

Ignis

Wireless light system.



Bryant Dental Product



Dentistry, reimagined.

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The BD story.





Dr Connor Bryant
Co CEO and Founder



Dr Priyam Patel
Co CEO

Bryant Dental was created by dentists to solve clinical problems they themselves had faced, by using technology in unprecedented ways.

Since our incorporation we have grown exponentially, thanks to our community of passionate, talented dentists who believe, like us, that dentistry can be done differently.

Inspired by clinicians who strive for brilliance, we aim to bring the latest innovation and technology to extraordinary dentists to facilitate their pursuit of excellence.

C-Flo® dentair Ignis® Lucidum® MagStrap® iShields® TapNote® HALO®

Uniform beam pattern

Edge-edge conformity for maximum clarity.

Hingeless

Rotating lens filter design.



Specialised silicone rubber

Head strap is a specialised silicone rubber, which is disinfectable and non-sticky.



Please do not use if you have a silicone rubber allergy.

**No fiddling with
screws or wires**

Neodymium magnets hold the battery securely in place and allow a super quick swap-over time of less than three seconds.

Indication

Cool Blue Indicator light for battery management.

Ignis instructions.



Intended use: Ignis Wireless Headlight is an illumination device attached to spectacles that is intended to illuminate oral structures and operating areas.

This device is designed to be used by qualified dental professionals, including, but not limited to, dentists and dental hygienists, as well as medical doctors and/or professionals. Ignis must be used with the bracket provided, which is specific to your frames.

The Ignis Kit comes pre-assembled, hassle free and ready to use. Please follow the instructions presented for usage. A screw driver is provided if you require further adjustments.

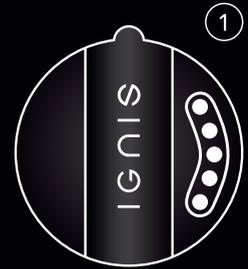
If you experience any problems please contact us on +44 (0)1932 320064.

What's included

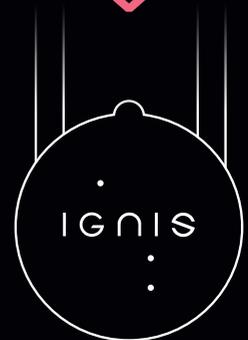
- Ignis LED with integrated headstrap
- X1 Ignis MagStrap
- X1 Dichroic wavelength filter
- X2 Ignis batteries
- X1 Battery charging plate
- X1 Ignis USB wall plug (country specific)
- X1 Ignis screw driver
- X1 Ignis bracket

Attaching the battery switch

- 1 Attach the battery switch to the base plate on the head strap, aligning the grooves to the 'OFF' position.



Neodymium magnet-powered battery switch



Base plate

2 Select power modes



Keep switch vertical to power off device (shown above).



Twist one click for regular power (shown above).



Twist two clicks for high power (shown above).



Battery takes 1.5s to power up when switched ON to calculate optimum output.

Important: For safety reasons, to operate in high power mode, the battery must first be switched to regular and then to high.



Blue indicator lights are activated when device is ON.



When indicator light does not show any bars, the battery is near depletion and requires charging. (See page 27 for charging.)

3 Selecting the lens filter

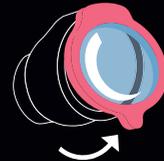
Dichroic Lens Filter – this smart filter is held in place with six neodymium magnets, allowing a really smooth transition between regular light and filtered light. This design prevents the filter accidentally rotating into place.



Dos and Don'ts



✓
Rotate



✗
Lift

This filter cuts out the curing wavelengths of light, to prevent composite setting with a bright yellow tint rather than dark orange. This allows fine aesthetic work with the light on.



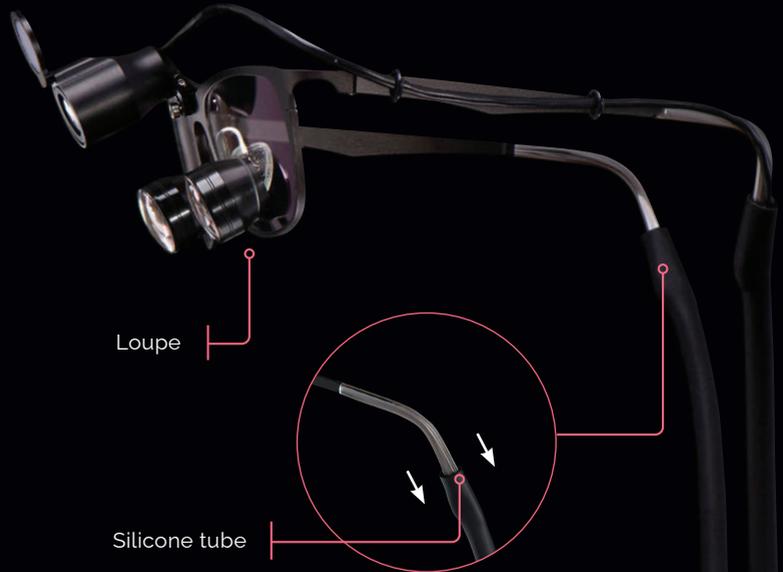
To avoid damage. Please do not lift the lens filter upwards. Rotate only.

Ignis MagStrap adjustment.

Ignis Magstrap is a revolutionary upgrade to stabilize your loupes. A fully disinfectable and custom fitting magnetic design enables you to perform safer and smarter dentistry.

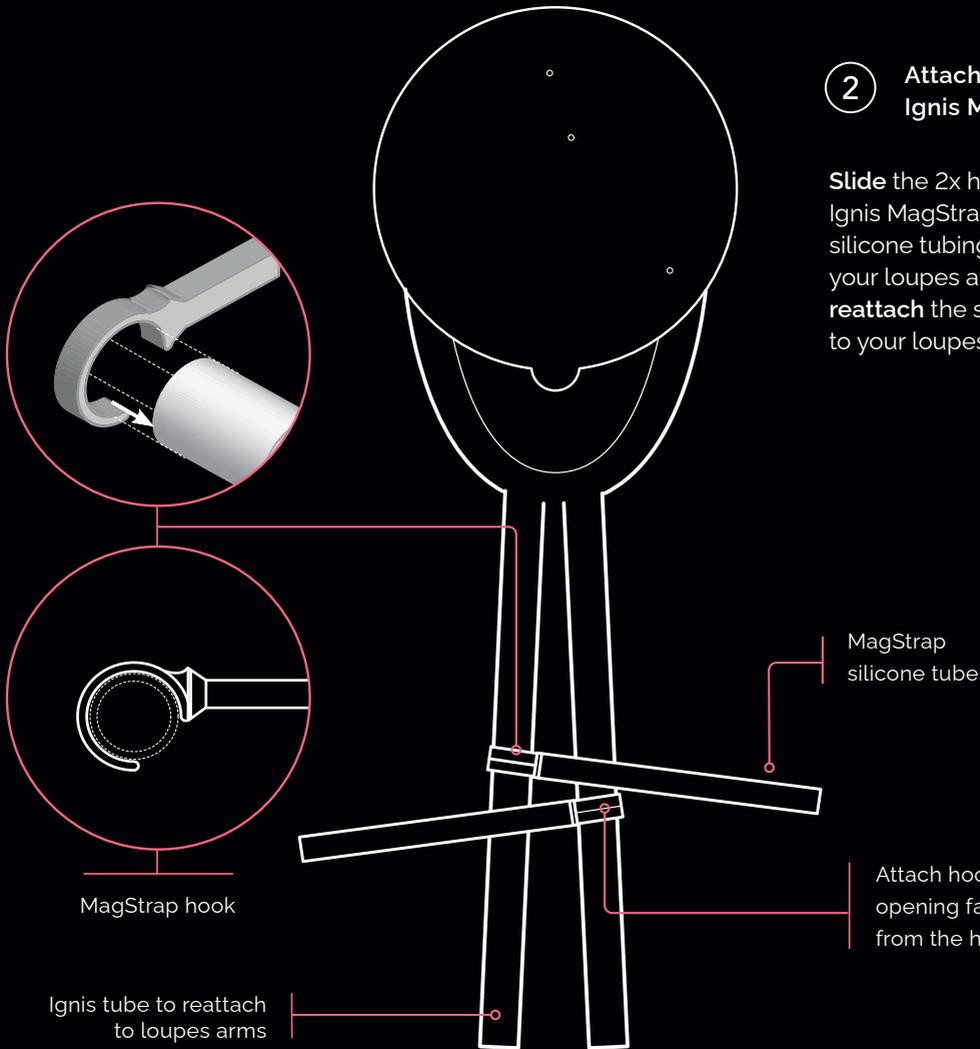
1 Detach silicone tubes from loupe arms.

Gently slide of silicone tubes from your loupe arms.



Troubleshooting.

For further information please scan the QR code below to see our instructional video.

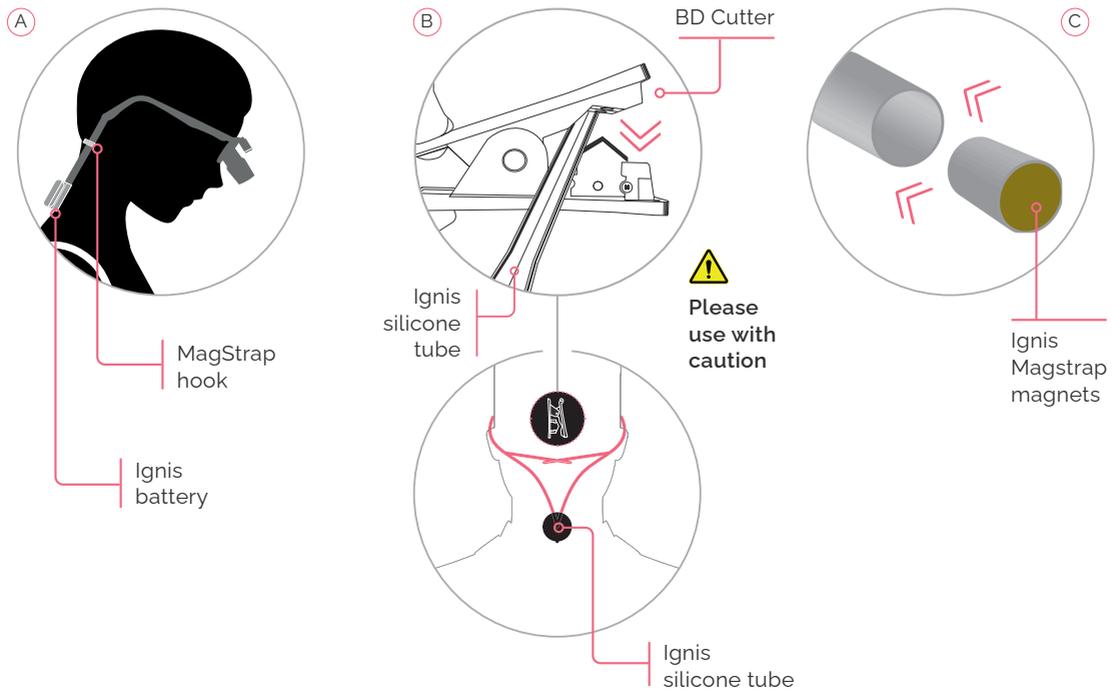


2 Attaching the Ignis MagStrap.

Slide the 2x hooks of the Ignis MagStrap onto the silicone tubing removed from your loupes arms and then **reattach** the silicone tubes to your loupes.

3 Customising your Ignis Magstrap silicone tubes to the required length.

Place the loupes back onto your head. The Ignis MagStrap tubes should be placed at the bottom of your ears and tightened to your required length and cut away the excess. The Ignis MagStrap magnets can then be placed into the end of the Ignis silicone tubes. Lastly, connect the Ignis MagStrap magnets together to complete your upgrade.



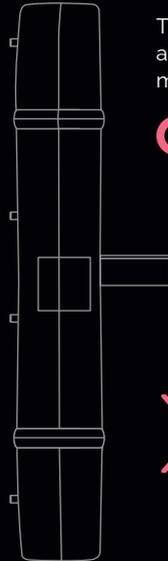
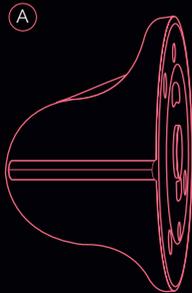
Charging.

Charged in **1 hour 45 mins**

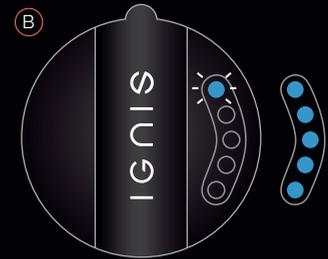
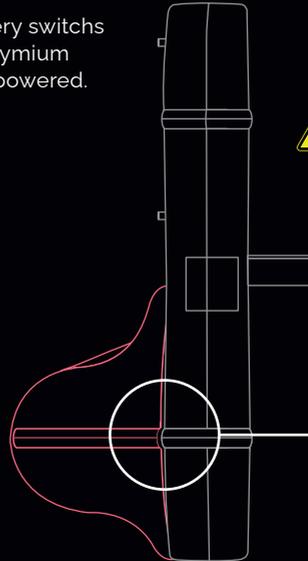
It's **important** to take care of the batteries. Intelligent adaptive charging means the batteries cannot be overcharged. Each battery comes with a two-year warranty.

1 Detach the battery from the head strap plate.

2 **Attach** battery to battery charging plate. Aligning the grooves on the top to activate the charging sequence (See diagram A).



The battery switches are Neodymium magnet-powered.



Do not place the battery on the charging plate in the incorrect orientation. Always ensure the grooves are aligned prior to attachment.

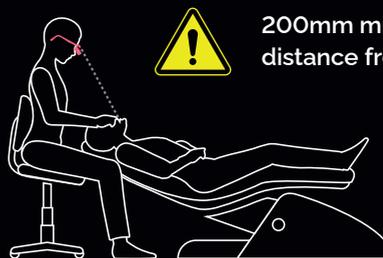
3 Once a **FULL** bar appears and stops flashing, the battery is fully charged. (See diagram B)

- Neodymium magnet-powered battery switch.
- USB mains adaptor attached to battery charging plate.



Do not expose batteries to naked flame.

Safety instructions.



200mm minimum safe distance from patient.

Conditions

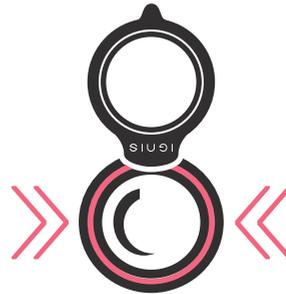
- Only use supplied wall charger, using another charger will damage the batteries and invalidate the warranty.
- Do not immerse any of the Ignis® light parts in water.
- If any problems occur with the unit return to Bryant Dental for repair, attempting to repair yourself will void the warranty.
- Do not change or modify any of the existing components without authorisation from Bryant Dental.
- Do not leave the light on inside a pocket – it will cause the unit to overheat.
- Do not leave the batteries on exposed skin.
- Do not charge unattended or leave in environments exceeding 40°C.
- Do not attach multiple batteries together.
- Batteries should be stored in a cool, dry place.
- If batteries behave abnormally immediately contact Bryant Dental.
- Take care when attaching battery to base plate to avoid trapping your hair.
- Take care not to touch the LED during use as this can reach 60-65°C and cause a burn injury.
- Avoid eye contact with the light switch on as this will dazzle other persons.
- Do not bring LED within 200mm of the patient.
- Do not bring neodymium magnets on batteries closer than 25cm to patients or operators with pacemakers.

Cleaning & maintenance instructions.

- ⚠ Do not run under water.
- ⚠ Do not spray the device.
- ⚠ Do not submerge in any liquid or ultrasonic cleaner.
- ⚠ Do not pull on exposed cables during cleaning.
- ⚠ Do not use autoclave or chemiclave.
- ⚠ Do not use glutaraldehyde or iodophor.
- ⚠ Do not use a cleaner with alcohol concentration greater than 70%.

You may disinfect using a low alcohol disinfectant or soap and water.

- Take care to ensure the ventilation gap around the LED is thoroughly cleaned along with all other surfaces that may be contaminated.



Ventilation gap

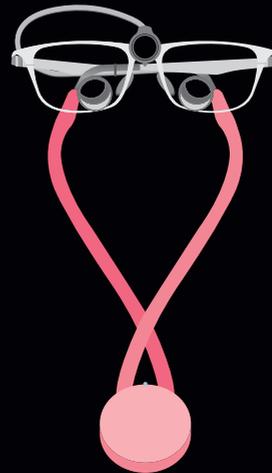


5 easy steps to store your Loupes and Refractives

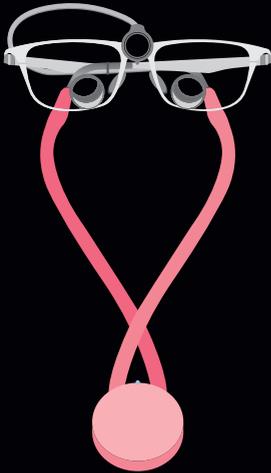
With an
Ignis Kit



1 Close the left arm
(shown above).



2 Followed by the right
arm. Silicone straps
should cross over
(shown above).



3 Face your Loupes or Refractives towards you. Hold the battery base plate and fold up (shown above).

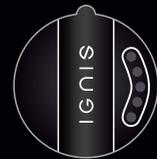


4

Place folded Loupes or Refractives in the center of the case (shown left).



5 The battery charging plate sits **beneath** the headstrap and in the designated compartment.



Servicing and troubleshooting.

- Lithium Ion batteries are considered expendable and will last 300 charge/discharge cycles before gradually losing capacity. New batteries can be ordered directly from Bryant Dental or your local distributor.
- Ensure the Ignis Wireless headlight is regularly cleaned and disinfected.
- Enquire with Bryant Dental about a service plan for the highest level of support.

Battery is not charging

If the battery is fully charged, and it senses it is going to 'overcharge', it will go into sleep mode and stop charging. The battery can appear dead. By putting the battery on a light to discharge it, it will then re-charge when put back on a charging plate. If this does not solve the issue – immediately cease use of the battery and contact Bryant Dental.

Battery isn't lasting a full morning or afternoon session

After about 2 years, the battery capacity will begin to decrease as in most Lithium Ion batteries. If the battery is under 1 year old and not lasting a full session please ensure it is being used in 'regular' mode not 'high' power mode. If still an issue – please contact Bryant Dental and cease further use of the battery.

Battery keeps twisting on my back

Lay your frames and Ignis out on a flat table. Unslide the earpieces from the silicone tubes and relieve any tension in the straps. With the base of the Ignis Plate flat on the table, re-attach the tubes and this should solve any twisting issues. Please contact Bryant Dental if not.

Light comes on intermittently

Ensure batteries are fully charged.

Light is flickering

Ensure batteries are fully charged.

There is no light output

The light must be turned on regular first, then high. If you go straight to high the light won't turn on. This is to prevent accidental discharge at high power.

Battery is behaving abnormally

If the battery exhibits abnormal function please cease use immediately and contact Bryant Dental®. Abnormal function could include, though is not limited to, overheating, expanding or changing shape.

Warranty.

Limited liability policy

Bryant Dental will repair any Ignis issue arising from a manufacturing defect for a period of 2 years, without charge. The liability will not exceed the amount you originally paid for the product. The warranty does not cover defects arising from negligence, product modification, unauthorised repairs, accidental damage, theft, loss or acts of God.

REF 5060678490003 **SN** See LED device **LOT** See LED device



When you plan to dispose of the device, please return to Bryant Dental for recycling.

The European Union Waste Electrical and Electronic Equipment (WEEE) Directive forbids the disposal of waste electrical and electronic equipment as unsorted municipal waste, requiring that it be collected and recycled or disposed of separately. Hazardous substances are present in electrical and electronic equipment and present potential risk to human

health and the environment if disposed of in municipal landfills, which are not designed to prevent migration of substances into the soil and groundwater.

The Ignis battery packs contain Lithium Ion cells. Recycle or dispose of the batteries according to national, state, and local regulations.

Compliant with RoHS Directive 2011/65/EU.

Repairs.

Accidental damage

1. **Safely Return:** Please let us, or your local Bryant Dental distributor know as soon as possible so we can work out how best to support you in the interim.
2. **Inspection & Repair:** Our engineers will inspect the damage and assess whether or not an in-house repair is possible. Any damage to your frames can usually in a week or less, although this is longer outside the UK due to shipping related delays. Any damage to the lenses will require a more extensive assessment and repair which can take up to 28 days.
3. **Return & Swap:** Once repaired, we will ask you to confirm a delivery address and ship your Refractives back out. Please send the courtesy Refractives back to us by Special Guaranteed delivery as soon as possible in case other customers are in desperate need of them.

Warranty repair

1. Safely Return: Please let us or your local Bryant Dental distributor know as soon as possible so we can work out how best to support you in the interim.
2. Inspection & Repair: Our engineers will inspect the damage and assess whether or not an in-house repair is possible. Any damage to your frames can usually in a week or less, although this is longer outside the UK due to shipping related delays. Any damage to the lenses will require more extensive assessment and repair which can take up to 28 days.
3. More extensive assessment and repair which can take up to 28 days.
4. Fault Cause Analysis: Will be conducted on every case of non-accidental damage in order to feedback into Design & Verification stages of batch production. The fault will then be rectified for every customer moving forwards.
5. Return & Swap: Once repaired, we will ask you to confirm a delivery address and ship your Refractives back out. Please send the courtesy Refractives back to us by Special Guaranteed delivery as soon as possible in case other customers require them.

Get in touch.

If you have any questions or concerns, please don't hesitate to get in touch.



Scan to connect

Our 24/7 support team is always on hand if you need anything. In the first instance please contact your product specialist or local distributor, you can find their contact details on the support page of the website at www.bryant.dental/support

Our office team are also available to answer any questions you may have.

UK office contact number:

☎ +44 (0)1932 320064

☎ +44 (0)7990 113723

UK office address:

The Barns, Hilltop Farm, Lyne Lane
Chertsey KT16 0AW, United Kingdom

Australian office contact number:

☎ +61(2)72089592

Australian Office Address:

Suite 12, 13U/175 Lower Gibbes
St Roseville NSW 2069, Australia



Technical specifications.

Parts list:

Part Name	Part Code	Supplier
Ignis® LED with Integrated Headstrap	BD2	Bryant Dental
Dichroic Wavelength Filter	1X	Bryant Dental
Ignis® Battery	BDBATT15	Bryant Dental
Battery Charging Plate	BDCP1	Bryant Dental
Ignis® Pro Battery	BDPBATT20	Bryant Dental
Ignis® Pro Charging Plate	BDPCP2	Bryant Dental
Ignis® Screw Driver	IGNIS	Bryant Dental
Ignis® USB Wall Plug	BDUKP1	Bryant Dental
Ignis® Bracket	BDXAMP1	Bryant Dental
Ignis® MagStrap®	IM2	Bryant Dental
MagStrap® (Optional)	RL2	Bryant Dental

Applicable standards:

EN 60601-1:2006

EN 60601-1-2:2015

IEC 60601-1-6:2010/AMD1:2013

IEC 60601-1-2:2014

ICES-003 (Issue 6)

IEC 62471:2006 (Risk Group 2)

EU-MDR 2017/745

Known Contraindications: Silicone Rubber Allergy or Sensitivity

Ignis regular battery

Power Mode: High	Constant use: 1 hour 10mins Clinical use: 2 hours
Power Mode: Regular	Constant use: 2 hours 45mins Clinical use: 3-4 hours
Battery Cycle Count	300
LED Cycle Count	10,000

Ignis pro battery

Power Mode: High	Constant use: 1 hour 45mins Clinical use: 2-3 hours
Power Mode: Regular	Constant use: 3 hours 30mins Clinical use: 4-5 hours
Battery Cycle Count	300
LED Cycle Count	10,000



Fully CNC machined housing, using 6061 Grade aluminium.



Headlight unit weight 9g, full unit weight 32g.

Full Charge Time	1 hour 45 Mins
Spot Size	8.4cm diameter @ 40cm Working Distance
Beam Colour Temperature	5700K
Beam Intensity	50-100 Lumens
Overall Unit Weight	32g-45g Excl. Batteries
LED Weight	9g
IPX	IPX0 (0 Rated)

The charge circuit is protected by a MCP73831 charge control chip. This has current limiting protection and over temperature protection, along with reverse discharge protection.

Adverse Reactions	None Known
Charging Temperature	10-35°C
Operating Temperatures	10-40°C
Ignis Regular-Operating Power	DC3.7V  700mAh
Ignis Pro-Operating Power	DC3.7V  1000mAh
Charger Input	AC100-240V, 50-60Hz
Charger Output	· 12W 5V  2.4A

Only use supplied charging plug

Storage & shipping conditions

Storage Temperature	0-35°C
Relative Humidity	30-75%

Environmental operating conditions

Operating Temperature	10-40°C
Relative Humidity	30-75%
Atmospheric Pressure	70.0 kPa to 106.0 kPa



This device contains magnets which should not be used if you have a pacemaker, or with patients with pacemakers.



Follow instructions for use



Fragile, handle with care



Keep dry



This device is not sterile



Do not dispose



Operating temperature limit



Do not use if package is damaged



Do not bring neodymium magnets in battery and charging plate within 25cm of patients with pacemakers



Do not use if you have a silicone rubber allergy



Do not expose batteries to naked flame



Possible hazardous optical radiation emitted from this product. Do not stare at the operating lamp. May be harmful to your eyes - Risk Group 2



This device can become very hot and cause burn injuries. Do not leave batteries unattended



Bryant Dental
The Barns, Hilltop Farm,
Lyne Lane, Chertsey,
KT16 0AW, U.K

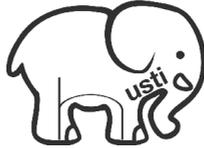


Meets requirements of the Medical Device Directive



Advena Ltd. Tower Business Centre, 2nd Flr.,
Tower Street, Swatar, BKR 4013 Malta





Bryant Dental x Husti.

Husti is a charity which empowers children in rural India using education and offering them tools to improve their lives. Bryant Dental are proud to partner with this cause which aims to change lives and build communities for underprivileged children.



**You have the power
to change lives.**

Find out more about the work they do here.

www.bryant.dental

 UK +44 (0)1932 320064 | AUS +61 (02) 72089592

 UK +44 (0)7990 113723

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Bryant Dental

Dentistry, reimagined.

EN/IG/IFU Rev_F Sept 2023