung  
 Apertura con uscita di radiazioni laser  
 Laseruitgangsopening  
 レーザー射出口  
 Laserudgangsåbning  
 Ανοίγιο εξόδου Laser  
 Abertura da saída do laser  
 Laserns utgångsöppning  
 A lézer kilépési nyílása  
 Otvor výstupu laseru  
 Otwór wyjściowy lasera  
 Utgangsåpning for laser  
 激光射出出口  
 레이저 출구 어퍼처  
 Lazer Çıkış Deliği  
 Abertura de saída do laser  
 Выключение питания  
 Aperturā iesrie laser  
 Выходное окно лазерного излучателя  
 Otvor výstupu lasera  
 Izходно прозорче на лазерния излъчвател  
 Izlaziņi otvor laserske zrake  
 Laseri vājūmisava  
 Ūtgangsof laser-geisla  
 Lāzera izejas apertūra  
 Lazero išėjimo anga  
 Izhodna odprtina laserja

 Remote Interlock  
 Bloqueo a distancia  
 Verrouillage à distance  
 Türsicherung  
 Blocco remoto  
 Externe interlock  
 リモート・インターロック  
 Fjernafbryder  
 Ενδοασφάλεια από απόσταση  
 Interbloqueo Remoto  
 Fjärrstyrd förregling  
 Távoli reteszelés  
 Dálkový zámek  
 Blokada zdalna  
 Fjernspærre  
 遙控聯鎖  
 원격 연동  
 Uzaktan Kilit  
 Intertravamento remoto  
 Etālukitūs  
 Dispozitiv de blocare la distanță  
 Дистанционная блокировка  
 Dialkovej blokovanie  
 Отдалечено блокиране  
 Dajjinsko zaključavanje  
 Kaugjuhtimisega blokeering  
 Fjarsamlæsing  
 Attālais bloķētājs  
 Nuotolinė blokoatė  
 Oddaljeni zaklep



Service Port USB Connection  
 Conexión USB de puerto de servicio  
 Connexion USB du port de maintenance  
 Service-Port USB-Anschluss  
 Connessione USB della porta di servizio  
 USB-aansluiting onderhoudspoor  
 サービス・ポート USB接続  
 USB-tilslutning til serviceport  
 Σύνδεση USB θύρας σέρβις  
 Ligação USB na Entrada de Serviço  
 Serviceport USB-anslutning  
 Szervizport USB-kapcsolat  
 USB připojení servisního portu  
 Złącze USB portu serwisowego  
 USB-tilkobling for serviceport  
 服務端口USB連接  
 서비스 포트 USB 연결  
 Servis Portu USB Bağlantısı  
 Conexão USB da porta de serviço  
 Huoltoportin USB-liitäntä  
 Conexiune USB port service  
 USB-соединение сервисного порта  
 Pripojenie servisného portu USB  
 Сервізен порт (USB в'язка)  
 USB-priključak servisnog ulaza  
 Teenindusporti USB-ühendus  
 Þjónustugátt USB-tenging  
 Apkopes USB pieslēgviestas savienojums  
 Priēziūros prievado USB jungtis  
 USB-povezava servisnih vrat



[black and red safety sign] No Pushing  
 [símbolo de seguridad rojo y negro] No empujar  
 [panneau de sécurité noir et rouge] Interdiction de pousser  
 [schwarz-rottes Sicherheitszeichen] Schieben verboten  
 [segnale di sicurezza nero e rosso] Non spingere  
 [zwart met rood veiligheidssymbool] Niet tegen duwen  
 [黒と赤の安全標識] 押さないでください  
 [sort og rødt sikkerhedssymbol] Der må ikke skubbes  
 [μαύρο και κόκκινο σήμα ασφαλείας] Απαγορεύεται η ώθηση  
 [sinal de segurança preto e vermelho] Não Empurrar  
 [svart och röd säkerhetsskylt] Framskjutning förbjuden  
 [fekete és piros biztonsági jel] Tilos tolni! [černočervený bezpečnostní symbol] Netlačit  
 [czarno-czerwony znak ostrzegawczy] Nie popychać  
 [sort og rødt sikkerhedssymbol] Forbudt å skyve  
 [黑色和红色安全标识] 禁止推动  
 [검은색과 빨간색 안전 표지] 밀지 마시오  
 [siyah ve kırmızı güvenlik işareti] İtmek yasaktır  
 [sinalização de segurança preto e vermelho] Proibido empurrar  
 [musta ja punainen turvallisuusmerkintä] Työntäminen kielletty  
 [símbol de siguranță negru cu roșu] Împingerea interzisă  
 [чёрно-красный знак безопасности] Не толкать!  
 [čierne a červené bezpečnostné označenie] Zákaz tlačit  
 [предупредителен знак в червено и черно] Бутането забранено  
 [crno-crveni znak sigurnosti] Pritiskanje je zabranjeno  
 [must ja punane ohutusmärk] Mitte lükata  
 [svart og røtt varúðarmerk] Ekki ýta  
 [melni sarkana bridinājuma zīme] Nestumt  
 [juodas ir raudonas saugos ženklas] Negalima stumti  
 [rdeče-črn varnostni znak] Potiskanje prepovedano



This product complies with standards set forth in EN 60601-1, 60601-1-2 and 60601-2-22. cTUVus Mark indicates compliance to UL 60601-1 and CAN/CSA 22.2 601.1 M90 covering electrical safety requirements for the US and Canada.  
 Este producto cumple la normativa establecida en EN 60601-1, 60601-1-2 y 60601-2-22. El símbolo cTUVus indica cumplimiento con las regulaciones UL 60601-1 y CAN/CSA 22.2 601.1 M90 correspondientes a los requisitos de seguridad eléctrica en Estados Unidos y Canadá.  
 Ce produit est conforme aux normes établies dans les publications EN 60601-1, 60601-1-2 et 60601-2-22. La marque cTUVus indique le respect des normes de sécurité électrique UL 60601-1 et CAN/CSA 22.2 601.1 M90 pour les États-Unis et le Canada.  
 Dieses Produkt entspricht den Anforderungen der Normen EN 60601-1, 60601-1-2 und 60601-2-22. Das cTUVus-Kennzeichen weist auf Konformität mit den Richtlinien UL 60601-1 und CAN/CSA 22.2 601.1 M90 bezüglich der Anforderungen für elektrische Sicherheit in den USA und in Kanada hin.  
 Il prodotto è conforme agli standard esposti in EN 60601-1, 60601-1-2 e 60601-2-22. Il marchio cTUVus indica la conformità del prodotto ai requisiti elettrici di sicurezza UL 60601-1 e CAN/CSA 22.2 601.1 M90 per gli Stati Uniti e il Canada.  
 Dit product voldoet aan de eisen van norm EN 60601-1, 60601-1-2 en 60601-2-22. Het cTUVus-keurmerk geeft aan dat het product voldoet aan UL 60601-1 en CAN/CSA 22.2 601.1 M90 aangaande de vereisten betreffende elektrische veiligheid voor de VS en Canada.  
 本製品は、EN 60601-1, 60601-1-2 および 60601-2-22に定める基準を遵守しています。cTUVusマークは、米国およびカナダ向け電気安全要件を包含するUL 60601-1およびCAN/CSA 22.2 601.1 M90へ適合していることを示す。  
 Dette produkt er i overensstemmelse med standarderne i EN 60601-1, 60601-1-2 og 60601-2-22. cTUVus-market betyder, at produktet overholder UL 60601-1 og CAN/CSA 22.2 601.1 M90 vedr. sikkerhedskrav til elektrisk udstyr for USA og Canada.  
 Το προϊόν αυτό συμμορφώνεται με τα πρότυπα EN 60601-1, 60601-1-2 και 60601-2-22. Η σήμανση cTUVus δείχνει συμμόρφωση με τα πρότυπα UL 60601-1 και CAN/CSA 22.2 601.1 M90, τα οποία καλύπτουν τις απαιτήσεις ηλεκτρικής ασφαλείας στις Η.Π.Α. και τον Καναδά.  
 Este produto cumpre as normas estipuladas em EN 60601-1, 60601-1-2 e 60601-2-22. A marca cTUVus indica conformidade com as normas UL 60601-1 e CAN/CSA 22.2 601.1 M90 que cobrem os requisitos de segurança elétrica para os EUA e o Canadá.  
 Denna produkt uppfyller kraven i standarderna SS-EN 60601-1, SS-EN 60601-1-2 och SS-EN 60601-2-22. cTUVus-märkningen indikerar efterlevnad av UL 60601-1 och CAN/CSA 22.2 601.1 M90 som behandlar elektriska säkerhetskrav i USA och Kanada.  
 Ez a termék megfelel az EN 60601-1, 60601-1-2 és 60601-2-22 szabványok előírásainak. A cTUVus jel az USA és Kanada területén érvényes UL 60601-1 és a CAN/CSA 22.2 601.1 M90 számú elektromos biztonsági követelményeknek való megfeleléseget jelzi.  
 Tento produkt vyhovuje standardům podle norem EN 60601-1, 60601-1-2 a 60601-2-22. Označení cTUVus tohoto produktu značí soulad s elektrickými bezpečnostními předpisy UL 60601-1 a CAN/CSA 22.2 601.1 M90 pro Spojené státy a Kanadu.  
 Niniejszy produkt jest zgodny z normami określonymi w EN 60601-1, 60601-1-2 i 60601-2-22. Znak cTUVus jest potwierdzeniem zgodności z normami UL 60601-1 i CAN/CSA 22.2 601.1 M90 określającymi wymagania dotyczące bezpieczeństwa instalacji elektrycznych w USA i Kanadzie.  
 Dette produktet er i samsvar med standarder i EN 60601-1, 60601-1-2 og 60601-2-22. cTUVus-merket angir at produktet er i samsvar med UL 60601-1 og CAN/CSA 22.2 601.1 M90, som dekker de elektriske sikkerhetskravene for USA og Canada.  
 此产品符合 EN 60601-1、60601-1-2 和 60601-2-22 中设置的标准。cTUVus 标记表示符合美国及加拿大关于电气安全要求的 UL 60601-1 和 CAN/CSA 22.2 601.1 M90 标准的规定。  
 이 제품은 EN 60601-1, 60601-1-2, 60601-2-22에 규정된 표준을 준수합니다. cTUVus 마크는 미국 및 캐나다의 전기 안전 요건에 대한 UL 60601-1 및 CAN/CSA 22.2 601.1 M90을 준수함을 나타냅니다.  
 Bu ürün, EN 60601-1, 60601-1-2 ve 60601-2-22'de ortaya konan standartlarla uyumludur. cTUVus işareti, ABD ve Kanada için elektrik güvenliği gereklilerini kapsayan UL 60601-1 ve CAN/CSA 22.2 601.1 M90 normlarına uygunluğu gösterir.  
 Este produto está em conformidade com as normas estabelecidas na EN 60601-1, 60601-1-2 e 60601-2-22. A marca cTUVus indica conformidade com as normas UL 60601-1 e CAN/CSA 22.2 601.1 M90 que abrangem os requisitos de segurança elétrica nos EUA e no Canadá.  
 Tämä tuote noudattaa standardeja EN 60601-1, 60601-1-2 ja 60601-2-22. cTUVus-merkki osoittaa, että laite on yhdenmukainen standardien UL 60601-1 ja CAN/CSA 22.2 601.1 M90 kanssa, jotka kattavat sähköturvallisuusvaatimukset USA:ssa ja Kanadassa.  
 Acest produs respectă normele stabilite în EN 60601-1, 60601-1-2 și 60601-2-22. Marca cTUVus atestă conformitatea cu UL 60601-1 și CAN/CSA 22.2 601.1 M90 privind cerințele de siguranță pentru echipamentele electrice în SUA și Canada.  
 Изделие отвечает требованиям стандартов EN 60601-1, 60601-1-2 и 60601-2-22. Знак cTUVus указывает на соответствие стандартам UL 60601-1 и CAN/CSA 22.2 601.1 M90, которые содержат требования к электрической безопасности для США и Канады.  
 Tento produkt je v súlade so štandardmi uvedenými v normách EN 60601-1, 60601-1-2 a 60601-2-22. Označenie cTUVus predstavuje súlad s požiadavkami na elektrickú bezpečnosť podľa normy UL 60601-1 a CAN/CSA 22.2 601.1 M90 pre USA a Kanadu.  
 Tози продукт отговаря на стандартите, посочени в EN 60601-1, 60601-1-2 и 60601-2-22. Обозначението cTUVus указва съответствие със стандартите UL 60601-1 и CAN/CSA 22.2 601.1 M90 относно изискванията за безопасност на електрическото оборудване в САЩ и Канада.  
 Ovaj je proizvod uskladen s odredbama normi EN 60601-1, 60601-1-2 i 60601-2-22. Oznaka cTUVus označava uskladenost s normama UL 60601-1 i CAN/CSA 22.2 601.1 M90 koje obuhvaćaju zahtjeve električne sigurnosti za SAD i Kanadu.  
 See toode vastab standarditele EN 60601-1, 60601-1-2 ja 60601-2-22. cTUVus-märk tähistab vastavust USA ja Kanada elektroohutusnõuetele UL 60601-1 ja CAN/CSA 22.2 601.1 M90.  
 beši vara samræmist stöðlum sem settir eru fram í EN 60601-1, 60601-1-2 og 60601-2-22. cTUVus merkið sýnir að fylgt sé UL 60601-1 og CAN/CSA 22.2 601.1 M90 kröfum um rafmagnsryggi í Bandaríkjunum og Kanada.  
 Ši ierice atbilst EN 60601-1, 60601-1-2 un 60601-2-22 noteiktajiem standartiem. cTUVus marķējums apliecina atbilstību standartiem UL 60601-1 un CAN/CSA 22.2 601.1 M90 par elektrodrosību ASV un Kanādā.  
 Šis gamyns atitinka standartus, išdėstytus EN 60601-1, 60601-1-2 ir 60601-2-22 „cTUVus“ ženklas reiškia, kad prietaisas atitinka UL 60601-1 ir CAN/CSA 22.2 601.1 M90 standartus „JAV ir Kanadoje nustatancius elektrosaugos reikalavimus.“  
 Izdelek je skladen s štandardi EN 60601-1, 60601-1-2 in 60601-2-22. Oznaka cTUVus predstavlja skladnost z UL 60601-1 in CAN/CSA 22.2 601.1 M90 na področju zahtev glede električne varnosti za ZDA in Kanado.