GelONE/GelONEPLUSPLUS manual
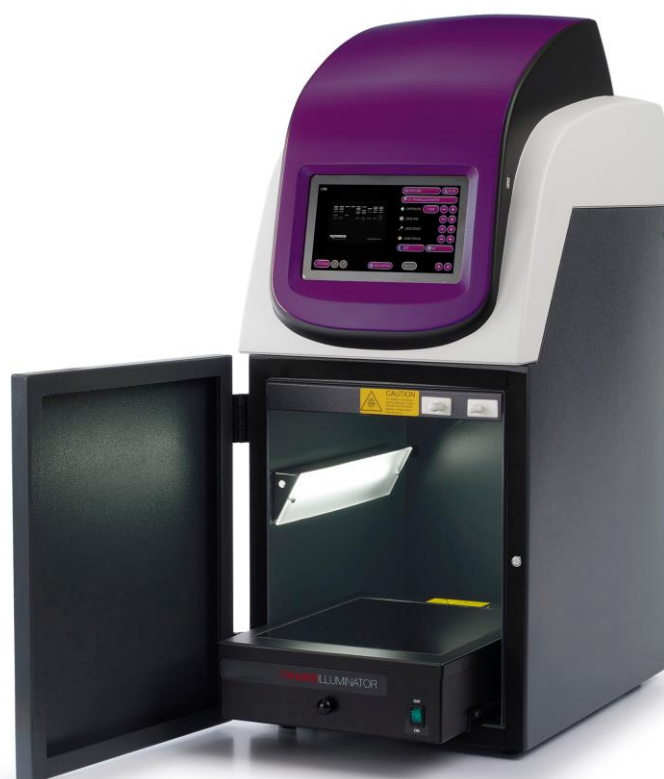
Contents Page

Safety practices

This document describes the general safety practices and precautions that must be observed when operating the GelONE/GelONEPLUS/GelONE/GelONEPLUSPLUS.

This advice is intended to supplement, not supersede, the normal safety codes in the user's country. The information provided does not cover every safety procedure that should be followed. Ultimately, maintenance of a safe laboratory environment is the responsibility of the user and the user's organization.

Please consult all documentation supplied with the GelONE/GelONEPLUS/GelONE/GelONEPLUSPLUS before you start working with the instrument. Carefully read the safety information in this document and in the other documentation supplied. When setting up the instrument or performing analyses or maintenance procedures, strictly follow the instructions provided.

Warning notices

⚠️ WARNING	We use 'Warnings' to highlight information or instructions that **MUST** be followed to avoid personal injury to yourself or other people in the vicinity. **For example: Switch off the mains voltage and remove the mains cord before cleaning.**

⚠️ WARNING	**Ensure that all instrument operators read and understand the precautions listed below.** **You are advised to post a copy of the precautions near or on the instrument shelf.**

The following precautions must be observed when using the GelONE/GelONEPLUS.

- Be sure that the voltage of the GelONE/GelONEPLUS instrument corresponds to the voltage used in your laboratory.

- Never remove the rear panel of the GelONE/GelONEPLUS instrument without shutting down the instrument and disconnecting the instrument power cord from line power.

- The power cord must be an appropriately rated and approved cord-set in accordance with the regulations of the country it is used in.

- Do not replace the power cord with one of inadequate rating.

Symbols

Symbol	Definition
	Attention: See instructions for use.
	Attention: Use of UV lights. Please Read UV Safety Warning.
	Attention: Danger of electric shock.
SN	Serial Number.
	Symbol indicating "Not for general waste." For European Union (EU) States, this symbol should be used to mark devices that are reusable and not contaminated at the end of the device life.
CE	This symbol is a mandatory marking for devices entering the European market to indicate conformity with the essential health and safety requirements set out in European Directives.
	Symbol for "Manufacturer." This symbol shall be adjacent to the name and address of the manufacturer.
	Symbol for "temperature limitation." The upper and lower temperature limits will be indicated on either side of the symbol.
	Symbol used to indicate that the product should be kept dry.
	Symbol indicating that the device is "fragile" and should be handled with care.
	Symbol indicating the correct upright position of the transport package.

⚠️ WARNING	Warning labels attached to the instrument draw your attention to specific hazards. You must refer to this user guide and other documentation provided with your system for more details concerning the potential hazard and any precautions or other actions that must be taken.

Warning Labels

The following labels are displayed on the outer surfaces of the instrument:

Electrical Safety Warning

UV Warning

Power Rating and Serial

UV Safety Warning

The GelONE/GelONEPLUS/GelONE/GelONEPLUSPLUS imaging system has a UV Transilluminator. If you open the door the system will automatically switch the UV off. If you wish to override the UV, please refer to section 6.3.

Before you override the UV safety interlock, read the following recommendations:

⚠ WARNING	You should wear appropriate personal protection. As a minimum, we recommend the use of full-face shields that meet the necessary levels of UV protection. Those meeting the standard will be marked with the ANSI Z87.1. notation [ANSI Z87.1-89, Practice for Occupational and Educational Eye and Face Protection, IBR approved for 29CFR1910.133(b)(1)].
	We recommend that all users of UV be made familiar with the guidelines published by the various national authorities. In the USA these guidelines are published by OSHA (www.osha.gov) in their standard 29CFR1910. This provides up to date safety information and guidance. In the UK the NRPB (www.nrpb.org) issues similar guidelines. Employers must familiarise themselves with these guidelines and their obligations described in the standards.
	In addition to face shields, we recommend that you should consider wearing appropriate clothing to protect potential exposure to areas of skin (face, arms, and hands for example).

N.B. The door safety interlock is reset when you close the door

General operating conditions

The GelONE/GelONEPLUS has been designed and tested in accordance with the safety requirements of the International Electrotechnical Commission (IEC). The GelONE/GelONEPLUS conforms to IEC61010-1 (Safety Requirements for electrical equipment for measurement, control and laboratory use) as it applies to IEC Class 1 (earthed) appliances, and therefore meets the requirements of EC directive 2014/35/EU.

If possible, avoid any adjustment, maintenance or repair to the instrument while it is open and operative. However, if any adjustment, maintenance or repair is necessary while the instrument is open, this *must* be done by a *skilled* person who is aware of the *hazards* involved.

Whenever circumstances arise that mean your GelONE/GelONEPLUS may be unsafe, make it inoperative. In particular, a GelONE/GelONEPLUS may be unsafe if it:
- Shows visible damage
- Fails to perform the intended measurement
- Has been subjected to severe transport stresses
- Has been subjected to prolonged storage in unfavorable conditions
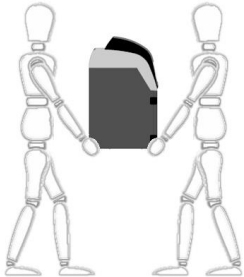
Transportation and Storage Conditions

The system should only be transported and stored in its original packaging to ensure maximum protection. It is recommended to keep the original packaging.

The unit should be transported and stored in an environment -10°C to +50°C, not condensing.

If you must move the imaging system any great distance please contact your local distributor to advise you about moving your system.

⚠ WARNING	The GelONE/GelONEPLUS instrument requires two people to lift it safely. The GelONE/GelONEPLUS weighs 20kg.	

Environmental conditions

- The instrument should only be used under the following conditions:
- Indoors
- Altitudes below 2000m
- Ambient temperature between 5°C and 40°C
- Relative humidity below 80% for temperatures up to 31°C, decreasing linearly to 50% relative humidity at 40°C
- Electrical supply fluctuations not exceeding +10% of the nominal voltage

⚠ WARNING	**The protection provided by the equipment may be impaired if the operating conditions do not lie within these parameters.**

Electrical safety

The instrument has been designed to protect the operator from potential electrical hazards. This section describes some recommended electrical safety practices.

⚠️ **WARNING**	**Lethal voltages are present at certain points within the instrument.** **When the instrument is connected to line power, removing the instrument covers is likely to expose live parts.** **Even when the power switch is set to off, high voltages can still be present – capacitors within the instrument may still be charged even if the instrument has been disconnected from all voltage sources.**

The instrument must be correctly connected to a suitable electrical supply. The supply must have a correctly installed protective conductor (earth ground) and must be installed or checked by a qualified electrician before connecting the instrument.

⚠️ **WARNING**	**Any interruption of the protective conductor (earth ground) inside or outside the instrument, or disconnection of the protective conductor terminal is likely to make the instrument dangerous.** **Intentional interruption of the protective conductor is prohibited**

⚠️ **WARNING**	**Ensure that the electricity supply inlets on the instrument are not obstructed, i.e. leave a gap to allow easy disconnection from the electricity supply.**

When working with the instrument:

- Connect the instrument to a correctly installed line power outlet that has a protective conductor connection (earth ground).
- Do not operate the instrument with any covers or internal parts removed.
- Do not attempt to make internal adjustments or replacements except as directed in the manuals.
- Disconnect the instrument from all voltage sources before opening it for any adjustment, replacement, maintenance or repair. If the opened instrument must be operated for further adjustment, maintenance or repair, this must *only* be done by your supplier's Service Engineer.
- Whenever it is possible that the instrument is no longer electrically safe for use, make the instrument inoperative and secure it against any unauthorised or unintentional operation. The electrical safety of the instrument is likely to be impaired if, for example, the instrument:

  - Shows visible damage

  - Has been subjected to prolonged storage in unfavorable conditions

- Has been subjected to severe stress during transportation

Electrical protection

▪ Insulation: Class I rating for external circuits. Only connect equipment that meets the requirements of IEC 61010-1, IEC 60950 or equivalent standards.

▪ Installation Category: The instruments are able to withstand transient over voltages typically present on the MAINS supply. The normal level of transient over voltages is impulse withstand (overvoltage) category II of IEC 60364-4-443.

▪ Pollution Degree 2: Normally only non-conductive pollution occurs. Occasionally, however, temporary conductivity caused by condensation must be expected.

Electrical Specifications

The GelONE/GelONEPLUS power rating is as follows:

Voltage	100-240Vac
Frequency	50-60Hz
Current	2A
Fuse	2 of 20 mm x 5 mm IEC127 T 6.3 A H 250V

Changing fuses

There are two sets of fuses that you may need to replace: the first set is located near the electrical power cord socket on the rear of the darkroom; the second set is located on the rear of the UV Transilluminator inside the darkroom (if supplied).

To change the fuses on the rear of the darkroom:

▪ Switch off the darkroom and remove the line power cord from the electrical supply.

▪ Gently pull out the fuse holder on the rear of the darkroom:

Power socket
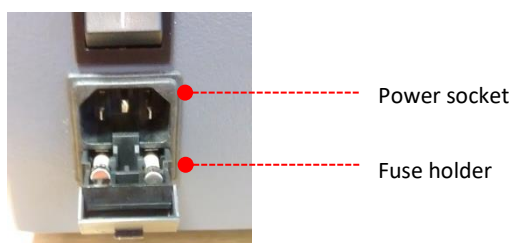
Fuse holder

• Replace the fuse(s) with new ones of the same type and rating. The fuse type is 20 mm x 5 mm IEC127 T 6.3 A H 250V for instruments in all countries.

• Replace the fuse holder.

Note: It is recommended to always replace both fuses at the same time, even if only one of them has blown, as the other may have been weakened.

If the instrument still does not work correctly after replacing the fuses with the correct replacements, or if the fuses blow repeatedly, contact your supplier's office or representative.

EMC compliance

EC directive

The GelONE/GelONEPLUS instrument has been designed and tested to meet the requirements of the EC directive 2014/30/EU. The GelONE/GelONEPLUS instrument complies with the EMC standard EN61326 (EMC standard for electrical equipment for measurement, control and laboratory use) and EN55011 (ISM) class B (RF emissions).

FCC rules and regulations

This product is classified as a digital device used exclusively as industrial, commercial or medical test equipment. It is exempt from the technical standards specified in Part 15 of the FCC Rules and Regulations based on Section 15.103 (c).

Chapter One - Introduction

The GelONE/GelONEPLUS system has been designed to make your gel imaging simple, quick and easy. This system is the perfect choice for a low budget gel imaging system and features a compact darkroom which has an internal LED white light and a motorised lens.

The GelONE/GelONEPLUS system supports multiple applications including DNA/RNA gel imaging such as EtBr, SYBR Green and visible stained gels i.e. Coomassie Blue and silver stain.

1.1 Applications supported

Transilluminator UV	Visible Light Converter	Blue Light Converter
Ethidium Bromide SYBR Green SYBR Gold SYBR Safe Gel Green Gel Red EZEE RubyPRO Stain-Free (gelONEPLUS only)	EZEE UltraBlue Coomassie blue stain Copper stain Zinc stain Silver stain	runSAFE SYBR Gold SYBR Green SYBR Safe UltraSafe blue

1.2 Hardware

1.2.1 Specification

	GelONE	GelONEPLUS
Camera	12/16 bit	12/16 bit
Camera sensor	1/2.5 inch	2/3 inch
Zoom	Motorised zoom 8-48, F1.2, aperture and focus	Motorised zoom 11.5-69, F1.4, aperture and focus
Display	7" widescreen colour touch screen	7" widescreen colour touch screen
Filter	UV032 filter as standard	UV06 filter as standard
Max gel size	20 x 24 cm	20 x 24 cm
Data types	TIFF and JPEG	TIFF and JPEG
Image resolution	5M pixels	5M pixels
Image storage	USB	USB
Image enhancements	Rotation and inversion, sharpen, smooth and more	Rotation and inversion, sharpen, smooth and more
Illumination	Slide in and out UV Transilluminator, visible light converter and blue light converter, Epi white LED	Slide in and out UV Transilluminator, visible light converter and blue light converter, Epi white LED

1.2.2   System Components

TOUCH SCREEN
Colour LCD Screen

USB
For storing of images on USB memory stick

POWER INDICATOR
Green if power is on

INTERNAL WHITE LIGHT
For sample positioning and focusing

SAFETY SWITCHES
To prevent accidental UV exposure when door is open

HINGED DOOR
With magnetic catch

TRANSILLUMINATOR (OPTIONAL)
For UV, white or blue light
▪ UV transilluminator slides in and out of darkroom
▪ Blue light converter
▪ Visible light converter

1.2.2.1 Darkroom

The darkroom has a hinged door. The darkroom features:
- Slide out mid wave 302nm UV Transilluminator
- Internal white light LED
- Safety switches to protect from accidental UV exposure

1.2.2.2 UV Transilluminator

The UV Transilluminator will excite many fluorescent stains such as Ethidium bromide, SYBR™ stains, Gel Red™. The standard wavelength is 302nm.
To protect users from accidental exposure, the UV light is automatically shut off if the door is opened. The Transilluminator can be slid easily in and out of the cabinet.

1.2.2.3 LCD Touch Screen

A built-in 7 inch colour LCD touch-screen allows users to preview, capture, print and save images, as well as to select various processing functions, without the connection of an external keyboard or mouse.
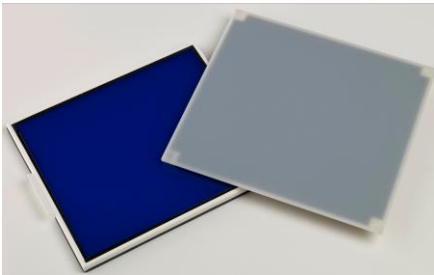
1.2.2.4 USB Flash Drive

The USB flash drive on the front of the GelONE/GelONEPLUS allows for the easy storage of images.

1.2.3   Accessories

1.2.3.1 Visible or blue light converter screens

Cleaver Scientific offers a visible light converter that can be placed on top of the UV Transilluminator for imaging Coomassie and silver stained gels.

Cleaver Scientific also offers a blue light converter that can be placed on top of the UV Transilluminator for safely imaging gels stained with runSAFE, SYBR Safe, Gold and Green, GelGreen and UltraSafe blue.

1.2.3.2 Printer

Printer available for the GelONE/GelONEPLUS:

- Mitsubishi P95DW
- Canon Selphy CP1200

The drivers are preinstalled.

1.2.3.3 Analysis software

The GelONE/GelONEPLUS system is supplied with 4 copies of geneQUANT analysis software from Cleaver Scientific. This may be loaded on a PC of your choice. Please see the loading instructions in section 2.6.

1.2.3.4 Network connectivity

The GelONE/GelONEPLUS system can be networked. The GelONE/GelONEPLUS system supports the saving and loading of images to a location on a windows network.
To enable network connectivity a USB network dongle needs to be purchased.

Chapter Two - Installation

2.1   Installation

CAUTION: Do not connect power supply to any of the components until you are satisfied that everything is connected correctly.

For assistance please contact your supplier or Cleaver Scientific directly.

2.1.1   Transilluminator set-up
Place the UV Transilluminator inside and connect it to the free flying mains lead inside the GelONE/GelONEPLUS system.

2.2.2   Power on/off
Connect the mains lead from the GelONE/GelONEPLUS system to the mains power supply and switch on the unit. There will be a few seconds delay as the system boots. After a few seconds a display will appear.

To turn the internal computer off, press the 'SHUT DOWN' button on screen and then select 'SHUT DOWN NOW'. The System will now shut down. Once the screen has gone black wait 20 seconds and then turn the unit off at the rear.

2.2   User Interface

The user interface is shown below.
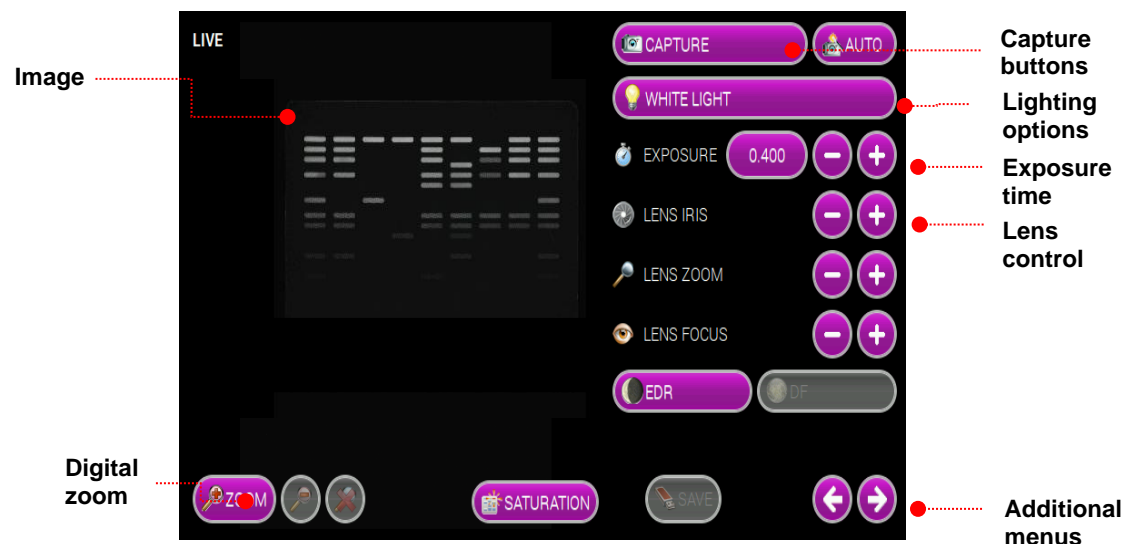
2.3   Dynamic field correction

The dynamic field function is based on powerful algorithms which corrects for uneven illumination from the light source. This results in an image with a flat, even background whilst maintaining GLP compliance.

Once switched on, please follow the on-screen instructions.

**2.4	Extended Dynamic Range (EDR)**

Some gels contain areas that are too bright or too dark to be successfully captured. Closing the iris to cut down the light may prevent the viewing of dark or faint bands, whilst opening it may lead to saturation. EDR solves this problem by automatically capturing a series of images at different exposure times. The content of each image is assessed and those areas that are within the dynamic range of the camera are combined. The result is an image with a large dynamic range (up to 65536 grey levels) that encompasses all the brightness ranges existing within the sample without saturation.

**2.5	Select Regional Power Frequency**

Press the 'SETTINGS' button on screen, select either 50 or 60Hz depending on the electricity supply of your region.

**2.6	Installing geneQUANT on a separate PC**

Plug the Cleaver Scientific branded flash drive into the PC you wish to install geneQUANT on. Navigate into the "geneQUANT" folder on the flash drive and run the "InstallgeneQUANT" program.

Follow the on-screen instructions to install geneQUANT software.

Chapter Three - Image Acquisition

3.1 Capturing an image of an agarose EtBr or similar gel

Step 1 – Position sample and choose lighting

Press the 'Live' button and then position the sample on the centre of the Transilluminator and close the door. Select 'UV TRANSILLUMINATOR' from the lighting options.

Step 2 – Adjust lens

Adjust the aperture, zoom and focus settings until a suitable image is displayed, preferably with the sample filling the screen for maximum resolution.

Please note that opening the aperture too far may result in areas of the sample being saturated.

You can select to display any saturation on screen by pressing the 'DISPLAY SATURATION' button. Saturated areas will appear orange.

Step 3 – Set exposure time

The exposure time can either be set manually or automatically. Adjusting the exposure time will alter the brightness of the image. To manually increase or decrease the exposure time, use the following icons.

Click on the or to increase or decrease the exposure time, or alternatively, click on the time to set it manually.

Set an exposure time you are happy with and press 'CAPTURE'.

Alternatively, the auto-exposure function sets the exposure time to a level that ensures no saturation of the image occurs. To use the auto-exposure function press 'AUTO'.

You can then save or print the image.

3.2 Capturing an image of a protein gel (Coomassie, silver stained) or other white light image (Colony plate, autorad, microtitre plate etc)

Step 1 – Position sample and choose lighting

Press the 'Live' button, then position the sample on the centre of the Transilluminator and then close the door. Select 'VISIBLE-LIGHT CONVERTER' from the lighting options.

Step 2 – Adjust lens

Adjust the aperture, zoom and focus settings until a suitable image is displayed, preferably with the sample filling the screen for maximum resolution.

Please note that opening the aperture too far may result in areas of the sample being saturated.

You can select to display any saturation on screen by pressing the 'DISPLAY SATURATION' button.

Step 3 – Set exposure time

The exposure time can either be set manually or automatically. Adjusting the exposure time will alter the brightness of the image. To manually increase or decrease the exposure time, use the following icons.

Click on the ⊕ or ⊖ to increase or decrease the exposure time, or alternatively, click on the time 0.100 to set it manually.

Set an exposure time you are happy with and press 'CAPTURE'.

Alternatively, the auto-exposure function sets the exposure time to a level that ensures no saturation of the image occurs. To use the auto-exposure function press 'AUTO'.

You can then save or print the image.

3.3   Capturing an image of an agarose "safe" dye gel

Step 1 – Position sample and choose lighting

Press the 'Live' button, then position the sample on the centre of the Transilluminator and then close the door. Select 'BLUE-LIGHT CONVERTER' from the lighting options.

Step 2 – Adjust lens

Adjust the aperture, zoom and focus settings until a suitable image is displayed, preferably with the sample filling the screen for maximum resolution.

Please note that opening the aperture too far may result in areas of the sample being saturated.

You can select to display any saturation on screen by pressing the 'DISPLAY SATURATION' button.

Step 3 – Set exposure time

The exposure time can either be set manually or automatically. Adjusting the exposure time will alter the brightness of the image. To manually increase or decrease the exposure time, use the following icons.

Click on the ➕ or ➖ to increase or decrease the exposure time, or alternatively, click on the time `0.100` to set it manually.

Set an exposure time you are happy with and press 'CAPTURE'.

Alternatively, the auto-exposure function sets the exposure time to a level that ensures no saturation of the image occurs. To use the auto-exposure function press 'AUTO'.

You can then save or print the image.

3.4   Capturing an image of a Stain-Free gel (GelONEPLUS only)

Step 1 – Position sample and choose lighting

Press the 'Live' button, then position the sample on the centre of the Transilluminator and then close the door. Select 'STAIN-FREE QUICK' (2.5 min) or 'STAIN-FREE FULL' (5 min) from the lighting options.

Step 2 – Adjust lens
Adjust the aperture, zoom and focus settings until a suitable image is displayed, preferably with the sample filling the screen for maximum resolution.

Please note that opening the aperture too far may result in areas of the sample being saturated.

You can select to display any saturation on screen by pressing the 'DISPLAY SATURATION' button.

Step 3 – Set exposure time

The exposure time can either be set manually or automatically. Adjusting the exposure time will alter the brightness of the image. To manually increase or decrease the exposure time, use the following icons.

Click on the ⊕ or ⊖ to increase or decrease the exposure time, or alternatively, click on the time [0.100] to set it manually.

Set an exposure time you are happy with and press 'CAPTURE'.

Alternatively, the auto-exposure function sets the exposure time to a level that ensures no saturation of the image occurs. To use the auto-exposure function press 'AUTO'.

You can then save or print the image.

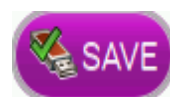# Chapter Four - Saving / Opening Images and Printing Images

4.1   Saving images

Insert a USB flash drive into the USB port on the front of the instrument.

Press on the 'SAVE TO USB' button. The image will change to display that the image has been saved.

| Unsaved image | Saved Image |

Images can be saved in the following formats:

- JPEG
- PNG
- TIFF

NOTE: Before removing the USB drive, we recommend you press the 'EJECT USB DRIVE' button to ensure no data is lost.

Eject USB Drive button

4.2   Opening images

Insert a USB flash drive into the USB port on the front of the instrument.
Press on the 'OPEN SAVED IMAGE' button.

Open Saved Image button

NOTE: Before removing the USB drive, we recommend you press the 'EJECT USB DRIVE' button to ensure no data is lost.

Eject USB Drive button

4.3 Printing

To print directly from the GelONE/GelONEPLUS system, press the 'PRINT' icon.

If the print button is not available, you have not selected your printer. See section 6.4 for more details on selecting your printer.

Chapter Five - Image Enhancement

The GelONE/GelONEPLUS system offers a variety of functions ranging from image enhancement to annotation.

5.1   Image enhancement

To access the enhance functions select the ⬅ or ➡ button until you get to the "Image Enhancement" screen. From here you can select to smooth, sharpen, invert, lighten, darken or rotate your image.

The Invert button will reverse the image to give black bands on a white background or vice versa. This icon is particularly useful when trying to see faint bands.

The Rotate function will allow you to rotate the image in both 5 degree steps (by using the - and + buttons) and also rotate to set positions (0, 90, 180, 270 degrees).

To apply a sharpening filter to your image move the SMOOTHER/ SHARPER slider to the right. When this filter has been applied band edges should become more pronounced but you may also observe an increase in the graininess of the image.

The DARKER/LIGHTER slider will allow you to change how dark or light the image is.

The RESET button will undo the changes from the captured image.

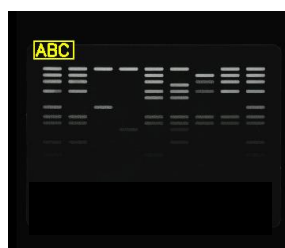5. Image Enhancement

5.2   Annotation

To add text to the image, press the 'ADD TEXT' button.

An on-screen keyboard will pop-up. Type your text then press 'ENTER'.

The text will now appear on the image. To reposition the text, press on the text, a box should appear around it, press and hold on this then drag the text to the position you want it in.

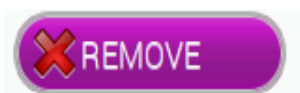The 'EDIT TEXT' button allows the user to edit the text.

The colour of the text can be changed.

Select from a selection of colours available from the palette.

The size of the text can be adjusted. Press the to increase the font size and the to decrease the font size.

To remove any text annotations select the text that you wish to remove and then press the 'REMOVE' button.

5.3   Digital zoom

To zoom in or out of your image use the 'ZOOM' buttons on screen once you have captured your image.
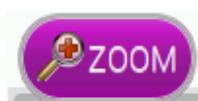
Digitally zoom in on your image.

24

5. Image Enhancement

Zoom settings can be reset at any time.
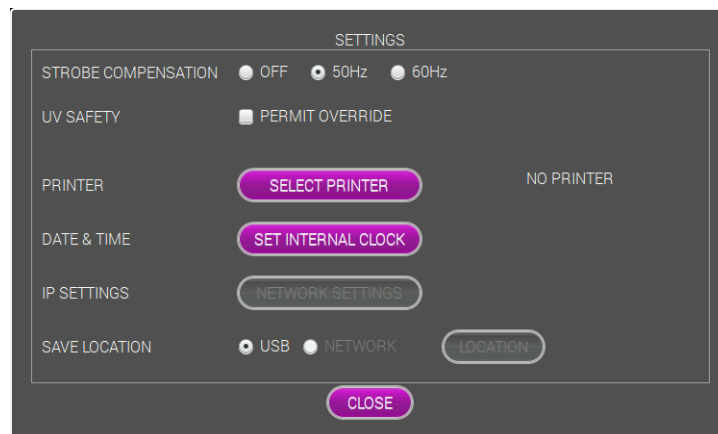
Digitally zoom out of your image.

Chapter Six - User Preferences

6.1   Settings

Select the 'SETTINGS' button.

The following screen, with the different setting options, will then appear.

6.2   Strobe compensation

Select your regional power frequency settings - choose between 50Hz or 60Hz.

6.3   UV safety

Select 'PERMIT OVERRIDE' if you wish the user to be able to override the UV Safety protocols.

To turn the Transilluminator on while the door is open, this must be selected.
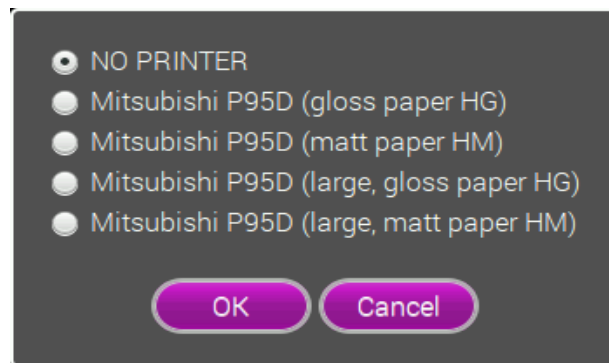
To override the UV Safety interlock, pull the right hand door switch and then follow the on-screen instructions.
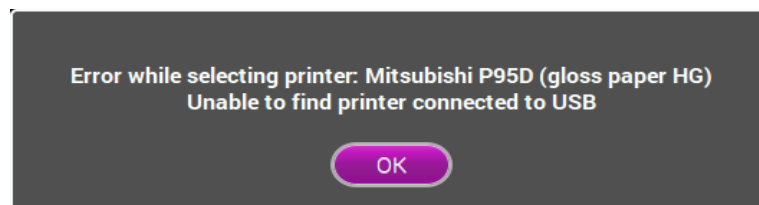
WARNING: UV light can be hazardous to your health, please refer to the UV Safety instructions.

6.4   Printer

Click 'SELECT PRINTER' and then select the printer you have attached to the GelONE/GelONEPLUS system and then click 'OK'.
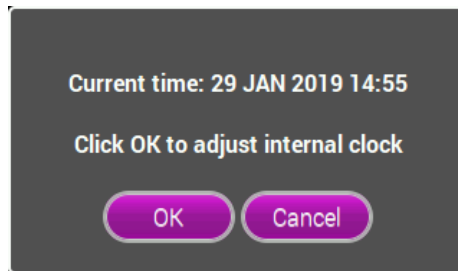

If no printer is connected and/or not detected by the system an error message will appear. Connect the printer to the system and then select 'Ok'.
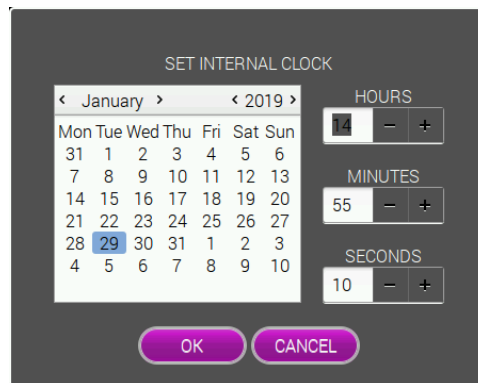
6. User Preferences

6.5   Date & Time

Select 'SET INTERNAL CLOCK' - the current time and date will appear.

To change the time or date, select 'OK' and adjust accordingly, then select 'OK' to save.

Chapter Seven - Troubleshooting and Contact Information

7.1   Troubleshooting

<u>No power to the darkroom</u>

- Check connection of main power cord to main power port on the rear of the GelONE/GelONEPLUS
- Try another power socket within lab.

<u>Transilluminator will not turn on</u>

- Check power cord by sliding Transilluminator fully out from cabinet. If loose push back in.
- If still not on, remove power cord and attach another one plugged in elsewhere. If Transilluminator comes on there is an electrical supply problem within the GelONE/GelONEPLUS. If it still does not come on it is likely the Transilluminator has failed. Contact Cleaver Scientific. **NOTE: Please take UV precautions.**

<u>Print button is enabled but nothing happens when you select it</u>

- Check the correct printer has been selected.
- If more than one printer is present, the system may be unable to distinguish between them. Disconnect one and then continue.

<u>Unable to save images with USB present</u>

- Check that the options on the "Image storage" screen are not disabled. If they are, to re-enable them eject the USB and reinsert it. This should re-enable the options and you will be able to save your image.

7.2   Contact Cleaver Scientific

Unit 41, Somers Road Industrial Estate,
Rugby,
Warwickshire,
CV22 7DH,
United Kingdom

Tel: 0044 (0)1788 565300
Email: support@cleaverscientific.com

www.Cleaverscientific.com

Appendix A - Looking after your GelONE/GelONEPLUS system

The system does not require regular maintenance or calibration other than occasional checking and cleaning.

Cleaning the imaging system

⚠️ **WARNING**	Switch off the mains voltage and remove the mains cord before cleaning.

You can clean the outside of the GelONE/GelONEPLUS using a soft lint-free cloth, moistened if required with a little water. Mild detergent may be used, if necessary. Do not use abrasive or solvent based cleaning materials. Always perform a patch test on an inconspicuous area before you clean the entire accessory.

Avoid spilling any liquid into the body of the GelONE/GelONEPLUS and clean any external spills immediately. If any liquid enters the main body of the instrument, make the system inoperative and contact your dealer.

WolfLabs

Pricing on any accessories shown can be found by keying the part number into the search box on our website.

The specifications listed in this brochure are subject to change by the manufacturer and therefore cannot be guaranteed to be correct.
If there are aspects of the specification that must be guaranteed, please provide these to our sales team so that details can be confirmed.

www.wolflabs.co.uk

Tel : 01759 301142

Fax : 01759 301143

sales@wolflabs.co.uk

Please contact us if this literature doesn't answer all your questions.