Ritter Dental™

Dental Catalog
- Equipment -

Assembled in Germany

Ritter Dental: More than 137 years in dental experience.

The German Frank Ritter – founder of Ritter Dental and inventor of the first Dental Unit.

In 1887, Frank Ritter produced one of the world's first treatment chairs for the dental profession.
In the 130 years since, Ritter Dental has produced a long line of products that has changed the face of dentistry.

1912 Ritter Dental introduced the "control panel" for the dental instruments, a major advancement and the beginning of modern technology in dentistry.
In 1917 Ritter Dental introduced the integrated treatment system; chair with control panel, drill, cuspidor, saliva ejector, tray table and air/water syringes – all instruments in one unit.

This system delivered for the first time the modern dental system, the core concept which has not changed even today.

First Dental Chair / about 1900

Ritter Dental™

Dental Unit Vanguard

Dental Unit Vanguard Smart

Curing Light

Scaler

Micromotor

Intraoral Cam

Compressors and Suction

Autoclave

Imaging

Vanguard Smart

Electric
Chair Only

Ritter Dental™

Chair Features

- Electric movement for smooth, quiet positioning
- Ergonomic design for comfortable seating during long treatments
- Broad space for dentist's legs
- High-quality seamless upholstery
- Auto return function:
    Safety switches
    If the safety switch is activated, the chair automatically moves up a few inches.
- Trendelenburg movement:
    Seat and backrest movement synchronized
- Left and right armrest
- Double-articulated headrest
- Load capacity of up to 135 Kg

Vanguard Smart Dental Chair

Assembled in Germany

Foot control for chair movements

Ritter Dental™

Features and options Vanguard Smart Chair only

● STANDARD   ○ OPTION

Patient Chair

Trendelenburg movement	●
Safety switch	●
Double articulating headrest	●
Left and right armrest	●
Foot controller	●
Seamless upholstery	●
Upgraded upholstery	○
(Patient Chair and two Stools)	

Allow 90 days for delivery of optional equipment.

Optimum use of space

The Vanguard Smart Chair is well suited for smaller operatories where limited space is available.

Assembled in Germany

Ritter Dental™

Chair Features

- Electric or Hydraulic chair movement for fast and quiet positioning

- Ergonomic design for comfortable seating during long treatments

- Broad space for dentist's legs

- High-quality seamless upholstery

- Chair swivel 30° left/right

- Programmable chair positions, plus last "position recall"

- Auto return function:
   Safety switches
   If the safety switch is activated, the chair automatically goes up a few inches

- Trendelenburg movement:
   Seat and backrest movement synchronized

- Left and right armrest

- Double-articulated headrest

- Load capacity of up to 180 kg (hydraulic), 135 Kg (electric)

Vanguard **Dental Chair**

Foot control for
chair movements

Assembled in Germany

Ritter Dental™

Features and options Vanguard Chair only

● STANDARD   ○ OPTION

Patient Chair

Trendelenburg movement	●
Programmable positions	●
Safety switch	●
Double articulating headrest	●
Left and right armrest	●
2 Foot controllers	●
30° chair movement	●
Seamless upholstery	●
Upgraded upholstery	○
(Patient Chair and two Stools)	

Allow 90 days for delivery of optional equipment.

Optimum use of space

The Vanguard without Cuspidor is well suited for smaller operatories where limited space is available.

49"-77"
40"
16"-32"
60.0°±2.0°
71"
63"
35"
14"-35"

71"
90.0°
180°
42"
25"
8"
8"
89"

2 m (79 in)
1.5 m (59 in)

Assembled in Germany
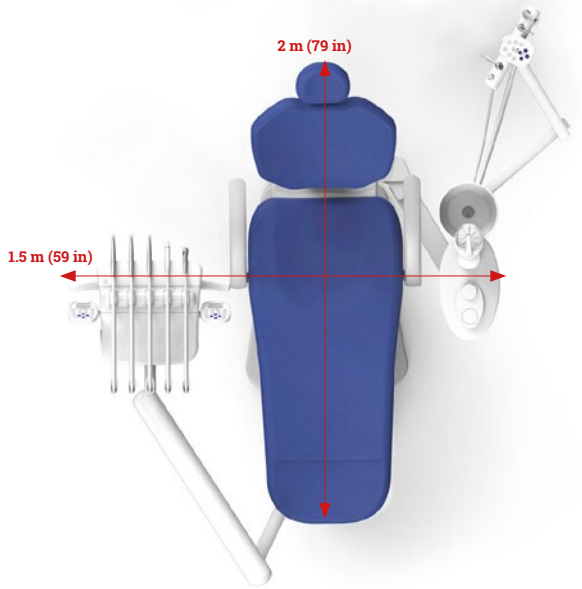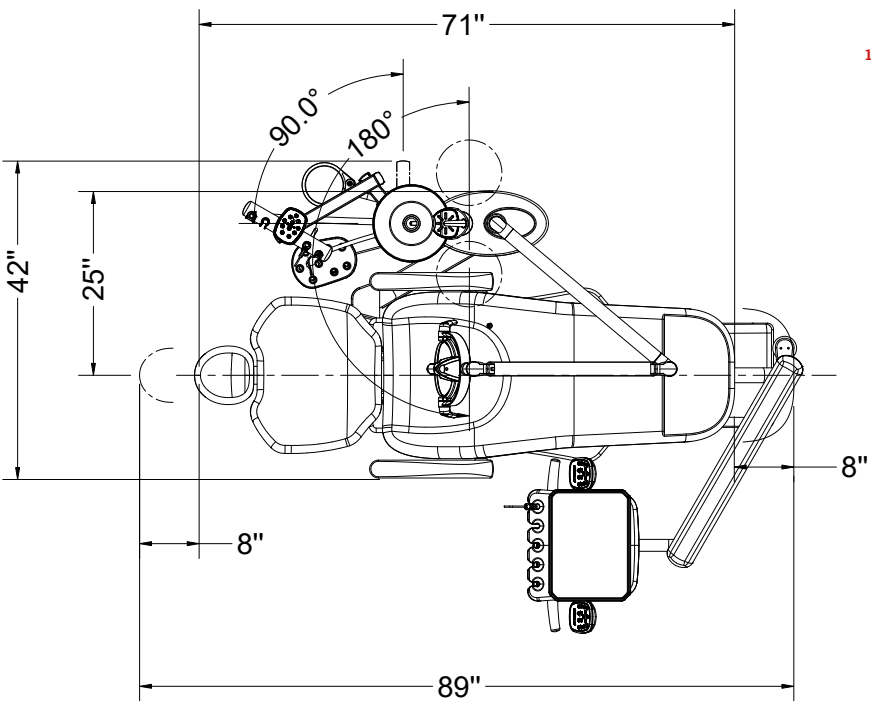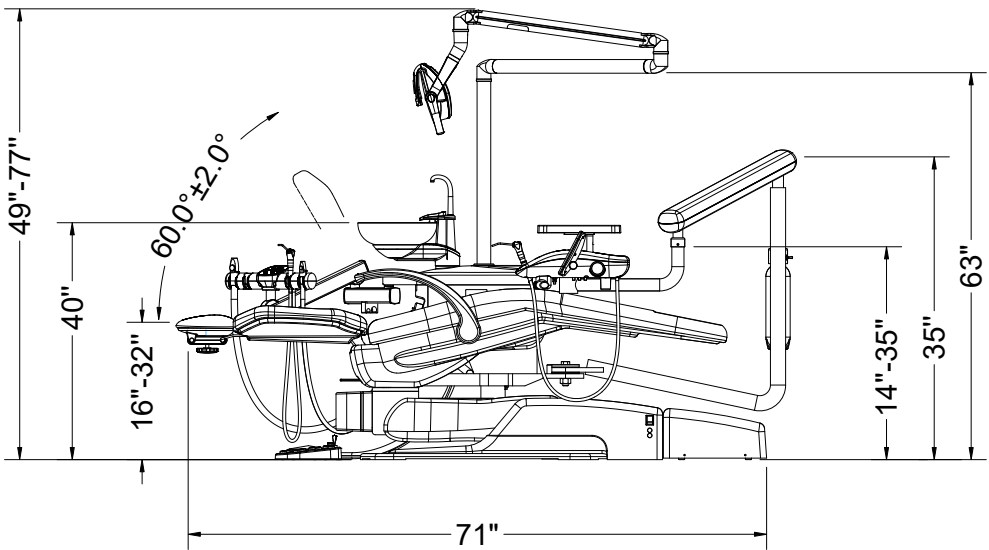
COMPLETE DENTAL UNIT

The New Vanguard Smart Unit

The versatile new Ritter Dental Vanguard Smart is a German-engineered dental unit that unites electronic technology with a sleek, contemporary design. This unit comes with the excellent quality and features you have come to expect from Ritter Dental.

Standard Features

- Advanced traditional or continental delivery system
- Self-contained clean water system
- Assistant's instrument package
- LED operating light
- Patient chair with seamless upholstery
- Cuspidor with movable spittoon
- Load capacity of up to 135 Kg

Assembled in Germany

Vanguard Smart Dental Unit

Features and options Vanguard Smart

● STANDARD   ❍ OPTION

Patient Chair

Trendelenburg movement	●
Programmable positions	●
Safety switch	●
Double articulating headrest	●
Left and right armrest	●
2 Foot controllers	●
Seamless upholstery	●
Upgraded upholstery	❍
(Patient Chair and two Stools)	

Dentist's Delivery System

Traditional (hanging) or Continental (swinging)	●
Three-way syringe	●
3 outlets for turbine or air motor without light	●
Fiber optic outlets 5 or 6 Pin	❍
MCX Micro Motor Kit with Optima Display	❍
iOptima^INT Micro Motor Kit Standard	❍
iOptima^INT Micro Motor Kit ALL-IN-ONE	❍
Acteon Newton Scaler	❍
Holder for 2 standard trays	
- Traytable on top	●
- Lower double tray	❍

Assistant's Package

Integrated button panel	●
Moveable assistant's delivery arm	●
Three-way syringe	●
Large suction hose	●
Small suction hose	●
Curing light LED	❍

Cuspidor

Moveable ceramic cuspidor	●
ABS Aqua Bottle System	●
Venturi Internal System water/air or air/air	❍
Connection for external suction	●
Vacuum Drain Kit	❍

Operating Light

EDI LED	●
Maia Light LED	❍
Eva Sunlite LED	❍
Eva Sunlite LED with Camera	❍
Eva Light Arm	❍
Eva Ceiling Mount	❍

Stools

Vanguard Doctor Stool	❍
Vanguard Assistant Stool	❍

Multi-Media

Intraoral camera with monitor	❍

Allow 90 days for delivery of optional equipment.
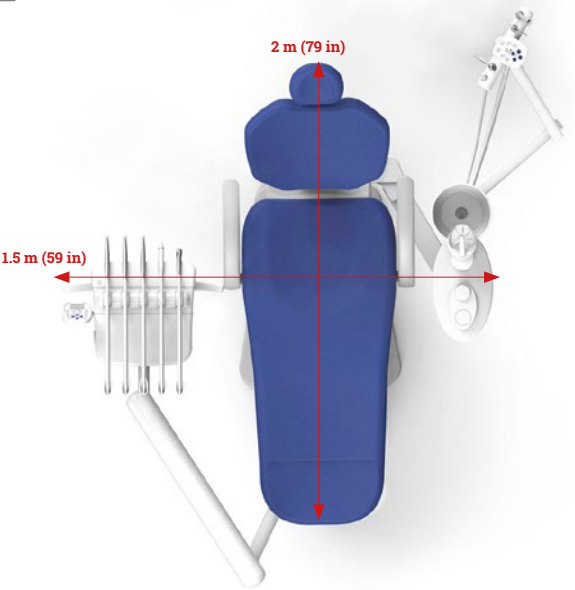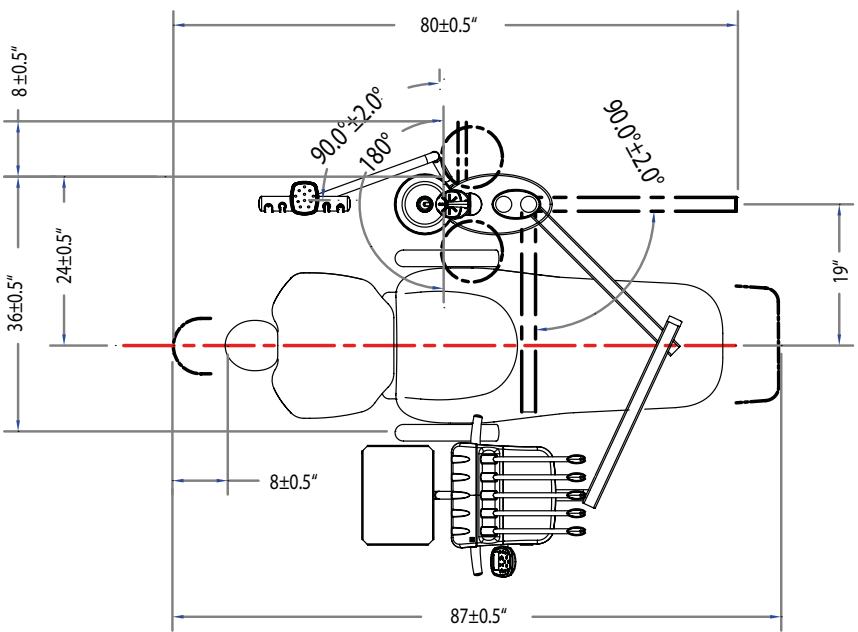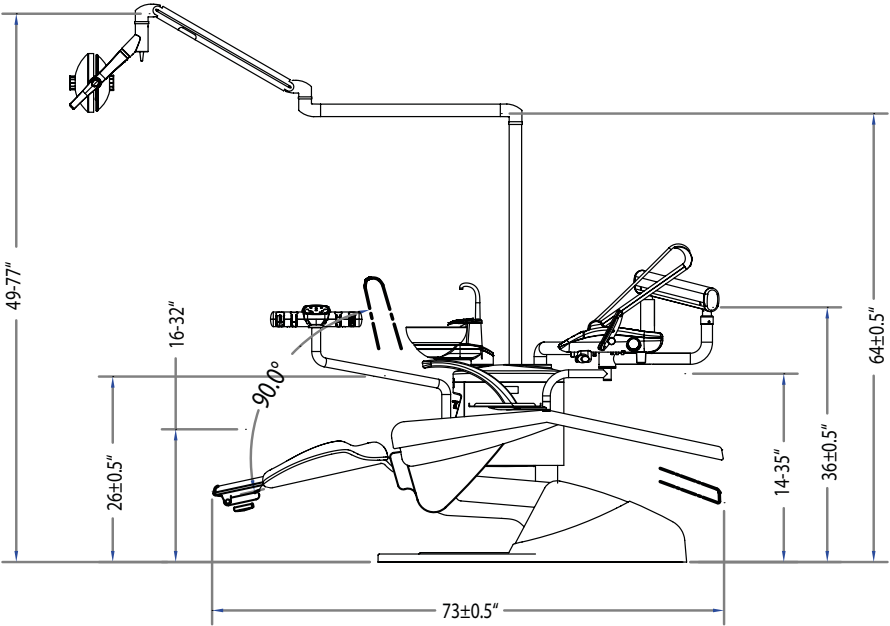
Lower tray (optional)   Tray on top (standard)

Optimum use of space

The Vanguard Smart is well suited for smaller operatories where limited space is available.

49-77"   16-32"   90.0°   26±0.5"   64±0.5"   14-35"   36±0.5"   73±0.5"

2 m (79 in)
1.5 m (59 in)

8±0.5"   80±0.5"   90.0°±2.0°   180°   90.0°±2.0°   36±0.5"   24±0.5"   19"   8±0.5"   87±0.5"

Assembled in Germany

Vanguard
Electric or Hydraulic without Cuspidor

Ritter Dental™

WITHOUT CUSPIDOR

The New Vanguard Unit

The exciting new Ritter Dental Vanguard dental unit is german-engineered to integrate electronic technology with smooth electric or hydraulic movement. It is Ritter's latest and most advanced unit. The Vanguard is left/right adaptable, with all of the quality and features you have come to expect from Ritter Dental.

Standard Features

- Advanced traditional or continental delivery system
- Self-contained clean water system
- Assistant's instrument package
- Adjustable intensity LED operating light
- left/right conversion
- Patient chair with seamless upholstery
- Load capacity of up to 180 kg (hydraulic), 135 Kg (electric)

Assembled in Germany

Vanguard **Dental Unit** without Cuspidor

Features and options Vanguard

●   ○
STANDARD   OPTION

Patient Chair

Trendelenburg movement	●
Programmable positions	●
Safety switch	●
Double articulating headrest	●
Left and right armrest	●
2 Foot controllers	●
30° chair movement	●
Seamless upholstery	●
Upgraded upholstery	○
(Patient Chair and two Stools)	

Dentist's Delivery System

Traditional (hanging) or Continental (swinging)	●
Three-way syringe	●
3 outlets for turbine or air motor without light	●
Fiber optic outlets 5 or 6 Pin	○
MCX Micro Motor Kit with Optima Display	○
iOptima^INT Micro Motor Kit Standard	○
iOptima^INT Micro Motor Kit ALL-IN-ONE	○
Acteon Newton Scaler	○
Scaler S type LED	○
Holder for 2 standard trays	
- Traytable on top	●
- Lower double tray	○

Assistant's Package

Integrated Button panel	●
Moveable assistant's delivery arm	●
Three-way syringe	●
Large suction hose	●
Small suction hose	●
Curing light LED	○

Operating Light

EDI LED	●
Maia Light LED	○
Eva Sunlite LED	○
Eva Sunlite LED with Camera	○
Eva Light Arm	○
Eva Ceiling Mount	○

Stools

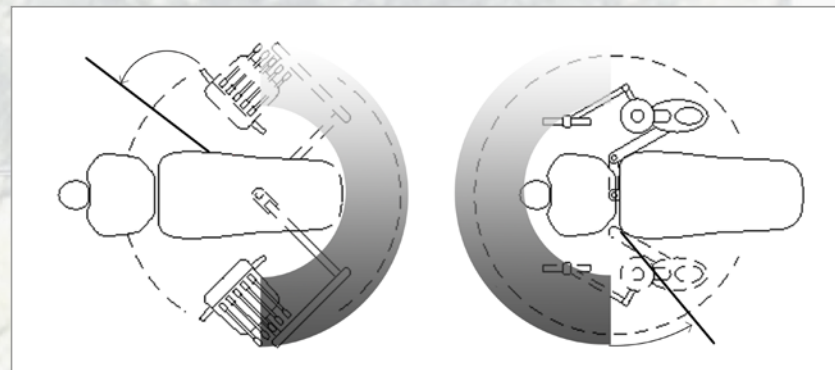|	
Vanguard Doctor Stool	○
Vanguard Assistant Stool	○

Multi-media

Intraoral camera with monitor	○

Allow 90 days for delivery of optional equipment.

Lower tray (optional)   Tray on top (standard)

Optimum use of space

The Vanguard without Cuspidor is well suited for smaller operatories where limited space is available.

Assembled in Germany

Vanguard
Electric or Hydraulic

Ritter Dental™

C O M P L E T E   D E N T A L   U N I T

The New Vanguard Unit

The exciting new Ritter Dental Vanguard dental unit is german-engineered to integrate electronic technology with smooth electric or hydraulic movement. It is Ritter's latest and most advanced unit. The Vanguard is left/right adaptable, with all of the quality and features you have come to expect from Ritter Dental.

Standard Features

- Advanced traditional or continental delivery system
- Self-contained clean water system
- Assistant's instrument package
- Adjustable intensity LED operating light
- left/right conversion
- Patient chair with seamless upholstery
- Cuspidor with movable spittoon
- Load capacity of up to 180 kg (hydraulic), 135 Kg (electric)

Assembled in Germany

Vanguard Dental Unit with Cuspidor

Ritter Dental™

Changeable on the fly: Swivel points and centers of rotation

Chair Features

- Electric or Hydraulic chair movement for fast and quiet positioning

- Ergonomic design for comfortable seating during long treatments

- Broad space for dentist's legs

- High-quality seamless upholstery

- Chair swivel 30° left/right

- Programmable chair positions, plus last "position recall"

- Auto return function:
  Safety switches
  If the safety switch is activated, the chair automatically goes up a few inches

- Trendelenburg movement:
  Seat and backrest movement synchronized

- Left and right armrest

- Double-articulated headrest

Assembled in Germany

Picture shown with standard seamless upholstery.

Easy handling and efficient treatments: According to the personal preference,
two different versions are available, which allow an easy adjustment of the instruments.

- Tray table available
- Pneumatic arm brake mechanism
- Up to 5 instruments
- 2 control panels
- Pneumatic switches in instrument holders
- Optional brushless motors with LED
- Optional fiber optic outlets
- Optional Scaler S type LED

2 Control panels

- 4 programmable patient chair
  positions, plus last position
  and exit position
- Removable silicon pad for easy
  cleaning and disinfection (S-Version)

Traditional Delivery System

(hanging version)

External Wet Suction   Venturi Suction System

Double-articulated assistant arm,
height adjustable

Continental Delivery System

(swinging version)

Assistant's Package

- Integrated button panel
- Up to 4 instruments
- Small an large suction hose
- Air/water syringe
- Double-articulated and
  adjustable arm movement

Ritter Dental™

Features and options Vanguard

● STANDARD   ○ OPTION

Patient Chair

Trendelenburg movement	●
Programmable positions	●
Safety switch	●
Double articulating headrest	●
Left and right armrest	●
2 Foot controllers	●
30° chair movement	●
Seamless upholstery	●
Upgraded upholstery	○
(Patient Chair and two Stools)	

Dentist's Delivery System

Traditional (hanging) or Continental (swinging)	●
Three-way syringe	●
3 outlets for turbine or air motor without light	●
Fiber optic outlets 5 or 6 Pin	○
MCX Micro Motor Kit with Optima Display	○
iOptima^{INT} Micro Motor Kit Standard	○
iOptima^{INT} Micro Motor Kit ALL-IN-ONE	○
Acteon Newton Scaler	○
Scaler S type LED	○
Holder for 2 standard trays	
- Traytable on top	●
- Lower double tray	○

Assistant's Package

Integrated Button panel	●
Moveable assistant's delivery arm	●
Three-way syringe	●
Large suction hose	●
Small suction hose	●
Curing light LED	○

Cuspidor

Moveable ceramic cuspidor	●
ABS Aqua Bottle System	●
Venturi Internal System water/air or air/air	○
Connection for external suction	●
Vacuum Drain Kit	○

Operating Light

EDI LED	●
Maia Light LED	○
Eva Sunlite LED	○
Eva Sunlite LED with Camera	○
Eva Light Arm	○
Eva Ceiling Mount	○

Stools

Vanguard Doctor Stool	○
Vanguard Assistant Stool	○

Multi-media

Intraoral camera with monitor	○

Allow 90 days for delivery of optional equipment.

Lower tray (optional)   Tray on top (standard)

Optimum use of space

The Vanguard is well suited for smaller operatories where limited space is available.

Assembled in Germany

Ritter Dental™
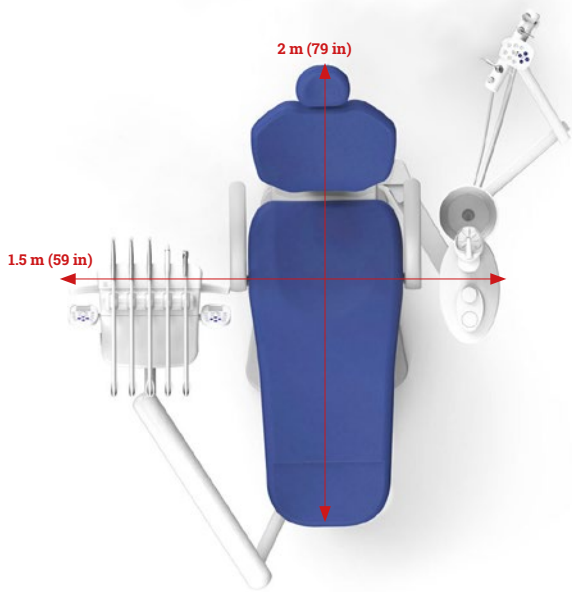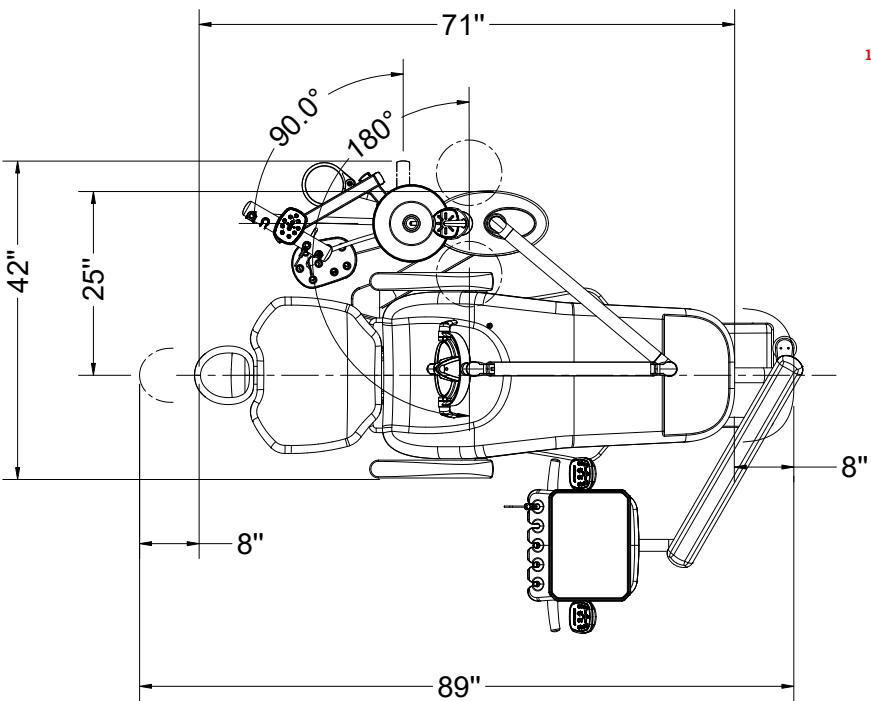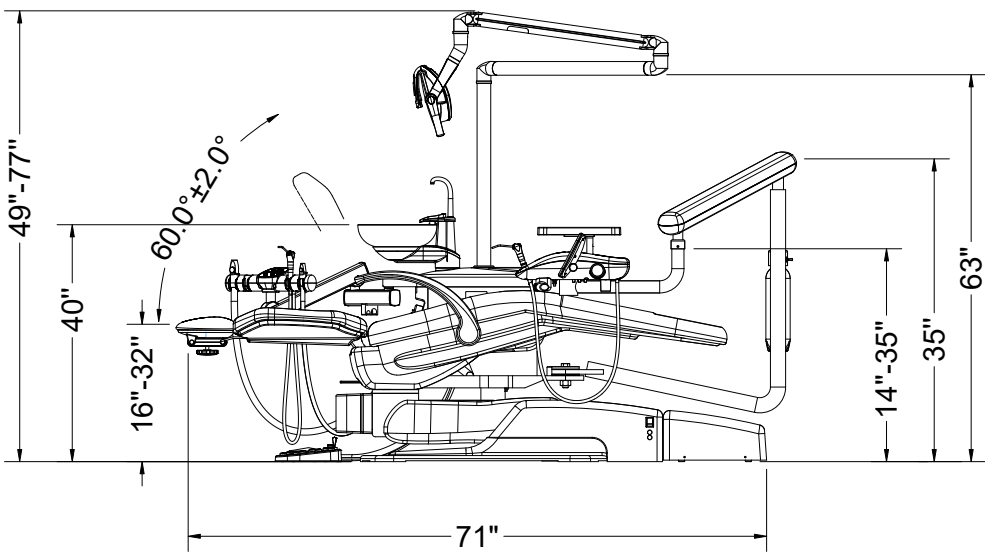
Upholstery Colors

15 seamless and 11 stitched upholstery colors give your practice an individual touch.

S190 Parrot Green	S140 Indigo	S160 Grey	S130 Garnet
S100 Aquamarine	S220 Onyx	S170 Stone	S180 Merlot
S120 Ice Blue	S310 Anthracite	S300 Taupe	S200 Orange
S150 Sky Blue	S210 Cobalt Blue	S230 Silver	
R80 Cornflower Blue A1	R100 Orange A5	R260 Dark Brown A6	R160 Khaki A8
R250 Steele Grey A9	R240 Beige A10	R170 Slate L6180	R200 Maroon L6191
R190 Cyan L6194	R210 Apple Green L6196	R60 Onyx L135019	

Shown samples may appear different in structure and color due to the printing process.

Stools

A long workday is comfortably mastered with good equipment. Ergonomic seating and precise illumination of your patient are the essential prerequisites for this.

- Backrest with fixed position or dynamic movement
- Ergonomic and comfortable seating
- Symmetrical backrest
- Gas lift cylinder

- Chrome legs
- Five dual casters for stability
- Color-matching upholstery available in multiple colors
- Available with or without foot ring

Doctor Stool

Assistant Stool

Operating Lights

Best illumination where it is needed.

EDI LED

The LED technology is the present and the future of lighting systems: the light is obtained by a flow of electrons that goes trough a semiconductor material generating very little heat at constant light flow. Because of their simple design, LED lamps are virtually maintenance free, have a great luminous efficiency and incomparable durability.

• Light intensity: from 3.000 to 45.000
• Colour temperature: 5.000 Kelvin
• activated by joystick or sensor
• static heat sink (no fan required)
• Precise illumination of the working field 150 x 80 mm

Maia Light LED

• Light intensity: 3.000 to 45.000 Lux
• Colour temperature: 6.000 Kelvin
• Cooling system: static heat sink (no fan required)
• Automatic saving of the light intensity used, after shutting off the dental unit and after the rinse function.
• The electronic lighting control can be activated by joystick, sensor or dental unit.
It adjusts the light from maximum to minimum continuous intensity, while maintaining constant colour temperature.
• Working light field: 8 x 3.9" (at 28" distance)
• Handles are removable and autoclavable

EVA Sunlight LED

EVA Sunlight provides a new generation of Sunlike LED, to benefit from the illumination, colour rendering and well-being as similar as the natural sunlight.
It drives the operator through tiny details for an increasingly reliable, efficient and comfortable view. The bright bulb on the head shows the level of illumination in use.

• Light intensity: 50.000 Lux
• Colour temperature: 5.000 Kelvin
• Working light field: 7.5 x 3.9" (at 28" distance)
• Handles are removable and autoclavable
• Rotation System: 3rd axis

EVA Sunlight LED with Camera

EVA CAM is the operating lamp with integrated professional camera. The zoom is specific for dental practice to ensure direct and precise framing. The foot control allows no interruptive procedure to keep the attention on the operating field. EVA CAM is the best partner for constant and effective communication with the patient, colleagues and students and it enables a comprehensive and accurate record for diagnosis, treatment and traceability.

• Resolution 4K
• Video format MP4
• Photo format JPG
• Standard lens: 25mm
• Optional lens: 16mm

Options for EVA Sunlight:
EVA Ceiling Mount

EVA Light Arm

Vanguard & Vanguard Smart

Ritter Dental™

Foot Controllers

Designed for ease in chair movement

- Large foot control pad for easy repositioning
- Manual control of chair movements
- Up/down of backrest and chair

Foot control for chair movements

- Rinsing position/last treatment position
- Entry/exit position
- Three programmable chair positions

Foot control for chair movements

Foot control for instrument functions

- Speed/power control for the active instrument
- Water on/off mode instruments

Buttons

- Switch for instrument water
- button for chip air function

Foot control for instruments

Feature Comparison of Dental Units

	Vanguard	Vanguard without Cuspidor	Vanguard Chair Only	Vanguard Smart	Vanguard Smart Chair Only
Patient chair					
Chair Movement	Electric or Hydraulic	Electric or Hydraulic	Electric or Hydraulic	Electric	Electric
Unit Mounting	Chair-mounted	Chair-mounted	Chair-mounted	Chair-mounted	Chair-mounted
Patient chair synchronized (Trendelenburg)	●	●	●	●	●
Left/Right hander version, 30° movement	●	●	●	–	●
Left armrest	● (movable)	● (movable)	● (movable)	● (not movable)	● (not movable)
Right armrest	● (movable)	● (movable)	● (movable)	● (movable)	● (movable)
Double Articulated headrest	●	●	●	●	●
Foot control for chair movements	●	●	●	●	●
Foot control for instruments	●	●	●	●	–
Programmable positions	●	●	●	●	–
Safety switch	●	●	●	●	●
Seamless upholstery	●	●	●	●	●
Upgraded upholstery (Chair and two Stools)	○	○	○	○	○
Dentist's Delivery System					
Three-way syringe	●	●	–	●	–
3 outlets for turbine or air motor without light	●	●	–	●	–
Fiber optic outlets	○	○	–	○	–
MCX Micro Motor Kit with Optima Display	○	○	–	○	–
iOptima™ Micro Motor Standard	○	○	–	○	–
iOptima™ Micro Motor Kit ALL-IN-ONE	○	○	–	○	–
Acteon Newton Scaler	○	○	–	○	–
Double tray support for 2 trays	●	●	–	●	–
Traytable on top	●	●	–	●	–
Lower double tray	○	○	–	○	–
1. Tray stainless steel	○	○	–	○	–
2. Trays stainless steel	○	○	–	○	–
Silicone mat for 2 trays	●	●	–	●	–
Assistant's Package					
Three-way syringe	●	●	–	●	–
Large suction hose	●	●	–	●	–
Small suction hose	●	●	–	●	–
Curing light LED	○	○	–	○	–
Integrated button panel	●	●	–	●	–
Moveable assistant's delivery arm	●	●	–	●	–
Cuspidor					
Cup heating	○	–	–	○	–
Detachable and thermodisinfectable cuspidor	● (Ceramic)	–	–	● (Ceramic)	–
Tray table with 2 trays	●	–	–	●	–
Aqua Bottle System (ABS)	●	–	–	●	–
Venturi internal System water/air or air/air	○	–	–	○	–
Connection for external suction	●	–	–	●	–
Operating light					
EDI LED	●	●	–	●	–
Maia Light LED	○	○	–	○	–
Eva Sunlight LED	○	○	–	○	–
Eva Sunlight LED with Camera	○	○	–	○	–
Eva Light Arm	○	○	–	○	–
Eva Ceiling Mount	○	○	–	○	–
Stools					
Vanguard Doctor Stool	○	○	–	○	–
anguard Assistant Stool	○	○	–	○	–
Multimedia					
Intraoral camera with Monitor	○	○	–	○	–

Intraoral Camera
RITTER CAM

**A3W-X Intraoral Camera
Mount and Monitor incl.**

Digital intra-oral camera and monitor

With the Ritter intraoral camera, you can easily highlight pathological processes in the image and explain clinical measures in a simple way. This facilitates the dialog with the patient and prevents patient objections and concerns. Acceptance of the treatment is increased because patients are more involved in the process and thus quickly understand the importance of the planned treatment.

For you as a practitioner, this means more efficiency and productivity

Technical specifications:

Power supply:	220 V or 24 V
Input Power:	4.5 VA~5.5 VA
Camera Lens Auto Focus:	15 mm~30 mm
Operating Range:	18 mm~25 mm
Handle Wire Length:	2 m
Image Format:	JPEG
View Angles:	62 degrees
Imaging Sensor:	CMOS sensor, 2.0 Mega Pixels
Resolution:	1280*1024 (30 fps)
Display Screen:	17"
Backlight:	10 LEDs; Support lights off

MCX Micro Motor Kit
With Optima^{INT} Display

Perfect Control

Optima^{INT} and its MCX micromotor guarantee perfect control of the tool, managing the speed and the reversal of the direction of rotation. Providing the ultimate speed and torque control, the Optima^{INT} with Smart Logic technology is capable of exploiting to the fullest. Thanks to its Easy-Nav philosophy, the Optima^{INT} is incredibly intuitive and adapts perfectly to Ritter Ultimate Comfort Line.
The Optima^{INT} interface has 10 preprogrammed sequences for restorative operations and 10 sequences for endodontic operations with MX2 micromotor. You can perform your root treatments in complete safety. The Optima^{INT} has been designed to reduce the risk of NiTi instrument breakage to a minimum, by means of the auto-reverse function.
The MCX with adjustable LED light is the smallest and lightest brushless micromotor ever designed by Bien-Air. With MCX, you'll benefit from an even better grip and balance, ensuring more precise movements and less fatigue during the day.

Technical specifications MCX Motor:

Applications:	Restoration, Prophylaxis
Speed range:	100–40 000 rpm
Max. torque:	2,5 Ncm
Torque control:	No
Dimensions Ø:	21 x 42 mm
Weight:	78 g
Endo functions:	No
Light:	LED
Autoclavable:	Yes
Hose attachment/rotation:	Screws / ± 200°

Available options:
Optima^{INT} with 1 MCX LED motor
Optima^{INT} with 2 MCX LED motors
Optima^{INT} with 1 MX2 motor
Optima^{INT} with 2 MX2 motors

MX2 Micro Motor Kit

With iOptima^{INT} STANDARD

Ritter Dental™

Bien Air Dental

Endodontics. Restauration. Prophylaxis.

iOptima^{INT} and its MX2 micromotor is the all-in-one solution that o ers the full range of treatment options and is seamlessly integrated into the Ritter Dental Vanguard Line. You no longer need any additional equipment: iOptima^{INT} can be used to perform restorative procedures and endo treatments.

The system can be easily controlled via an Apple® iPad mini tablet *. The iOptima^{INT} therefore requires little space and guarantees a perfectly functional working environment. Highly versatile, the iOptima^{INT} enables you to perform most of your dental procedures.

The Bien-Air MX2 carbonless micromotor with adjustable LED light is a little overachiever. The result is exemplary balance and comfort: constant power, perfect control of speed, torque and reversal.

Technical specifications MX2 Motor:

Applications:	Restoration, Prophylaxis, Endodontics
Speed range:	100–40 000 rpm
Max. torque:	3,5 Ncm
Torque control:	Yes
Dimensions Ø:	21 x 44 mm
Weight:	79 g
Endo functions:	Yes
Light:	LED with adjustable light intensity
Autoclavable:	Yes
Hose attachment/rotation: Screws / ± 200°	

Available options:
iOptima^{INT} with 1 MX2 motor
iOptima^{INT} with 2 MX2 motors

*iPad mini not included

MX-i Micro Motor Kit

With iOptima^{INT} ALL-IN-ONE

Ritter Dental™

Bien Air Dental

Implantology. Surgery.

iOptima^{INT} is the All-in-One solution offering you the full range of treatment options seamlessly integrated into your dental chair. No need for additional equipment anymore: iOptima^{INT} lets you perform your restorative procedures, endo treatments (incl. reciprocating mode) and surgical procedures incl. implant placement. A Piezo scaling function is included as well.

Installed directly into the existing dental unit, the system is easily controlled through an Apple® tablet. The iOptima^{INT} therefore requires minimal space and guarantees a perfectly functional working environment.

MX-i LED micromotors are first and foremost a model of stability. At both high and low speeds, they offer enhanced working comfort and their high torque copes with the most complex implant insertion procedures. Depending on the desired speed, the power is constantly adapted in order to provide the optimum result.

Technical specifications MX-i Motor:

Applications:	Implantology, Surgery
Speed range:	100–40 000 rpm
Max. torque:	6 Ncm
Torque control:	Yes
Dimensions Ø:	23 x 69 mm
Weight:	115 g
Light:	LED with adjustable light intensity
Autoclavable:	Yes
Hose rotation:	0°

*iPad mini not included

Chiropro 3rd Gen Implant System.

Simplicity – the keyword of the new range of products developed by Bien-Air Dental in the field of implantology and oral surgery motors. Are you a dentist and/or specialized in implantology and looking for a simple, fast and efficient solution for your daily procedures? The Chiropro is the ideal solution for precise, reliable implant placement.

Technical specifications:

Intuitive navigation: a single rotary knob for control
                                Removable and sterilizable knob
5 programs freely programmable
Torque control
MX-i LED micromotor with ceramic ball bearing
Maximum torque: 70 Ncm
Set includes:
1 x console Chiropro 3rd Gen 1x contra-angle CA 20:1 L Micro-Series
1 x MX-i LED 3rd Gen micromotor with 3 years warranty
1 x cable MX-i LED 3rd Gen
1 x foot pedal
1 x handpiece holder
5 x irrigation cables
2 x sterile protective foils

Notes

Ritter ProCure

Scaler

Ritter ProCure

- Wireless
- Three working modes: Full, Ramping, Pulse
- Curing light up to 50 seconds
- Constant light intensity.
  The solidification effect is stable.

Technical specifications:

Rated Voltage::	24 V~
Rated Input:	≤8 W
Power:	from 1000 mW/cm^2
	to 1200 mW/cm^2
Light source:	blue light
	385–515 nm
Working conditions:	
Environment temp.:	5 °C to 40 °C
Relative humidity:	30 %–75 %
Dimension:	26x25x260 mm
Weight:	135 g

Dental Ultrasonic Scaler LED Handpiece

The autoclavable LED handpiece with a light source of 100,000 lux guarantees perfect visibility of the surgical area and is ideal and is ideal when working with the loupe. Cold light is used for better differentiation of soft tissue types. Thanks to innovative air supply system, the filtered air is fed directly to the tip at low directly to the tip – for thorough cleaning of the root canals of the root canals.

Technical specifications:

Frequency of oscillation:	≤ 28 KHz
Amplitude of the approach:	≤ 200 μm
Illuminance:	100,000 lux
Color temperature:	6,000-7,000 Kelvin
Length:	113 mm
Weight:	55 g
Handpiece cable:	2000 mm +/- 50 mm
Scaler Tips:	Satelec 1, 2, 10P

Ritter Compressor RA 7/3 D (Dryer)

Features:

• Oil free
• Adjustable pressure
• Auto stop and restart
• Air tank internal surface epoxy treatment
• Low maintenance
• Thermally protected
• Low running costs

Advantages:

• Lower noise level
• Compact layout and smart design
• Competitive price
• Secure handling
• Constructed for continuous duty
• Options available: Tank volume, Silent cabinet

Technical specifications:

Power:	3 HP via 3 pumps
Rotational speed:	1400 rpm
Tank:	80 Liter (18 Gallons)
Conveying capacity:	456 Liter (100 Gallons) Minute
Sound pressure:	56 dB (A)
Users:	5 to 6
Operating voltage:	220 V
Dimensions:	920 x 425 x 725 mm
	(36,2" x 16,7" x 28,5")
Weight:	78/90 kg
	(172/198 lb)

Ritter Compressor RA 7/4 D (Dryer)

Features:

• Oil free
• Adjustable pressure
• Auto stop and restart
• Air tank internal surface epoxy treatment
• Low maintenance
• Thermally protected
• Low running costs

Advantages:

• Lower noise level
• Compact layout and smart design
• Competitive price
• Secure handling
• Constructed for continuous duty
• Options available: Tank volume, Silent cabinet

Technical specifications:

Power:	4 HP via 4 pumps
Rotational speed:	1400 rpm
Tank:	135 Liter (30 Gallons)
Conveying capacity:	608 Liter (134 Gallons) Minute
Sound pressure:	56 dB (A)
Users:	7 to 8
Operating voltage:	220 V
Dimensions:	1070 x 460 x 750 mm
	(42,1" x 18,1" x 29,5")
Weight:	91/114,5 kg
	(201/252 lb)

MGF 100/50 TANDEM PRIME M

Features:

Prime oil-free compressors equipped with adsorption air dryers provide pure air with 0,01 micron filtration and -40°C dew point at atmospheric pressure, in conformity with the International Stardards in matter of compressed air qualiy. These versions are suitable for food and medical industry, in general can be used in all the applications where an excellent purity of compressed air is required.

Technical specifications:

Power:	6 HP
Tank:	90 Liter (24 Gallons)
Air capacity:	450 Liter (119 Gallons) Minute
Pressure max:	10 bar
Sound pressure:	69 dB (A)
Users:	6 Maximum simultaneous
Dimensions:	1230 x 630 x 820 mm (49" x 28,5" x 40,2")
Weight:	118 kg (260 lb)
Available as:	220 V/60 Hz / single Phase 230-400 V/60 Hz / 3 Phase

MGF 200/75 PRIME M

Features:

Prime oil-free compressors equipped with adsorption air dryers provide pure air with 0,01 micron filtration and -40°C dew point at atmospheric pressure, in conformity with the International Stardards in matter of compressed air qualiy. These versions are suitable for food and medical industry, in general can be used in all the applications where an excellent purity of compressed air is required.

Technical specifications:

Power:	9 HP
Tank:	200 Liter (53 Gallons)
Air capacity:	660 Liter (174 Gallons) Minute
Pressure max:	7 bar
Sound pressure:	72 dB (A)
Users:	9 Maximum simultaneous
Dimensions:	1450 x 820 x 900 mm (57" x 32,3" x 35,4")
Weight:	183 kg (403 lb)

Ritter Dental™

METASYS

Ritter Dental™

W&H

Metasys Excom Hybrid 5 Suction Unit 1,5/1,75 Kw

Features:

- Centrifugal separation rotor
- Frequency-controlled suction power regulation
- Aluminium turbine wheel
- High wastewater outlet
- One motor shaft
- Airflow-optimized cooling fins
- Low running costs

Advantages:

The suction power of dry suction motors, combined with integrated air/water separation and different, optional amalgam separator modules are the cornerstones of a central suction system, marked by its flexible and individual structure, high level of user-friendliness, and its unobtrusive yet efficient technology. The EXCOM hybrid can be used as a dry as well as a semi-wet suction system makes it so unique.

Technical specifications:

Power supply:	230 V AC
Frequency:	50/60 Hz
Max. current consumption:	9,0/10,0 A
Max. electrical shaft power:	1,5/1,75 kW
Max. ambient temperature:	40 °C
Airflow rate:	2000/2400 l/min
Negative pressure regulated:	180 mbar
Noise level:	64/68 dB(A)
Noise level with cover:	51/54 dB(A)
Dimensions (H x W x D):	620 x 460 x 455 mm
Dimensions with cover (H x W x D):	785 x 500 x 550 mm
Weight:	30 kg (66 lb)
Weight with cover:	67 kg (148 lb)

W&H Lexa MN-111

Features:

- User-friendly interface
- Customizable drying time
- Large capacity sterilizer
- Versatile sterilization program options
- Superior vacuumassisted drying
- Meets stringent hygiene standards
- Easy maintenance
- Programmable cycle start
- Excellent value for money
- Automatic digital cycle recording on USB stick
- Automatic water filling (optional)
- User authentication and load release (optional)
- Barcode label printing (optional)

Technical specifications:

Chamber size:	28 liters (7.4 gal)
Main/Used water tanks:	6.4/6.7 liters (1.7/1.8 gal)
Connection types:	2 USB ports
	1 Ethernet port (optional)
Power supply:	100–125 V AC; 50/60 Hz
	12 A Single Phase
Dimension (W x H x D):	490 x 452 x 616 mm
	19.3" x 17.8" x 24.3"
Weight (empty):	48 kg (105.8 lbs)

Sterilizer supplied with chamber rack, 4 large trays, tray holder, drain tube, USB drive

Ritter Dental™

DENTRI max

HDX WILL PERFORMANCE RADIOLOGY

3D Imaging
MAX 18x16.5 cm FOV, perfect for capturing most maxillofacial structures

PANO with Autofocus
2D panoramic feature with Autofocus for minimized distortion

Bitewings
Extraoral bitewing images for better patient comfort

Cephalometric X-ray(optional)
Optional cephalometric arm attachment, excellent diagnostic images for orthodontic practice

Model Scan Option
Model CBCT Scan for STL extraction

✔ Field of View
Expansive FOV 18x16.5 cm maximizes your practice.
Dentri Max provides you with various FOV size options from 3x3 cm to 18x16.5 cm

Free FOV
(3x3 cm - 12x9 cm)

16x9 cm
Dental Arch mode

18x16.5 cm
Dental Arch mode
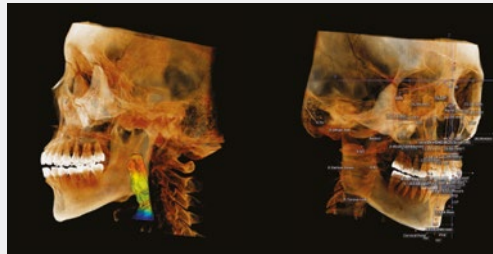
18.x16.5 cm
Airway Analysis

18.x16.5 cm
3D Cephalometric analysis

✔ Low Dose Radiation
An additionally equipped filter & Adaptive Exposure Control(AEC) technology significantly reduces radiation exposure. HDX WILL's imaging reconstruction still allows superior image quality.

Standard PANO

CBCT scan with only HALF the dose of PANO scan
*16x9 cm FOV with Ultra Low Dose & AEC ON

Adaptive Exposure Control(AEC)

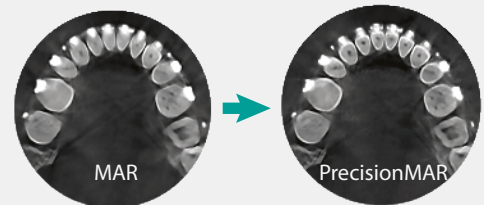Detector

X-RAY

mA

Angle

✔ Superior Image Quality
HDX WILL's state of the art imaging reconstruction algorithm finds the best value of each voxel and enhances image contrast and sharpness.

✔ PrecisionMAR
PrecisionMAR™ offers unprecedented clarity around metal, improving diagnostics and planning.
▪ Minimal scatter
▪ Reduced shading artifact
▪ Clearly define bone and teeth structures around metal

MAR

PrecisionMAR

CBCT Panoramic Imaging FOV 16.5 x 18

HDX WILL PERFORMANCE RADIOLOGY

Dedicated 2D Panoramic X-ray

Auto Focus
Minimized distortion, Maximized ability to obtain clear images

Bitewings
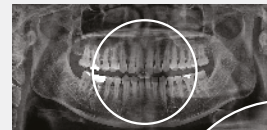Extraoral Bitewing options

TMJ
TMJ diagnostic x-ray

Low Dose Mode
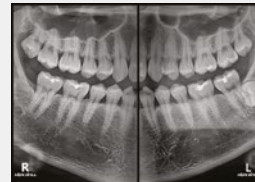Rapid scan time, Minimized dosage to patient
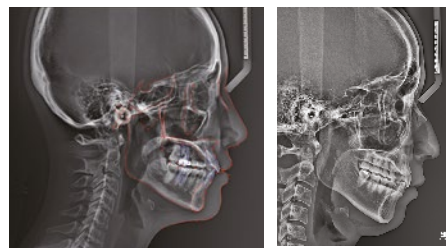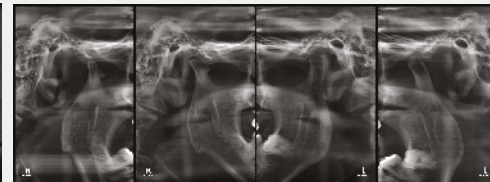
Auto Focus

Auto Focus OFF

Auto Focus ON

Bitewings

TMJ

Cephalometric X-ray(Optional)
Various cephalometric x-ray options with auto landmark tracing feature*.
Scan type & One-shot type available.

*Auto Tracing - Available with Willceph software purchase.

Function	CBCT + PANORAMA + Cephlometric X-ray(Scan type, Optional) + Model Scan + 3D Ceph Module
Focal Spot	0.5 mm
Scan Time	CBCT: 8 s or 12 s, 24 s, 36 s
	Panorama: 14 s or less / Bitewings: 8 s or less / TMJ: 6 s or less
	Cephalometric X-ray(Optional): 8 s or less(Scan Type) / 0.5 s ~2 s (One-Shot Type)
FOV size(DxH)	18 × 16.5 cm(Stitch), 16 x 9 cm(Non-Stitch), Free FOV (min. 3 × 3 cm)
Voxel Size(CT)	0.1 - 0.3 mm
Tube Voltage	60 kV - 90 kV
Tube Current	4 mA - 10 mA
Dimension(WxDxH)	DENTRI Max: 1201 mm × 1361 mm × 2455 mm (47.3" × 53.6" × 96.7")
	DENTRI C MAX: 1999 mm × 1361 mm × 2455 mm (78.7" × 53.6" × 96.7")
	DENTRI S MAX: 1941 mm × 1361 mm× 2455 mm (76.4" × 53.6" × 96.7")

Ritter Dental™

HDX WILL PERFORMANCE RADIOLOGY

3D Imaging
MAX 16x9 cm FOV, perfect for capturing dentition, sinus, or TMJ

Bitewings
Extraoral bitewing images for better patient comfort

Model Scan Option
Model CBCT Scan for STL extraction

PANO with Autofocus
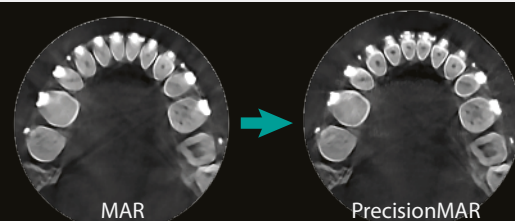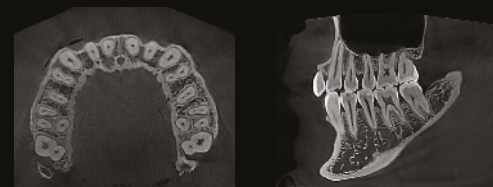2D panoramic feature with Autofocus for minimized distortion

Cephalometric X-ray(optional)
Optional cephalometric arm attachment, excellent diagnostic images for orthodontic practice

Superior Image Quality

HDX WILL's state of the art imaging reconstruction algorithm finds the best value of each voxel and enhances image contrast and sharpness.

PrecisionMAR

PrecisionMAR™ offers unprecedented clarity around metal, improving diagnostics and planning.
- Minimal scatter
- Reduced shading artifact
- Clearly define bone and teeth structures around metal

MAR → PrecisionMAR

CBCT FOV(Field of View) Size

Wide 16x9 cm FOV allows for the entire dentition, TMJ, Nose, Ear or Pediatric dental arch to be captured in one scan. Various options are available from 3x3cm to 16x9cm FOV

16x9 cm
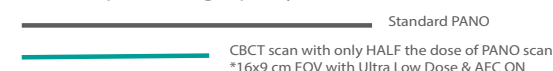Dental Arch mode

16x9 cm
Nose / Ear Mode
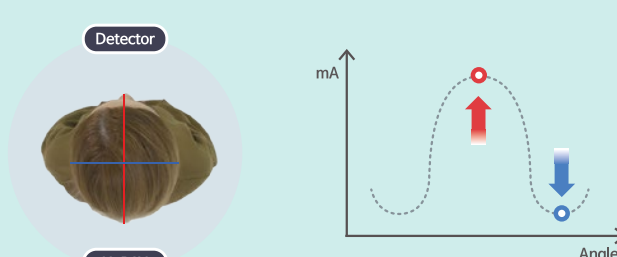
Free FOV
(3x3 cm - 12x9 cm)

10x8 cm
Child Mode

Low Dose Radiation

An additionally equipped filter & Adaptive Exposure Control(AEC) technology significantly reduces radiation exposure. HDX WILL's imaging reconstruction still allows superior image quality.

— Standard PANO
— CBCT scan with only HALF the dose of PANO scan
*16x9 cm FOV with Ultra Low Dose & AEC ON

Adaptive Exposure Control(AEC)

Detector

X-RAY

mA

Angle

CBCT Panoramic Imaging FOV 16 x 9

HDX WILL PERFORMANCE RADIOLOGY

Dedicated 2D Panoramic X-ray

Auto Focus
Minimized distortion, Maximized ability to obtain clear images

Bitewings
Extraoral Bitewing options

TMJ
TMJ diagnostic x-ray

Low Dose Mode
Rapid scan time, Minimized dosage to patient
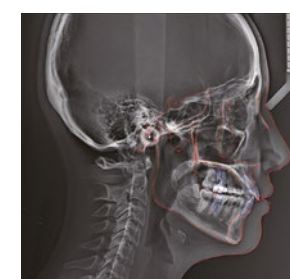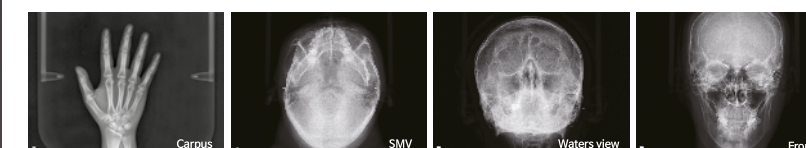
Auto Focus

Auto Focus OFF

Auto Focus ON

Bitewings

TMJ

Cephalometric X-ray(Optional)

Various cephalometric x-ray options with auto landmark tracing feature*
*Auto Tracing - Available with Willceph software purchase

Carpus | SMV | Waters view | Frontal

Function	CBCT + PANORAMA + Cephlometric X-ray(Scan type, Optional) + Model Scan
Focal Spot	0.5 mm
Scan Time	CBCT: 8 s or 12 s, 24 s
	Panorama: 14 s or less / Bitewings: 8 s or less / TMJ: 6 s or less
	Cephalometric X-ray(Optional): 8 s or less(Adult) / 6 s or less(Child)
FOV size(DxH)	16x9 cm or 12x9 cm, 10x8 cm(Child), Free FOV (Min. 3x3 cm)
Voxel Size(CT)	0.1 - 0.3 mm
Tube Voltage	60 kV - 90 kV
Tube Current	4 mA - 10 mA
Dimension(WxDxH)	Eco-X: 980 mm × 1225 mm × 2314 mm(38.6 ″× 48.3 ″× 91.1 ″)
	Eco-X S:1802 mm × 1225 mm × 2314 mm(71 ″× 48.3 ″× 91.1 ″)

Ritter Dental™

Intraoral Sensor 42 x 30 or 39 x 25

Product packaging

Easy USB Connection

Waterproof

SENSOR
Fast Response
High Image Quality

SENSOR
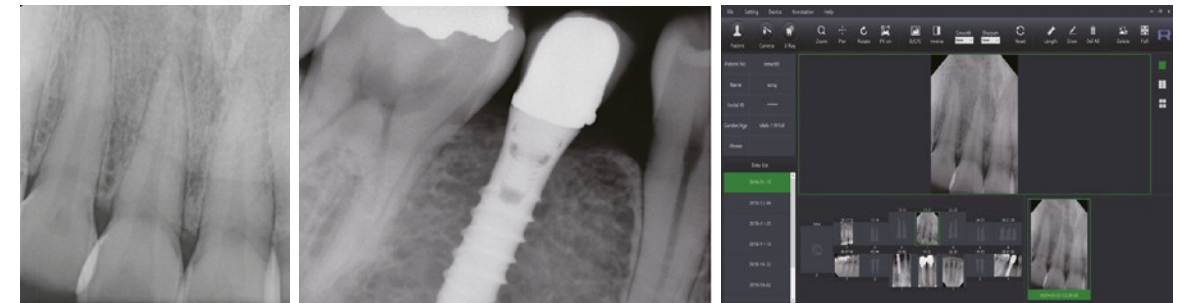
Fast Response
High Image Quality

- CSI Scintillator
- High Resolution
- Advanced Image Processing Algorithm
- Easy to Use
- Increased Patient Comfortableness and Ergonomic Design
- Easy Connection Using Twain Driver.

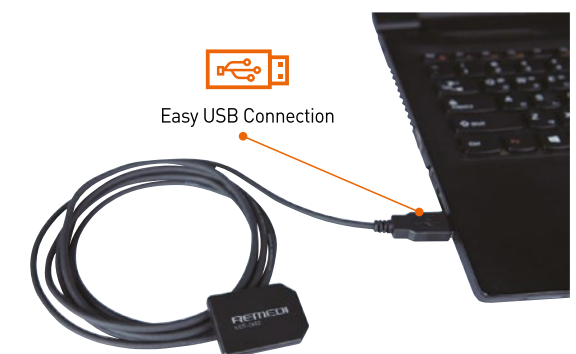DIGITAL INTRAORAL IMAGE SENSOR

REVOLUTION IN
MEDICAL DEVICES

FEATURES

Image Quality

- Less graininess - Enhanced image
- Contrast resolution – Best at the penny test
- Spatial Resolution – 19-micron pixel size

Patient Comfort

- Ergonomic Design with round corners – 6.0mm radius
- Thin Sensor Plate – 5.4mm (less than 1/4″)
- Low Profile Button – 6.0mm

Designed for Durability

- Thinner Cord – Direct USB from sensor plate to computer
- Sturdier Cord Jacket – Fewer wires enables greater protection
- Protected Against Fluids / Contaminants – Sealed cord / sensor junction
- Repair Option – Cord serviceability

Ergonomic Design

- Broad Range of Acceptable Exposure – Superior electronic gain control
- Sang-Resistant Cord –No interface box or cord bulge
- Easy Cleaning – Immiscible in glutaraldehyde and other disinfectants

SPECIFICATION

Parameter	IoDS-2401	IoDS-2402
Dimension (mm)	39 x 25	42 x 30
Image size (mm)	30 x 20	34 x 26
Image resolution (lp/mm)	25	
Pixel size (μm)	20	
Pixel pitch (μm)	20	
Total pixels (px)	1.5M	2.2M
Effective pixels (px)	1000 x 1500	1300 x 1700
Sensor technology	CMOS with Optical Fiber	
Scintillator	CsI (Tl)	
Interface	USB 2.0 high speed	
Frame rate (fps)	1.4	1

Ritter Dental™

The lightest The Smallest
The highest performance of 70kV
Safe & Easy to use

REMEX

☢ **High Quality**
Portable X-Ray Digital Camera

- Conveniently transportable anywhere: office, surgery suites, humanitarian work
  Easily take an x-ray anytime during procedures
- No cumbersome stands or cables
- Cordless, rechargeable batteries. More than 250 exposures per charge
- Lightweight, highly convenient. No motion artifacts; blur-free radiographs

Remex provides the best diagnostic imaging

REVOLUTION IN
MEDICAL DEVICES

Handheld X-Ray Camera

Convenient
Light weight, cordless, easily transportable
No awkward arms to manipulate; no drift
No need for special stands, cables, remotes
Hundreds of diagnostic quality images from a single battery charge

Sharp, clear images
Works with sensors, film, phosphor plates
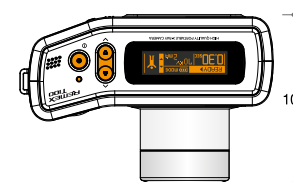0.4 mm focal spot produces sharp, high-resolution images

Safety
Low patient dosage
Internal shielding protect the operator
Studies show yearly operator exposure is equivalent to or less than exposure from a typical wall-mounted x-ray
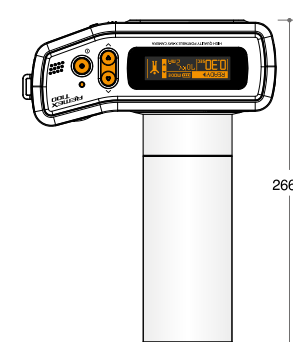
REMEX
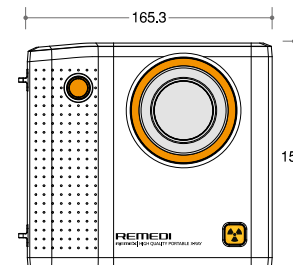High Quality
Portable X-Ray Digital Camera
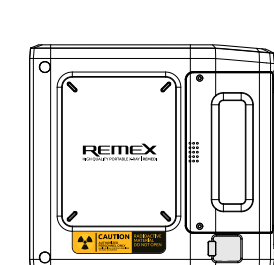
DRAWING

Top View
Install Short Cone

Top View
Install Long Cone

105

266.5

Front View
165.3

Rear View

153.6

SPECIFICATION

Constant Potential High-Voltage Generator

Electrical

X-ray Tube Voltage	70 kV
X-ray Tube Current	2 mA
Focal Spot Value	0.4 x 0.4 mm
Output Power	140 W
Exposure Time	0.01 ~ 1.3 sec

Mechanical

Anode Angle	12.5 degrees
Inherent Filtration	At least 1.5 mmAl
X-ray Coverage	Ø60 mm at SID 233 mm

Dimension

165.3 x 105~266.5 x 153.6 [WxDxH]

Weight

About 1.7 kg

Power requirement

Rechargeable Battery

DC 11.1 V, 1500 mAh

Charger

Input	100~240 VAC, 50~60 Hz, 0.5 A
Output	12.6 Vdc, 1500 mAh

REMEDI

REVOLUTION IN MEDICAL DEVICES

Ritter Implants

The Ritter SB/LA-Implant System offers a wide range of selected sizes and prosthetic components. This includes the Narrow Line with 3.0 and 3.3 Diameters and Platform Shifting features for all Implants and Abutments to assist a perfect soft tissue management.

Get our latest Catalog and more information at www.ritterimplants.com

1. PICK YOUR IMPLANT PACKAGE

| 25 IMPLANT PACKAGE | 50 IMPLANT PACKAGE | 100 IMPLANT PACKAGE |

2. PICK YOUR IMPLANT SIZES

			5.0	6.0	
	3.75	4.2			6
3.0	3.3				8
					10
					11.5
					13
					16

LENGTH (mm)

WRITE AMOUNT IN EACH CELL

FREE KIT INCLUDED
Compact Surgical Kit

33 reasons you need Ritter Implants

Ritter Implants
Made in **GERMANY**

3. ADD OR UPGRADE SURGICAL KIT

ADD THIS KIT
Complete Surgical Kit

- ADD FOR
- UPGRADE FOR

ADD THIS KIT
Fully Guided Surgical Kit

- ADD FOR
- UPGRADE FOR

Worldwide

Ritter Dental™

DENTAL TRADITION
137 YEARS

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San Antonio, TX 78213
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Fax: 800.831.5973
www.RitterDentalUSA.com

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Ritter Implants GmbH & Co. KG
Freiburger Str. 45, 88400 Biberach
GERMANY
www.ritterconcept.com
www.ritterimplants.com

Your Ritter-Partner:

2402US