

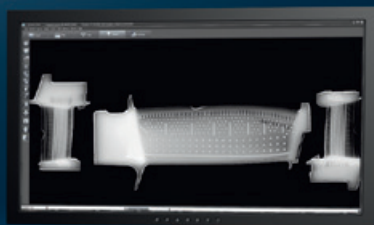
scan►X

MANUAL

EN



Ellipse



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Important information

1. General

1.1 Note on conformity

This equipment has undergone a test of conformity as prescribed under the relevant European Union directive. This equipment conforms to all requirements.

ETL approval

This Class A digital apparatus complies with Canadian ICES-003. 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 these 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.

FDA-Registration

Complies with FDA performance standards for laser products except for deviations pursuant to Laser Notice No. 50, date (June, 2007).

Classification:

Appliance class I, no application parts, transportable continuous operation. This appliance is not designed for use in areas where flammable anesthetic materials are present.

1.2 General Notes

- The Installation and Operating Instructions constitute part of the appliance. They must be made available to the operator. Correct observance of the Installation and Operating Instructions is a basic requirement for using the appliance properly and safely, and new personnel must be instructed accordingly. These Installation and Operating Instructions must be handed over to any subsequent owner or operator of this appliance.
- The safety of the operator and trouble-free operation of the appliance can only be ensured where original engineering manufactured parts are used. Furthermore, only the accessories described in the installation and operating instructions or approved by ALLPRO NDT for use with this appliance may be used. If accessories are used manufactured by third parties, then ALLPRO NDT can no longer provide any guarantee for safe operation or correction functioning. No liability on the part of the manufacture will be accepted in the case that damage arises through the use of non-approved accessories.
- ALLPRO NDT cannot be held responsible for the appliance with regard to safety, reliability and function where installation, reset, alterations, extension or repairs were not carried out either by or for ALLPRO NDT or by a third party specifically approved by ALLPRO NDT, or if the appliance is not used and operated according to the instructions laid down in the Installation and Operating Instructions.
- These Installation and Operating Instructions accord with the features of the appliance and the level of engineering at the time of first introduction of the model. All circuits, processes, names, software and appliances quoted are protected under industrial property rights.
- This translation of the Installation and Operating Instructions has been carried out in good faith. Liability for incorrect translation will not be accepted. The accompanying German version of these Installation and Operating Instructions are to be used as reference; if you have any doubt as to the correct interpretation of the instructions, please consult your dealer.

- Any reproduction of these Installation and Operating Instructions, or parts thereof, in any medium whatsoever including electronic is only permitted with the prior written approval of ALLPRO NDT.
- Keep original packing for possible return of the appliance to the supplier. **Ensure that the packaging is stored away from children.** Only the original packing ensures optimum protection for the appliance during transport. If a return is required during the warranty period, ALLPRO NDT cannot be held liable for damages during transport that have been caused by inadequate packaging!

1.3 Disposal of appliance

Device

EU Directive(s) 2002/96/EG - WEEE (Waste Electric and Electronic Equipment) of 27th January 2003 and their current application in national law states that products covered by the above directive within the European Union must be disposed of as special waste.

For further questions about the proper disposal of the products, please contact ALLPRO NDT or the specialised trade.

Cassettes and image plates

The image plate contains barium compounds.

- Dispose of the image plate properly in accordance with the locally applicable regulations.
- In Europe, dispose of the image plate in accordance with waste code 090199 "wastes not otherwise specified". Disposal as domestic waste is not possible.

1.4 Correct Usage

- The system is intended exclusively for visual scanning and processing of image data on an image plate under industrial conditions.
- The device is only to be used in enclosed, dry rooms.
- Correct usage of the appliance also involves observing the Installation and Operating Instructions and adhering to the instructions concerning set-up, operating and maintenance.
- Any usage which is not in accordance with the correct usage above will lead to the guarantees and warranties becoming null and void.
- The operator is liable for any damage arising through incorrect usage.
- Correct usage includes compliance with all legal provisions applicable at the place of use with regard work and radiation protection.
- The scanner may only be operated in combination with cassettes from ALLPRO NDT.

1.5 Incorrect Usage

The system is not intended for optical scanning of image plates in human and veterinary medicine.

Any use of the appliance above and beyond that laid down here is considered to be improper use of the equipment. Any resulting damage thus caused is the sole liability of the user. The manufacturer cannot be held responsible for damage caused by improper use.

Cassettes from third-party manufacturers are not compatible with the system and could damage the appliance.



This appliance must not be used in operating theatres or similar types of room, where there is a risk of inflammable materials catching fire.

1.6 Using Peripheral Devices



Only peripheral devices (computers, monitors, printers) conforming to standard IEC 60950-1 (EN 60950-1) may be connected to the appliance.

- Appliances may only be connected together or connected to other system parts where the safety of operators and also the environment is ensured.

Where there is any element of doubt concerning the safety of connected equipment, the user must contact the manufacturers concerned or ask an expert to determine that the level of safety required for the operator and the environment is not impaired by the intended coupling.

1.7 Use of cassettes

Other cassettes are not compatible with the system and could damage the appliance.

1.8 Use of software

An X-ray software approved by ALLPRO NDT must be used, such as e.g. ScanX View. The use of third party software requires the express approval of ALLPRO NDT. For further information refer to our internet site at www.allpro-ndt.com.



See "System requirements for computer systems in combination with Dürr NDT - CR Systems", Order No. 9000-608-02/01 or on the Internet.

1.9 Guarantee

Content

The guarantee granted herein applies only to image plates mounted included in image plate cassettes for scanner family "ScanX Ellipse". The guarantee is granted with regard to damage-free transport of the image plate in the scanner and the respective image plate cassette. This means that we guarantee that the image plate will not show any scratches or other mechanical damage on the optical side of the image plate within the Duration as specified below.

Duration

The guarantee is granted for a period of two years as of the date of purchase or for 25,000 scan cycles, whatever comes first. Proof needs to be submitted in the form of a copy of the purchase invoice or other appropriate documents or through the RFID chip included in the image plate cassette.

Exclusions

Excluded from guarantee are image plate cassettes of third-party manufacturers, image plate cassettes which have had their RFID chip manipulated and image plate cassettes which have been subjected to temperatures that could affect the functionality outside the intended usage or mechanical damage that could affect functionality or that have their safe functionality affected in any way. This guarantee also does not cover cases of scanner defects caused by insufficient maintenance or other external factors of any kind. In addition, the guarantee does not apply in cases of wear and tear or malfunctioning caused by increased X-ray or gamma radiation.

Rights

In case of breach of the above-defined guarantee, the client has the right to demand delivery of a new image plate cassette. All other rights are excluded, in particular the right to request damages.

Applicable law

This guarantee is governed by German law.

2. Safety

2.1 General notes on safety

The appliance has been developed and designed in such a way that dangers are effectively ruled out if operated in accordance with the intended use. However, we feel it is important to describe the following safety measures in order to remove any likelihood of danger.

- When operating this appliance, all local and national rules and regulations must be observed!
This appliance must not be converted or altered in any way. ALLPRO NDT accepts no liability claims where an appliance has been converted or altered in any way. In the interests of safe usage of the appliance, both operator and owner are responsible for seeing that all relevant regulations and provisions are observed.
- Opening an appliance while connected to the main electrical supply results in danger from Class 3B laser radiation.
- Installation must be carried out by a specialist authorised by the manufacturer.
- The operator must carefully check the appliance for safety of function and proper working condition before every use.
- The operator must be trained in the correct operation of the appliance.

2.2 Electrical safety instructions

- The appliance may only be connected to a correctly installed electrical socket.
- Connection to a multi-socket power strip is not permitted.
- Before connecting to the electricity supply, the appliance must be inspected and checked to ensure that the supply voltage and the supply frequency correspond to that of the local electrical supply.
- Before initial use and start-up, the appliance and all power supply cables must be checked for any signs of damage. Damaged cables and connections must be replaced immediately.
- Never touch persons and open connectors of the appliance simultaneously.
- When using the appliance, observe all the relevant electrical safety procedures.



Before opening the device, unplug at the mains and remove all power!

3. Warnings and Symbols

In the operating instructions, the following warnings and symbols have been used:



Information including preventative measures to protect injury to persons or damage.



Special information regarding the economical use of the equipment and other information



Unplug at the mains and remove all power



Warning: Laser



Warning: Dangerous voltage



Do not push the appliance.



Do not sit on the appliance.



Do not enter the appliance.



ON/OFF button



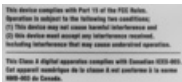
Ready for operation



Data transmission



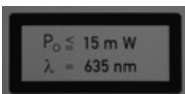
Fault



FCC-Approval



Warning: Laser



Notes on laser source



Laser class 1

3.1 Model identification plate

The model identification plate is located on the rear side of the scanner. The following designations or signs exist on the model identification plate:



Caution, observe accompanying documentation



Warning: Dangerous voltage



Date of manufacture



Observe accompanying documentation



Manufacturer



Dispose of properly in accordance with EU Directive (2002/96/EU - WEEE)

IP20 Type of protection

NEMA 1 Type of protection

REF Order number

SN Serial number



CE label without notified body number



ETL-Certification
CONFORMS TO UL STD 61010-1
CERTIFIED TO CAN/CSA STD C22.2 NO 61010-1
NO 61010-1
Complies with 21 CFR 1040.10 & IEC 60825-1



4. Delivery contents

Please compare the completeness of the delivery with the purchase order.

EN

ScanX Ellipse F2010 (2133-41AT)

ScanX Ellipse	2133-000-54AT
Network cable RJ45 (3 m).	419342
Installation and Operating Instructions.	F2011 (9000-608-134/..)

Country-specific:	
Main Power line cable (EUR)	9000-118-17
Main Power line cable (CH)	9000-119-002
Main Power line cable (DK)	9000-119-041
Main Power line cable (GB)	9000-118-59
Main Power line cable (AUS)	9000-119-037
Main Power line cable (IT)	23171 (9000-119-036)
Main Power line cable (US, CA, MX, AU, NZ, JP, TW)	77243 (9000-119-039)

4.1 Consumables

ALLPRO PSP wipes (50 pcs.)	B8910
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4.2 Special accessories

The parts listed in the following are **not** included in the scope of delivery.
Please order as required.

Cassettes 18x24 (10x12 inch)

General Purpose (G CR / GDP), High Resolution (H CR / HDP) or Extra Definition (X HD / XDP)

Order number Dürr NDT	Order number ALLPRO NDT	Designation	Copper thickness (mm)
2133-010-70	F2476	Dürr NDT G CR Cassette 18x24 cm	0,1
2133-010-71	F2470	Dürr NDT H CR Cassette 18x24 cm	0,1
2133-010-72	F2473	Dürr NDT X HD Cassette 18x24 cm	0,1

Cassettes 24x30 (8x10 inch)

General Purpose (G CR / GDP), High Resolution (H CR / HDP) or Extra Definition (X HD / XDP)

Order number Dürr NDT	Order number ALLPRO NDT	Designation	Copper thickness (mm)
2133-020-70	F2477	Dürr NDT G CR Cassette 24x30 cm	0,1
2133-020-71	F2471	Dürr NDT H CR Cassette 24x30 cm	0,1
2133-020-72	F2474	Dürr NDT X HD Cassette 24x30 cm	0,1

Cassettes 35x43 (14x17 inch)

General Purpose (G CR / GDP), High Resolution (H CR / HDP) or Extra Definition (X HD / XDP)

Order number Dürr NDT	Order number ALLPRO NDT	Designation	Copper thickness (mm)
2133-040-70	F2478	Dürr NDT G CR Cassette 35x43 cm	0,1
2133-040-71	F2472	Dürr NDT H CR Cassette 35x43 cm	0,1
2133-040-72	F2475	Dürr NDT X HD Cassette 35x43 cm	0,1

5. System requirements

For the operation of the scanner, the following components and requirements are necessary.

5.1 Monitor



The monitor does not form part of the scope of supply of the scanner.

Only monitors designed for digital x-ray with superior light intensity and broader contrast which conform to standard EN 25580 should be used. Bright room lighting, direct sunlight and even reflected light will reduce the diagnostic usefulness of the x-rays.

5.2. Minimum system requirements



See enclosed information sheet, order number 9000-608-02

6. Technical data

6.1 ScanX Ellipse

Electrical Rated connection data

Voltage (Vac)	100 - 240
Frequency (Hz)	50 - 60
Current consumption (A)	2.5 - 1.0
Output (VA)	250
Type of protection	IP20
Type of protection	NEMA 1
Protection class	1
Transient surge voltage category	II

Data connections

Network	LAN 100 Base T
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Weight

ScanX Ellipse	
(kg / lbs)	ca. 55 / ca. 121.25

Dimensions

(H/D/W in mm)	1130 x 440 x 400
(H/D/W in)	44.49 x 17.32 x 15.15

Ambient conditions for storage and transport

Temperature (°C)	-20 to +60
Temperature (°F)	-4 to +140
Relative humidity (%)	10 - 80

Ambient conditions for operation

Temperature (°C)	+10 to +35
Temperature (°F)	+50 to +95
Relative humidity (%)	20 - 80

Atmospheric pressure for operation and storage

Appliance in operation (hPa)	750 - 1060
Sea level (m)	<2000
Sea level (foot)	<6 561,67
Storage and transport (hPa)	750 - 1060
Sea level (m)	16000
Sea level (foot)	52 493.43

General values

Laser protection class

external 1 (EN60825-1)

Laser protection class

internal 3b (EN60825-1)



Wavelength λ 635 nm 15mW

EN 60825-1:2006-04 +

A1:2002-07+A2:2001-03

Heat output (W)250

Sound level

Stand-by (db(A)) approx. 42

During readout (db(A)) approx. 45

Pixel size

ScanX Ellipse

can be selected in a range from 12.5 μ m to

250 μ m

Resolution based on the image plate, theoretically up to max. approx. 40 line pairs/mm (LP/mm)

Conformity Acceptance Procedure

06/95/EC (Low Voltage Directive)

04/108/EC (EMC Directive)

Manufacturer

DÜRR NDT GmbH & Co. KG

Höpfigheimer Straße 22

74321 Bietigheim-Bissingen, Germany

Tel: +49 7142 99381-0

Fax: +49 7142 99381-299

info@duerr-ndt.de

www.duerr-ndt.de

Distributor

Air Techniques, Inc

Allpro NDT

1295 Walt Whitman Road

NY 11747 Melville

USA

mail@allpro-ndt.com

www.allpro-ndt.com

6.2 Cassettes with integrated image plates

Storage and transport

Temperature (°C)<33

Temperature (°F)<93.2

Relative humidity (%)<80

Use

Temperature (°C) 18 - 45

Temperature (°F)59 to 93.2

Relative humidity (%)<80

No. of cycles

Cycles/cassette 25,000

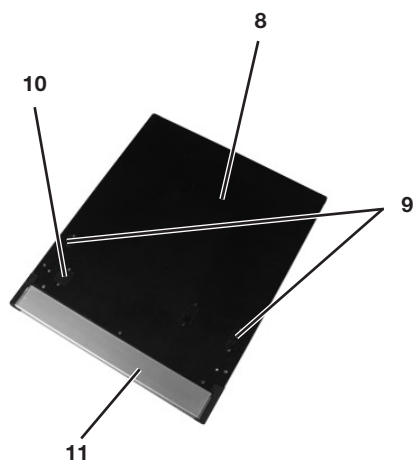
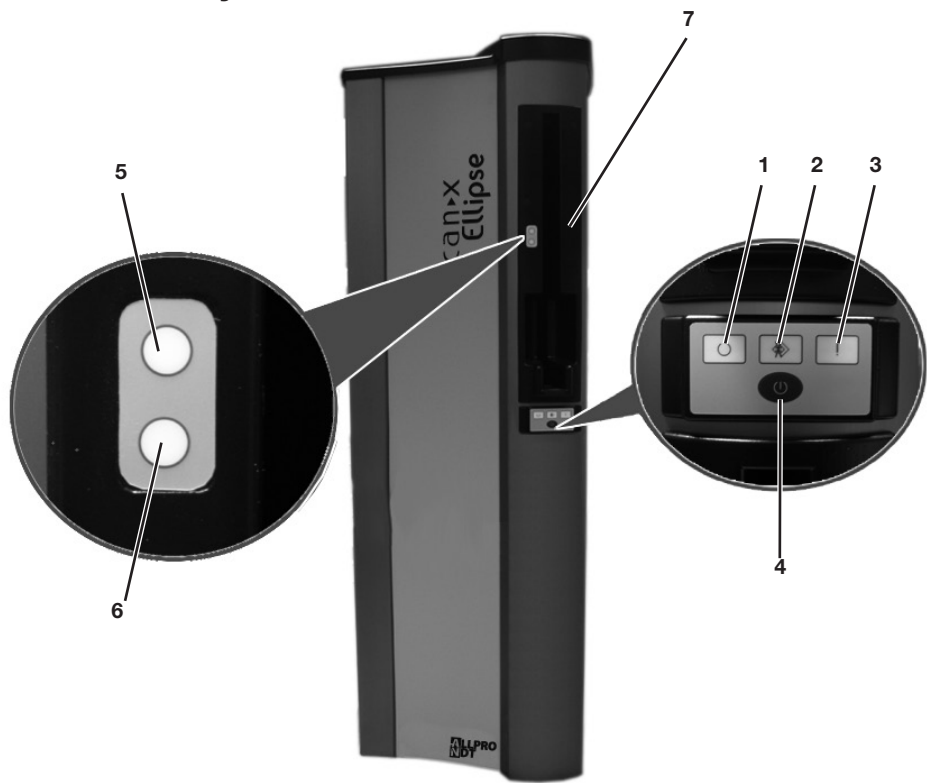


A warning message is displayed after the 25,000 cycles. The cassette can continue to be used.

After 27,500 cycles, the cassette must be replaced in order to avoid incorrect diagnoses or defects.

7. Functional layout

EN



7.1 Function of individual components

1 LED white

The appliance is ready for operation.

2 LED blue

LED out: Communication to PC established

LED lit: Communication to PC interrupted.

3 LED red

LED lit: Error

Device fault: Urgent need for action by the operator

- Switch off the ScanX Ellipse for approx. 10 seconds.
- Restart the ScanX Ellipse.
- If the ScanX Ellipse does not start, inform the service technician.



For further information refer to the Troubleshooting section.

4 ON/OFF button

Press the button to switch ON and OFF.

5 LED yellow

Lights up during processing of a cassette.

6 LED green

Lights up when the cassette slide is ready.

Flashes when the process has been completed.

7 Cassette slide

The cassette is inserted into the appliance via the cassette slide.

8 Cassette

The cassette contains the image plate and prevents the deletion of image data by foreign light and protects the image plate from mechanical damages.

9 Cassette lock

The cassette is locked via the recesses during removal of the image plate.

10 Transponder

Information such as cassette size and serial number of the cassette is stored on the transponder and is read out when the cassette is inserted.

11 Opening

The integrated image plate is taken out of the cassette via the cassette opening for scanning.

8. Functional description

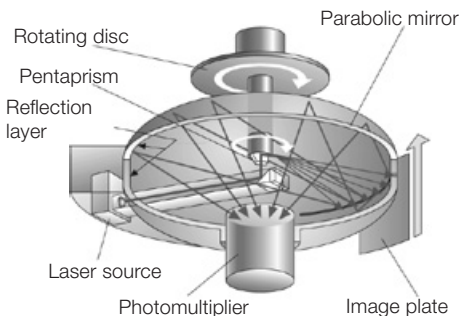
ScanX Ellipse converts the image data on the image plate into a digital image.

EN X-rays

The cassette with the integral image plate is placed into the X-ray appliance and exposed.

Scanning the image data

The ScanX Ellipse is switched on by pressing the ON/OFF button. The scan mode is then activated (via the interfaced PC and the software). The cassette with the exposed image plate is then pushed into the cassette slide as far as possible. The cassette is automatically drawn in and locked. In the cassette is a transponder that transmits the identification data of the cassette to the scanner when the cassette is pushed in. This ensures that the scanned image is identified with the correct information. The image plate is drawn automatically onto the scanner slide by the transport mechanism. The scanner slide with the image plate moves past the scanner unit where the image data are scanned. The status of the image scanning is displayed in a window on the monitor of the interfaced PC. After scanning, the image plate passes through the erasure unit. There the image plate is erased. The image plate is then pushed back automatically into the cassette by the transport mechanism.





Mounting



Only qualified specialists or persons trained by ALLPRO NDT may install, connect and commission the appliance.

EN

9. Transport and packaging

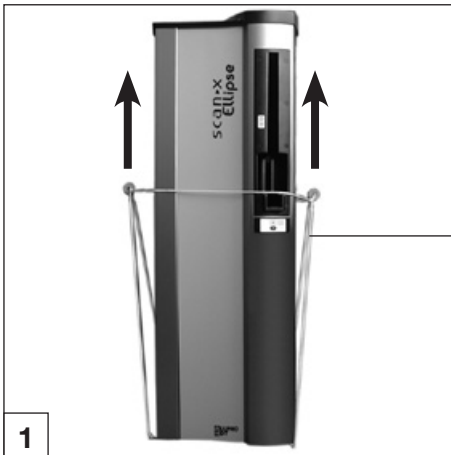
- Transport the appliance only in the original packaging.
- Check that the delivery contents are complete and check for any signs of transport damage.
- Carefully remove the packaging. Do not use a knife in order to avoid damaging the surface and other delicate parts of the appliance.
- Do not expose the ScanX Ellipse to severe vibrations during transport as delicate components in the appliance could be damaged.

10. Carrying the ScanX Ellipse



Carry the appliance only with the transport aids (13) installed at the factory.

If the appliance is carried in any other way (e.g. on the base, cover, cassette slide), there is a risk of injury or delicate parts could be damaged.



13

11. Set-up

11.1 Installation room

- Install the ScanX Ellipse only in a closed, dry and well ventilated room.
- The room temperature must not drop below + 10 °C / 50 °F in winter or exceed + 35 °C / 95 °F in summer.



Danger of short circuit due to build up of condensation.

The system can only be put into operation once the appliance has warmed up to room temperature and it is dry.

- Installation in a purpose-built room, e.g. in a boiler room or in a wet room is not permitted.
- Do not expose the appliance to direct sunlight, e.g. near windows. The ambient light must be reduced if necessary. The maximum light intensity is 1500 lux.
- The device is designed for use in laboratory, test and measurement areas. There must be no source of interference in the room for set-up (e.g. strong magnetic field). Interference fields may cause malfunctions in the appliance.
- This appliance is not equipped with its own main power switch. Therefore, the appliance must be set up in such a way that the socket outlet is easily accessible in case of a possible fault and that this is situated within the maximum cable length of 3 m / 118.11 inch.
- Install the appliance in such a way that it does not cause interference with other appliances during the scanning process or use of the RFID system of the ScanX Ellipse.
- Set up the appliance so that it is not in the path of the X-rays.

11.2 Set-up alternatives



In order to avoid errors during scanning of the image data, always install the appliance horizontally and on a solid surface where it is not exposed to vibrations.

Table set-up

ScanX Ellipse can be set up as a tabletop appliance.



Observe the maximum load-bearing strength of the table. The table must have an adequate load-bearing strength.

The table and appliance must be set up so that there is no danger of tipping over.

Mobile use

The appliance can also be installed in a motor vehicle for mobile use.

The appliance must thereby be

- transported with low vibration level (damped - decoupled from the vehicle).
- safely installed in the vehicle (with suitable mounting kit)

Level adjustment

The front foot (14) with knurled surface is adjustable.

See point 13.2 Aligning the appliance.



12. Electrical Connection

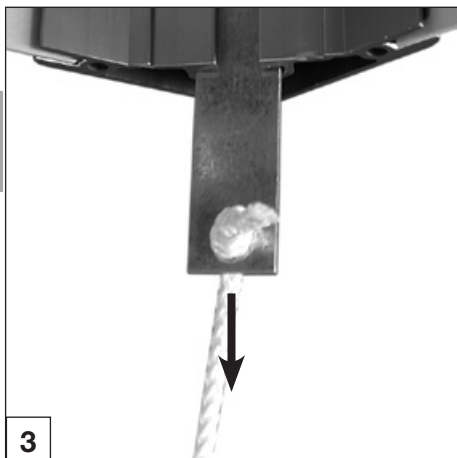
Before start-up, check the mains voltage against the voltage indicated on the model identification plate.

The connection ports are located in the recess on the rear of the appliance.

- Insert the mains cable supplied into the mains jack on the appliance.
- Plug the mains cable into the mains supply socket.



This appliance is not equipped with its own main power switch. Therefore, the appliance must be set up in such a way that the socket outlet is easily accessible in case of a possible fault and that this is situated within the maximum cable length of 3 m / 118.11 inch.



13. Initial use and start-up

13.1 Remove the transport aids

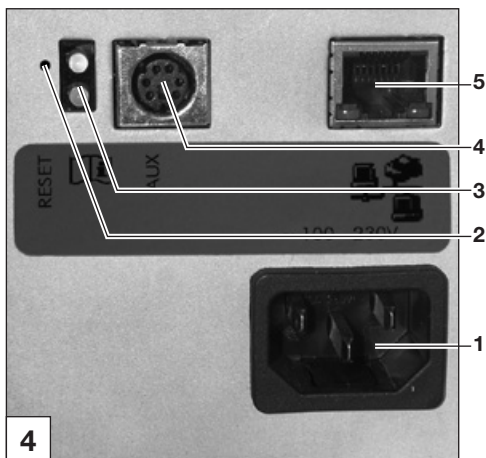
- When the appliance has been moved to its intended location, remove the transport aids by tilting the appliance slightly.

i The transport aids should fall out on their own when the appliance is tilted. If this is not the case, pull briefly downwards on the cord.

13.2 Setting up the appliance

The front foot (14) of the appliance is adjustable. The adjustment range is ± 3 mm / 0.12 inch.

- Set up the appliance at its intended location.
- Carefully tilt the appliance slightly to the rear. Adjust the foot, if necessary, until the appliance is standing firmly on all four feet.



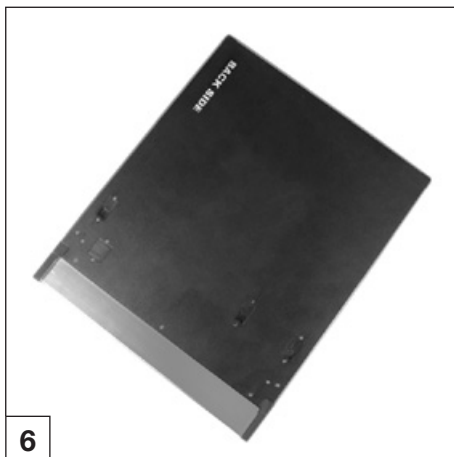
13.3 Installation and configuration

i Perform the installation and configuration according to the provided operating instructions "Installation and Configuration CR 43" Order No. 9000-608-61/..

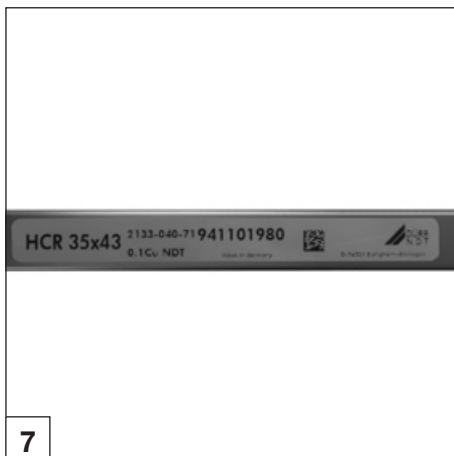
Connections and displays

- Mains connection:**
For connection of the appliance to the mains power supply.
- Reset button:**
By pressing and holding the Reset button for 15 - 20 seconds while switching on, all network settings for the appliance are set back to factory settings.
- Status LEDs:**
Display of the device status during the service
- AUX port:**
Programming and test interface. For service purposes only.
- Network port:**
For connection of the appliance to the network.





6



7



Use

14. Cassettes



The scanner may only be operated in combination with cassettes from ALLPRO NDT. Other cassettes are not compatible with the appliance and could damage the appliance.

Cassettes

- protect the image plate from light, soiling and mechanical damage.
- prevent the erasure of image data on the image plate.
- are positioned at the cassette slide of the appliance.
- Are designed for approx. 25,000 cycles. After this time the cassettes should be replaced in order to avoid incorrect diagnoses or defects.
- can be briefly exposed to higher surface temperatures as the surface is made of aluminium.

14.1 Identification of the cassettes

General identification: The size, order number and identification number are shown on a label on the narrow side.

Active side: The active side is not labelled.

Passive side: The passive side is marked "BACK SIDE".

14.2 Handling of cassettes

Inspect cassettes for visible damage. Damaged cassettes (e.g. visible scratches that could impair the diagnosis) must be replaced.

- Do not bend or expose to extreme pressure.
- Do not scratch or soil.
- Do not immerse cassettes in liquids and do not spray with liquids. We recommend the use of protective sleeves, see paragraph 4.1 for ordering information.

14.3 Storage of cassettes

- Do not store in hot or moist conditions.
- If the cassette is stored for longer than 24 hours, it must be erased again before the next X-ray exposure.
- If stored in the X-ray room, the cassettes must be protected against exposure to X-ray radiation.

15. X-ray

15.1 Preparation for X-raying



Image plates are pre-exposed by natural X-ray radiation and scattered X-ray radiation.

When the cassette is used for the first time or after storage for more than 24 hours, the image plate must be erased again before use. See also point 16.5 Erasing the image data.

15.2 X-ray exposure

- Position the cassette in the normal way. The inactive side (marked with "BACK SIDE") must face away from the X-rays.



Liquids can destroy the image plate on the inside of the cassette and the cassette can become contaminated. Protect cassettes against fluids. We recommend using protective sleeves (on demand).

- Taking the X-ray exposure.



The image data must be read within 30 minutes after the creation.

15.3 Preparation for reading out the image data



Soiling of the ScanX Ellipse: The cassette must be clean before reading out the image data. Otherwise there can be a loss of the image data, soiling of the image plate and the inside of the scanner.

- Remove any large debris with a damp cloth.
- Oil or grease should be removed with a non-aggressive disinfection wipe (e.g. ALLPRO PSP wipes).



15.4 Reading out the image data

Description of the main control panel



ON/OFF button



Ready for operation



Data transmission



Fault

- Switch on the ScanX Ellipse at the ON/OFF button.
- Start the computer.
- Start the software.



The sequence of the read-out procedure can differ, depending on the software used. See also the manual of the software used.

- Select the object type and recording mode.
- Activate the ScanX Ellipse in the software.



Observe the LEDs at the cassette slide of the scanner.

Green LED on the cassette slide is lit:

- Place the cassette into the cassette slide and push into the appliance straight.
The cassette is automatically locked and the image plate drawn in for the scanning process. The cassette then moves back slightly, but remains locked.



This movement closes the light protection flaps.

Yellow LED on the cassette slide is lit:

Cassette drawn in and locked. Read-out procedure running.









The appliance must not be exposed to vibrations during the read-out procedure.

Green LED on the cassette slide flashes:

- Remove cassette from the cassette slide.

Description of the LED on the cassette slide

	Cassette slide
	Appliance not ready to receive the cassette
	Cassette slide enabled, cassette can be pushed in.
	Cassette drawn in and locked.
	Remove cassette.
	Cassette was inserted incorrectly (RFID was not recognised)
	Cassette was ejected again or slide refuses to accept the cassette (no matching order)

 or  ON  OFF  Flashing

15.5 Erasing the image data

After scanning, the image plate automatically runs through the erasure unit. There, the image data on the image plate are automatically erased. The image plate is then transported back into the cassette.

To erase again:

The image plate in the cassette has to be erased again if:

- The cassette is stored for longer than 24 hours.
- The image data on the image plate was not deleted by a fault in the ScanX Ellipse.

Proceed as follows:

- Select a mode with low resolution in the software used.
- Click "Scan".



Observe the LEDs on the cassette slide.

Green LED lit:

- Place the cassette into the cassette slide and push into the appliance straight.
The cassette is automatically locked and the image plate drawn in for the scanning process.

Yellow LED on the cassette slide is lit:

Cassette drawn in and locked. Erasure process running.



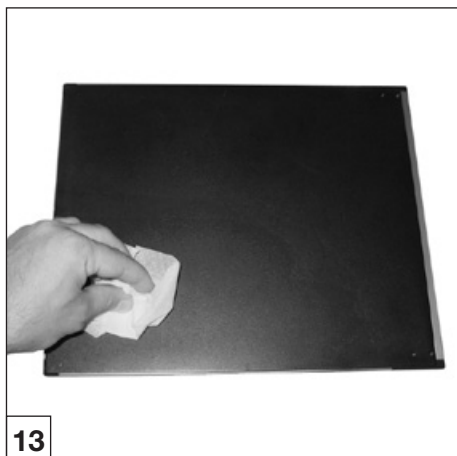
The appliance must not be exposed to vibrations during the erasure procedure.

Green LED on the cassette slide flashes:

- Remove cassette from the cassette slide.



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16. Cleaning



Only cleaning agents authorised by ALLPRO NDT must be used. Other cleaning preparations can damage the device and accessories.

16.1 ScanX Ellipse



Damage to the ScanX Ellipse:
Do not spray the appliance with cleaning preparation!
No liquid must get inside the appliance. This might damage the appliance.

- Remove any large debris with a damp cloth.
- Oil or grease should be removed with a non-aggressive disinfection wipe (e.g. ALLPRO PSP wipes).



See instructions for use of the disinfectant and cleaning agent.

16.2 Cassettes



Damage to the cassettes:
Do not spray the cassettes with a cleaning preparation! The image plate in the cassette will be destroyed by liquids. Clean only by wiping.
Visible soiling must be removed before further use of the cassettes.

- Remove coarse soiling of the surface with a damp cloth.
- Oil or grease should be removed with a non-aggressive disinfection wipe (e.g. ALLPRO PSP wipes).
- Before using again, the cassette must be completely dried.

17. Maintenance



Maintenance must be carried out by a specialist approved by the manufacturer or the distributor.

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Maintenance interval

The appliance must be serviced at regular intervals, but at least once a year.

The scope of the maintenance depends on the number of operating hours and the degree of soiling.



Troubleshooting

EN

18. Tips for Operators and Technicians

Any repairs above and beyond routine maintenance must be carried out by suitably qualified personnel or one of our service technicians.



Before starting repairs or opening the appliance unplug at the mains and remove all power, remove the mains plug from the plug socket.

18.1 Unit fault

Problem	Probable cause	Solution
1. ScanX Ellipse does not switch on	<ul style="list-style-type: none">No supply voltageSwitch-on button defective	<ul style="list-style-type: none">Check the mains cable and all connectionsCheck the main fuse box to buildingInform your service technician
2. ScanX Ellipse switches off after a short period	<ul style="list-style-type: none">Mains cable not properly plugged inHardware defectiveMains supply voltage too low	<ul style="list-style-type: none">Check the mains cable and all connectionsInform your service technicianCheck the supply voltage
3. Status or operating LED does not light up	<ul style="list-style-type: none">LED defective	<ul style="list-style-type: none">Inform your service technician
4. Loud noises during operation after switching on	<ul style="list-style-type: none">If the noises persist longer than 30 seconds, then the radiation deflector is defective	<ul style="list-style-type: none">Inform your service technician
5. Software does not recognise the ScanX Ellipse	<ul style="list-style-type: none">ScanX Ellipse is not switched onConnecting cable between ScanX Ellipse and network loosePC does not recognise connection to ScanX EllipseHardware fault	<ul style="list-style-type: none">Switch on ScanX EllipseCheck the network cableDriver not installed or inactiveCheck the network cableCheck IP addressesInform your service technician
6. Appliance does not react	<ul style="list-style-type: none">ScanX Ellipse has not yet completed boot procedureScanX Ellipse is blocked by the firewall.	<ul style="list-style-type: none">The appliance takes approx. 20-30 seconds to boot after switching on. Repeat the procedure again after this time.Enable the ports for the appliance (45123, 45124, 2006) in the firewall.

Problem	Probable cause	Solution
7. Cassette is not drawn into the cassette slide	<ul style="list-style-type: none"> • Cassette not properly engaged • Cassette not pushed in correctly • ScanX Ellipse is not ready 	<ul style="list-style-type: none"> • Position the cassette correctly • Position the cassette correctly • Activate ScanX Ellipse
8. X-ray exposure does not appear on the screen after the scanning	<ul style="list-style-type: none"> • Image data on the image plate of the cassette were erased, e.g. by natural or scattered X-ray radiation • Problem with the hardware • X-ray device is faulty • No image information on the image plate of the cassette 	<ul style="list-style-type: none"> • Image data on the image plate must be read out as quickly as possible after removal • Inform your service technician • Inform your service technician • Expose the image plate
9. X-ray too dark/light	<ul style="list-style-type: none"> • Wrong brightness/contrast setting in the software 	<ul style="list-style-type: none"> • Set the brightness of the X-ray image with the software
10. X-ray unclear	<ul style="list-style-type: none"> • X-ray dose too low 	<ul style="list-style-type: none"> • Check the X-ray parameters
11. Ghosts and shadows on the X-ray exposure	<ul style="list-style-type: none"> • Image data on the image plate in the cassette were not sufficiently erased 	<ul style="list-style-type: none"> • Erase the image plate of the cassette again
12. ScanX Ellipse does not appear in the selection list in CRConfig	<ul style="list-style-type: none"> • Appliance is connected behind a network router. 	<ul style="list-style-type: none"> • Configure the IP address at the ScanX Ellipse without an intermediate network router. • Connect the network router again. • Enter the IP address manually in CRConfig and register the appliance.
13. Image appears shadowy on the scan window Software cannot combine data to make a complete image	<ul style="list-style-type: none"> • The X-ray dose on the image plate was insufficient 	<ul style="list-style-type: none"> • Increase the X-ray dose
	<ul style="list-style-type: none"> • The amplification is set too low (HV value) 	<ul style="list-style-type: none"> • Increase amplification (HV value)
	<ul style="list-style-type: none"> • The selected scan mode is not suitable 	<ul style="list-style-type: none"> • Select suitable scan mode
	<ul style="list-style-type: none"> • The setting for the threshold value is too high 	<ul style="list-style-type: none"> • Reduce setting
14. When starting the X-ray module in D-Tect, a fault message appears	<ul style="list-style-type: none"> • ScanX Ellipse is conflicting with another device 	<ul style="list-style-type: none"> • In "CRConfig", set the ScanX Ellipse or the like to "Demo without Scanner".

Problem	Probable cause	Solution
15. X-ray exposure has stripes on image	<ul style="list-style-type: none"> Image plate in the cassette was exposed by natural or scattered X-ray radiation Image plate in the cassette soiled or scratched 	<ul style="list-style-type: none"> Only use the image plate within 24 hours of data erasure. Inform your service technician
16. Warning message: "Too much ambient light"	<ul style="list-style-type: none"> ScanX Ellipse exposed to too much light 	<ul style="list-style-type: none"> Darken the room Turn the ScanX Ellipse so that the light does not fall directly onto the input unit
17. Pale stripes in scanning window	<ul style="list-style-type: none"> Too much stray light entered during scanning 	<ul style="list-style-type: none"> Darken the room Turn the ScanX Ellipse so that the light does not fall directly onto the input unit
18. Narrow images with light and dark streaks appear in addition to the correct image	<ul style="list-style-type: none"> Ambient light entered during scanning 	<ul style="list-style-type: none"> Darken the room Turn the ScanX Ellipse so that the light does not fall directly onto the input unit
19. Blue LED out	<ul style="list-style-type: none"> No connection between ScanX Ellipse and PC 	<ul style="list-style-type: none"> Activate the ScanX Ellipse via the software
20. Red LED lit	<ul style="list-style-type: none"> Device fault: Urgent need for action by the operator 	<ul style="list-style-type: none"> Switch off the ScanX Ellipse for approx. 10 seconds. Restart the ScanX Ellipse. If the ScanX Ellipse does not start, inform the service technician.

18.2 Error messages

Problem	Probable cause	Solution
Fault code -11	Unit is in illegal condition - in combination with an initialization problem	
Fault code -1006	RFID Fault	
Fault code -1008	Internal communication fault to sub-assembly	<ul style="list-style-type: none"> • Switch the appliance off and on. • Check all sub-assemblies.
Fault code -1010	Temperature of unit too high	<ul style="list-style-type: none"> • Allow unit to cool down • Inform service technician.
Fault code -1020	Non-permissible action	<ul style="list-style-type: none"> • Switch the appliance off and on.
Fault code -1022	Subassembly not initialized	<ul style="list-style-type: none"> • Fault in software, if necessary up-date the software. • Inform service technician.
Fault code -1026	Scan mode is faulty	<ul style="list-style-type: none"> • Choose alternative scan mode • Correct scan mode settings
Fault code -1100	Scanning process has exceeded allotted time allowance	<ul style="list-style-type: none"> • Inform service technician. • Check belt drive. • Check for blockage, remove image plate from unit.
Fault code -1104	Erasure unit fault	<ul style="list-style-type: none"> • Inform service technician. • Replace erasure unit
Fault code -1108	Motor blocks on ejecting cassette	
Fault code -1117	Position error on insertion or transport, internal faulty setting of unit	<ul style="list-style-type: none"> • Switch the appliance off and on. • Check insertion mechanism. • Check image plate detector.
Fault code -1120	As a result of -1160, motor blocks on image plate ejection	
Fault code -1122	Unit cannot carry out self-adjust	<ul style="list-style-type: none"> • Check self-adjust.
Fault code -1150	Temperature of unit too high	<ul style="list-style-type: none"> • Allow unit to cool down
Fault code -1153	Subassembly fault	<ul style="list-style-type: none"> • Switch the appliance off and on.
Fault code -1154	Internal data communication fault	<ul style="list-style-type: none"> • Switch the appliance off and on.
Fault code -1160	Final radiation deflector rotation speed not achieved	<ul style="list-style-type: none"> • Inform service technician. • Replace the deflector sub-assembly if problem regularly occurs

Problem	Probable cause	Solution
Fault code -1170	SOL-Sensor Timeout Fault at laser or SOL-sensor	<ul style="list-style-type: none"> • Switch the appliance off and on. • Inform service technician.
Fault code -2002	Occurs when there are problems with network	<ul style="list-style-type: none"> • See fault code -2490
Fault code -2395	Occurs when there are problems with network	<ul style="list-style-type: none"> • See fault code -2490
Fault code -2490	Network problem / faulty connection	<ul style="list-style-type: none"> • Check the network
Fault code -3000	Internal faulty setting of unit	<ul style="list-style-type: none"> • Move cassette slide to upper position manually.
Fault code -3001	Motor fault Motor has automatically switched itself off	<ul style="list-style-type: none"> • Switch the appliance off and on.
Fault code -3002	Sensor fault Arm sensor has not switched on (potentiometer must be set)	<ul style="list-style-type: none"> • Switch the appliance off and on.
Fault code -3003	Cassette flap does not open fully	<ul style="list-style-type: none"> • Switch the appliance off and on.
Fault code -3004	Shaft subassembly does not function correctly Fault with cassette insertion - occurs in combination with network problems, image not correctly scanned etc.	<ul style="list-style-type: none"> • Switch the appliance off and on.
Fault code -3005	Arm subassembly does not function correctly	<ul style="list-style-type: none"> • Switch the appliance off and on.
Fault code -3008	Invalid cassette identification	<ul style="list-style-type: none"> • Switch the appliance off and on.
Fault code -3009	No cassette detected,	<ul style="list-style-type: none"> • Switch the appliance off and on.
Fault code -78	Memory card full.	<ul style="list-style-type: none"> • Transmit image data to computer. • Insert empty memory card
Fault code -10000	Unit exposed to too much light	<ul style="list-style-type: none"> • Darken room. • Turn the unit so that no direct light falls on the entry slot.
Fault code -10017	Unit switches off	<ul style="list-style-type: none"> • Wait until unit has shut down completely
Firmware not running	Firmware update not carried out Fault in internal communication	<ul style="list-style-type: none"> • Switch the appliance off and on. • Switch the appliance off and on.



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