

Ultimate protection from the unseen



For over 50 years,
Entec has selected and
deployed the best lighting
technologies to entertain
and amaze. Today we also
offer the power to protect.



Take charge!

We are slowly understanding the 'new normal' ways to work and socialise. One thing is clear - we need to do more to ensure the air we breathe and the surfaces we touch are safe and clean. This helps minimise the risks of any kind of infection or costly operational disruption.

As the UK's longest running event & production specialist we spent 15 months researching and testing how UVC (Ultra Violet C) light can help venues and offices safely reopen. We were amazed by the potential it offers.

50 years of event production, lighting & safety expertise have been channelled into developing Entec UVC SafeClean - a service that enables employees, guests, audiences, shoppers, students - in fact anyone - to have the peace of mind that comes with being in the safest possible working and socialising spaces.

Here's the science bit

Sunlight contains three types of UV light. Most of us are familiar with UVA and UVB. The third type of ultraviolet light - UVC - does not penetrate the earth's atmosphere but is responsible for keeping space germ free. This natural sterilizer has been safely harnessed and proven for over 100 years to be effective in neutralizing any viral particles or bacteria ranging from the most challenging like C. difficile to much simpler viruses like Covid 19.

As far back as 1878, scientists discovered UVC's ability to neutralise micro-organisms. In 1903 Niels Finsen won the Nobel Prize for his work in this area. We now know UVC light breaks the bonds in DNA (and RNA), which prevents replication and causes any virus or bacteria to die.

Importantly, UVC treatment requires the right strength, targeting and dosage to work. Deployed correctly there is nothing more effective for producing safe interior spaces.

We now know that Covid 19 airborne particles are the key source of transmission. UVC treated air is the next best thing to 'fresh air'. What's more, UVC also cleans all surfaces it shines upon.

UVC is already used across the globe to ensure germ free environments where it is critical for our health – in water treatment works, hospital operating theatres, ambulances, dentists and even spas. Our goal is to help bring this technology into the mainstream, to ensure - whether in cultural, educational or commercial settings - we are offered the same level of protection from both infection and disruption of services.

Face masks, social distancing, vaccines, cleaning, hand washing, standard ventilation and testing are not enough. We believe UVC light is a critical component in keeping us safe.



Manual cleaning and ventilation are not enough...

8 reasons why we also need UVC disinfection

- ▶ The effectiveness and coverage of manual surface cleaning is questionable - individual cleaners cannot be 100% effective or comprehensively audited. Even the deep cleaning of operating theatres has only been proven to be 50-60% effective.
- ▶ The manual cleaning of surfaces actually increases the viral load in the air by disturbing and dispersing harmful particles. It also creates additional environmental pollution in terms of wipes, PPE and chemicals deployed.
- ▶ Depending on their type, air conditioning and filters can either help or hinder infection control. They can re-circulate any viruses contained in the aerosols we exhale. Unfortunately the entry points to these conditioning systems also become viral magnets and dangerous without a robust cleaning regime (i.e. with UVC).
- ▶ Only UVC can truly clean the indoor air we breathe. It does this by destroying virus carried in both droplets and aerosols. Aerosols are smaller than droplets and are a key source of Covid 19 transmission, having been shown to pass through masks and even the best filter systems.
- ▶ Fomite transmission (i.e. via surfaces) can also be reduced by using UVC. The light naturally germicidally cleans the surfaces it shines upon without chemicals, wipes, plastics or releasing viruses into the air. It can also reach fomite covered surfaces that standard cleaning cannot (e.g. ceiling corners).
- ▶ UVC is chemical free. Sprays and misting introduce damp or pollutants which can be harmful to asthmatics and those with respiratory issues (there is a reason misting treatments require the wearing of protective suits).
- ▶ Many of the solutions we offer enable dosage to be calculated, audited and verified as effective. Manual cleaning, misting and most UVC treatments cannot offer this critical "closed loop" and management oversight.
- ▶ UVC is not only effective against Covid 19 and all current and future variants, but also against all other bacteria and viral particles including norovirus, rotavirus, poliovirus, parechovirus, adenovirus, influenza virus, Staphylococcus aureus and Salmonella enterica.

Buyer beware:

we have done the research so you don't have to

We have been working with doctors and a medical advisory panel, testing different solutions and exploring clinical trials to find the best, most robust and safest way to deliver effective and practical UVC solutions. In our exhaustive search, we found many lacking – with lots of claims that did not stand up and specifications that could not deliver true UVC protection.

After extensive trials we have partnered with FinsenTech and Goldensea, to offer a comprehensive range of products and a choice of price points. All equipment is supplied with Signify/Phillips or Osram UVC bulbs - the world's leading bulb manufacturers.

We are happy to sell or hire our equipment and can offer full training and support.



Finsen Tech are a UK owned specialist UV equipment manufacturer in the scientific and medical world known for innovation and high-quality solutions.



GOLDENSEA UV is part of the industry leading Chinese lighting design and manufacturer Golden Sea Professional.



Proud to be the UK's longest running and independently owned sound and lighting specialist for live events.

A winning combination

We offer the expertise, the solutions and equipment to deliver safer indoor spaces. Our aim is to help us all reclaim our working and social lives, to reduce infection risks and the very real financial risks of cancellations, closures and disruption.

We have harnessed leading edge UVC technology - already used effectively in healthcare settings and backed by research and science - and adapted this for use in work and leisure environments. We offer equipment that is intelligently designed for ease of use and can provide automated calculations for where and how long to use it (thereby reducing the risk of human error). Software also provides a clear audit trail of use, enabling demonstrable compliance.

In combination, our UVC equipment ensures:

- ▶ Your space is cleared of viral load (built up over days, weeks or months) - reset to zero - before anyone enters.
- ▶ Items that enter your space can be safely cleaned – so regularly used items like your phone, passes, keys or laptop are proven germ free.
- ▶ Once in a space the air you breathe is continually refreshed and all germs and viruses eradicated over time.
- ▶ For any space we clean or audit we can provide our “Entec UVC SafeClean” seal which can be displayed to demonstrate to visitors that every effort has been taken to protect their wellbeing.



A shared mission: safe socialising, work and learning environments

If you would like to know more about the natural power of UVC light, and find out exactly how you can take the protection of yourself, your employees, your customers and guests to the next level – please contact us.

We urge you not to choose any UVC system, chemical and misting treatments or manual cleaning regime without taking advantage of the knowledge that we can share.

Our focus isn't on closing a sale – we want to ensure everyone is aware of the benefits that UVC can bring and how it can be safely and effectively harnessed.

We have a shared mission to help us all get back to enjoying work, socialising and normal life safely together.



Our ABC checklist to choosing the right UVC solution

In order for any UVC solution to be effective, think A,B,C...

Area

Does the device scan your space to identify square footage and configuration; does it have software that calculates optimal positioning of the device and duration of operation to ensure full effectiveness?

Bulbs

Is the device fitted with the highest quality UVC bulbs? (Beware - substitution of imitation blue light bulbs); can it monitor/warn when bulbs need replacing?

Confirmation

Can the equipment provide auditable data detailing location and duration of disinfection treatment?

Dosage

Can the equipment generate enough power to deliver the right level of light intensity to kill viruses and bacteria (to the required 4-6 log kill rate)?

Exposure

Does the equipment have appropriate locks and safety mechanisms to avoid human exposure while the UVC treatment is being undertaken?

Flexibility

Is the device designed to be able to work around all items in a space, avoiding shadowing? Without this manoeuvrability the UVC cannot reach all areas and surfaces.



We are all having to adapt and find new solutions to protect ourselves and our businesses against invisible enemies. Navigating how to do this effectively is made harder by often ill-informed media coverage, confusing messaging and opportunists looking to exploit our needs.

Using our 50 years of technical knowledge and real world experience we have selected trusted brands and equipment, to provide a reliable, affordable and effective UVC solution backed by science. This will give you and your customers a level of protection that we believe will become the required standard to thrive in the future.

**Be safe.
Take positive action.
Contact us.**

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UVC
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