FLASH STUDIO INDUCTION 2019/20

Workshop Copy
Do not
remove

wsa.wikidot.com

UNIVERSITY OF Southampton

Getting Started

Opening Times

9.30am - 5.00pm
Mon - Fri

Technician:

Dave Gibbons
Email: drg@soton.ac.uk
Telephone: 023 80 596987
Room: W.1197

Use the little giant ladder if you need to. The ladder is found in the Copy Studio: W.1217

Use Henry to clean the floor after use.

In order to use the photo studios, you must follow the Health & Safety rules. Anyone found to be breaking these rules will be asked to leave immediately.

No Food or Drink allowed in this area

Do not cut the backdrop paper

No Aerosols

No shoes on backdrop

No Trip Hazards

Bottled Water is OK

Do not obstruct Fire Exits

Do not leave lights on unattended

Setting Up

→ Use the generators on both sides of the room to reduce trip hazards
→ Take off your shoes to keep the paper clean
→ You can adjust the temperature of the room from the control box

Once Finished

→ Turn off the generators
→ Return lights to their lowest positions against the wall
→ Coil flash head cables under the flash heads
→ Coil USB Extension cables neatly
→ Wind up the backdrop paper
→ Take away any rubbish
→ Vacuum the floor if you created any mess
→ Return the DSLR to the Technician"s office

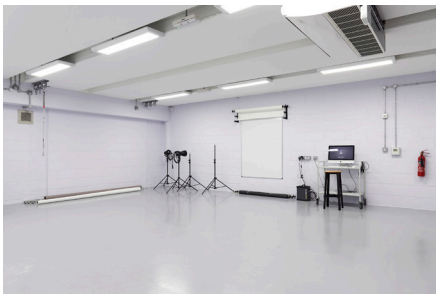
Tidying up time

Each studio booking includes an additional 15 minutes to allow you to tidy up all equipment and transfer your images. There is no excuse for leaving the space untidy.

Leaving the studio untidy is unprofessional and inconsiderate to your peers. An untidy studio can cause trip hazards and poses a fire risk. If this happens, you will be reported to the Faculty Health & Safety Officer.

Bookings

Studio 1 + 2
Bowens Quad X 2400 x2
High quality DSLR + lens
2.7m backdrops
Air Conditioning
iMac with Capture One Pro 9



Studio 1
1.3m backdrops
Magnetic wall

Studio 2
HD Projector available on request

WARNING!
In order to use the photo studio you must have been inducted.

Tip: If you need a different backdrop fitted, put it in the Extra comments box.

The induction covers how to work safely in the space using the equipment correctly in relation to Health & Safety.
The induction ensures you are able to use the facilities effectively and also to make sure you get the most out of the resources.

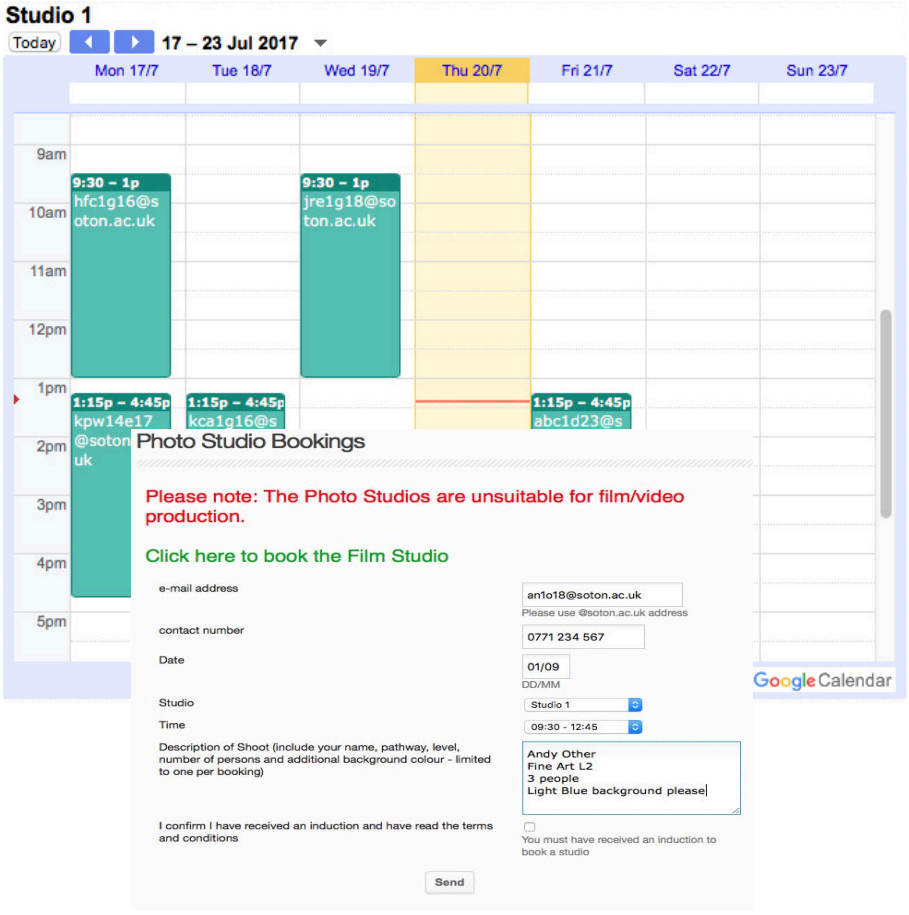
The studios can be booked out Monday to Friday:

→ Morning: 9.30am - 12.45pm
→ Afternoon: 1.00pm - 4.15pm
→ Evening: 4.30pm - 7.45pm (during peak periods only)

Evening Bookings
There is an increased risk of serious injury to yourself whilst using the studios in the evening. To minimise this risk, there must be a minimum of 2 persons in the studios. You will need to let us know when you make a booking how many people are attending.

To book a studio, visit the link below to view the studios, calendars, and bookings page.

wsa.wikidot.com/studios



DSLRs

Each studio comes equipped with a DSLR so you do not need to visit Media Stores to loan out a camera. You can still visit Media Stores if you wish to loan out an additional lens or you prefer to use a different DSLR.

The DSLRs can be collected from the Photography Technicians' office. If this is closed, the DSLRs can be collected from Media Stores.

The DSLR must be returned to the Photography Technician or Media Stores when your booking ends. Do not take the DSLR out of the Photo Studios for anything other than to return it.

Canon 5DS Manual

Nikon D810 Manual

Studio 1
Canon 5Ds + 24-105mm f/4
50MP
60MB files
112cm x 74cm @200dpi

Studio 2
Nikon D810 + 24-120mm f/4
36MP
40MB files
90cm x60cm @200dpi

Each camera comes with a 32GB CF card, giving you enough storage space to shoot 350+ Images.

It is easiest to transfer all of your images before you leave the studio. That way you will not be impeding the next student from using the equipment.

Formatting a memory card
It is good practice to format the memory card before using it. This erases any previous images, allowing you to use the full capacity of the card.

Nikon
MENU > Settings Menu > Format > OK

Canon
MENU > Yellow spanner > Format card

Use the camera strap to take the strain off your arms and prevent the DSLR being dropped.

Transferring Files Once Finished

We recommend transferring your files to the TBM drive, located on the desktop. TBM provides you with 300GB of secure storage space, and can be accessed from any other machine on campus.

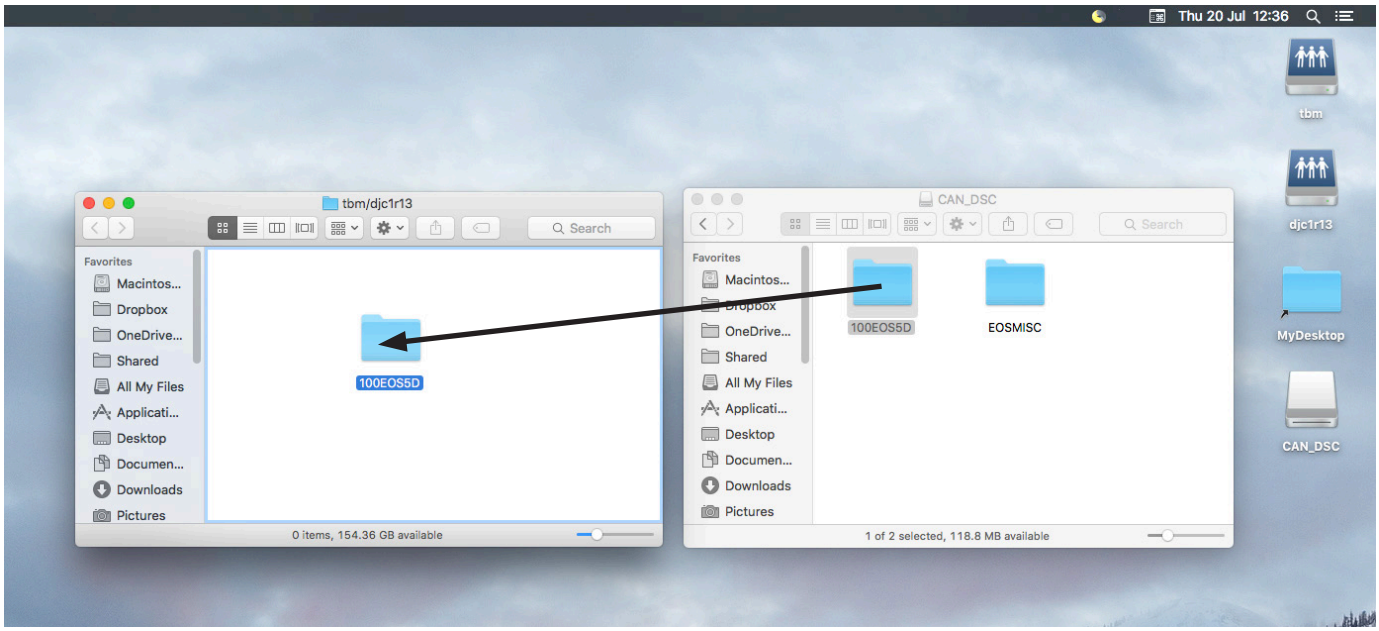
Tip: Whilst your images transfer, make sure the studio has been tidied.

15 minutes has been allocated between your booking ending and the next starting. This gives you enough time to log on to the studio iMac and transfer images to the TBM drive. This takes roughly 10-15 minutes.

Tip: See the Photography technician for help accessing files from home. (Bring your laptop)

Any files left on the Desktop will be deleted after 48hrs. Please make sure you backup your work before you leave.

Follow the steps below to transfer your images:

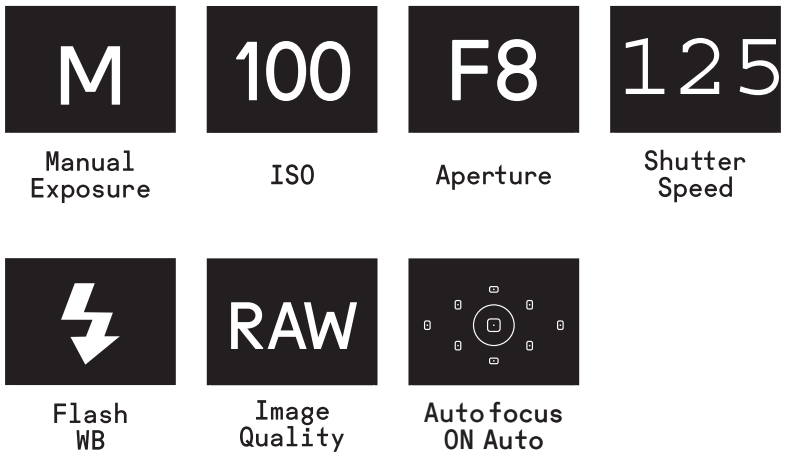


1. Using the card reader, connect the CF card to the iMac.
2. Double click the TBM drive icon, followed by your username.
3. Drag and drop the images folder into tbm/"username"

DSLR Settings

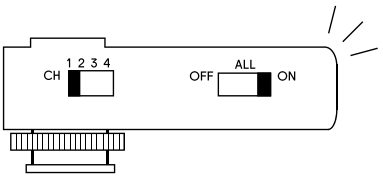
The DSLRs provided should be on the correct settings. It is worthwhile checking all of the settings and making adjustments where neccesary.

In order to get the best quality images whilst in the photo studios, you will need to set your camera to the settings listed below.



Flash Trigger

The flash trigger should already be attached to the DSLR. If not, connect the trigger by sliding it onto the hotshoe and rotating the ring to fix it. The settings on the flash trigger have been fixed in position to reduce problems. It is very rare for the batteries in the flash trigger to be completely flat. However, if you suspect they are flat, bring the trigger to the Photography Technician for a replacement.

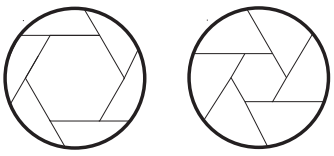


Make sure the Flash Trigger connected to DSLR Hotshoe

Depth of Field

When working in the photo studios it is best to set your camera settings once and leave them for the rest of the photo shoot. However, if you wish to adjust the depth of field in your images, this will affect the exposure.

If you adjust the aperture you will need to adjust the power output of ALL flashes.

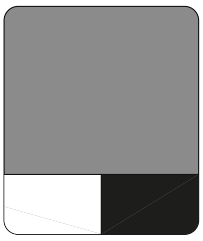


f/5.6 f/11

Grey card

A grey card is a tool used in photography to help you to achieve the correct white balance. Grey cards are coated with a colour neutral 18% grey. If we know this object is a perfect grey, we can match our white balance to it.

To improve the white balance of your image, you can take a test shot with your model holding a grey card. This image can then be used to adjust the WB (White Balance) during Post Production.



A grey card can be used to correct White Balance in Post Production

Generators

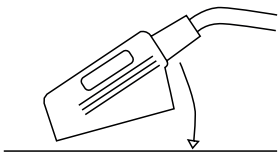
Each studio comes with two generators allowing you to use up to 4 flash heads at once. The maximum output is 4 x 1200Ws or 2 x 2400Ws.

The generators are extremely simple to use. They are used to store the energy required to create the flash from the light. Each generator allows you to control the power output, modelling output, and a few additional settings.

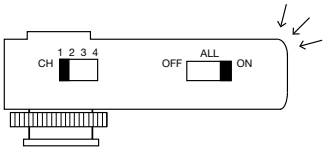
When you need to use lights on the opposite side of the studio you should connect them to the secondary generator. This helps to minimize trip hazards caused from trailing leads.

Start by connecting a flash head connector to the generator. Insert the tip of the connector, followed by the rear, then press firmly. To unplug a light, pull the metal tab away from the connector and lift upwards.

Bowens Quad 2400 Manual

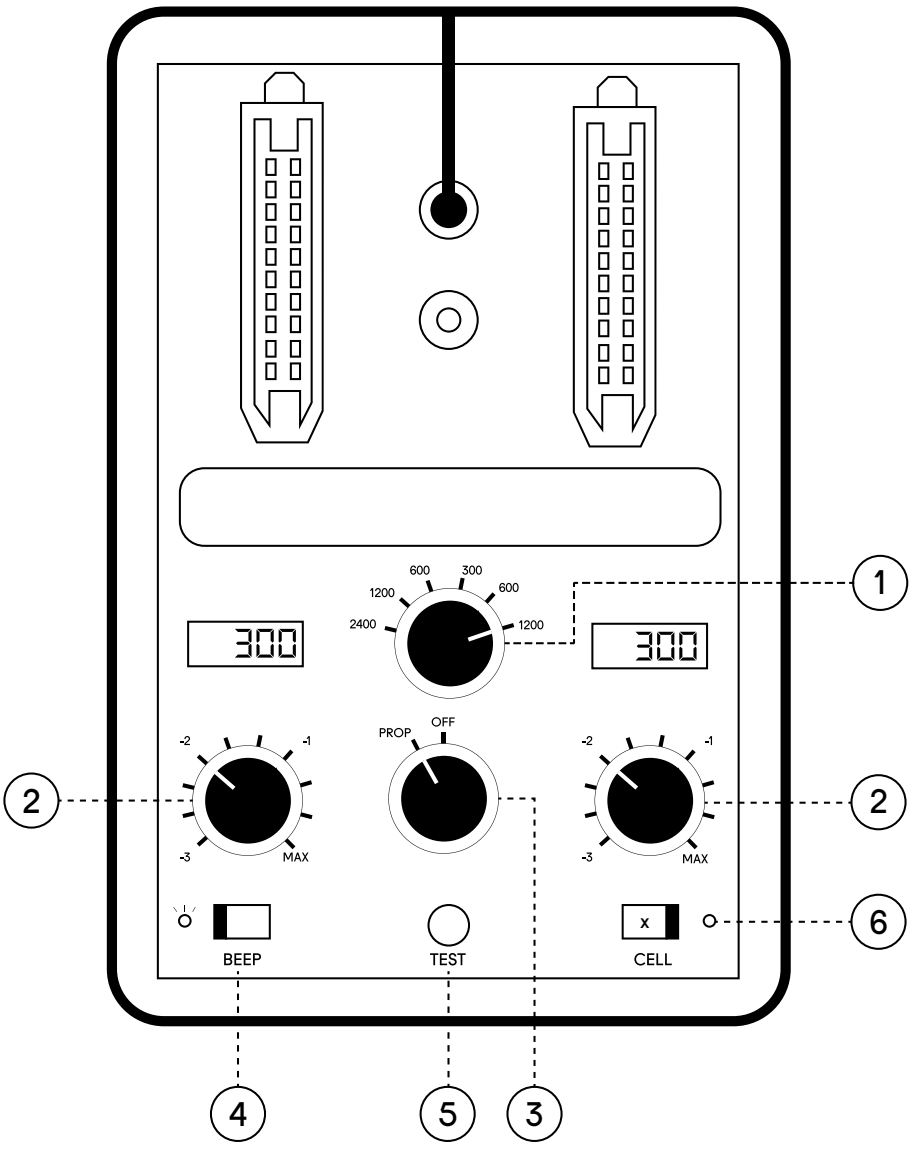


Insert the tip of the connector, followed by the rear ensuring it a pressed down fully.



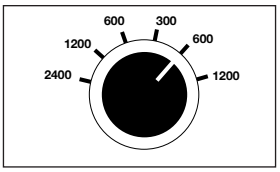
Make sure the wireless receiver is turned on at the wall.

→ Remember to turn the generator and wireless receiver ON at the wall



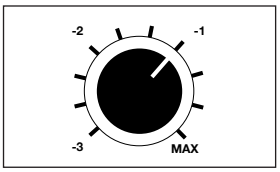
Tip: The recommended starting settings are pictured here. You will still need to fine-tune the flash output.

1 Maximum Power Output



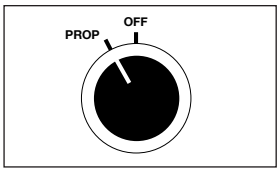
Adjusts the maximum power output from the flash heads. Numbers to the left will only use the left hand channel. Numbers to the right will use both channels.

2 Fine Power Adjustment



These dials are for fine tuning the power output of the lights. It is a good idea to set these to -1 to begin with, as it gives you the ability to increase or decrease the power output of the flash heads.

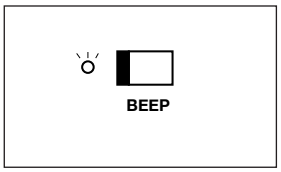
3 Modelling lamp



This controls the continuous bulb in the lights. PROP adjusts the output in line with the flash power.

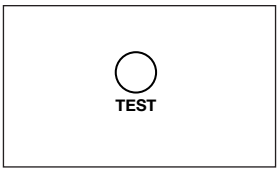
Modelling lamps get hot very quickly so it is good to limit their use.

4 Beep



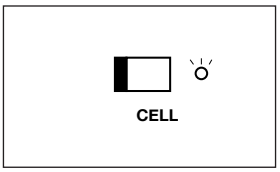
Plays an audible beep once fully charged. Useful when testing if all lights are firing correctly.

5 Test



Tests the flash heads by dumping the flash power. You should press the test button when you decrease the power of the lights. This dumps the flash, allowing the lights to recharge to the correct level.

6 Cell



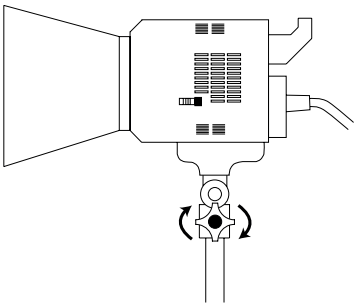
Allows the unit to be triggered by an external flash. As we have wireless flash triggers, CELL should be set to OFF at all times.

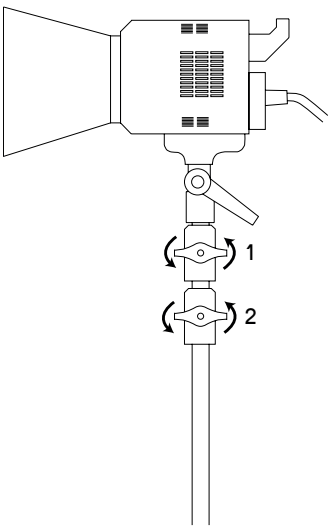
Lighting

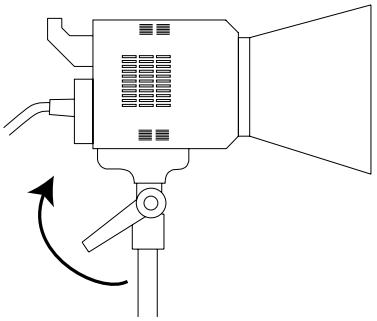
Adjusting Lights

All lights are on a set of small wheels to allow you to easily position the light without having to lift anything. Each light can be adjusted to angle the light in a wide range of positions. The stands are also air cushioned so that if you accidentally undo the height adjustment, the light should fall down gently.

It is good practice to adjust the angle before you adjust the height, as the light may need to be positioned high up making it difficult to safely adjust the angle.







Swing
left to right

Undo the knob on the flash head to swing the light left or right.

Height
up and down

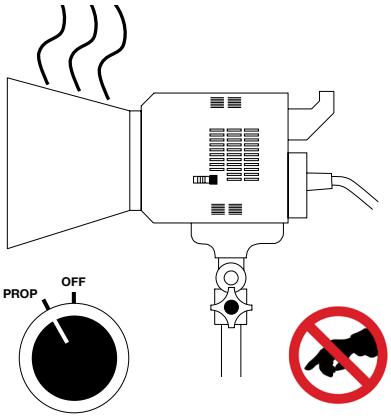
Undo the knob to extend the section.

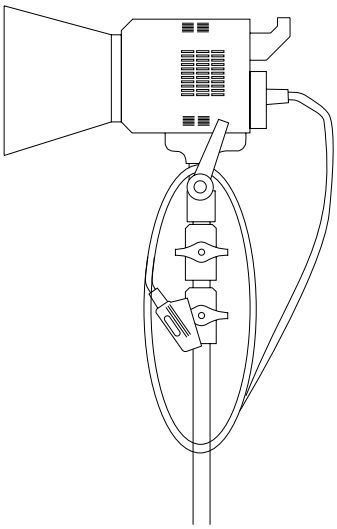
Angle
up and down

Undo the lever on the light to angle the light up or down.

Remember to hold on to the handle whilst adjusting the angle.

Power cables cause trip hazards





Modelling Lamp Heat

When modelling lamps have been left on for more than 5 minutes, the flash head gets extremely hot.

You may want to switch the modelling lamps OFF to reduce heat.

Coil cables loosely under the light afterwards

Once you have finished with a flash head, remember it stays hot for around 5 minutes.

Please loosely coil the power cable underneath the light, looping it around the angle lever.

Lighting Modifiers

Lighting modifiers is a general term used to describe anything that is placed in between the light source and the object or subject being photographed. Different lighting modifiers will affect the way the light falls on the subject in different ways. Lighting modifiers can be separated into two groups: hard light and soft light.

Please make sure softboxes are never left face down on the studio floor.

Hard light modifiers will give you a very harsh quality of lighting. This will be very directional, creating strong textures and bold shadows. Hard light is achieved by using reflective surfaces or by shining the light source directly at the subject with nothing in between.

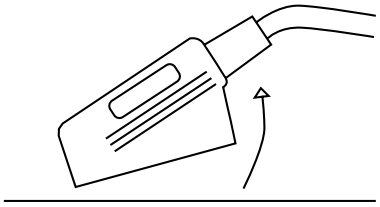
Ensure lighting modifiers are returned to the storage area after use.

Soft light modifiers will give you a very gentle quality of light. The light is a lot more blended and helps to cover up a lot of textures or smooth over surfaces. Soft light is achieved by shooting through a translucent material, or reflecting light off a matte white surface. Using a larger light source will help to soften the light more. Using a larger softbox or bouncing the light off a white reflector will help to give even softer light.

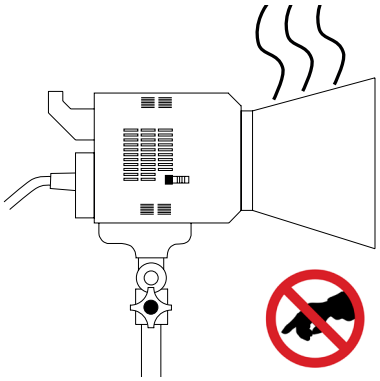
Changing a Lighting Modifier

Make sure you disconnect the light completely from mains power by unplugging it. If you have been using the lights with the modelling lamps turned on, you may need to wait up to 5 minutes for the lighting modifier to have sufficiently cooled before you can touch it.

Tip: Instead of waiting for a light to cool down, change the modifier on a light that is cold and hasn't been turned on.

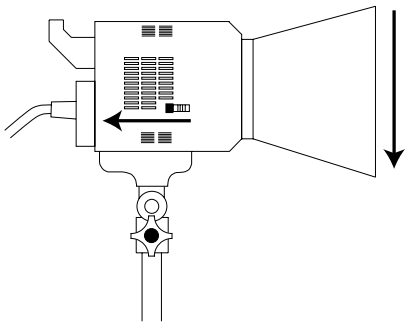


Unplug the light.

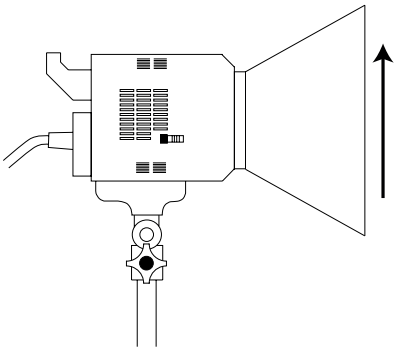


Leave to cool down for 2-5 mins.

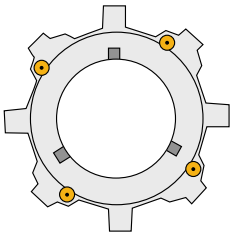
Heat protective gloves are available from the storage area.



Pull back slider and rotate.



Pull back slider and rotate.



Tighten up the four thumb screws on the speed ring when changing softboxes.

Changing Softboxes

Softboxes will need to have the rear baffle opened up to expose the connection ring. You can then tighten up any of the four thumb screws in order to make it easier to remove the lighting modifier.

H&S CAUTION!

Risk of burning and temporarily blinding yourself if these instructions are not followed when changing lighting modifier.

Softbox

Creates a soft light source. Larger softboxes can help to produce softer light as the source is bigger. Softboxes are most effective when placed close to a subject.

Grids

Used in conjunction with a reflector. Enhances a reflector to have even more tightly controlled illumination. Smaller gauged honeycomb grids produce tighter spot effects.

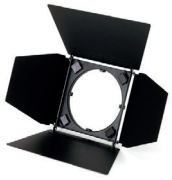
Gels

Used to artificially change the colour of the light source. Using gels can be difficult without much experience. Gels pose a fire risk if used incorrectly. You must not use modelling lamps whilst using gels.

Umbrella

Creates a soft light source similar to a softbox. As they aren't enclosed they often spill light over a wider area. This can be good and bad.

Barn Doors



Used in conjunction with a reflector. Barn Doors helps you control the spill of light. This can be useful in eliminating lens flare, or if too much light is hitting your background or subject.

Ring Flash

Usually used for up close and deadpan fashion photography. Provides a circular light source that gives a pleasing aesethetic due to its symetry.

Reflector

Produces a wide angle spread of intense directional light. Useful when wanting to enhance contrast and exaggerate textures.

Beauty Dish

Combines a honeycomb light with a diffused soft light around the perimeter.
This can be great for portraiture or fashion.

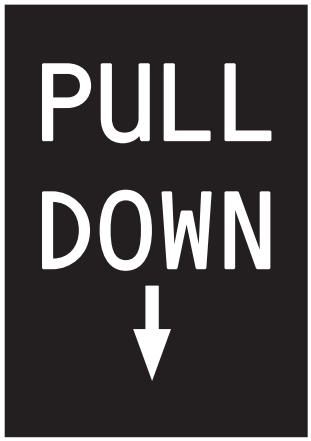
Backdrops

Do not cut the backdrop yourself. Please ask the photography technician.

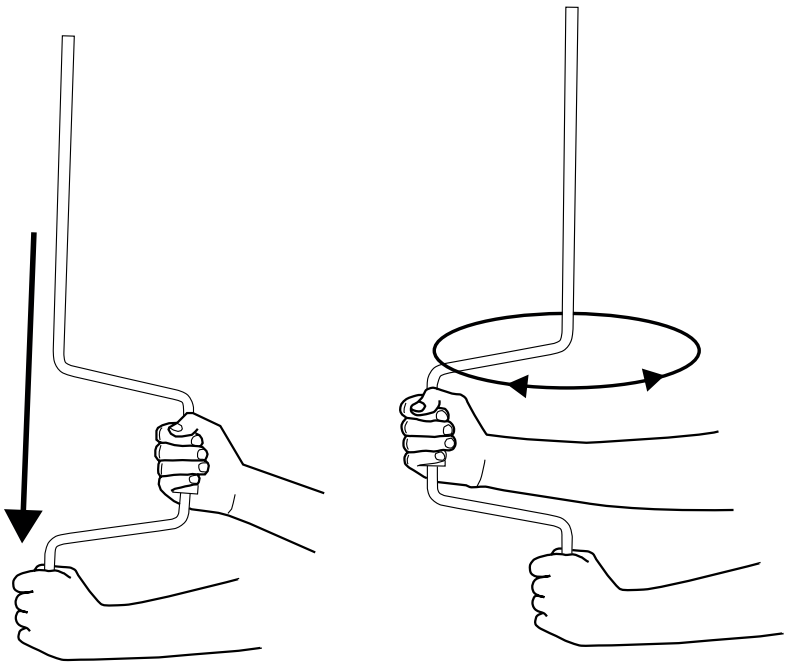
The backdrops (sometimes referred to as Coloramas) are the long rolls of paper used in the photo studios. Each studio can hold 3 backdrops at one time. The photo studios stock a wide range of colours that can be fitted by the technician. This can take up to 30 minutes to change, so you will need to request this when you make your booking.

In order to unwind the backdrops, you need to place your hands on the two handles, pull down (with quite a lot of force) and rotate your upper hand. If you don't pull down hard enough on the winder, the rollers will make a crunching noise. If you hear this noise, apply more downward force. If you fail to do this, the winder will break.

When the paper reaches the floor you will need to hold the aluminium bar and walk backwards with the paper. You may need to unwind it then walk it backwards a few times. If someone can help, get them to hold the aluminium bar whilst you unwind it.



Remember to pull down on the handles when adjusting the backdrop.



1. Place both hands on the handles whilst leaning down to unlock the mechanism.

2. Rotate your upper hand whilst pulling down on both handles.

CAUTION!
If it sounds like the winder is getting stuck or breaking, you need to lean on the handles and pull down harder to unlock the mechanism.

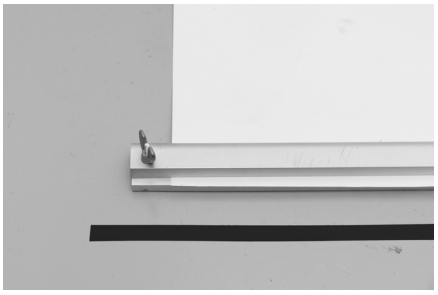
Keeping the backdrop paper clean

We want to keep the backdrop paper as clean as possible in the studios. Firstly it cuts down on our waste and carbon footprint. Secondly, a clean backdrop requires less post production to remove dirty marks.

In order to preserve the life of the backdrop paper you must follow these four rules:

We reuse backdrop paper by cutting it into smaller sheets for models to wipe their shoes on, preserving the life of the new backdrop.

After this, waste paper is recycled.



Don't unwind the backdrop paper beyond the black line.

Take your shoes off before standing on the backdrop paper.

Models:
Please wipe your feet on scrap paper before standing on the backdrop.

If your model needs to wear shoes, they must wipe their feet on scrap paper, available from the blue storage rack.

If you are only doing half length shots, don't unwind the paper onto the floor.

Backdrop paper costs £7/m so please try to keep it clean.

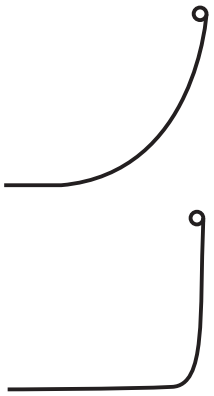
H&S CAUTION!
Fire hazard if backdrops are not wound up after use.

Backdrop Curvature

Often overlooked, the curve of the backdrop paper plays a big role in the studio. There isn't specifically a right or wrong way to lay the backdrop paper, but it is important to be aware of how it affects your shots.

If there is a gentle curve, your photographs will appear to have no horizon line and will transition seamlessly from foreground to background.

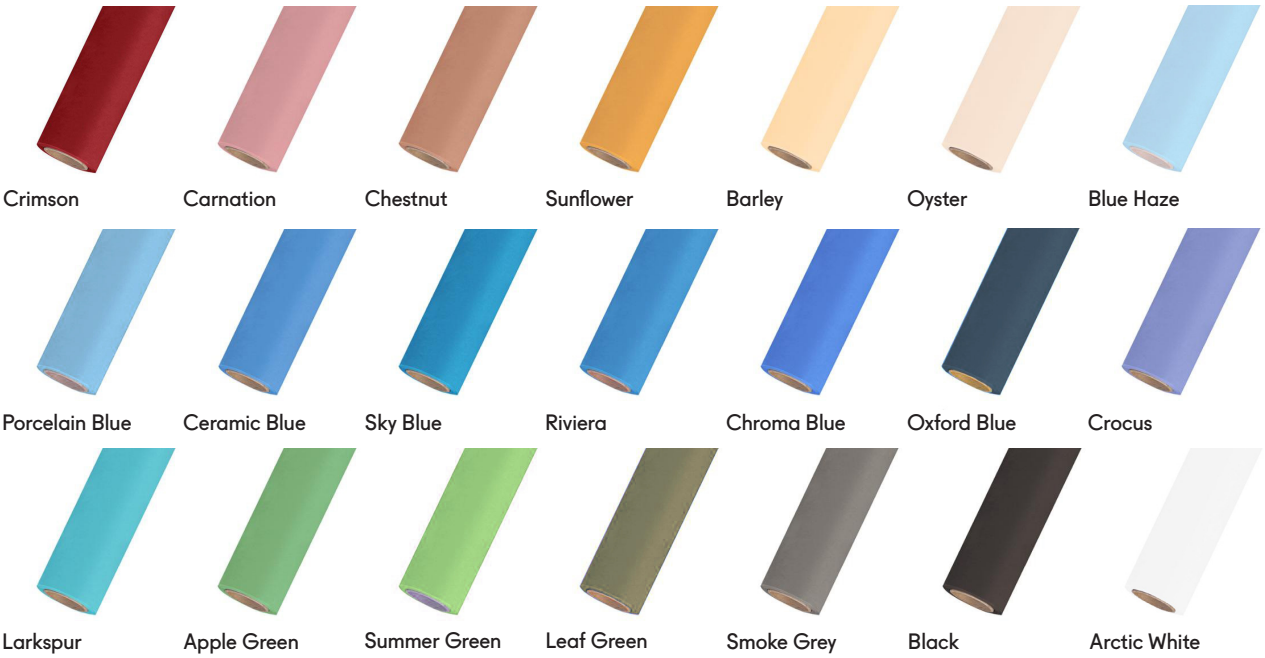
If the paper drops down vertically you are more likely to have a visible horizon line and harsh transition between foreground and background.



WARNING!
Do not attempt to change backdrop colours yourself. Ask the Photography Technician.

Available Backdrop Colours

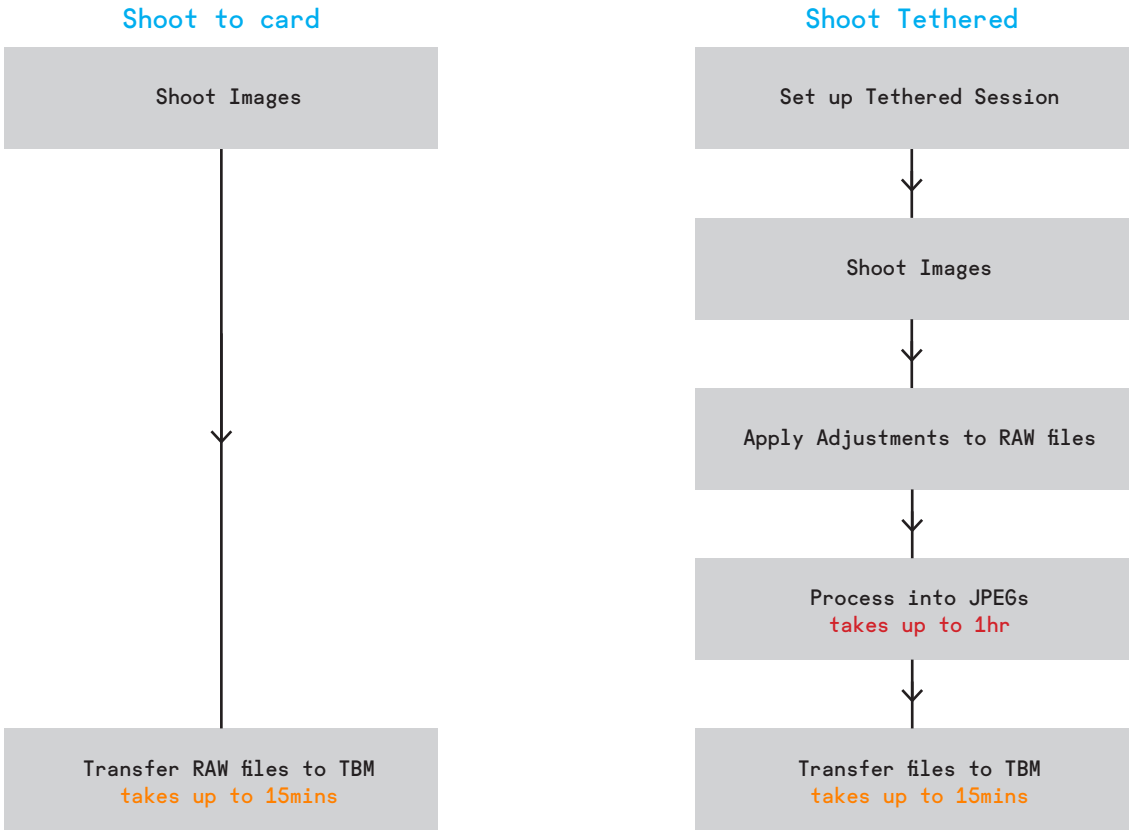
We have a large range of backdrop colours that can be fitted by the technician in advance, if requested at the time of booking. Below is a list of available colours. Stock levels may vary throughout the year. Colours are approximate.



You can request an additional backdrop colour by writing in the comments section when submitting a request. 1 per booking. Requests must be made at the time of booking.

Shooting Workflow

When shooting in the studio, there are multiple workflows or routes for you to achieve your images. Essentially they all end with you transferring your images to the TBM Storage drive. Some workflows are more complicated to follow, but can save time in the long run, and provide you with higher quality images.



Shooting to Card

Beginner

Shooting to card is straightforward: simply shoot your images. Once finished, just transfer the RAW files to the TBM Storage drive. You will then need to edit the RAW files afterwards.

Shooting Tethered

Intermediate

Shooting tethered gives you the ability to make adjustments to all images such as White Balance, Sharpening, and Contrast. This can save time editing images afterwards. However it can take up to 1hr to process all of the images into JPEGs.

Tethered Capture: DSLR

In an effort for power efficiency, Computer manufacturers are underpowering or dynamicly powering USB ports. This causes problems with tethering. That is why in the photo studios we have added Tethertools TetherBoost Pro to each iMac. This ensures the USB port is supplied with enough power to transfer images with fewer dropouts.

A USB Cable is weakest at its connection points. By adding a TetherBlock to each DSLR, we are able to ensure a stronger connection between the cable and camera.

One advantage of shooting in the studio is the ability to shoot tethered. Tethered Capture allows you to connect a DSLR to a computer. All images shot on the DSLR will then be automatically transferred to the computer.

Sometimes shooting tethered can cause additional problems. Usually these are to do with connectivity issues and Session locations. If you are losing too much time due to these problems it may be beneficial to abandon shooting tethered on this occasion.

The DSLR is already set up ready to shoot tethered. All you need to do is connect the DSLR to the iMac using the cables provided.

Connect the USB cable from the DSLR to the USB Extension cable on the iMac

Phase One create the industry leading software 'Capture One'. Capture One is able to support a wide range of cameras and comes with some of the most powerful RAW processing tools available.

If you expect to be working on shoots during or after University, knowledge of Capture One will be extremely useful.

Do not unscrew the TetherBlock

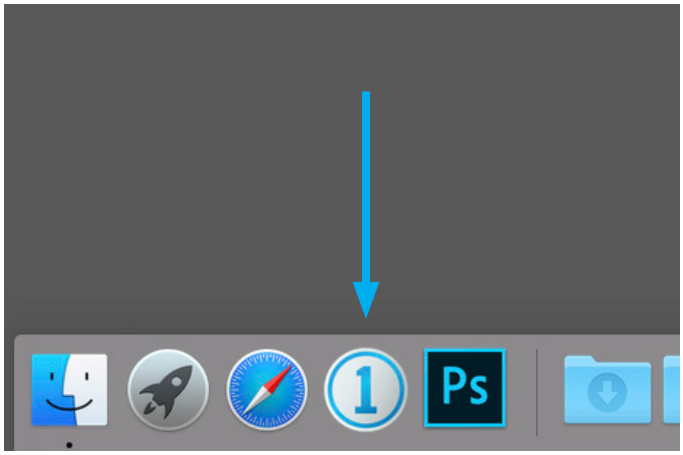
Coil up cables neatly after use

Trip hazard when shooting tethered

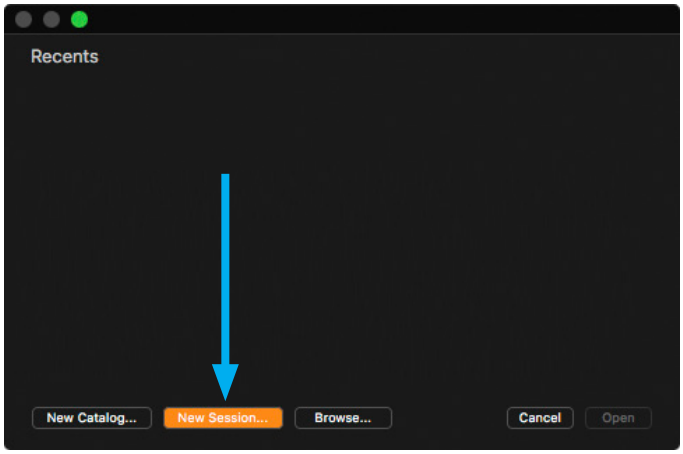
Tethered Capture: Capture One

We use Capture One to shoot tethered in the photo studios. This is also the same software used in the Copy Studio and Image Lab. In order for Capture One to work correctly, you must set it up to save your files locally. The easiest way to achieve this is to leave the default Save location as Pictures. Setting up a session directly on a USB drive or portable hard drive will be unreliable and performance will be extremely slow.

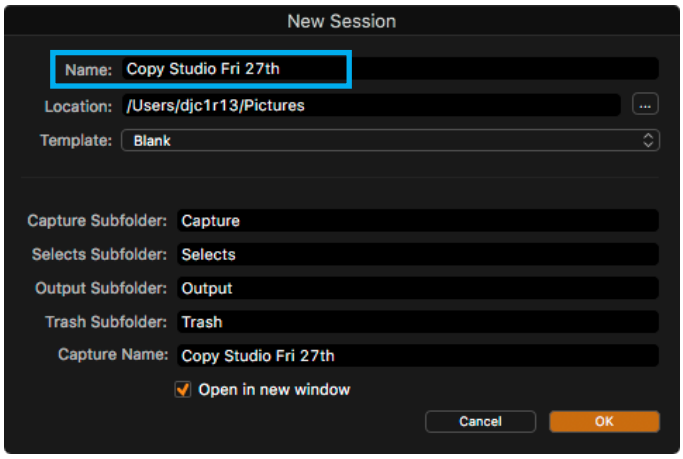
Follow these steps to set up Capture One to shoot tethered:



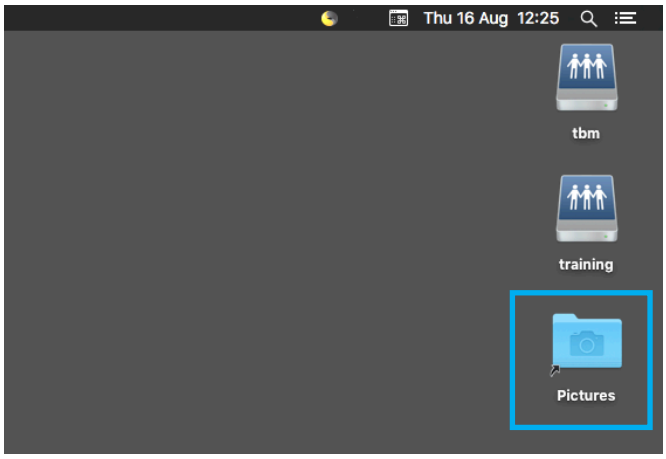
1. Load up **Capture One**



2. Click **New Session...**

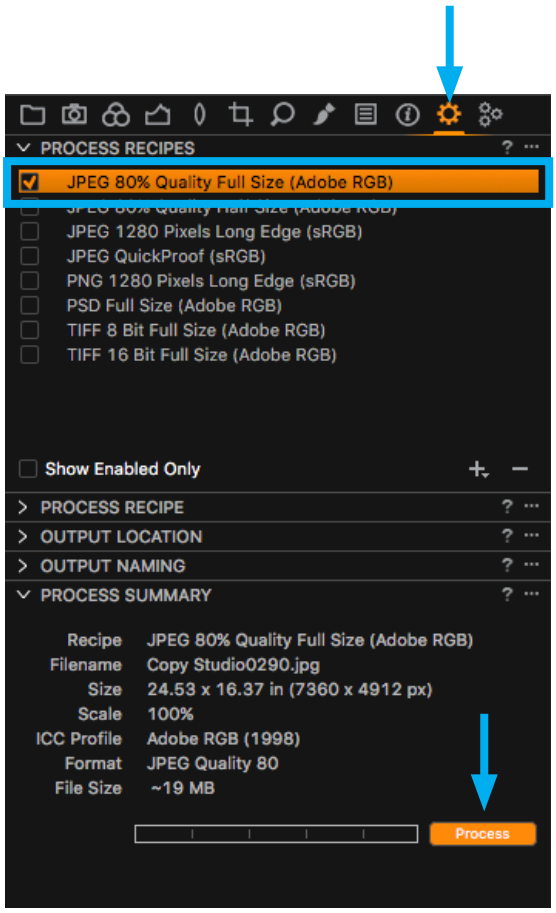


3. Name the session and click **OK**



Your session will be saved in **Pictures**

Exporting



Currently all your captures are saved as RAW files around 40MB in size.

If you need to spend further time editing the RAW files, you may skip this step.

If you are happy with how your images look after making some basic adjustments you can process the RAW files into JPEGs. Once you have JPEGs, they can be used in other applications such as Photoshop and InDesign. It is recommended to output images as JPEG 80% Full Size.
Other recipes are available to give you different file types if required.

Click the **Output Tool** Tab

Click and select:
Process Recipes > JPEG 80% Full Size (Adobe RGB)

Make sure the recipe is TICKED and SELECTED to avoid export errors.

Select all images you wish to export.

Click **Process.**

The progress bar will estimate the time remaining until complete.
Exported Images will be roughly 5MB in size.

Image Export times

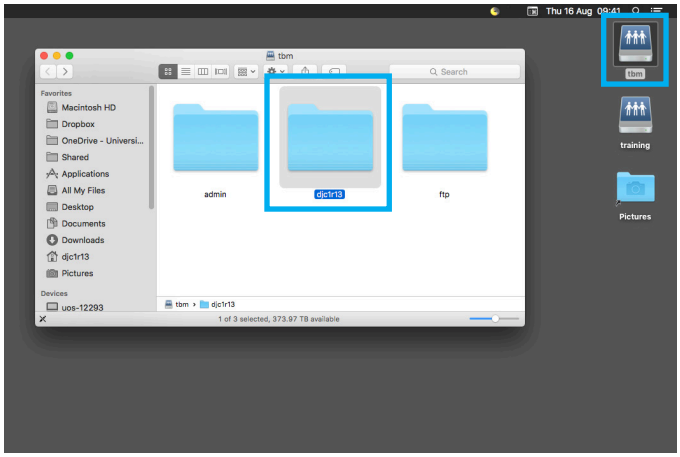
100 Images	15mins
200 Images	30mins
400 Images	60mins

It is your responsibility to make sure you leave enough time to export all images before the next booking starts.

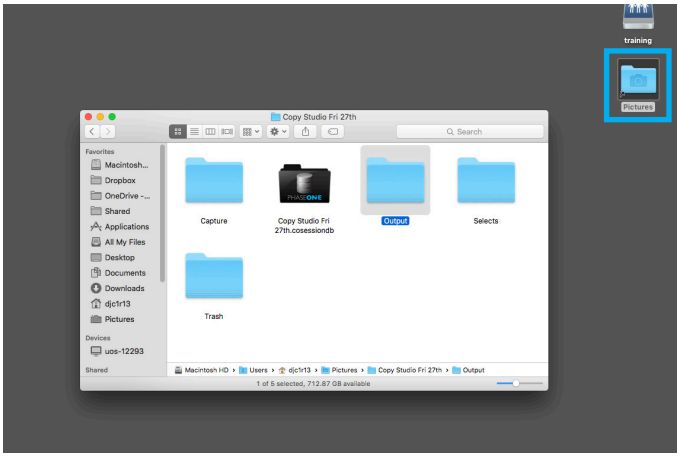
Unfortunately if you overrun, we reserve the right to log you off before all images have exported.

Transferring Images to TBM

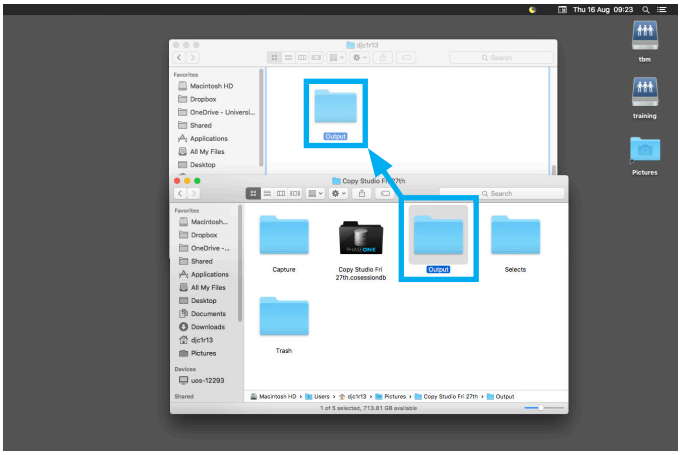
If you want to keep your **RAW** files - Transfer the entire **Session** folder
If you want to keep only **JPEGs** - Transfer the **Output** folder only



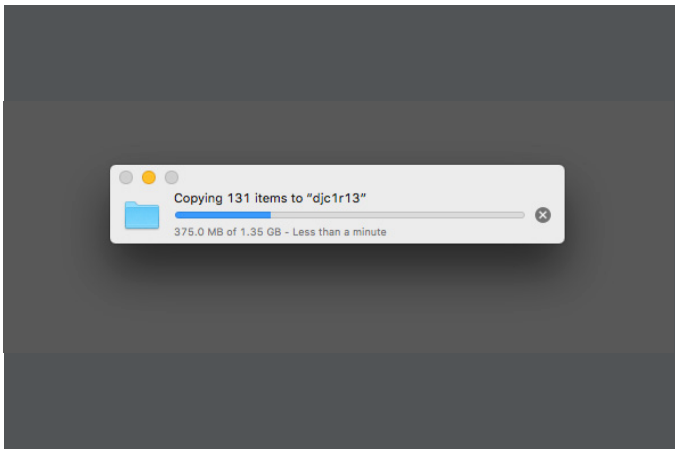
1. Open up your folder in **TBM**



2. Open **Pictures/Your Session/**



3. Drag **Output** into **TBM**



Files should take no more than 2 minutes to transfer

WARNING!

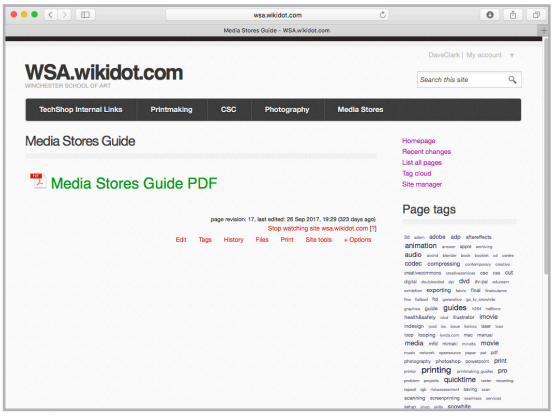
Local files are deleted after 72hrs. Make sure they are backed up before you log off.

Once your files have transferred you can log-off. Please remember to turn off the DSLR and lights on the wall.

Accessing Images

On Campus

You can now access your processed JPEGs from any workstation on campus at WSA. Simply log in, and you should see the TBM drive attached.



Off Campus

If you need to access files from off-campus please follow the instructions in the Media Stores Guide:
wsa.wikidot.com > Media Stores > Media Stores Guide p59-61

You will need to first set up the VPN (Virtual Private Network)
Then connect to the TBM server:
smb://wsacloud.soton.ac.uk/tbm/

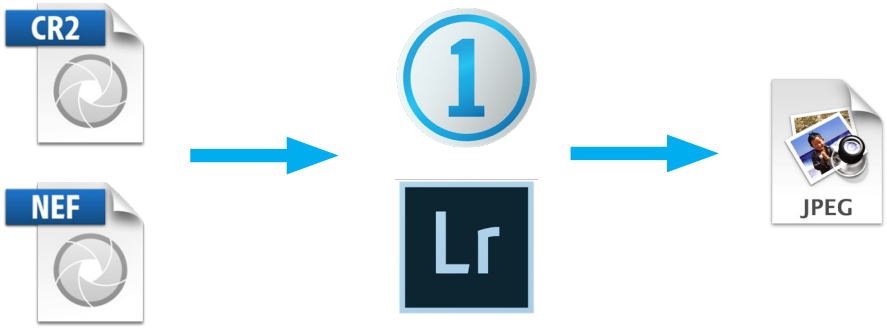
Need help?

Alternatively, bring your MacBook to the Photography Technician and he can help you set it up. It takes roughly 5 - 10 minutes.

Editing RAW files

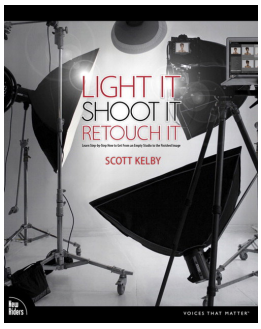
Once finished in the studio, you will need to process your RAW files (Canon = .CR2 Nikon = .NEF) into JPEGs. Shooting in RAW gives you much more power and control to get better quality images.

To convert RAW files into JPEGs you will need to use RAW Processing software such as Capture One (available on all Photography machines) or Lightroom (available in all Mac Suites).

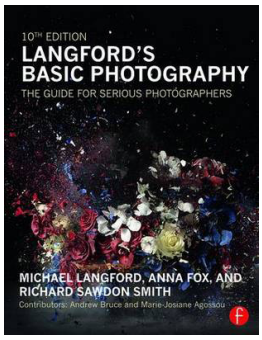


Ideally, after you have finished your shoot, you can begin editing the images in Image Lab using Capture One. Please contact the Photography Technician to help get you started.

Further Reading



Light It, Shoot It, Retouch It
Scott Kelby
771 KEL



Langford"s Basic Photography: The Guide for Serious Photographers
Michael Langford
770.232 LAN

Capture One Learning Hub

Cambridge In Colour

Flash Studio Induction Notes

Troubleshooting

If you are experiencing problems in the photo studios, make sure you have followed these basic troubleshooting tips.

1. Make sure the flash receiver is turned on at the wall. It should flash green every few seconds when it is turned on.
2. Make sure the generators are turned on. A red LED display should be visible on the unit.
3. Make sure any connected lights are fully inserted by pushing down firmly on the sockets.
6. Ensure the number on the flash trigger corresponds to the studio you are in.
5. If you are using the second generator, ensure 'CELL' is turned on.

Shooting Tethered?

i. Ensure the USB cable is connected to the tetherboost.

ii. Ensure your session is being saved to "Pictures".

Advanced Troubleshooting

DSLR fires but flash does not
Ensure the flash receiver is turned ON at the wall. and connected to the generator. Push down firmly on all connected lights to ensure a good connection to the generator.

Not all lights are firing
Check the secondary generators" CELL is turned ON. Make sure the second generator is being illuminated with the primary flash.

Flash Exposure is wrong
You will need to adjust the fine control of the generators to adjust the exposure of your images (see page 04). If the problem persists, check your camera settings (see page 03).

Dark band on the image
Make sure your shutter speed is set to 1/125.

Images have a colour cast
Check the DSLRs WB (White Balance) is set to Flash.

DSLR not firing
Ensure the lens is set to autofocus and the autofocus mode is set to Auto / ALL.
Try focussing on something different.

DSLR not detected on Capture One
Check battery is charged and turned on. Half press the DSLR shutter to wake it. Ensure the USB cable is connected to the tetherboost and DSLR.

Images are loading slowly
Make sure your session isn"t located on a USB drive or external hard drive. Sessions should be saved to "Pictures".

Still having problems?

Better ask the Photography Technician. Chances are it's a simple fix.

Email: drg@soton.ac.uk
Telephone: 023 80 596987 Room: W.1197