

# Refractives Pro.



**Bryant Dental.**



**Humanity,  
augmented.**

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# Why we exist, and what we do.



## Our Mission.

**We exist because we know great clinicians change lives.**

We believe that the optics we create for clinicians should feel like the first time they wear a pair of prescription glasses - as though it's the first time they've seen the world as it really is.

Our mission is to bring the most human-centric technology to every clinician on the planet. Technology that is so lightweight, so biomimetic and so clear that it feels as though human sight has been amplified not just magnified. Loupes that work to go beyond the limits of human vision.

## Our Vision.

**Imagine a world where technology is so intuitive, so intelligent, so seamlessly woven into the fabric of healthcare, that it feels like clinicians are magicians. Man, elevated by machine, to new heights.**

We're crafting a system that's not just intelligent in a computational sense but in a profoundly human sense. A system so seamless that you forget where the technology ends and where you begin. This is more than augmented reality; it's augmented humanity.



# The earth's most trusted loupe brand.

To us, service is an art form. We believe in building real relationships, not transactional ones. That's why the thousands of clinicians we serve came to us, and that's why we have 500+ five-star reviews. Join the BD community and see for yourself.



## Proudly Manufactured in the UK.

### Drop shipping is easy. Making things is hard.

We do it anyway. We brought manufacturing to the UK because we know our products are transformative, and we also know how upsetting it is when things go wrong. We make our products in our Surrey based HQ to make sure we can control the quality of every product we place in your hands - and you're always welcome to visit.

### Our office locations



# Our optics.



If you can read this, you're wearing Refractives.



# Refractives Pro.

Not only designed for ergonomics, Refractives were designed by real dentists to allow for biodynamics, for true biological comfort in the ideal posture.

A symphony of lenses and human-centric design comes together in the world's lightest, and most comfortable ergo-loupe. Available in 3 magnifications.

## Intended use

BD RH2 is a modular device intended to illuminate and/or magnify the surgical field of operation.

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.



**Our Refractives were  
the original ergo-loupes.**

## The ultimate ergonomic design.

A range of biometric frame sizes for the ultimate bespoke fit.



Glare and scratch resistant lenses - expertly engineered to withstand the stresses of life.

Our signature optical excellence reimagined using advanced prism technology.





**The collection.**





## Refractives P7.8x

Single-tooth dentistry and endodontics.

**45**

Field of  
view (mm)

**40**

Depth of  
focus (mm)



Wired and wireless  
headlight options.



## Refractives P5.7x

High end cosmetic dentistry.

**60**

Field of  
view (mm)

**50**

Depth of  
focus (mm)



Wired and wireless  
headlight options.



## Refractives P3.8x

Best for general dentistry.

**100**

Field of  
view (mm)

**70**

Depth of  
focus (mm)



Wired and wireless  
headlight options.



## Refractives P2.9x

Best for general dentistry.

**130**

Field of  
view (mm)

**100**

Depth of  
focus (mm)



Wired and wireless  
headlight options.

## What to expect when you first try on the Pros.



The Refractive Pro is a paradigm change in the world of optics, and we have made them as lightweight as possible, and more bespoke than ever before. These changes mean the initial viewing experience is a little different.

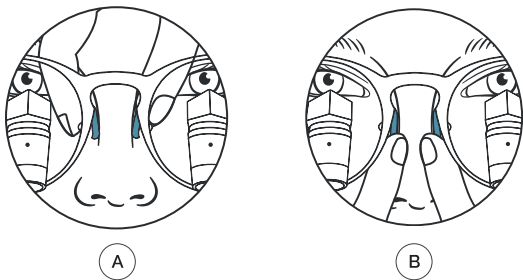
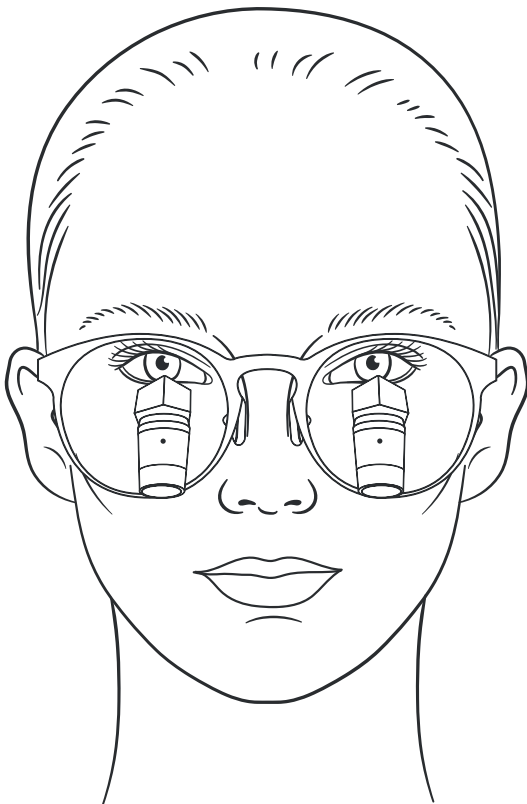
With the Pros, you'll find two telescopes, each generating a circular image for one eye. Instead of merging these circles into one, we deliberately create a figure-of-8 style overlap between them. This intentional design choice significantly expands your field of view.

Initially, when you wear the Pros, you may observe two overlapping circles instead of one clear figure of eight. This phenomenon arises from the unparalleled clarity offered by the Pros, which allows you to see the edge of the telescope. However, after approximately two weeks of wearing them, your brain adapts and seamlessly stitches the images together. The result is an unobstructed, panoramic view with a broader field of vision. Get ready for an optical experience that evolves and improves over time.



Our team is here to support you throughout this process, you can contact us here.

# How to set up your Refractives.



Try out your new Refractives, and ensure that your vision is clear and unobstructed.

You can adjust where they sit on your face by pinching the nose pads closer together, which will make them sit higher up your nose (A), or widen the nose pads to move them lower down (B). This process may help you find the best position for the optimal unobstructed view.

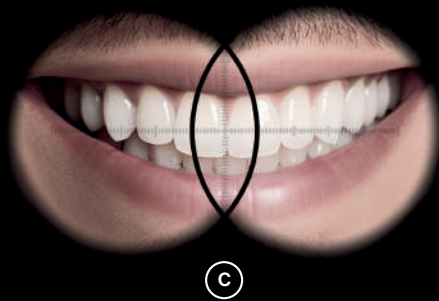


**CAUTION:** Nosepads are tightened and checked before shipment but may become loose in transit, please use the enclosed screwdrivers to tighten before use.



Scan to access our bespoke guide.

Every pair is highly bespoke and often needs to be adjusted to fit your face perfectly.



When you first look through your Refractives, you should see an image that looks something like this (see above (C)), however, it is common for highly bespoke products such as Refractives to require some modification to mould to your face shape.



If your vision is shadowed at the top you can **push your nosepads together** so they sit higher on your face.



If your vision is shadowed at the bottom, you can **push your nosepads further apart** so they sit lower on your face.



If your vision is shadowed to the right, you can **push your nosepads further to the left** to correct this.



If your vision is shadowed to the left, you can **push your nosepads further to the right** to correct this.



## Troubleshooting.

Still having trouble getting the perfect visual experience? Scan here to get in touch with our specialists.



## Getting used to your Refractives.

**It can often be a challenge getting used to your Refractives, and it is normal to take several weeks or months to fully adjust.**

We recommend trying them out at home to start with while doing small tasks, such as reading a page of a book, texting, or painting your nails, to acclimatise to the new and ergonomic position of your neck and back.

If you do experience any issues with the Refractives, please do not hesitate in the first instance to get in touch with your product specialist. We pride ourselves on our customer service, and our specialists, office staff, and BD partners are always ready to help.



## Maintenance and protection.

Maintaining your new Refractives is very important. To help prolong the life of your new investment, we recommend cleaning them regularly. We have provided some suggestions shown right:

- We only recommend 70% isopropyl alcohol to clean your Refractives, as we can finely control the chemical makeup and ensure no damage to the lenses, scratch and glare coating.
- You can use the 3 in 1 to help remove debris without scratching the lens.
- Always wipe and dry with the Refractives cleaning cloth.
- Use the iShields® Visor system for additional protection.



Scan to  
view iShields.

### Cautions for cleaning and maintenance.

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





# Storage instructions.

# Securing your Refractives.

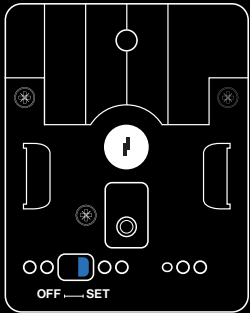


**Keep your Refractives safe with our TSA-approved lock.**

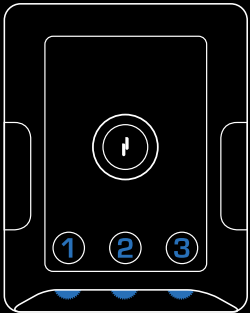
Your matte black case has been engineered for the highest level of impact resistance to help protect your Refractives from the elements and intruders. Please see the instructions shown on the right.

## Setting the code.

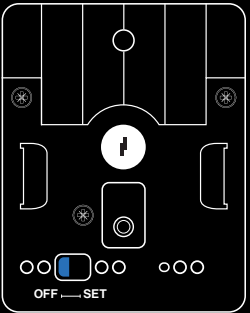
Located on the reverse of the lock face.



Move switch to 'SET'

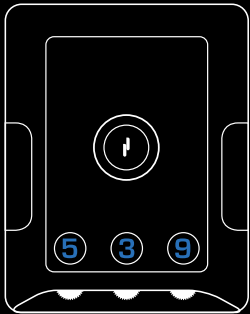


Select a 3-digit code

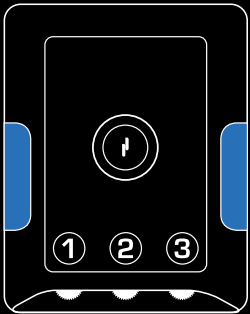


Move switch to 'OFF'

## Closing / opening.



**Closing:** Shut the lock buckle down and change code



**Opening:** Select your chosen code and push the side buttons

### Forgotten your code?

Unfortunately, we don't have a master code that can unlock it. If you need help, please get in touch with your specialist, local office or distributor.

# Airtag compatible.

Keep track of your Refractives and ensure their safety with a built in Airtag.

Our cases are Airtag compatible\*, making it easy to always be able to locate your Refractives. Please see the instructions below to learn how to connect your iPhone to the Airtag in your case.

\*Cases are also SmartTag compatible



## Step 1.

Open your Refractives case and remove any contents from within.



## Step 2.

To insert your AirTag, remove the silicone mould inlay and place it upside down. The underside contains two compartments either AirTag (A) or SmartTag (B). Once inserted flip back to original position.



## Step 3.

Place your unlocked iPhone/Smartphone into compartment (C). **Shown above.**



## Step 4.

Wait for your iPhone/Smartphone to detect the Airtag and a pop up will appear on your screen. Press the connect button and simply follow the instructions that appear on the screen.





### Step 1.

Place the power adapter (A) and charging plate (B) into the slot. Shown left

### Step 2.

Disconnect the battery from your loupes and place them into the case (C). Shown left

### Step 3.

Please fold loupes by following the instructions (3a-3c, shown right) and then insert loupes into case (D), followed by tilting the headlight downwards (E). Shown left

### Step 4.

Place the screwdrivers into the slots (F). Shown left

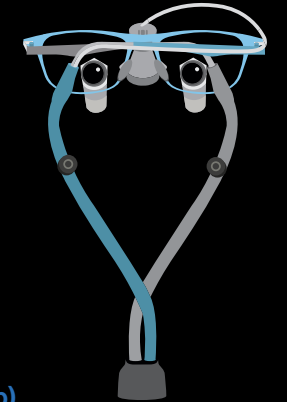
### Step 5.

Close and lock the case



(3a)

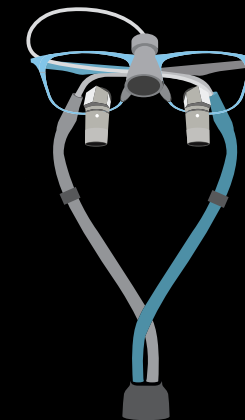
Close the left Loupe arm (shown above)



(3b)

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

(3c)



Face your Loupes towards you. Hold the battery base plate and fold up (shown below)





### Step 1.

Disconnect the battery pack from Halo headlight (A)

### Step 2.

Please fold loupes by following the instructions (2a-2c, shown right) and then insert loupes in to case (B), followed by tilting the headlight downwards (C).  
Shown left

### Step 3.

Using the cable tidy attached to the headlight lead. Fold your cable up/fasten and place under loupes (D).  
Shown left

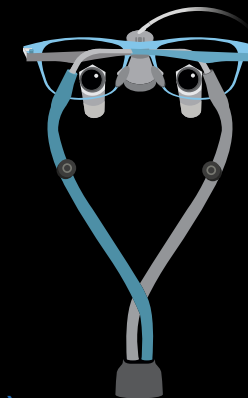
### Step 4.

Place Battery Pack (E)  
Shown left followed by closing and locking the case



(2a)

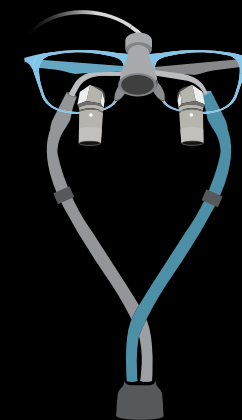
**Close** the left Loupe arm (shown above)



(2b)

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

(2c)



**Face** your Loupes towards you. Hold the battery base plate and fold up (shown below)



# 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. **Courtesy loupes:** Courtesy loupes will be available for service plan subscribers. We will locate a courtesy pair of loupes that will best fit your unique requirements. As all of our loupes are bespoke, they will not fit as well as your own pair. We will ship these to you as soon as possible.
3. **Inspection & repair:** All of our repairs are done in house in one of our dedicated repairs facilities. The engineers at the facility will inspect the damage and assess how best to repair them. Any damage to your frames can usually be rectified 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.
4. **Return & swap:** Once repaired, we will ask you to confirm a delivery address and ship your loupes back out. Please send the courtesy loupes back to us by Special Guaranteed delivery as soon as possible, in case other customers require them.

# Warranty.

## Lifetime warranty.

### Limited Liability Policy

Bryant Dental will repair any issue arising from a manufacturing defect for the lifetime of the product, 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.

## Conditions.

- **Ensure your Refractives are wiped with 70% isopropyl alcohol to ensure telescope longevity.**
- **Store at room temperature.**
- **Do not change or modify any of the existing components without authorisation from Bryant Dental.**

# 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 use the direct whatsapp link above to connect with our customer support team.

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 (02) 72089592

## Australian Office Address:

Suite 202, 70-76 Alexander St  
Crows Nest NSW 2065



# Technical specifications.

## Finish



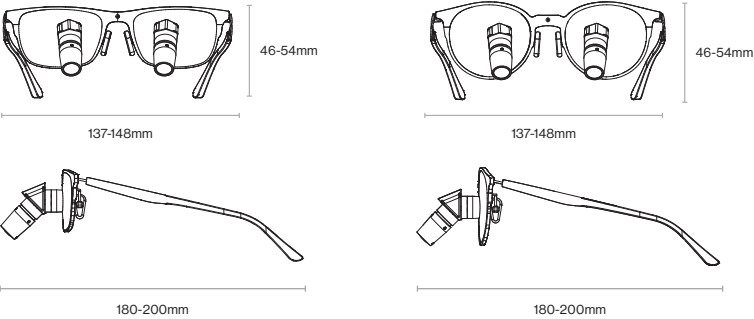
Telescopes formed of aerospace grade aluminium and the frames in ultra-lightweight titanium alloy.

## Magnification

Including field of view and depth of focus

Refractives Pro 7.8x		Refractives Pro 5.7x		Refractives Pro 3.8x		Refractives Pro 2.9x	
45	40	60	50	100	70	130	100
Field of view (mm)	Depth of focus (mm)	Field of view (mm)	Depth of focus (mm)	Field of view (mm)	Depth of focus (mm)	Field of view (mm)	Depth of focus (mm)

## Dimensions



## In the box

- Refractives
- MagStrap®
- Refractives cleaning cloth
- Screwdriver
- Matte black engraved case

## Storage and shipping condition:

- Storage at room temperature
- Under normal atmospheric pressures

**Known contraindications:** silicone rubber allergy or sensitivity.

Model Variant Name	UDI-DI	Basic-UDI-DI
BD Refractive P2.9x Ignis 3.0	5061056950935	506067849RH2JV
BD Refractive P3.6x Ignis 3.0	5060678496623	506067849RH2JV
BD Refractive P5.7x Ignis 3.0	5060678496630	506067849RH2JV
BD Refractive P7.8x Ignis 3.0	5060678496647	506067849RH2JV
BD Refractive P2.9x Halo 2.0	5060678496685	506067849RH2JV
BD Refractive P3.6x Halo 2.0	5060678496654	506067849RH2JV
BD Refractive P5.7 x Halo 2.0	5060678496661	506067849RH2JV
BD Refractive P7.8 x Halo 2.0	5060678496678	506067849RH2JV
BD Refractive P2.9x	5060678499983	506067849RH2JV
BD Refractive P3.6x	5060678499655	506067849RH2JV
BD Refractive P5.7x	5060678499662	506067849RH2JV
BD Refractive P7.8x	5060678499679	506067849RH2JV

Failure to use the products in the specified manner for the intended purposes may result in the void of your warranty. Please use this product as dictated.

## Contraindications:

- Do not use the Magstrap, the Gesture Magstrap or iShield brackets if you have a pacemaker
- Silicone allergy



Follow instructions for use.



Do not dispose. Return to Bryant Dental or Recycle.



This device is not sterile.



Do not use if package is damaged.



Fragile, handle with care.



Keep dry.



Before use ensure that Filter and Nose Pads are fully tighten using enclosed screwdriver. Using device with any loose components carries with it a Serious Risk of Choking.



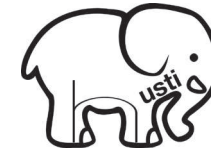
If any part of the Refractives appear loose, please immediately cease use and contact BD. Do not attempt to reattach.



Do not use any non approved headlamps as these can damage the structural integrity of the loupes, Refractives and optics.



Do not use with a silicone allergy.




## 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 is 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.

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

 **UK +44 (0)7990 113723**

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