



# Bactiscope

Reliable, portable bacteria  
and biofilm detection system

## USER MANUAL



**Thank you for purchasing the EIT Bactiscope™ rechargeable bacteria and biofilm detection probe, our latest innovation offering an all-in-one IP65 rated solution with miniature camera and video capture capabilities, housed in a single lightweight unit.**

***Important: Please read these instructions carefully to ensure the safe and effective use of this product.***

With the unique wave alternating UV system, Bactiscope™ enables food processors to immediately isolate biofilms, mould and bacteria such as salmonella and E.coli. Many other contaminants are easily located and identified with Bactiscope™ which makes the remediation job much faster and therefore more cost effective.

These contaminants are often undetectable using other methods such as white light and UV lamps. With Bactiscope™ you can light up the entire surface and get an immediate result, so within seconds you can pick things up that would take hours with any other method.

With its small video camera head and flexible cable (available in various lengths) it is possible to detect in hard to reach areas such as inside pipework or behind large equipment.



Think before you print!

## **Technical Support**

**E-Mail: [support@eit-international.com](mailto:support@eit-international.com) or speak to your regional in-country EIT International approved associate.**

**Web Site: Visit our web site at [www.eit-international.com/support](http://www.eit-international.com/support) where you can browse our FAQ's, or request assistance.**

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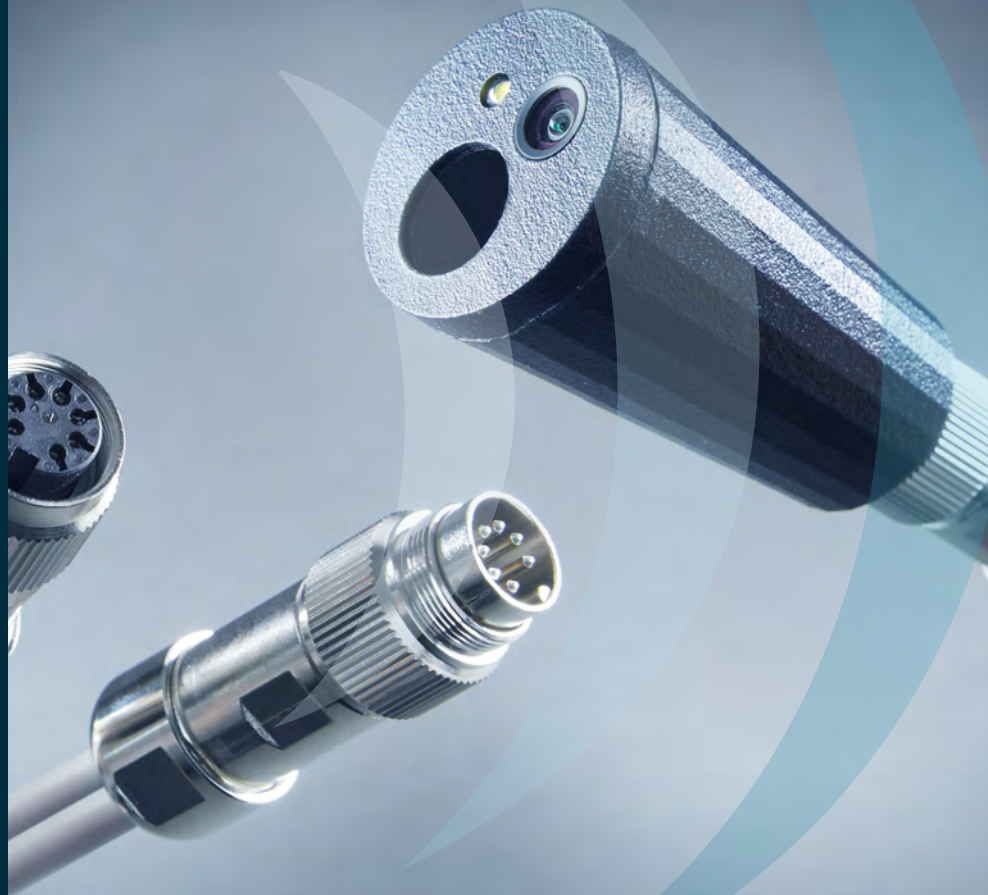
## What's in the box?

Fundamentally, the Bactiscope™ is a miniature camera, or probe, on a flexible cable (in cable lengths of 1m, 2m or 5m) housed in its own carry case which also holds the video screen. The Bactiscope™ has a single camera head with an external diameter of 37mm, that can be manoeuvred into awkward areas such as pipework or behind hard-to-reach areas, that then transmits a video feed that allows you to see a close-up, real time view of inspection areas using its unique wave-alternating UV system.

## UV Light Bulbs

Bactiscope™ utilises UV-A and UV-B light bulbs which are fluorescent tubes with a dark blue or purple filter to remove other parts of the spectrum and leave just UV light.

UV (ultraviolet) light bulbs are often referred to as black light bulbs, or BLB (blacklight blue) bulbs. UV lights feature small wavelengths that are measured in nanometres (nm). Nanometres often affect the UV light bulb, with the bulb emitting either UVA, UVB or UVC UV radiation. None of these bulbs can penetrate human skin and are safe to use. EIT consider the health and safety of our customers to be of the utmost importance and as a matter of good practice we suggest that users wear protective eyewear when operating UV equipment.



# Operating the Bactiscope

1. Remove Bactiscope from protective case
2. Plug in the cable to the side of the Bactiscope
3. Open the Bactiscope and attach Bactiscope head to the end of the cable
4. To turn on the camera press the camera button - make sure it latches
5. Press the light button to activate the Bactiscope light - make sure it latches
6. Open screen, Press and hold  $\cup$ /Menu on the screen to turn screen on
7. Press SEARCH to find the video feed
8. Press REC to start the recording
9. Press REC to stop recording
10. Press the camera button to turn camera off
11. Press the light button to turn the Bactiscan light off
12. Press and hold  $\cup$ /Menu to turn screen off and close screen
13. Place Bactiscope head back in the Bactiscope case and close the case
14. Place the Bactiscope case back in the protective case along with the cable



## Adjusting the light

From our research in many different types of pipe we have found that a white LED helps with the illumination of the bacteria. Depending on the pipe in use it may require different levels of brightness. There is a potentiometer on the right handside of the device which adjusts the brightness of the white LED whilst keeping the main Bactiscan LED illuminated at the same intensity. Rotate the potentiometer to the optimal position for your pipe type. To get the best brightness use the screen along with adjusting the potentiometer.



# Bactiscope controls

## Screen button controls

In Normal mode press:

- ⏻/Menu: Short Press into MENU mode; Long Press (More than 2 sec) for Power on/off
- SEARCH: Short Press for Auto-searching
- REC: Short Press to start or stop recording – Red light on screen will appear
- Band +: Short Press for Band+ (Change Bands A-B-E-F-R Circularly)
- CH+: Short Press for Channel+ (Change channels 1-2-3-4-5-6-7-8 Circularly)

## Menu instructions

In Normal mode press:

- ⏻/Menu: Scroll Options
- SEARCH: Auto-Searching
- REC: Invalid
- Band +: Enter/Value +
- CH+: Enter/Value –



## Playback instructions

In MENU mode press, select “DVR” option bar to enter the DVR mode

In DVR Mode Press:

- ⏻/Menu: : Return/Quit Playback Mode
- SEARCH: Delete Current File
- REC: Play/Pause
- Band +: Forward Selection of video/Fast Forwarding (When Video is playing)
- CH+: Backward Selection of video/Fast Rewind (When Video is playing)

# Specifications

Specifications	
Power on	1 hour 30 mins
Charge time	6 hours 30 mins
Warranty	1 year
UV light type	UV-A
UV bulb life	6,000 hours
IP rating	IP65
Battery	7.4V 6.6Ah Li-ion
Impact resistance	1.5 metres
Dimensions	123 x 274 x 248 (mm)
Carry case dimensions	357 x 470 x 176 (mm)
Weight	1.5KG
Video capture	Yes
Screen type	7" TFT LCD / long life, LED backlight
Screen resolution	800x480
Brightness	600cd/m2
View angle	140°/120° (Horizontal/Vertical)



## FAQs

Why can't I see video on the screen?

Follow the below steps:

1. Make sure the Camera is turned on by ensuring the button is latched
2. Make sure the screen is turned on
3. If 1 + 2 are done press the SEARCH button on the screen



Figure 1

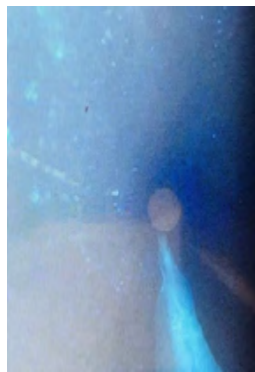


Figure 2

Figure 1 shows remnants of product still present in pipework.

Figure 2 shows evidence of further contamination across the sides and top surfaces within the pipework.



## CAUTION

Modifications not expressly approved by EIT International may void the users authority to operate the equipment. The removal of any panels or components, or to open the sealed Bactiscope™ casing will render the equipment damaged and will void any Warranty in place. Damaged Bactiscope™ unit through the malice of any third party will render the equipment written-off and the user will be liable for all costs associated for repair or replacement of the unit.

This User Manual contains information that is subject to change.

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The Bactiscope product may be protected by one or more patents.

## Manuals and Guides

To reduce our use of paper and to conform to our environmental/sustainability policies and responsibility, we have moved our product documentation online. For the latest Bactiscope User Manual or Product Guide, please go to [www.eit-international.com/products/#scope](http://www.eit-international.com/products/#scope)