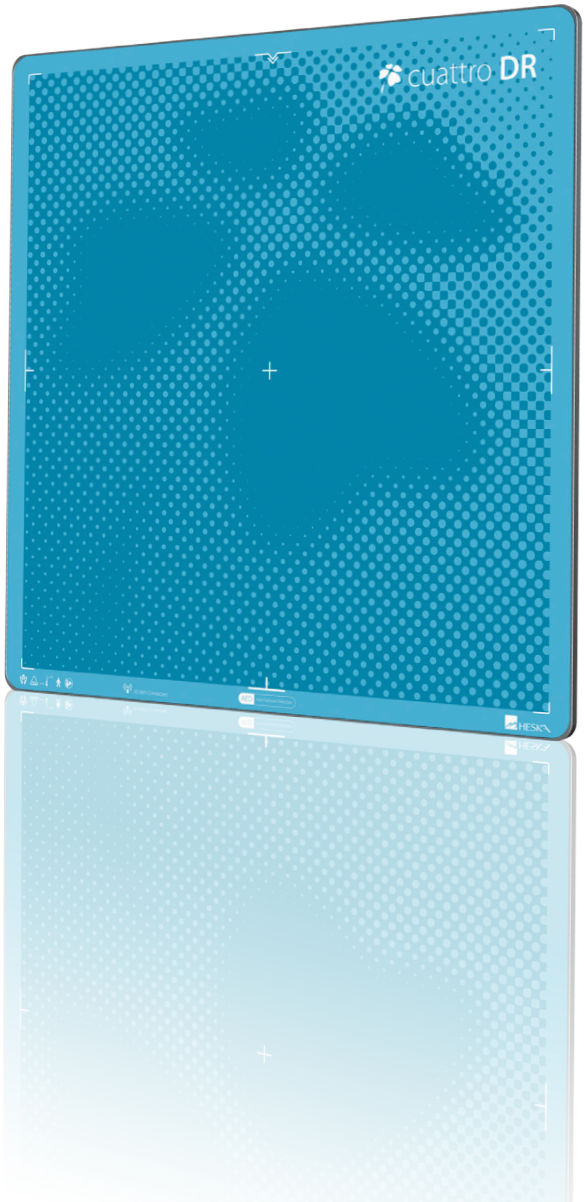
cuattroDR HD

Wireless 1717 Digital Radiography Detector Product Manual



HESKA

Document Guide

This document is intended for customers who use the CuattroDR HD Wireless 1717 Detector.

Revision History

Initial Release: Version 1.1

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1.1 Symbols

WARNING

Indicates hazardous situations that may lead to serious injury, death, or the transmission of infectious agents if the precaution is not followed.

CAUTION

Indicates hazardous situations that may lead to minor injury, moderate injury, or physical damage if the precaution is not followed.

IMPORTANT

Indicates improper handling that could have an adverse effect on the accuracy of the measurement values if the precaution is not followed.

NOTE: Indicates procedures requiring special attention, instructions that must be followed, supplementary explanations, *etc*.

FCC mark

Li-ion Recycle

Do not dispose of in residential or commercial waste.
Dispose of in conformity with applicable local laws and regulations.

Refer to Instruction Manual.

Indicates non-ionized electromagnetic radiation.

Manufacturer name and address

SN Serial number

EC REP Authorized representative in the European region name and address.

Expiry date

CE Indicates that the equipment has passed CE testing and the CE notified Body number follows it.

1.2 Safe Use and Handling

1.2.1 Intended Use

The CuattroDR HD Wireless 1717 Detector is part of a digital x-ray imaging solution. It acquires images by capturing x-rays which have penetrated the animal. When x-ray photons pass through the scintillator to the detector, the photons convert to visible light, and the visible light is converted to electronic signals through TFT (a-Si). The detector then digitizes the x-ray images and transfers them to the acquisition computer for radiography diagnostics. Advanced digital image processing allows automatic efficient diagnosis.

- Only a veterinarian or a legally certified operator should use this product.
- The equipment should be kept in a safe and operable condition by maintenance personnel.
- For details about installing and using this product, consult your sales representative or Heska's Customer Support Services.

1.2.2 Disclaimer

- In no event shall Heska be liable for damage or loss arising from negligent action by users.
- In no event shall Heska be liable for damage or loss arising from usage under abnormal conditions.
- In no event shall Heska be liable for personal physical harm or property damage that is sustained when the instructions of this manual are not followed.
- In no event shall Heska be liable for direct or indirect consequential damages arising from the use of this product.
- In no event shall Heska be liable for any damage arising from moving, alteration, inspection or repair by a person other than authorized Cuattro service engineers.
- In no event shall Heska be liable for loss of image data for any reason.
- The user is responsible for maintaining the privacy of image data acquired from this product.
- It is the responsibility of the attending clinician to provide medical care services. Heska will not be liable for faulty diagnoses.
- Specifications, composition, and appearance of this product may change without prior notice.

1.2.3 Management and Authority

- Operation and maintenance should be done in strict compliance with the operation instructions contained in this manual.
- The system, in whole or in part, cannot be modified in any way without prior approval from Cuattro.
- Before authorizing any person to operate the system, verify that the person has read and fully understood the CuattroDR HD Wireless 1717 Detector Product Manual. The owner should make certain that only properly trained and fully qualified personnel are authorized to operate the equipment.
- It is important the CuattroDR HD Wireless 1717 Detector Product Manual be kept at-hand, studied carefully, and reviewed periodically by the authorized operators.
- If a malfunction occurs, do not use device until qualified personnel correct the problem.

1.2.4 European Union (and EEA*) Only

 This symbol indicates that this product is not to be disposed with your household waste, according to the WEEE Directive (2012/19/EC) and your national law.

This product should be handed over to a designated collection point, *e.g.,* on an authorized one-for-one basis when buying a new similar product or to an authorized collection site for recycling electrical and electronic equipment (EEE). Improper handling of waste could have a negative impact on the environment and human health due to potentially hazardous substances that are generally associated with EEE. At the same time, cooperation in the correct

disposal of this product will contribute to the effective usage of natural resources. For more information on where waste may be dropped off for recycling, please contact the local city office, waste authority, approved WEEE scheme, or household waste disposal service.
*EEA: Norway, Iceland, and Liechtenstein

1.3 Product Disposal

Disposal of this product in an unlawful manner may have a negative impact on human health and the environment. When disposing of this product, therefore, be absolutely sure to follow the procedure which is in conformity with applicable local laws and regulations.

1.4 Usage Environment

When using the product, take the following precautions. Otherwise, problems may occur and the product may not function correctly.

- Do not install the equipment in any of the locations listed below. Doing so may result in failure or malfunction, equipment failing, fire or injury.
- Do not use close to facilities where water is being used.
- Do not use where it will be exposed to direct sunlight.
- Do not use close to the air outlet of an air-conditioner or ventilation equipment.
- Do not use near a electric heating appliance such as a heater.
- Do not use in a dusty environment.
- Do not use in a saline or sulfurous environment.
- Do not use where temperature or humidity is outside the recommendations in this manual.
- Do not use where there is freezing or condensation.
- Do not use in areas prone to vibration.
- Do not use on an incline or in an unstable area.
- This product may malfunction due to electromagnetic interference (EMI) caused by telecommunication devices, transceivers, electronic devices, etc. To prevent electromagnetic waves from badly influencing the product, be sure to avoid placing it in close proximity to the product. Change direction or position of the product or move to a shielded place to reduce electromagnetic interference.
- This equipment is not suitable for use in the presence of a flammable anesthetic mixture with air or with oxygen or nitrous oxide.
- Conductive fluids that drain into the active circuit components of the system may cause short circuits that can result in electrical fire. Therefore, do not place fluids or food on any part of the system.
- To avoid electric shocks and burns caused by use of the wrong type of fire extinguisher, make sure that the fire extinguisher at the site has been approved for use on electrical fires.

1.4.1 Temperature

- The product is not intended to supply heat to a patient.
- The temperature of contact area with a patient will not exceed 95°F (35°C) under the normal use conditions.
- Do not use the equipment beyond the range of recommended operating temperature.
- Be sure to monitor the internal temperature related to the patient contact area to avoid any adverse effect to the patient.

1.5 Handling

- Never disassemble or modify the equipment. Doing so may result in a fire or electric shock. Also, since the equipment incorporates parts that may cause an electric shock as well as other hazardous parts, touching them may cause death or serious injury.
- Do not connect any equipment which is not specified in this User Manual.
- Do not place anything on surface of the equipment. The object may fall and cause an injury. Also, if metal objects such as needles or clips fall into the equipment, or if liquid is spilled, it may result in a fire or electric shock.
- Do not hit or drop the equipment. It may be damaged if it receives a strong jolt. If the equipment is used without being repaired, it may result in a fire or electric shock.
- Do not place excessive weight on the detector. The internal image sensor may be damaged and it can affect image quality.
- Do not spill liquid or chemicals onto the detector. In cases where the patient is injured, protect the equipment with a disposable covering and do not allow contact with blood or other body fluids. Otherwise, it may result in a fire or electric shock.
- For safety reasons, be sure to turn OFF the power to the equipment when the inspections indicated in this manual are going to be performed.
- Do not submerge the detector in water.
- Be sure to use the detector on a flat surface so it will not bend. Otherwise, the internal image sensor may be damaged. Be sure to securely hold the detector while using it in upright positions. (Protectors are available if these views are required.)
- Should any of the following occur, immediately unplug the power cord, and contact Heska's Customer Support Services:
  - When there is smoke, an odd smell, or abnormal sound coming from the detector.
  - When liquid has penetrated into the equipment.
  - When a metal object has entered through an opening.
  - When the equipment has been dropped and damaged.

1.5.1 Left/Right Marker

- The operator is responsible for making a correct and clear mark on the left or right side of the image.
- The software includes a function to mark the image with L (left) or R (right) while acquiring the image.
- Prepare an alternative way to prevent any confusion if the operator does not choose to use L/R marks.

Before exposure

- Be sure to check the equipment daily and confirm that it works properly.
- To ensure best results, the detector should be powered on and warmed up for 15 minutes before exposure.
- Sudden heating of the room in cold areas will cause condensation to form on the equipment. In this case, wait until the condensation evaporates before performing an exposure. If the equipment is used while condensation is formed in it, problems may occur in the quality of captured images.
- When an air-conditioner is used, be sure to raise/lower the temperature gradually so that difference between the temperature in the room and in the equipment does not occur to prevent condensation.
- Once powered off, please wait at least 60s before powering on again.

During exposure

- Do not use the selected frequency channel (2.4 GHz and 5 GHz dual band) for other wireless devices. Mutual interference may affect the image data transmission rate.
- Do not use the detector near devices generating a strong magnetic field. Doing so may produce image noise or artifacts.
- Do not move Power Cable or Ethernet Cable during exposure to avoid image noise or artifacts.

After Usage

- After every examination, wipe the patient contact surfaces with a disinfectant, to prevent the risk of infection. For details on how to clean or disinfect the detector please refer to section 2.1.15.
- It's recommended to use a waterproof non-woven cover as the isolated layer between product and the bleeding patient.

1.5.2 Image Backup

To avoid missing images which might result in a patient being exposed to additional dose of radiation, it is important to send images to HeskaView Cloud or Alternative PACS, or backup images by using film or external storage media (CD, DVD, HDD, USB).

NOTE: The image backup should be done as a routine operation for every patient and image.

 CAUTION

To use products safely, make sure to check the products before use. If problems occur during inspection or if the product requires repair, contact Heska's Customer Support Services.

1.6 Maintenance and Inspection

- Do not use or store the equipment near flammable chemicals such as acetone, benzene, thinner, etc. If chemicals are spilled or evaporated, it may result in a fire or electric shock through contact with electric parts inside the equipment.
- If any flammable cleaning agent is used for the product, take proper precautions while using.
- When cleaning equipment, be sure to turn OFF the power and unplug the power cord from the AC outlet. Never use thinner, acetone, benzene or any other flammable cleaning agent. It may result in a fire or electric shock and will erode the equipment.
- Be sure that the equipment's surface & plugs are dry before turning on. Clean the power cord plug periodically by unplugging it from the AC outlet and removing dust or dirt from the plug, its periphery, and AC outlet with a dry cloth. If the cord is kept plugged in for a long time in a dusty, humid or sooty place, dust around the plug will attract moisture, causing potential insulation failure that could result in a fire.
- Be sure to turn OFF the power of the equipment while cleaning. Otherwise, a fire or electric shock may occur.

1.6.1 Daily Inspection

- Before or after using the detector and other surrounding devices, perform a daily check of the following:

Item	Description
Detector	• Ensure there are no loose screws or breaks. • Ensure there is no dust or foreign matter on the battery bay connector. • Ensure there are no breaks or short-circuits in the battery bay connector.
Cable	• Ensure cables are not damaged and cable jackets are not torn. • Ensure the power cord plugs are securely connected to both AC inlet and AC outlet of the equipment.

 CAUTION

Self-diagnosis and resolution can be conducted by a user or a service engineer. Sensitivity and calibration should be conducted by an authorized Heska service engineer.

1.6.2 Cleaning and Disinfection

After using the detector and peripheral equipment for examination, use germicidal disinfecting wipes or cloth with mild diluted disinfectant detergent to clean surfaces of the product.
Recommended disinfectant wipes:

- Super Sani-cloth® Plus Wipes by PDI
- Sani-cloth® Active Wipes Multi-Surface (Alcohol Free/Sans alcohol) by PDI
- Sani-cloth® CHG 2% by PDI
- CaviWipes® by Kerr Total Care
- Sporicidal Wipes by Clinell
- Universal Wipes by Clinell

Recommended disinfectant product:

- Sulfa'safe by Anios: Storage temp. 95°F (35°C)

How to use detergent foam:

1. Prepare the disinfectant detergent and a clean, dry, non-woven cloth.
2. Use a spray bottle to spray detergent on cloth and clean the equipment.
3. After detector has been cleaned, leave the equipment unused for 15 minutes.
4. Clean once a week or in case of contamination.

CAUTION

- Do not re-use wipes.
- Be careful using disinfectant detergent which can cause irritation to eyes and skin.
- Use in well-ventilated areas, and wear gloves at all times.
- Do not clean the equipment when powered on.
- Do not use abrasive brush or scraper to clean the product.
- Be careful not to soak the battery bay and/or the connector on the side of products while cleaning.

IMPORTANT

Other disinfectant detergents that are compliant to the conditions listed below may be used if proper procedures are followed according to usage manual:

- European biocidal products designed for surface disinfection (Directive 98/8/EC).
- Detergent with composition of didecyldimethylammonium chloride, polyhexamethylene biguamide hydrochloride.

CAUTION

- Skin and eyes can be irritated if contacting the cleaning solution.
- Use the cleaning solution while wearing gloves in a well ventilated area.
- Do not clean the equipment while powered on.

1.7 Calibration

- To ensure optimal system performance it is important to verify that the system is calibrated correctly.
- Check to see that calibration has been performed after the equipment is installed or repaired.
- Do not use system if the calibration has not been performed.
- If it is difficult to perform the calibration directly; contact Heska's Customer Support Services.

- **NOTE:** The environment may affect calibration and therefore results. If the result performed with the calibration data in the detector is not satisfactory, data may be created by using proper calibration setup. Contact Heska's Customer Support Services for assistance.

1.7.1 Performance Inspection

Check the detector and other devices periodically as follows:

Item		Description
Self-Diagnosis	Yearly	• Check the resolution of the detector through resolution chart or using a phantom.
Calibration	Yearly	• Updating calibration data. (Offset Gain Defect) • Calibrate when x-ray generator, tube, collimator or exposure environment changes.

The CuattroDR HD Wireless 1717 Detector is a cassette-size wireless X-ray flat panel detector based on amorphous flexible silicon thin-film transistor technologies. It is developed to provide the good quality of radiographic image, which contains an active matrix of 4267 ×4267 with 100 µm pixel pitch. The scintillator of CuattroDR HD Wireless 1717 Detector is CsI (Caesium Iodide) which is direct deposit. Since CuattroDR HD Wireless 1717 Detector supports multiple trigger modes, it can satisfy both of the general DR system and retrofit DR system.

2.1 Essential Performance

Image Acquisition and data transmission.
NOTE: To maintain proper data transmission function, the CuattroDR HD 1717 should not be influenced by outside data and signal transmissions.

Obtaining a dark field (calibration) image.
NOTE: It is important that the CuattroDR HD 1717 shall not be influenced by an any outside x-ray image acquisition when capturing a dark field calibration.

2.2 Application Specification

Animal application.

Intended operator:
All use, maintenance and operation steps should be carried out by the operator who has accepted the professional training offered by the company's customer service staff.

2.3 The Relative Position Between Animal and Detector

Because of the crosstalk effect of amorphous silicon flat-panel detector, pay attention to the relative position of animal and detector, otherwise, the image is prone to abnormal light lines.

2.4 Product Components

The product is configured with the following components:

Item	Quantity
CuattroDR HD Wireless 1717 Detector	1
AC power cable	2
Battery pack	2
Gigabit USB-C to Ethernet cable	1
Battery charger	1
CD ROM	1
DC power cable	1
Adapter	1

2.4.1 Detector

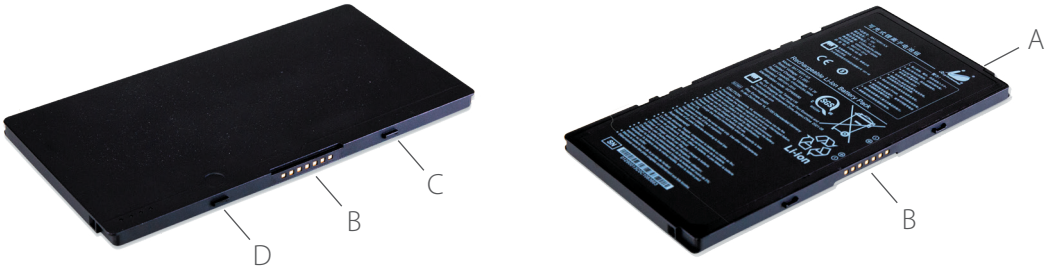
Detector

Indicator

External signals input and control panel

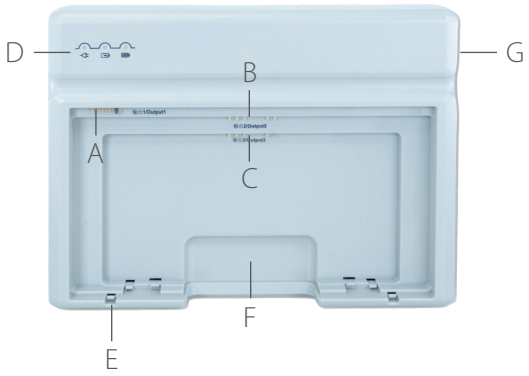
No.	Item	Description
A	Mode indicator	Detector mode/error
B	Status indicator	Detector link status
C	Link indicator	Detector network connection indicator
D	Power indicator	Detector power/battery level indicator
E	Power button	Power button
F	DC Input interface	24 V DC input
G	Multi-function button	Change detector functions

2.4.2 Battery



No.	Item	Description
A	Battery label	—
B	Battery interface	7 pin battery connector
C	Guide block	—
D	Touch display	Show battery level after touching

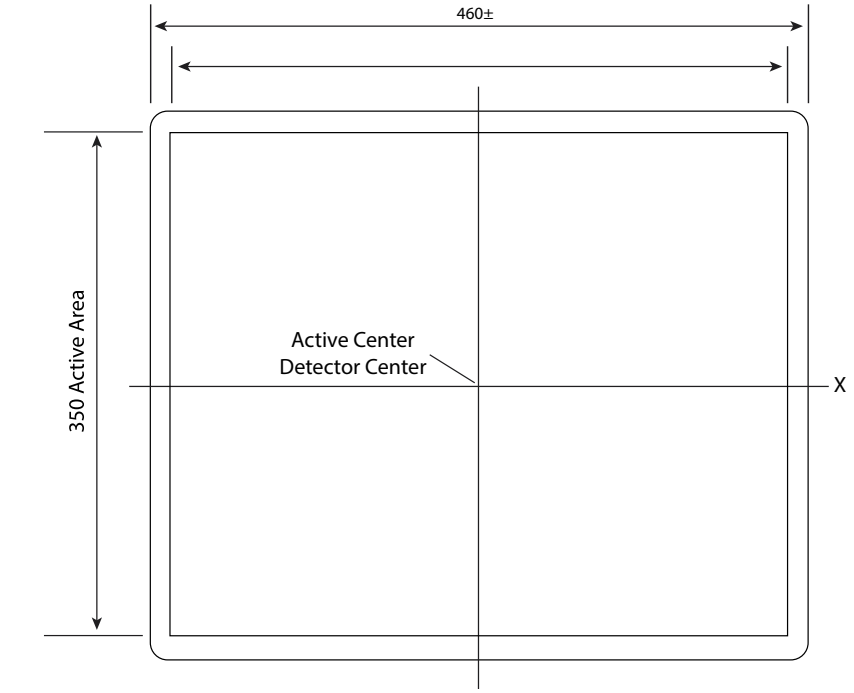
2.4.3 Battery Charger

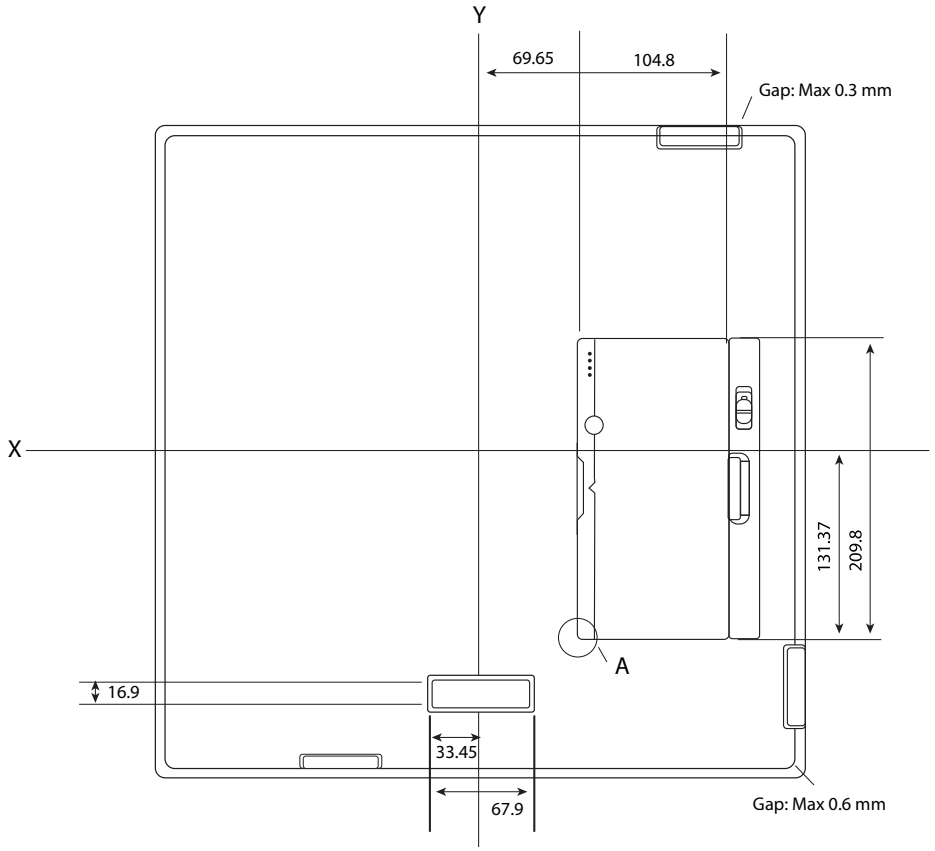


No.	Item	Description
A	Battery interface A	8 pin battery connector
B	Battery interface B	5 pin battery connector
C	Battery interface C	5 pin battery connector
D	Indicator	The indicator definition is a follows
E	The limit ball plug	—
F	Hand pull position	—
G	AC jack	220 V AC input

2.5 Product Specifications

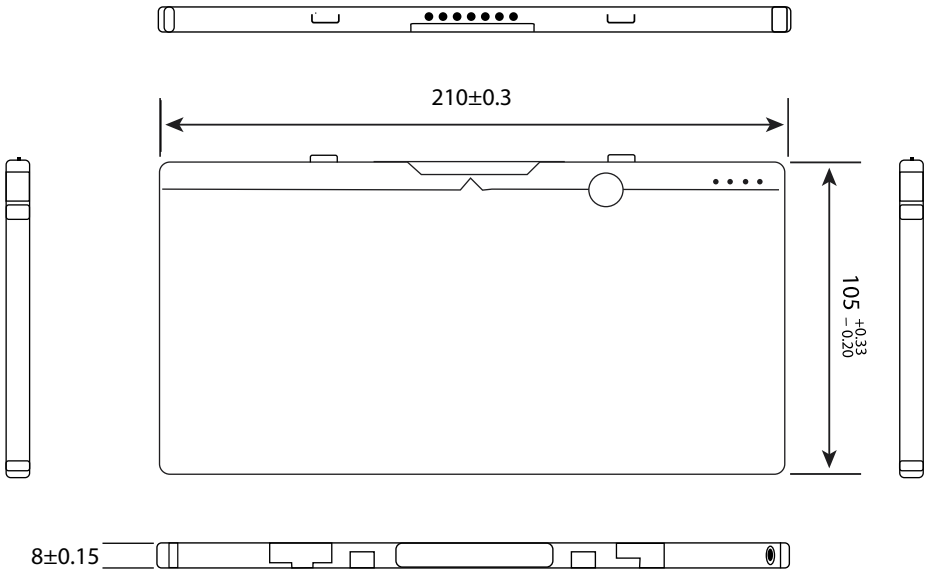
2.5.1 Detector





Item	Specification
Model	CuattroDR HD 1717
Image Sensor	a-Si (Amorphous Silicon) TFT
Scintillator	CsI
Pixel Size	100 µm
Fill Factor	60%
Effective Array	4267 x 4267 px
Effective Area (H x V)	17 in x 17 in (426.7 mm x 426.7 mm)
Spatial Resolution	4.3 lp/mm
Image Transfer	WIFI
Full Image Time	<5 s
Cycle Time	6 seconds
Power Consumption	20 W Max with no battery charging
Dimension (L × W × H)	17 in x 17 in x .59 in @ typ. (460 mm x 460 mm x 15 mm @ typ.)
Weight	7.72 lbs (3.5 kg) with battery
Image Transfer	Wireless : IEEE802.11 a/b/g/n/ac
Wireless Frequency Range	2.412~2.472GHz, 5.18~5.22GHz; 5.745~5.85GHz
Trigger Mode	Software/AED
Data Transmission Power	13dBm (Typ.) @ 802.11a 16dBm (Typ.) @ 802.11b 14dBm (Typ.) @ 802.11g 13dBm (Typ.) @ 802.11n HT20 11dBm (Typ.) @ 802.11n HT40 16dBm @ 2.4 GHz 13dBm @ 5 GHz
Wireless Modulation	802.11b: CCK, DQPSK, DBPSK 802.11a/g/n: 64QAM, 16QAM, QPSK, BPSK 802.11ac: 256QAM, 64QAM, 16QAM, QPSK, BPSK
Wireless Band	2.4GHz≤40MHz 5.19GHz≤40MHz 5.8GHz≤40MHz
X-ray Energy	40–150 kV
Panel protection	IP56
Trigger Mode	Software/AED
SID	90–180 cm

2.5.2 Battery

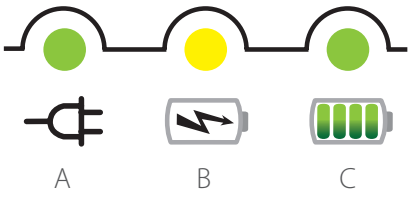


Item	Specifications
Model	Battery–KX
Rated Capacity	Min. 4700 mAh, Typ. 4900 mAh @ Discharge 0.2C
Nominal Voltage	11.55 V
Charge Voltage	13.2 V
Discharged End Voltage	9 V
Charging Method	CC–CV
Operating Temperature	Charge 32°F–140°F, Discharge 14°F–140°F (Charge 0°C–60°C, Discharge -10°C–60°C)
Storage Temperature	1 month -4°F–122°F (-20°C–50°C) 3 month -4°F–122°F (-20°C–45°C) 6 month -4°F–95°F (-20°C–35°C)
Relative Humidity	5%–95%
Dimension (L × W × H)	8.26 x 4.13 x .32 in (210 x 105 x 8 mm)
Weight	.63 lb (0.285 kg)

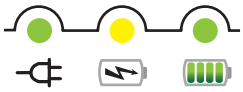
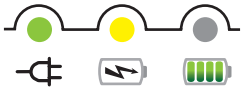
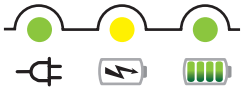
2.5.3 Battery Charger

Item	Specifications
Model	Charger-combo
Simultaneous Charging	1 battery pack
Full charging time	≤4 hours
Rated power supply	90 V–264 V (AC)
Dimension (L × W × H)	9.46 in x 7.25 in x 1.63 in (240.4 mm x 184.4 mm x 41.5 mm)
Weight	2.2 lbs (0.55 kg)

The battery charger indicator definition:



Item	Name
A	Power indicator
B	Charging indicator
C	Charge full indicator

Item	Lighting Status	Operating Status
All off		No power input
A indicator on		• AC power input • Multiple batteries inserted
A indicator on B and C alternately blink 2 times		Battery insertion self-test
A and B indicator on		Battery charging
A and C indicator on		Battery capacity full, charging stops
A indicator on B and C alternately blinking		Battery charging abnormal
Two or more batteries charging at the same time is prohibited. If inserted simultaneously, the charger will automatically stop working.		

2.6 Environment

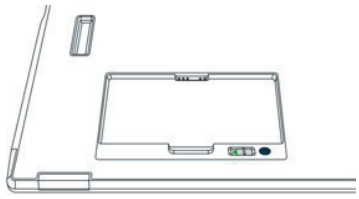
	Temperature	Temperature Variation	Humidity	Atmospheric Pressure	Atmospheric Pressure Variation
Operating	50°F–95°F (10–35°C)	<1 k/min	5%–90% RH	700–1060 hPa	<10 kp/min (1kp=1.0197E–5Pa)
Storage (without battery)	-4°F–131°F (-20–55°C)	<1 k/min	5%–95% RH	600–1060 hPa	<10 kp/min (1kp=1.0197E–5Pa)

3.1 Preparation

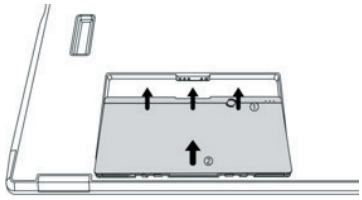
3.1.1 Attach Battery

The product can be powered by both a battery pack and DC power. Once the battery pack is inserted or DC power is connected, detectors will be turned on immediately. If neither battery nor DC power is connected, panel will power off. Please see below for battery installation.

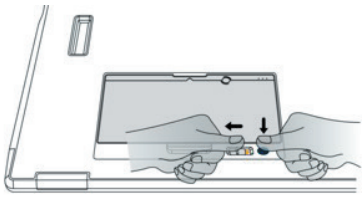
1. Ensure that the battery pack connectors are pointed to the opening in the battery compartment. The battery lock lever will be in the green unlocked position.



2. Slide battery package into battery compartment
   NOTE: Make sure battery capacity is above 15%.



3. Slide the battery lock lever to the red locked position.



3.1.2 Adapter

Detector supports an external adapter powered, It gets CB certificate No. SG PSB–MD–00005 and NRTL certificate No. U8V 093768 0016. The ports are defined as below:

No.	Definition	Voltage Range	Rated Current
P1	DC power negative	0~0.5 V	0~0.42 A
P2	DC power positive	23~25 V	0~0.42 A
P3	DC power positive	23~25 V	0~0.42 A
P4	DC power negative	0~0.5 V	0~0.42 A

In order to meet the safety and function requirements of the detector, standard components are recommended.

AC Adapter

3.2 Routine Operation

3.2.1 Starting Up

On the control panel, users can press the power button to turn on.

1. When the detector is powered down, the user presses the button for 4 seconds to turn on the detector if the battery is inserted and the capacity is not less than 7%, or DC power is connected.
   After booting up, users can check the indicator of the detector.

Power Indicator Table

		Status		
LED Indicator	Light Status	Battery Capacity	DC Input	Description
Off		N/A	N/A	Detector is off
Green on		N/A	Yes	Detector is on
Orange blinking		≥7% & <15%	No	Detector is on
Green blinking		≥15% & <95%	Yes	Detector is on
Green and orange blinking		<95%	Yes	Detector is off

Link Indicator Table

LED Indicator	Light Status	Description
Off		Detector is turned off Wired connection not established and wireless connection not ready
Blue blinking		Entering station mode (Wireless mode change state)
Blue on		Station mode wireless connected
Green on		Access point wireless connected Wired connection (Service mode)
Green blinking		Entering station mode (Wireless mode change state)

Mode Indicator Table

LED Indicator	Light Status	Description
On		Client connection is built
On		Client connection is built
Off		Detector is off Client connection is not built

Status Indicator Table

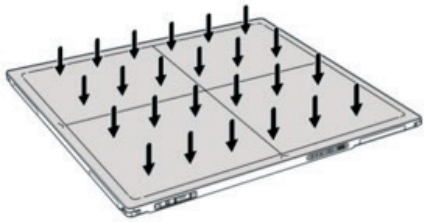
LED Indicator	Light Status	Description
Off		Detector is off
Green on		Exposure is allowed
Green blinking		Wireless Mode Change State
Orange on		Error

 CAUTION

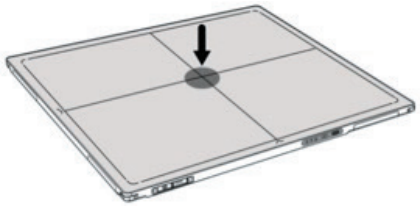
For safety reasons, be sure to turn OFF the power to each piece of equipment when performing inspections indicated in this manual. Otherwise, electric shocks may occur.

3.3.2 Load Limits

Uniform load: 661.6 lbs (300 kg) over the whole area of the surface.



Local load: 253.5 lbs (150 kg) on an area 1.6 in (4 cm) diameter



3.2.3 After Use

1. Disconnect the software
2. Power off
3. Keep it clean
4. Store under specified conditions

3.3 Changing Wireless Modes

1. Press and hold the Multi-function button for more than 7 seconds.

2. The status indicator will start slowly blinking "Green".

3. The user will have 5 seconds to short-press the multi-purpose button and change the wireless mode of the detector.

   Once the mode button is pressed the Link Indicator will start blinking to indicate which mode the detector is entering.

LED Indicator	Light Status	Description
Blue blinking		Entering Station Mode
Green blinking		Entering Access Point Mode

4. After 5 seconds of inactivity the panel will switch to the selected wireless mode and the status indicator will return to its normal state. Note: The Link indicator will blink rapidly for 5 seconds (in the color of the selected mode) while the mode settings are changed.

5. The Link indicator will display its normal selected mode:
   - Solid Blue Link Indicator = Wireless Station Mode
   - Solid Green Link Indicator = Wired Connection or Wireless Access Point Mode

3.3.1 Switching from Wired to Wireless Modes

When used in the following environments, the CuattroDR HD 1417 will automatically detect if the network link cable is disconnected. It will then connect the detector to the appropriate wireless network, seamlessly. Also, once connection to the network link cable is re-established the detector will use the (preferred) wired connection.

Small Animal Multi-bucky Configuration

In this configuration, the detector would connect to a fixed Small Animal DR Acquisition Station, utilizing the wired power cable (for use inside the table bucky). Then when needed, the power cable can be unplugged and the detector will be battery powered providing mobility of the detector, for use inside additional bucky's, or in Table Top mode.

NOTE: This configuration requires the proper installation and configuration of an "Heska Approved Wireless Router". Please contact Heska's Customer Support Services or a sales representative for more information about this configuration.

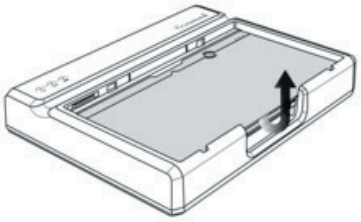
Mixed Practice Configuration

In this configuration, the detector would connect to a fixed Small Animal DR Acquisition Station, utilizing the wired network link cable and power cable. Then when needed, the network link cable and power cable may be unplugged and the detector will connect to a portable Large Animal DR Acquisition Station utilizing Wireless Access Point Mode.

NOTE: This configuration may require installation and configuration of an "Heska Approved Wireless Router." Please contact Heska's Customer Support Services or a sales representative for more information about this configuration

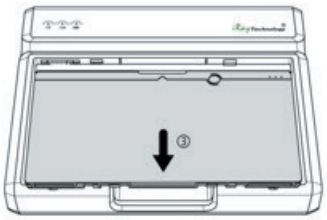
3.4 Battery Charger Operation

1. Unload Battery from battery charger.



2. Insert battery into battery charger.
   Note the interface position in the figure to the right.

3. Press the battery to the bottom of battery compartment.



4.1 Regulatory Information

4.1.1 FCC Compliance

The panel has been tested to comply with limits for a Class B digital device, pursuant to part 15 of FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation.

The panel generates, uses, and radiates radio frequency energy and, if not installed and used in accordance with the instruction, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If the panel does cause harmful interference to radio or television reception, which can be determined by turning the panel off and on, the user is encouraged to correct the interference by one or more of the following measures.

- Reorient or relocate the antenna.
- Increase the separation between the panel and receiver.
- Connect the panel into an outlet different from the receiver is connected.
- Consult the distributor or an experienced radio/TV technician for help.

Operation is subject to the following two conditions.

1. The panel may not cause harmful interference.
2. The panel must accept any interference received, including interference that may cause undesired operation.

This device complies with FCC SAR exposure limits set forth for an uncontrolled environment. The equipment can be used in close proximity to the human body without any restrictions.

NOTE: The grantee is not responsible for any changes or modifications not expressly approved by the party responsible for compliance. Such modifications could void the user's authority to operate the equipment.

4.1.2 Battery Safety Standards

Standards	Description
IEC 62133-2:2017	Secondary cells and batteries containing alkaline or other non-acid electrolytes - Safety requirements for portable sealed secondary lithium cells, and for batteries made from them, for use in portable applications - Part 2: Lithium systems
UN38.3	United Nations Recommendations on the Transport of dangerous goods Manual of tests and Criteria ST/SG/AC.10/11/Rev.6/Amend.1&Amend.1