# U:GENIUS 3

## GEL IMAGING AT A TOUCH

SYNGENE

A DIVISION OF THE SYNOPTICS GROUP

# U:GENIUS$^3$

Simply Genius. Designed to make your gel imaging simple, quick and easy. No set up, no external computer - just a complete imaging system for all your 1D needs.

A smooth and intuitive touch screen ensures that anyone can use a **U:Genius$^3$** with virtually no previous experience of gel imaging.

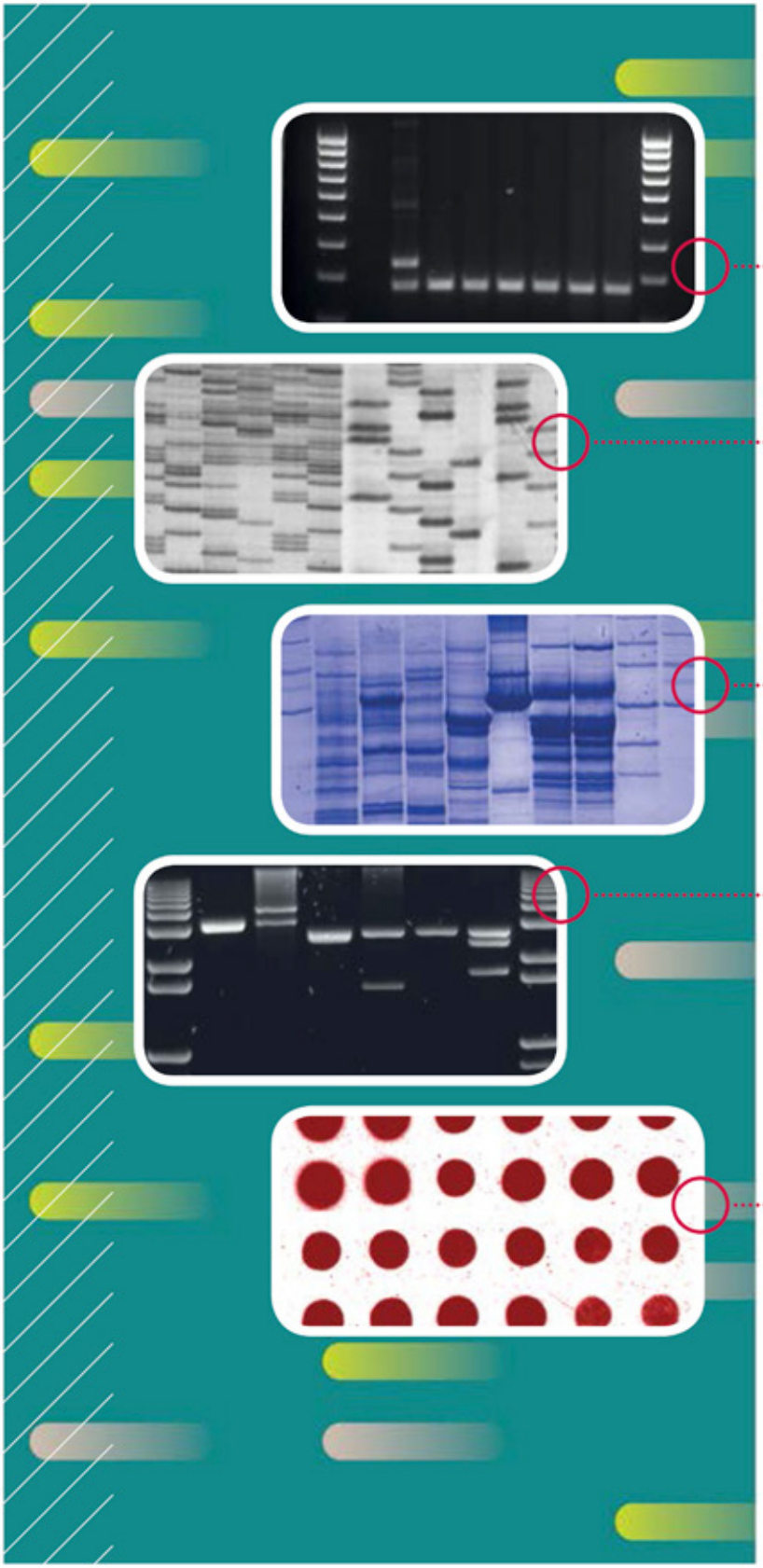
**U:Genius$^3$** - from switch-on to perfect image at a touch.


| Features | Benefits |
|---|---|
| Compact darkroom with sliding door - 46.5(w) x 51.0(h) x 39.0(d) cm | **Small footprint taking up minimal laboratory bench space** |
| Can use a range of transilluminators (20 x 20 cm) | **Versatile - not restricted to using only small gels** |
| No compromise on resolution - 3 million pixels | **Exceptional resolution for high quality images** |
| Easy to access filter drawer accepts interchangeable filters | **Capable of viewing a wide range of different fluorophores** |
| Integral computer | **Full networking capability, USB ports and an internal hard disk for image storage** |
| Colour touch screen | **Full intuitive touch control of all functions with large image view** |
| Image enhancements and annotations | **Total control over image quality** |
| Save images in TIFF, BMP or JPEG format | **Simple to download to any PC or Mac** |

# U:GENIUS³ SPECIFICATION

| | U:GENIUS³ |
|---|---|
| **Camera** | |
| Sensor | 1/3 inch |
| Resolution | 3 million pixels |
| Bit depth | 12/16 bit (extended) |
| Greyscales | 0 - 65,536 |
| Dynamic range | 3.6/4.8 (extended) |
| Lens | Manual/motor driven zoom option, 6.5 – 39, F1.4 |
| Viewing area | 20 x 20 cm |
| **Illumination** | |
| Slim UV transilluminator 20 x 20 cm | Option |
| UltraSlim Blue-LED transilluminator 10 x 12 cm | Option |
| Visible light converter | Option |
| White Epi overhead | Yes |
| **Software** | |
| Image capture | Yes |
| GeneTools image analysis | Yes |
| GeneDirectory | Option |

Use the large colour touch screen to navigate your way through the functions of **U:Genius³**. The icon driven menu is both intuitive and easily understood. All functions from image capture, manipulation, printing to archiving are at the touch of a button.



# U:GENIUS³ APPLICATIONS

## DNA

With a **U:Genius³** you can use the UV transilluminator to capture images of DNA gels stained with Ethidium Bromide

## AutoRads

The **U:Genius³** features a mega resolution camera which is ideal for capturing images requiring high detail. This is especially true when looking for separation between bands and spots. Capturing high quality images of Autorads is one of the strengths of the **U:Genius³**

## Visible light

With the transmitted visible light converter, a **U:Genius³** can be used to view gels which have been stained with silver stain and Coomassie blue. You can also view tissues, slides and films

## Blue light

The blue light LED transilluminator allows you to view some fluorescent stains with better clarity and with less gel damage. Examples: GFP, SYBR®Green, SYBR Gold, SYBR Safe, SYPRO Ruby, Safe View, Flamingo, Pro-Q Diamond, Pro-Q Emerald, Fluorescein, Rhodamine Red™, Texas Red®, Deep Purple™ and others

## Spot blots

Capturing and analysing spot blots is another very simple application for **U:Genius³**

These are just some of the applications that can be used with **U:Genius³**. The Syngene Applications & Support Department is always ready to discuss your particular application needs and how they can be imaged using the **U:Genius³**. The Syngene website contains further technical notes and FAQ's covering the use of all Syngene gel documentation systems.
Further details can be found at **www.syngene.com**

# U:GENIUS³ SYSTEM

**LIVE IMAGE**
capture the image you see with a single touch

**AUTO EXPOSURE**
automatic exposure control lets **U:Genius³** give you the perfect image

**EXPOSURE CONTROL**
manually set the exposure

**SATURATION DETECTION**
see which areas of the image are over exposed

**NEUTRAL FIELDING**
correction of any uneven background illumination

**EDR**
Syngene's patented extended dynamic range function

**SAVE/LOAD**
save or load image to USB memory stick, internal hard drive or use the networking capabilities

**ZOOM**
zoom image to view areas in greater detail

**PRINT**
send image to attached printer

**ROTATE**
rotate image by degrees - no more "skewed" images

**SHARPEN**
add sharpening to enhance band edges

**SMOOTH**
even out background noise when viewing

**INVERT**
view the reverse image

**ANNOTATION**
add annotation (text, shapes, lines) to images


**CAMERA**
Superb 3 million pixel resolution

**LENS**
Superior lens for exceptional image quality. Motor driven option (**U:Genius^EZ**)

**FILTER DRAWER**
Use a range of filters for extensive choice of applications*

**INTEGRAL COMPUTER**
High specification integral computer featuring Windows 7 operating system:
- network
- USB ports
- hard drive

**TOUCH SCREEN**
Large colour LCD screen

**USB**
Stores images on a USB memory stick

**SAFETY SWITCH**
Protects from accidental UV exposure when opening door

**INTERNAL WHITE LIGHT**
For sample positioning and focusing

**TRANSILLUMINATORS (OPTIONAL)**
For UV or blue light
- UV transilluminator slides in and out of darkroom
- Blue LED light (UltraSlim-LED) sits on a slide in and out tray
- Visible light converter

**SLIDING DOOR**
Space saving sliding door

*see the on-line Syngene database for details


# SUPERIOR GEL ILLUMINATION

UltraSlim Blue-LED option uses a high intensity LED array which can illuminate a range of dyes including GelRed, GelGreen, SYBR®Safe, EtBr and the new UltraSafe blue dye. UltraSlim-LED provides a uniform and bright excitation across gels up to 12 x 10 cm.

The unit is compact and slimline and has an array of LEDs which illuminate samples from the side, providing low signal to noise ratio (S/N). A built-in filter/lid provides the optimum viewing conditions and is ideal for band cutting.

UltraSlim Blue-LED is used instead of the UV transilluminator and is positioned on a sliding tray.

## UltraSlim-LED specification

| | |
|---|---|
| Dimension (mm) | 210(d) x 210(w) x 30(h) |
| Gel size (mm) | 100 x 120 |
| Wavelength | 470nm |
| Power | DC 24v 0.65A |
| Weight | 1.3kg |

Over 75,000 scientists world-wide in pharmaceutical and biotech companies, as well as academic and government institutions, have chosen Syngene as their expert imaging partner. If you'd like to find out why, please contact us or one of our dealers for more information and a demonstration of the revolutionary **U:Genius³**

**Please refer to www.syngene.com for all ordering information**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