VistaScan Smart Reader
ULR01.1D1

EN   Installation and operating instructions

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DÜRR DENTAL

The current version of the installation and operating instructions is available in the Download Center:

https://qr.duerrdental.com/2162100015

Contents

❗ Important information

1 About this document

These installation and operating instructions represent part of the unit.

ⓘ If the instructions and information in these installation and operating instructions are not followed, Dürr Dental will not be able to offer any warranty or assume any liability for the safe operation and the safe functioning of the unit.

The German version of the installation and operating instructions is the original manual. All other languages are translation of the original manual. These installation and operating instructions apply to order number: 2162100005 (ULR01.1D1).

1.1 Warnings and symbols

Warnings

The warnings in this document are intended to draw your attention to possible injury to persons or damage to machinery.
The following warning symbols are used:

⚠️ General warning symbol

The warnings are structured as follows:

> ⚠️ **SIGNAL WORD**
> **Description of the type and source of danger**
>
> Here you will find the possible consequences of ignoring the warning
>
> › Follow these measures to avoid the danger.

The signal word differentiates between four levels of danger:
– **DANGER**
  Immediate danger of severe injury or death
– **WARNING**
  Possible danger of severe injury or death
– **CAUTION**
  Risk of minor injuries
– **NOTICE**
  Risk of extensive material/property damage

Other symbols

These symbols are used in the document and on or in the unit:

ⓘ Note, e.g. specific instructions regarding efficient and cost-effective use of the unit.

REF Order number

SN Serial number

Model number

CE CE labelling

UKCA Conformity mark for the United Kingdom of Great Britain and Northern Ireland

Manufacturer

Dispose of correctly in accordance with EU Directive 2012/19/EU (WEEE).

Refer to the accompanying electronic documents.

Observe the operating instructions.

Refer to Operating Instructions.

Wear protective gloves.

Do not reuse

DC current

1.2 Copyright information

All circuits, processes, names, software programs and units mentioned in this document are protected by copyright.
The Installation and Operating Instructions must not be copied or reprinted, neither in full nor in part, without written authorisation from Dürr Dental.

2 Safety

Dürr Dental has designed and constructed this unit so that when used properly and for the intended purpose it does not pose any danger to people or property.

Despite this, the following residual risks can remain:

– Personal injury due to incorrect use/misuse
– Personal injury due to mechanical effects
– Personal injury due to electric shock
– Personal injury due to radiation
– Personal injury due to fire
– Personal injury due to thermal effects on skin
– Personal injury due to lack of hygiene, e.g. infection

2.1 General safety information

› Always comply with the specifications of all guidelines, laws, and other rules and regulations applicable at the site of operation for the operation of this unit.
› Check the function and condition of the unit prior to every use.
› Do not convert or modify the unit.
› Comply with the specifications of the Installation and Operating Instructions.
› The Installation and Operating Instructions must be accessible to all operators of the unit at all times.

2.2 Specialist personnel

Operation

Unit operating personnel must ensure safe and correct handling based on their training and knowledge.

› Instruct or have every user instructed in handling the unit.

Installation and repairs

› Installation, readjustments, alterations, upgrades and repairs must be carried out by Dürr Dental or by qualified personnel specifically approved and authorized by Dürr Dental.

2.3 Electrical safety

The unit is designed for use in a basic electromagnetic environment with connection to the public power supply mains in accordance with IEC 61326-1 (EN 61326-1).

› Replace any damaged cables or plugs immediately.

2.4 FCC note

This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

› Reorient or relocate the receiving antenna.
› Increase the separation between the equipment and receiver.
› To comply with FCC RF exposure compliance requirements, a separation distance of at least 20 cm must be maintained between the internal antenna of this device and all persons.
› Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
› Consult the dealer or an experienced radio/TV technician for help.

2.5 ISED Statement

This device contains licence-exempt transmitter(s)/receiver(s) that comply with Innovation, Science and Economic Development Canada's licence-exempt RSS(s). Operation is subject to the following two conditions:

1. This device may not cause interference.
2. This device must accept any interference, including interference that may cause undesired operation of the device.

2.6 Only use original parts

❯ Only use accessories and optional items that have been recommended or specifically approved by Dürr Dental.

❯ Only use only original wear parts and replacement parts.

ⓘ Dürr Dental accepts no liability for damages or injury resulting from the use of non-approved accessories or optional accessories, or from the use of non-original wear parts or replacement parts.

The use of non-approved accessories, optional accessories or non-genuine wear parts / replacement parts (e.g. mains cables) can have a negative effect in terms of electrical safety and EMC.

2.7 Transport

The original packaging provides optimum protection for the unit during transport.

ⓘ Dürr Dental will not accept any responsibility or liability for damage occurring during transport due to the use of incorrect packaging, even where the unit is still under guarantee.

❯ Only transport the device in its original packaging.

❯ Keep the packing materials out of the reach of children.

❯ Do not expose the unit to any strong vibrations or shocks.

2.8 Disposal

ⓘ An overview of the waste keys for Dürr Dental products can be found in the download area:

http://qr.duerrdental.com/P007100155

🗑 The unit must be disposed of properly. Within the European Union, the unit must be disposed of in accordance with EU Directive 2012/19/EU (WEEE).

❯ If you have any questions about the correct disposal of parts, please contact your dental trade supplier.

2.9 Protection from threats from the Internet

The unit is to be connected to a computer that can be connected to the Internet. Therefore, the system needs to be protected from threats from the Internet.

❯ Use antivirus software and update it regularly. Look for evidence of possible virus infection and, if applicable, check with the antivirus software and remove the virus.

❯ Perform regular data backups.

❯ Restrict access to units to trustworthy users, e.g. via a user name and password.

❯ Make sure that only trustworthy content is downloaded. Only install software and firmware updates that have been authenticated by the manufacturer.

▤ Product description

3 Overview
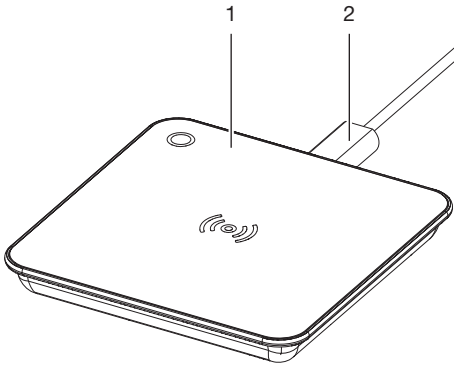
1   VistaScan Smart Reader
2   USB cable

3.1 Scope of delivery

The following items are included in the scope of delivery (possible variations due to country-specific requirements and/or import regulations):

VistaScan Smart Reader 2162100005

– VistaScan Smart Reader Basic unit
– USB cable (2 m)

3.2 Accessories

The following items are required for operation of the device, depending on the application:
USB cable (2 m)   9000101692

4 Technical data

Electrical data for the unit		
Nominal voltage (provided via USB)	V DC	5
Max. current consumption	mA	200
Max. power consumption	W	< 1
Power consumption, standby	W	0.16

General technical data		
Dimensions (W x H x D)	mm	90 x 13 x 90
	in	3.54 x 0.51 x 3.54
Weight	kg	approx. 0.13
	lb	approx. 0.29

Ambient conditions during operation		
Temperature	°C	+10 to +35
	°F	+50 to +95
Relative humidity	%	20 - 80
Air pressure	hPa	750 - 1060
Height above sea level	m	< 2000
	ft	< 6562

Ambient conditions during storage and transport		
Temperature	°C	-20 to 60
	°F	-4 to +140
Relative humidity	%	10 - 95
Air pressure	hPa	750 - 1060

USB port		
USB technology		USB 2.0 or higher
Data rate		Full Speed
Support for high-power units	mA	500
Connection on unit		USB, type C

Technical data for the RFID module		
Frequency	MHz	13.56
Supported standard		ISO/IEC 15693
Modulation		ASK
Max. power	mW	400

4.1 Type plate

The type plate is located on the underside of the device.
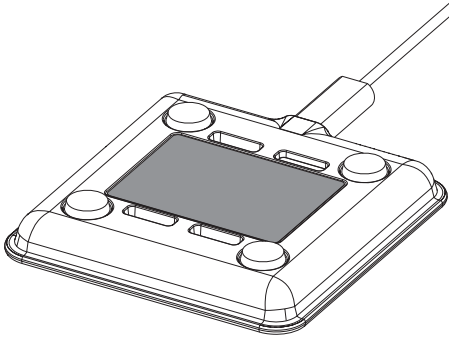
REF   Order number
SN   Serial number

4.2 Evaluation of conformity

This device has been subjected to conformity acceptance testing in accordance with the current relevant European Union guidelines. This equipment conforms to all relevant requirements.

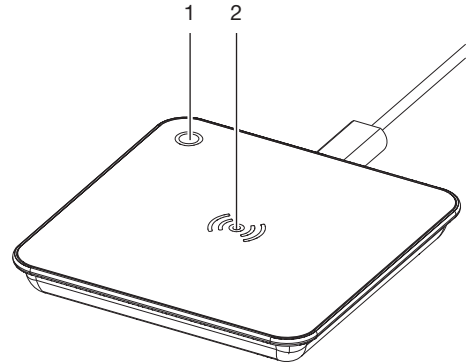## 4.3 Simplified declaration of conformity

The manufacturer hereby declares that the unit complies with Directive 2014/53/EU as well as others.

The full text of the EU declaration of conformity can be viewed online at the Download Center:

https://qr.duerrdental.com/conformity

5 Operation

1   Status LED
2   Scanner unit

The Smart Reader is an RFID reader that connects to a computer via a USB cable. It reads RFID chips and transmits the read data to software on the connected computer.

With the Smart Reader and SmartScan an image plate is assigned to a specific patient via the imaging software. This allows the image plate to be read without a scan job on all devices in the network that support SmartScan.

5.1 Status LED

Depending on the software used, the status display shows different colours. Refer to the respective description of the status display in the software used.

5.2 Connections

The connections are located on the rear of the unit.
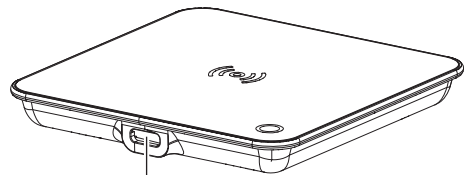
1   USB port (type C)

Assembly

6 Requirements

6.1 Installation/setup room

The room chosen for set up must fulfil the following requirements:

– Closed, dry, well-ventilated room
– Should not be a room made for another purpose (e. g. boiler room or wet cell)

6.2 System requirements

ⓘ The system requirements for the computer systems can be found in the download area at www.duerrdental.com (document no. 9000-618-148).

7 Installation

7.1 Setting up the unit

Portable and mobile HF communication appliances can interfere with the effectiveness of electrical medical devices.

❯ Do not stack the unit next to or together with other appliances.
❯ If, however, this unit is operated next to other units or stacked with other units, monitor the unit carefully in the configuration selected in order to ensure normal operation.
❯ Place the unit on a firm, horizontal surface.

7.2 Connecting the unit

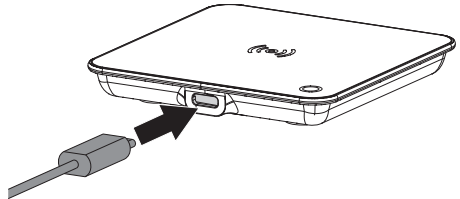**Combining devices safely**

❯ When connecting the unit to other devices, such as a computer system: make sure that e.g. the computer, monitor, or printer that is/are connected is/are compliant with at least the standard IEC 60950-1 or IEC 62368-1.

Connecting the unit via the USB port

❯ Plug the supplied USB cable into the USB port on the unit.

❯ Connect the USB cable to the computer.

8   Commissioning

⚠ **NOTICE**

Short circuit due to the build up of condensation

› Do not switch on the unit until it has warmed up to room temperature and it is dry.

The unit supports the following imaging programs:

– VistaSoft from Dürr Dental

ⓘ Always use the current version of the imaging program when commissioning the unit. Check the version of the imaging program supplied with the unit against the versions available at www.duerrdental.com.

The unit supports plug&play and can be used directly after connection.

👤 Usage

9 Operation

The unit is able to read RFID chips from different sources. Whether the RFID chip read can be used depends on the support or the devices and software used.

9.1 SmartScan

With SmartScan an image plate is assigned to a specific patient via the imaging software.
As soon as an image plate has been assigned to a patient in the imaging software, all devices that support SmartScan go into imaging standby. Image plates that have previously been linked to a patient can now be read in at any device in any order. The images are then automatically assigned to this patient by the imaging software.
SmartScan functions with the following imaging programs:
– VistaSoft from Dürr Dental

10 Cleaning and disinfection

When cleaning and disinfecting the unit and its accessories, observe country-specific directives, standards and specifications for medical products as well as the specific specifications for dental practices and clinics.

⚠️ **NOTICE**

The use of unsuitable agents and methods can damage the unit and accessories.

> Do not use any products based on phenolic compounds, halogen-releasing compounds, strong organic acids or oxygen-releasing compounds, as they may damage the materials.
> Dürr Dental recommends using disinfectants from the Dürr Dental product range. Only the products specified in these instructions have been subjected to material compatibility testing by Dürr Dental.
> Read the operating instructions for the disinfectants.

🧤 Wear protective gloves.

10.1 Unit surfaces

The unit surface must be cleaned and disinfected of any contamination or visible soiling.
Dürr Dental recommends using the disinfectants FD 322, FD 333, FD 350 and FD 366 sensitive.

⚠️ **NOTICE**

Liquid can cause damage to the unit.
> Do not spray the unit with cleaning and disinfectant agents.
> Make sure that liquid does not get inside the unit.

> Remove any soiling with a soft, lint-free cloth that has been dampened with cold tap water.
> Disinfect the surfaces using a disinfection wipe. Alternatively, use disinfectant on a soft, lint-free cloth.

11 Maintenance

The appliance is maintenance-free.

? Troubleshooting

12 Tips for operators and service technicians

ⓘ Any repairs exceeding routine maintenance may only be carried out by qualified personnel or our service.

12.1 Software error

Error	Possible cause	Remedy
Imaging software does not recognise the unit	Connecting cable between device and computer not correctly connected	› Check the connecting cable.
	Connecting cable between unit and computer defective	› Check the connecting cable and use a new one if necessary.
	Computer does not detect any connection to the unit.	› Check the connecting cable. › Use a different USB port.
	Hardware fault	› Inform a Service Technician.

12.2 Fault on the unit

Error	Possible cause	Remedy
Unit does not switch on	Unit not properly connected or connecting cable / USB port defective	› Check the connecting cable and use a new one if necessary. › Use a different USB port.
	Hardware fault	› Inform a Service Technician.
Unit does not recognise the image plate	Incorrect image plate guide used	› Only use image plates that are supported by the unit.
	RFID tag damaged or detached	› Check image plate for damage and exchange if necessary.
Unit does not react although status indicator is lit	Fault in the unit or problem with the software	› Depending on the software used, the status display shows different colours. Refer to the respective description of the status display in the software used.

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