VISIA[®]-CR User Guide



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VISIA-CR LIMITED ONE-YEAR WARRANTY

Coverage:

A one-year warranty is provided by Canfield Scientific, Inc. ("Canfield") on VISIA-CR booth parts. A 60-day warranty is provided on flash bulbs.

During the one year period beginning on the date of delivery, Canfield warrants that the VISIA-CR booth will be free from defects in material and workmanship. If the customer discovers a defect, Canfield will, at its option, repair or replace the defective component(s) at no charge to the customer, provided it is returned during the warranty period. All of VISIA-CR's electronics and optics are housed within a modular, replacement equipment box. The cost of shipping this replacement box both ways (less any applicable custom duties and/or export taxes) will be paid by Canfield for all warrantable repairs.

Canfield owns all parts removed from repaired products. If Canfield repairs or replaces a product, its warranty term is not extended.

After the first year, VISIA-CR's Warranty Service and Support can be extended by fee-based yearly service agreements covering product hardware, technical support, and software upgrades.

State Law Rights:

Some states do not allow limitations on how long an implied warranty lasts or the exclusion or limitation of incidental or consequential damages, so the above exclusions or limitations may not apply to you. This warranty gives you specific legal rights, and you may also have other rights which vary from state to state.

Exclusions:

This warranty does not cover customer training, instruction, installation, set up adjustments, or LAN-network-related problems.

This Warranty does not cover damage due to external causes, including accident, abuse, misuse, problems with electrical power, servicing not authorized by Canfield, usage not in accordance with product instructions, failure to perform required preventive maintenance, and problems caused by use of parts and components not supplied by Canfield.

This warranty does not cover computer systems, computer peripherals, or other equipment not manufactured by Canfield. All such third-party equipment is covered by separate manufacturers' warranties where applicable.

This warranty is expressly made in lieu of all other warranties, expressed or implied, including without limitation, warranties of merchantability and fitness for a particular purpose.

Our liability is limited to the repair or replacement, at our option, of any defective product and shall in no event include incidental or consequential commercial or property damages of any kind.

To request warranty service:

Customers located in the United States, Canada or Mexico, please phone Canfield technical support at 1-800-815-4330. Other international customers please call +1-973-276-0336.

The e-mail support address is techsupport@canfieldsci.com.

Should it be determined by Canfield technical support that a unit must be returned for service, a Return Merchandise Authorization (RMA) number will be provided. This RMA number must be clearly marked on the outside of all packaging. A replacement VISIA-CR equipment box will be shipped in a specially-designed shipping case that will be sent within two business days (within the continental US); longer (up to four days) for other destinations allowing for potential custom delays with international shipments. Information on packing and shipping will be included.

Shipping address: RMA # ______ (to be provided by Canfield prior to shipment) Canfield Scientific, Inc. 253 Passaic Avenue Fairfield, NJ 07004-2524 USA

EXTENDED CANFIELD CARE SERVICE AGREEMENT FOR VISIA-CR

One year of Canfield Care is included with your new VISIA-CR purchase. The initial Canfield Care agreement provides a warranty on the VISIA-CR booth with phone access to technical support¹ for one year from date of delivery.

Beyond this first year, Canfield Scientific, Inc. offers an extended Canfield Care service agreement for an annual fee. This extended service agreement extends the warranty for all VISIA-CR booth parts. All coverage and exclusion details for this extended warranty are the same as those described in the VISIA-CR Limited One-Year Warranty. In addition, the user continues to have phone access to technical support¹ for the term of the Canfield Care Agreement.

All renewal fees must be remitted to Canfield (or an authorized distributor where applicable) at least 30 days prior to the expiration date of the current VISIA-CR Service Agreement (initial or extended). Once a Canfield Care Agreement has expired, it may not be renewed; although imaging booth repair and technical support may still be obtained with individual service charges as noted below^{2–4}.

To enter into an Extended Canfield Care Service Agreement, please contact Canfield by e-mail at <u>support@canfieldsci.com</u> or by phoning 1-800-815-4330 toll-free in the US, Canada or Mexico (other international customers phone +1-973-276-0336).

¹Note that for international customers (outside of the U.S. and Canada), technical support is provided locally through an authorized distributor where available.

²Out-of-warranty repairs to the imaging booth: The customer will be charged a fixed diagnostic fee of \$350, plus any parts and labor required for repairs. The customer is responsible for prepaying all transportation charges including insurance and any associated fees and any applicable custom duties and/or export taxes. *IMPORTANT*: A Return Merchandise Authorization (RMA) number must be obtained from Canfield prior to shipping any equipment.

³For customers without a current Agreement, technical support may be obtained at the rate in effect at the time of service.

⁴All pricing subject to change without notice.

SAFETY AND TECHNICAL INFORMATION

DESCRIPTION OF MARKS



CAUTION and/or WARNING — Please consult ACCOMPANYING DOCUMENTS and read carefully to ensure safe use of this equipment.



DANGER/HIGH VOLTAGE — This symbol indicates "dangerous voltage" inside the product that presents a risk of electric shock or personal injury.

ENVIRONMENTAL RESTRICTIONS

- Not suitable for use in WET LOCATIONS.
- Not suitable for use in the presence of a FLAMMABLE ANAESTHETIC MIXTURE WITH OXYGEN or NITROUS OXIDE.

AUTHORIZED STANDARDS

This device complies with the following Standards:



Safety of Information Technology Equipment

Federal Communications Commission (FCC)

Safety European Union

This device complies with the requirements of the Low Voltage Directive 2006/95/EC. • EN60950-1: 2005-2nd Ed—Information Technology Equipment

United States of America

• UL60950-1:2007-2nd Ed—Safety of Information and Technology Equipment

Canada

 CSA C22.2 No. 60950-1:2007-2nd Ed—Standard for Safety for Information Technology Equipment

Safety and Technical Information

EMC Standard European Union: EMC Directive 89/336/EEC

- EN 55022:2006 + A1:2007—Information Technology Equipment—Radio Disturbance Characteristics
- EN 55024:1998 + A1:2001 + A2:2003—Information Technology Equipment— Immunity Characteristics
- EN 61000-3-2:2006—Harmonic Emissions
- EN 61000-3-3:1995 + A1:2001 + A2:2005-Voltage Fluctuation and Flicker
- EN 61000-4-2:1995-Electrostatic Discharge
- EN 61000-4-3:1996-Radiated RF Susceptibility
- EN 61000-4-4:1995-Electrical Fast Transients
- EN 61000-4-5:1995—Power Line Surge
- EN 61000-4-6:1996 + A1:2004 + A2:2006-Line Conducted RF Susceptibility
- EN 61000-4-11:1994-Voltage Dips and Dropouts

United States of America:



Federal Communications Commission (FCC): This device complies with FCC CFR 47 Part 15 sub part B. Operation is subject to the following two conditions: 1) This device may not cause harmful interference, and 2) this device must accept any interference received, including interference that may cause undesired operation.



WARNING: Changes or modifications to this unit not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.

NOTE: This equipment has been tested and found to comply with the limits for a Class A digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference when the equipment is operated in a commercial environment. This equipment generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with the instruction manual, may cause harmful interference to radio communications. Operation of this equipment in a residential area is likely to cause harmful interference in which case the user will be required to correct the interference at his own expense.

Shielded cables must be used with this unit to ensure compliance with the Class A FCC limits.

Canada This Class A digital apparatus meets all requirements of the Canadian Interference-Causing Equipment Regulations.

Compliance with other EU directives VISIA-CR complies with the following European Union Directives aimed at environmental protection as well as consumer health and safety.

- Directive 2002/96/EC on Waste Electrical and Electronic Equipment (WEEE Directive)
- Directive 2002/95/EC on the Restriction of the Use of Certain Hazardous Substances (RoHS Directive)
- Directive on Packaging and Packaging Waste 94/62/EC

RECYCLING AND DISPOSAL INFORMATION

In accordance with these directives, all non-electronic components removed for replacement, and any related packaging material should be disposed of following your country's or local area's legislation for recycling.

Any electronic components or modules removed for replacement should be returned to Canfield or its local agent, using the packaging material supplied with the replacement component or module received.

Shipping address: Canfield Scientific, Inc., 253 Passaic Avenue, Fairfield, NJ 07004-2524 USA

SAFETY PRECAUTIONS

Before you begin operating the VISIA-CR system, carefully read the Operating Instructions for this device and any relevant accessory equipment.

Be sure clients close their eyes before taking photographs.

To prevent electrical shock, use only the power cable supplied with your system by Canfield Imaging Systems.

Connect equipment only to properly grounded electrical receptacles.

To protect the VISIA-CR system from sudden, transient increases and decreases in electrical power, use a surge suppressor, line conditioner, or uninterruptible power supply (UPS) if such equipment is approved for use in the country where VISIA-CR is installed.

Do not make conversions and/or changes to the equipment without the express authorization from the manufacturer. Unauthorized conversions and/or changes could jeopardize the safety of the system and will void the warranty. Operate the system only with original and/or manufacturer authorized parts.

Do not attempt to clean the booth using alcohol, benzene, paint thinners, or other flammable substances.

Always ensure that this device and any relevant accessory equipment is placed on a dry, stable surface.

Keep cables free and clear from traffic areas to prevent trip hazards.





Do not place food or liquid on the VISIA-CR Imaging Booth. If the VISIA-CR system gets wet, contact Technical Support.



If you are placing the VISIA-CR System on a cart or stand, follow the manufacturer's instructions and specifications for proper installation.

To avoid potential safety hazards, set up the computer out of the client's view and/or reach.

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CHAPTER 1 System Set-up

The VISIA-CR is a facial imaging booth coupled with a high resolution SLR camera, designed for clinical research. The booth enables shaping of lighting modalities, standardizing the photographic environment.

1.1 GETTING CONNECTED



ONLY USE CABLES APPROVED BY CANFIELD.



1 VISIA-CR Power: Plug the power cable into the VISIA-CR and then into a properly grounded AC receptacle rated between

100-240VAC/50-60 Hz/2A.





2 VISIA-CR USB: Connect the USB cable between the VISIA-CR and the computer.



3 Camera USB: Connect the camera's USB cable — between the camera and the computer.

4 Camera Sync: Connect the Sync Cable to the camera's Sync Port.

5 Camera Power: Insert the camera's DC converter into the camera's battery compartment.





Be sure to properly route the cord so the camera's battery door is fully closed. (See the owner's manual for your camera.)

Chapter 1

1.2 ATTACHING THE CAMERA

ONLY USE CAMERAS APPROVED BY CANFIELD

✓ IMPORTANT: 1 Make sure the Auto Power Off feature of your camera is set to OFF to prevent the camera from automatically powering off after a period of inactivity. (See the owner's manual for your camera.)



- **2** Remove the protective lens cap from the rear of the VISIA-CR.
- **3** Remove the protective cap from the camera.





- **4** Turn camera 45 degrees to the left and gently seat the camera onto the lens.
- **5** Turn the camera clockwise until it clicks into place.





DO NOT FORCE camera onto lens. It should rotate smoothly without binding.

1.3 REMOVING THE CAMERA





1 Press the lens release button on the camera.

2 Turn camera counter-clockwise 45 degrees and remove.

3 Place the protective caps on the VISIA-CR lens and on the camera body.



CHAPTER 2 Maintenance

2.1 CLEANING THE VISIA-CR BOOTH

The exterior surface of the VISIA-CR booth should only be cleaned using a cloth or sponge slightly dampened with a mild detergent mixed with water.



IMPORTANT: Do not attempt to clean the VISIA-CR booth using alcohol, benzene, paint thinners or other flammable substances.

Wipe the interior booth surface with a soft cloth. If the unit has become soiled, soak a cloth in a mild detergent solution, wring it out, and wipe gently.

Remove dust from dark glass filters inside the booth using a soft brush. Do not rub the filters with hard material, as they are very easily scratched.

Use a soft brush to remove dust from the protective lens in front of the camera. Do not touch the lens with your fingertips. Gently wipe the lens with a dry, soft cloth; do not rub the lens with hard material as it is easily scratched. If the lens is soiled, purchase a camera lens cleaning kit and follow the manufacturer's instructions.

2.2 REPLACING THE EQUIPMENT BOX

If Canfield technical support diagnoses a failure in the VISIA-CR's equipment box, the box can be removed and returned. Our support technician will issue a Return Merchandise Authorization (RMA) number, and send a replacement unit to you. Upon receipt of the replacement unit, remove the entire equipment box and return it in the shipping carton that the new box came in.



WARNING: The equipment box contains dangerous, high voltage circuits that can cause bodily injury. DO NOT open the equipment box.

To remove the equipment box

1 Turn off the VISIA-CR booth using the switch — near the power cable at the rear of the unit.

2 Unplug all cables from the camera and booth.









- **3** To remove the camera from the booth:
 - **a** Press the lens release button on the front of the camera.
 - **b** Turn the camera body gently to the left (counterclockwise) to ten o'clock to disengage from the lens. Replace the lens caps on the camera and the booth.
- **4** Remove the three #4 screws from the small cover surrounding the lens on the rear of the booth.

5

5 Use the Philips head screwdriver to loosen the two #10 screws on the lower corners of the rear housing cover.



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6 Remove the housing by pivoting it out slightly at the bottom, and sliding it up and away from the booth.

7 Remove the three #6 screws from the top of the equipment box.

8 Grasp the handle of the equipment box and slide the box straight out from the booth.





To install the new equipment box

1 Align the new equipment box between the two rails near the bottom of the booth and slide it in.

2 Replace and tighten the three #6 screws on the top of the equipment box.

3 Mount the rear housing cover and tighten the two #10 screws on the lower corners of the cover.

4 Replace the small cover on the rear of the booth surrounding the VISIA-CR lens. Replace and tighten the three #4 screws on the cover.

5 Reconnect all cables to the camera and booth. **Note:** If you are unsure where to connect the cables, refer to *Chapter 1, System Set-up*.

6 Remove the lens covers from the camera and booth. With the camera at ten o'clock, bring the lens mount of the camera in contact with the lens of the booth.

7 Once the camera body and lens have joined, turn the camera body gently to the right (clockwise) to twelve o'clock until it clicks into place.

- **8** Turn on the camera.
- **9** Turn on the VISIA-CR booth.

2.3 REPLACING FLASHES



Replacing Flashes 1, 2, 3, 4 or 5

Complete the following steps to replace flash 1, 2, 3, 4, or 5 in the VISIA-CR booth.

1 Turn off the VISIA-CR booth using the switch near the power cable at the rear of the unit and unplug the power cable.





WAIT 5 MINUTES after power is removed from the VISIA-CR booth before continuing.

Chapter 2



2 Use the supplied Philips head screwdriver to remove the two #4 nylon screws on either side of the flash head inside the booth.

3 Use the flat head screwdriver to pry the top of the flash loose from its position in the wall of the booth. Gently pull the flash from the wall into the booth.





4 To disconnect the cable from the flash, squeeze the connector release on the cable and pull gently to remove it from the flash head.

IMPORTANT: Be sure the cable does not fall into the opening in the wall of the booth.



5 Attach the cable to the new flash by inserting the connector into the opening on the flash. The connector is keyed and inserts only one way. It will click into place.

6 Insert the new flash, connector end first, into the booth.

7 Gently push the top of the flash back until it is flush with the wall.

8 Replace the two nylon screws. Do not over tighten the screws or they may break.



Replacing Flash 6

Complete the following steps to replace flash 6 in the VISIA-CR booth.

Note: To replace flash 6, the equipment box must be removed from the booth so that there is sufficient room to maneuver the flash out of its position in the booth.

REMOVE THE EQUIPMENT BOX



2 Unplug all cables from the camera and booth.

WAIT 5 MINUTES after power is removed from the VISIA-CR booth before continuing.

3 To remove the camera from the booth:

a Press the lens release button on the front of the camera.

b Turn the camera body gently to the left (counterclockwise) to ten o'clock to disengage from the lens. Replace the lens caps on the camera and the booth.





4 Remove the three #4 screws from the small cover surrounding the lens on the rear of the booth.

5 Use the Philips head screwdriver to loosen the two #10 screws on the lower corners of the rear housing cover.







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6 Remove the housing by pivoting it out slightly at the bottom, and sliding it up and away from the booth.

7 Remove the three #6 screws from the top of the equipment box.

WARNING: The equipment box contains dangerous, high voltage circuits that can cause bodily injury. DO NOT open the equipment box.

8 Grasp the handle of the equipment box and slide the box straight out from the booth.

REPLACE THE FLASH









1 Use the supplied Philips head screwdriver to remove the two #4 screws on the black reflector covering flash 6. Remove the reflector.

2 Remove the two #4 nylon screws by the flash head.

3 Use the flat head screwdriver to gently pry the flash up from its position inside the booth and gently pull the flash into the booth.





4 To disconnect the cable from the flash, squeeze the connector release on the cable and pull gently.

5 Insert the connector of the cable into the opening on the new flash. The connector is keyed and inserts only one way. It will click into place.

6 Insert the new flash, connector end first, into the booth. Replace the two nylon screws. Do not over tighten the screws or they may break.

7 Replace the black reflector cover and replace and tighten the two screws on the cover.

RE-INSTALL THE EQUIPMENT BOX

1 Slide the equipment box back into the booth. Replace and tighten the three #6 screws.

2 Replace the large housing cover. Tighten the two #10 screws.

3 Replace the small cover surrounding the VISIA-CR lens. Replace and tighten the three #4 screws.

4 Reconnect all cables to the camera and booth. **Note:** If you are unsure where to connect the cables, refer to *Chapter 1, System Set-up*.

5 Remove the lens covers from the camera and booth. With the camera at ten o'clock, bring the lens mount of the camera in contact with the lens of the booth.

6 Once the camera body and lens have joined, turn the camera body gently to the right (clockwise) to twelve o'clock until it clicks into place.

7 Turn on the camera.

8 Turn on the VISIA-CR booth.

CHAPTER 3 Color Standard

Images captured in the VISIA-CR booth include a 7-chip color standard which may be referenced for color calibration. Color chip specifications are listed below.

VISIA-CR	Macbeth Color Name	Macbeth Reference Measurements					
Chip Position		L	а	b	R	G	В
1 (left)	Light skin	66.08	13.22	17.14	205	163	144
2	Magenta	51.57	48.98	-15.96	197	103	162
3	Yellow	81.35	-4.13	79.25	240	208	47
4	Cyan	51.57	-21.72	-26.63	0	146	178
5	Neutral 5	51.57	0	0	136	135	135
6	Neutral 3.5	35.99	0	0	99	99	99
7 (right)	Neutral 8	81.35	0	0	211	209	210



APPENDIX A VISIA-CR Facial Imaging Booth Specifications

A.1 VISIA-CR BOOTH, UV-A MODEL

- Headrest is adjustable vertically in three positions.
- Headrest and chin-cup are adjustable: left 37°, center 0°, right 37°
- Xenon Flash based lighting
- Multi-spectral filtering combinations:
 - tunable broad spectrum daylight
 - UV fluorescence
 - parallel polarized
 - cross polarized
 - custom option
- LED Modeling Lights
- Size: 20.47 × 19.6 × 18.35 inches (52 × 49.8 × 46.6 cm)
- Weight: 42.5 Lbs (19.3 Kg)
- Power: 100–240 VAC / 50-60 Hz / 2A

A.2 VISIA-CR BOOTH, NARROW BAND BLUE MODEL

- Headrest is adjustable vertically in three positions.
- Headrest and chin-cup are adjustable: left 37°, center 0°, right 37°
- Xenon Flash based lighting
- Multi-spectral filtering combinations:
 - tunable broad spectrum daylight
 - blue excitation
 - blue fluorescence
 - red fluorescence
 - green fluorescence
 - parallel polarized
 - cross polarized
 - custom option
- LED Modeling Lights
- Size: 20.47 × 19.6 × 18.35 inches (52 × 49.8 × 46.6 cm)
- Weight: 44 Lbs (20 Kg)
- Power: 100–240 VAC / 50-60 Hz / 8A

A.3 COMPUTER REQUIREMENTS

For current minimum computer requirements, refer to our website:

www.canfieldsci.com/imaging-systems/VISIA-CR/

APPENDIX B Support Information

Technical support

Technical support is available at 1-800-815-4330. Hours of support are from 6:00 a.m. EST to 8:00 p.m. EST Monday–Friday.

Warranty/repair

A one-year warranty is provided on VISIA-CR parts. Should our technical support technicians determine that a part must be returned for service, a Return Merchandise Authorization number will be provided to you. In addition, a replacement part and a shipping carton will be mailed to you within two business days. Information on packing and shipping will be included.

Our shipping address is: Canfield Scientific, Inc. 253 Passaic Avenue Fairfield, NJ 07004-2524 USA