

G:BOX EF

Gel Documentation and Analysis System

Installation Guide

The system components:

G:BOX EF consists of the following parts:-

Darkroom with epi White (factory fitted), Camera with lens and close-up lens factory fitted, GeneSnap software, GeneTools software.

If purchased you will also have a computer (processor, screen, keyboard, mouse), Microsoft Office (Small Business Edition), a thermal printer, UV transilluminator, Visible light converter (NovaGlo) or white light panel, 3 position filter slider (filters installed) or 7 position filter wheel (filters installed), epi UV (factory fitted), Neutral field screens.

G:BOX EF cannot be operated without connection to a suitable PC. For required specification please consult your supplier or Syngene

You are provided with a full set of leads, cables, screws and washers.

DO NOT CONNECT POWER TO ANY OF THE COMPONENTS UNTIL YOU ARE SATISFIED THAT EVERYTHING IS CONNECTED CORRECTLY. FOR ANY ASSISTANCE PLEASE CONTACT YOUR SUPPLIER OR SYNGENE DIRECTLY.

Installation of the filter slider in the darkroom

Open the darkroom door and inside below the camera position on the right hand side you will find a clip, move this towards the back of the darkroom. On the underside of the slider there are three notches; hold the slider such that the notches are closest to you. Then place the slider on the runners from the extreme right and move to the left. Pull the clip forward which will secure the slider in place. The filter positions are left blank, middle EtBr/UV and right Neutral Density. If you need to interchange extra/custom filters then first remove a filter by unscrewing the two screws and replace with the new filter, replacing the screws, but do not over-tighten the screws as breakage of the filter may occur.

Installation of darkroom lighting

White Epi illumination has been factory fitted.

Open the darkroom door and slide the transilluminator (if option purchased) between the runners located on each side. Connect the flying mains lead in the darkroom into the input socket on the rear of the transilluminator. Make sure the power button on the front is turned on.

Installation of the white light panel

In the inside rear of the darkroom pull down the black shelf, remove 6x white paper tops off the double sided pads, place the white light panel on top of the shelf located on the 4 studs and press gently down. Connect the white light panel flying mains lead to the white light panel (port on the left) and switch on (switch on the right).

Installation of the camera

Connect the camera power cable (9-way D-type connector) to the back of the darkroom (port labelled 'Camera'). Thread the cable from the back of the darkroom through the hole and up through the hole where the camera will be positioned. Place the camera (first remove lens cap if fitted) on top of the darkroom with the bracket facing the rear and connect the other end of camera power cable (red DC connector end) to the camera. Thread the camera lens cable through the same two holes as the camera power cable, connecting to the back of the darkroom (port labelled 'Lens'). You may find it easier to thread the camera lens cable prior to the camera power cable through the holes.

Using 4xM4x6mm pan head posi screws and shakeproof washers attach the camera to the top of the darkroom.

Attach the USB cable to the camera and thread the cable through the same two holes as the camera power and lens cables. Do not attach the free end of the USB cable to the USB 2 port on the PC until the GeneSnap/Camera drivers have been installed.

Place the hood on top of the darkroom to cover the camera/lens/bracket assembly. There is a recess in the back of the hood so that you do not trap the cables and a hole at the front for lens control.

Setting up the PC

Set up the PC by attaching the monitor, keyboard and mouse into the appropriately labelled ports. If your system has been supplied with a printer, you should attach this now. The thermal printer will attach via a USB cable.

1) Unpack the components

2) Installation of filter slider in the darkroom

3) Place transilluminator inside darkroom

4) Fit the white light panel

5) Fit the camera

6) Connect computer monitor, keyboard, mouse

7) Connect the PC to the darkroom

Connecting the PC to the darkroom

Connect the serial cable from the labelled port in the rear of the darkroom ('Darkroom/PC') to the serial port (com1 or com2) of your PC.

Connect electrical power leads to each component but *DO NOT SWITCH ON AT THIS TIME*.

Switching on with the Syngene supplied PC

Attach the free end of the camera USB cable to a USB 2 port on the PC. Ensure it does not share a paired port with a slower device, for instance a mouse, otherwise this will compromise the response time of the camera.

Ensure that each mains lead is now connected to a live supply.

Now switch on the darkroom using the on/off switch on the rear of the unit adjacent to the mains inlet socket. The green power On indicator will glow.

Next switch on the monitor, thermal printer and computer processor (hold the button in for 1-2 seconds).

During the next few seconds the computer will start up, load the necessary programs and check that the darkroom and camera are all fully connected and working.

Depending upon the operating system being used, you may need to input some details and/or establish a system administrator. You will need to accept the agreement terms of any pre-installed operating systems on the PC. There may be some back-up procedures that need to be carried out before you can capture your first image. Please be patient, these processes all contribute to later protection of your personal data and settings.

When the Windows operating system is fully loaded G:BOX EF will be ready to use - the initial acquisition part of the software - GeneSnap - is loaded into the start-up files and it is this part that is seen first.

If you are supplying the PC

Switch on the monitor, thermal printer and computer processor.

- When prompted by Windows, install the Printer drivers from the supplied disk.
- For G:BOX EF you will now need to follow the Hardware Installation document to install the Camera Drivers and GeneSnap software.
- Install the GeneTools software from the supplied CD. If the CD does not auto-run then using Windows Explorer locate the InstallGeneTools.exe file on the CD and double click on it. For Windows VISTA you will be presented with an AutoPlay dialogue box where you need to click on 'Run cdguide.exe'. Click 'Install' within the Syngene install dialogue box+. Within the resulting User Account Control dialogue box click 'Allow'. Follow the instructions and select the appropriate licensing for your system. For hardware or network licensing you will have been supplied with a hardware key. For software licensing each PC will need a Media key (found on the CD insert). Software licensing requires a Security Key code to activate GeneTools. This process involves sending an email to installations@syngene.com (You can also send the request by FAX, but this takes longer). Ensure that the information you send is copied accurately - any mistake can result in an incorrect code and create delays in activating your software. When you receive the Security Key code, you will need to enter it into the Installation Wizard 'Security Code' dialog. If you closed the Install Wizard you can restart it from the Windows START button - Choose: All) Programs/Syngene/Install Wizard.
- + If after clicking 'Install' within the Syngene dialogue box you are presented with an error message: 'Unable to run installation program. CD may be corrupted', then click 'OK'. Browse for the install.bat file on the CD and right click on it and select 'Run as administrator'. Within the resulting User Account Control dialogue box click 'Continue' and now GeneTools will install (continue from "Follow the instructions....").

8) Connect power leads

9) Switch on the darkroom

10) Switch on monitor, printer and Syngene supplied computer

11) Switch on monitor, printer and customer supplied computer

12) Printer driver installation

13) Camera drivers and GeneSnap software installation

14) GeneTools installation

NB GeneTools needs to be installed and licensed to activate both the Effective Pixels and Focus Indicator features in GeneSnap, the acquisition software.

NB2 Within GeneSnap, images can be automatically transferred to GeneTools using the Send to GeneTools icon. For Windows VISTA in order for this link to operate you need to perform a mouse right click on the GeneTools desktop icon and select Run as administrator. This only needs to be performed once and now all users can use this function.

• The Calibration File and calibration file installation program is supplied on a CD. The CD will either auto-run or you will need to run the Install.exe program from the CD.

15) Camera calibration
file installation



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