

Welcome to the Darkroom







Health and Safety - Chemicals

THE CONTROL OF SUBSTANCES HAZARDOUS TO HEALTH

KNOW THE RISKS AND PRECAUTIONS!

COSHH regulations 2002, made it necessary for all personnel to comply with, and be aware of the safety precautions available to protect themselves and others against substances and processes that are hazardous to health.

Listed below are a summary of the general classification of risks.

SYMBOL & CLASSIFICATION RISK	SAFETY PRECAUTIONS
 <p>Corrosive May on contact cause destruction of living tissue or burns.</p>	<ol style="list-style-type: none"> 1. Wear suitable gloves and eye / face protection. 2. Take off immediately all contaminated clothing. 3. In case of contact with skin, wash immediately with plenty of water. 4. In case of contact with eyes, rinse immediately (for 15 minutes) with plenty of water and seek medical advice.
 <p>Toxic/ Very toxic May cause serious health risk or even death if inhaled, ingested or if it penetrates the skin.</p>	<ol style="list-style-type: none"> 1. Wear suitable protective clothing, gloves and eye / face protection. 2. After contact with skin, wash immediately with plenty of water. 3. In case of contact with eyes, rinse immediately with plenty of water and seek medical advice. 4. In case of accident or if you feel unwell, seek medical advice immediately.
 <p>Harmful May cause limited health risk if inhaled or ingested or if it penetrates the skin.</p>	<ol style="list-style-type: none"> 1. Do not breathe vapour / spray / dust. 2. Avoid contact with skin. 3. Wash thoroughly before you eat, drink or smoke. 4. In case of contact with eyes, rinse immediately with plenty of water and seek medical advice.
 <p>Irritant May cause inflammation and irritation on immediate or repeated or prolonged contact with the skin or if inhaled.</p>	<ol style="list-style-type: none"> 1. In case of contact with eyes, rinse immediately with plenty of water and seek medical advice. 2. In case of contact with skin, wash immediately with plenty of water. 3. Do not breathe vapour / spray / dust.

IT IS YOUR DUTY TO KNOW THE RISKS AND THE APPROPRIATE SAFETY PRECAUTIONS! Failure to comply to COSHH regulations is an offence under the Health and Safety at Work Act.

IF IN DOUBT ASK!

GHS

Globally Harmonised System

New system of classification and labelling of chemicals











Physical Hazards







Flammable
Compressed Gas
Oxidising
Corrosive
Explosive

Health Hazards






Health Hazard
Corrosive
Harmful/Irritant
Toxic

Environmental Hazards



Dangerous for the Environment

For more information visit:
www.hse.gov.uk/ghs

Health and Safety – Other Stuff



No Mobile Phones



No Ear or Headphones



No Food or Drink

The Universities Emergency Health Line
Extension 2222

From a mobile 01273 642222

Film
and
Photo Paper

Setting Up Before You Start



The Focus Finder

Eye piece can be moved in and out to focus on calibration strip



Eye Piece

Eye Piece Adjuster Screw

Mirror

Setting Up The Focus Finder



By holding the Focus Finder carefully so that light hits the mirror, looking into the eye piece the calibration strip can be seen. The strip should be sharp and in focus. If it is not loosen the Eye Piece Adjuster screw just by half a turn and pull the eye piece out gently. When the line is sharp re-tighten the screw

Contrast Filters



A range of different density pink plastic sheets that fit into the enlarger to adjust the contrast of your print

How Contrast Filters Change Your Print



Grade 0



Grade 1



Grade 2



Grade 3



Grade 4



Grade 5

The Easel



The easel is used to hold your paper flat and square under the enlarger light. It also forms a border around your print and can help if you want to crop an image.

Most darkroom easels are ruled to allow for easy setting of the paper size and borders. Once you have achieved the desired framing, you can easily and repeatably print multiple prints by simply placing paper in the easel.



Adjusting the Blades

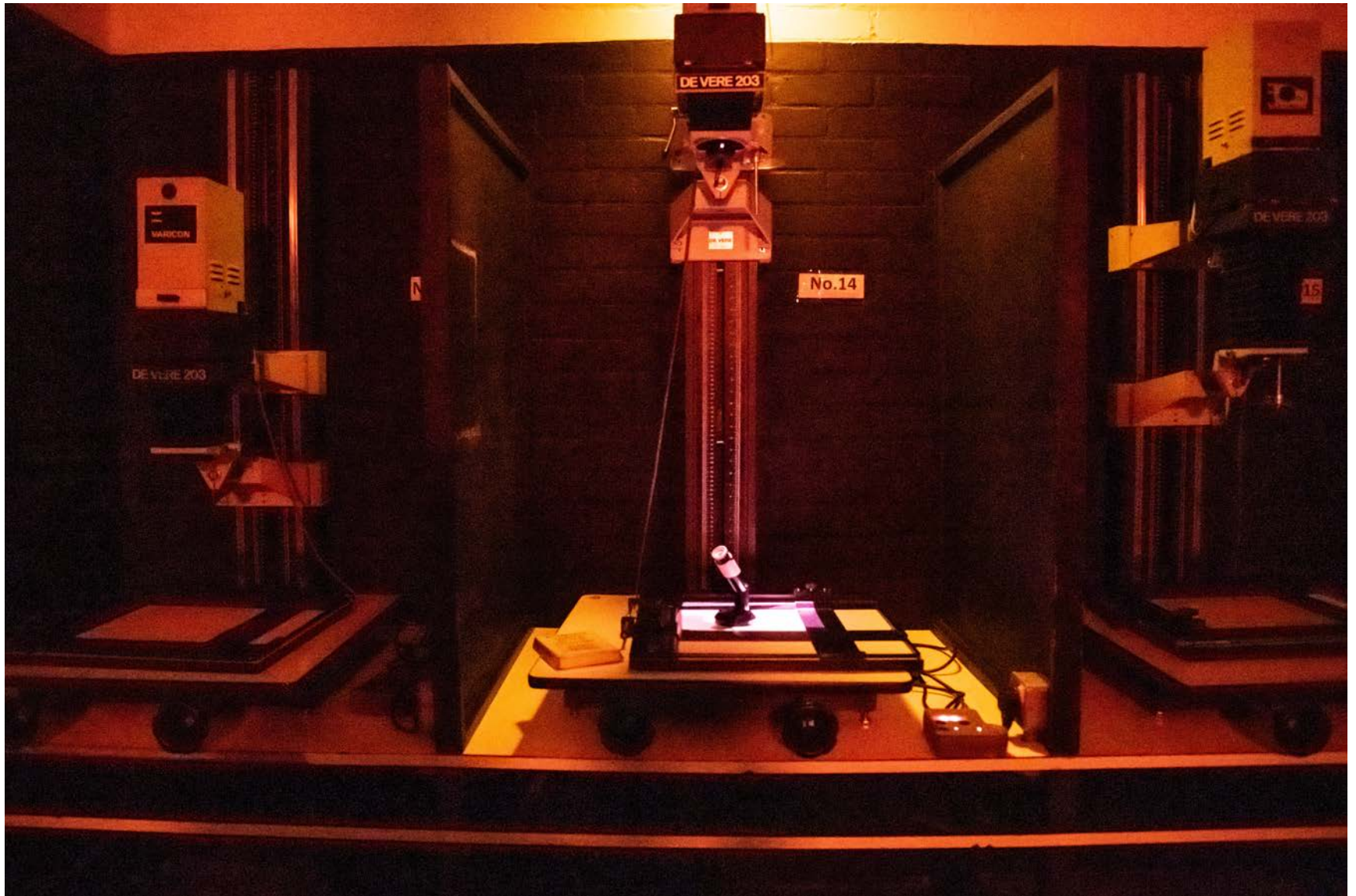


Adjust the internal blades first. They simply lift out and push into the slots. For your first darkroom workshop the top blade needs to be set at 1 inch and the side blade to $\frac{1}{2}$ inch. This will form a corresponding border to the top and left hand side of your 10" by 8" paper

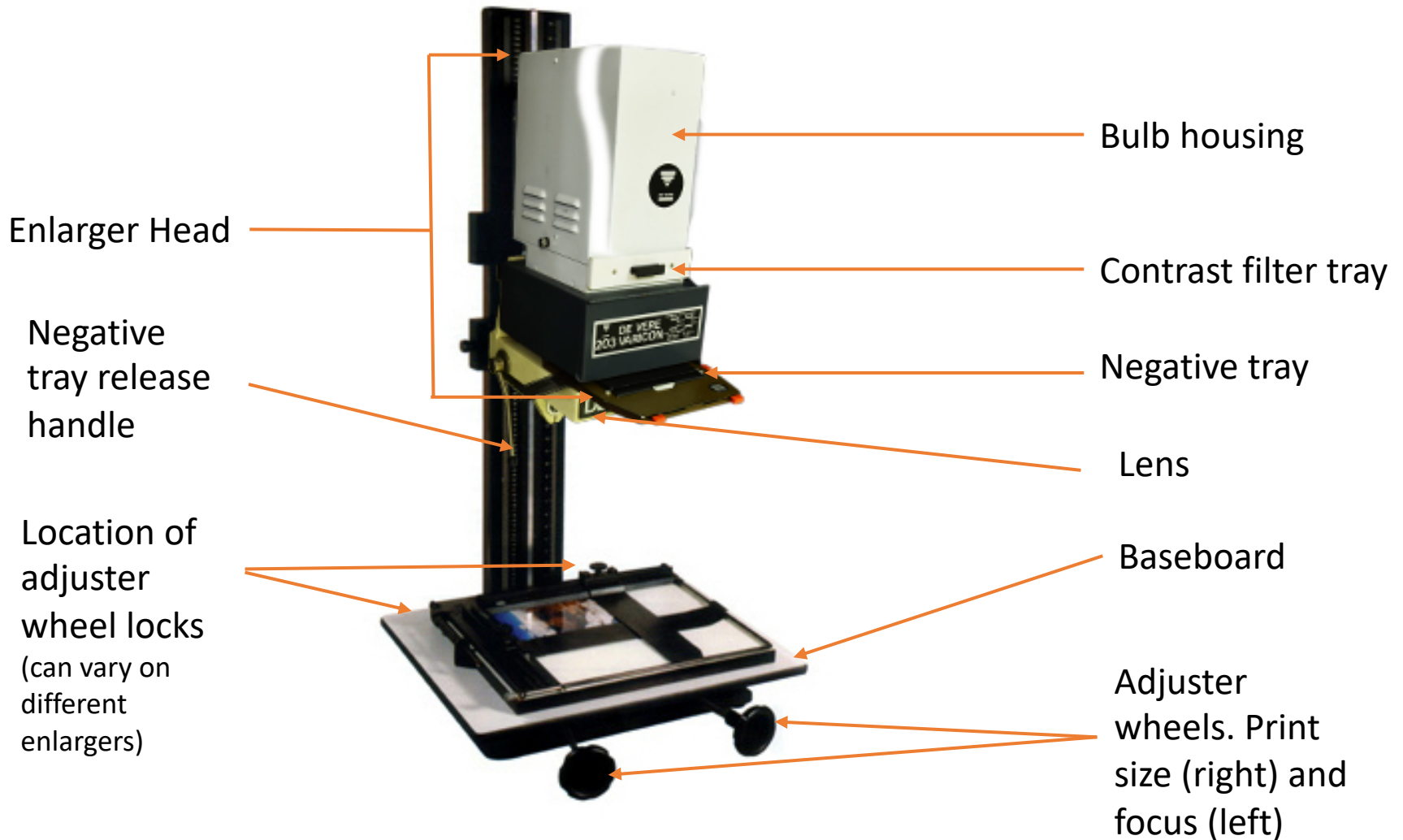
The two external blades can then be adjusted by gently loosening the screws and sliding the arms so that the numbers on the inside of the blades read 9" along the top and 6" along the bottom. This gives a corresponding border to the right hand side and bottom of your paper



The De Vere Enlarger



Setting up the De Vere



Do Not Place Paper Under Enlarger Until Completing Set Up

Follow these steps to set up your enlarger, working from the top down. Note that given recommendations for f stops and exposure times apply assuming that you have a good evenly exposed negative. It is very important that you do not switch the enlarger light on until you have completed steps 1 and 2.

1 – FILTER

Select an appropriate filter and place in the filter drawer, generally start with a 2 or a 3 grade.

2 – NEGATIVE

Push the silver lever on the left slightly away from you to raise the enlarger head up and pull the negative carrier out. Place your negative carefully into the holder (shiny side up) and return it to the enlarger remembering to pull the silver lever towards you again to secure the negative holder in place.

3 – APERTURE

Set your aperture to f2.8 (when the enlarger is on the f numbers light up on most lenses, to turn the enlarger on press the bottom left hand button on the timer), or the lowest number on the lens meaning the largest aperture. Note that this is for focussing purposes only and will allow you to see better, you will change the aperture again later.

4 – EASEL

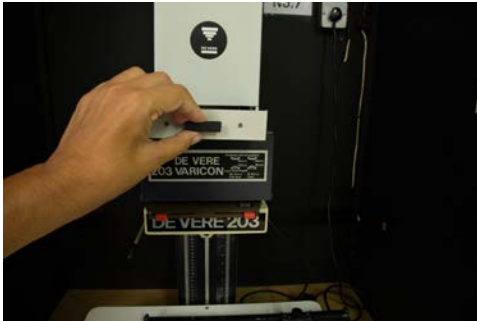
Lift the easel arms up and set the border size you require by moving the silver border guides, close it back down and then unscrew each easel arm and slide into place according to the size print you wish to make.

(During darkroom inductions we use 10x8 inch photographic paper, therefore we suggest you set a 1 inch border on the top border guide, a 1/2 inch border on the left border guide, and set the easel arms to 9 inches width and 6 inches height to accommodate the proportions of a 35mm negative).

5 – ENLARGER HEIGHT

Release the two black dials at the bottom back behind the baseboard by turning them slightly anti-clockwise. Switch the enlarger light on (usually the bottom left button on the timer). Take hold of the two black wheels at the front, the right one moves the enlarger head up and down while the left one moves the lens and controls the focus. Move them up or down together so that your image fills the masked area on your easel. Lock the bottom back right hand dial but leave the left.

Fitting the Filter into the Filter Tray



Remove tray



Place filter in tray

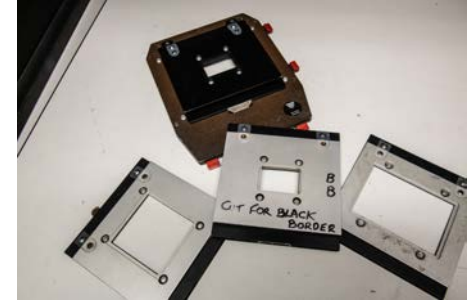


Replace tray ensuring filter sits flat

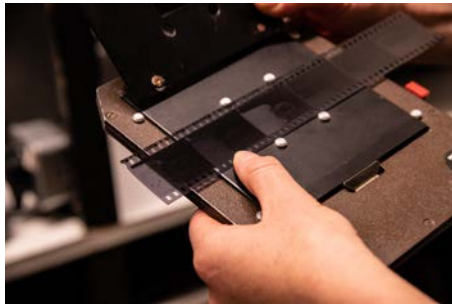
Placing Negative in Negative Tray



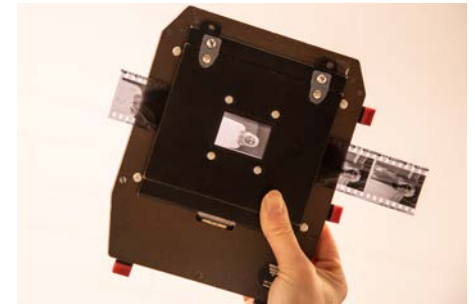
Remove negative tray from enlarger head



Select correct insert for negative size



Place negative emulsion side down, carefully into tray

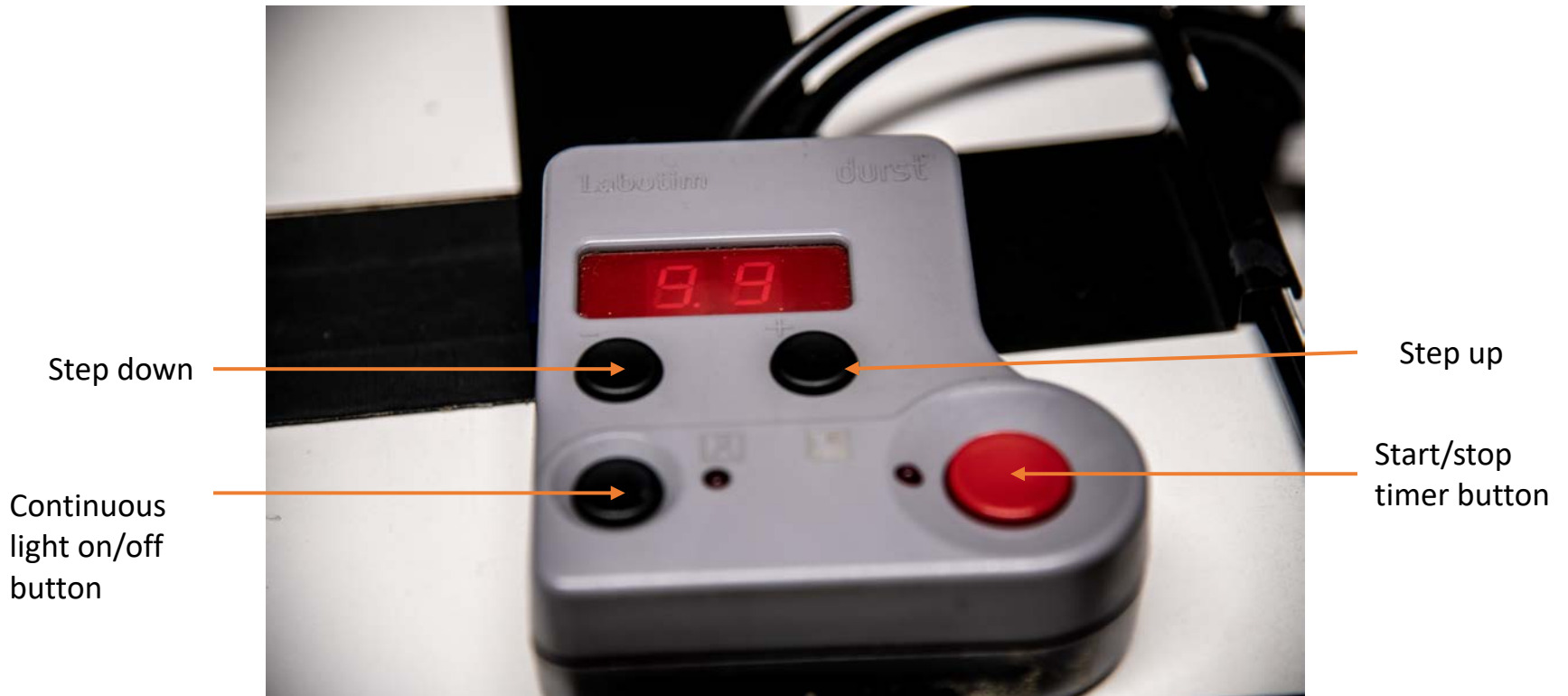


Ensure negative sits evenly in frame



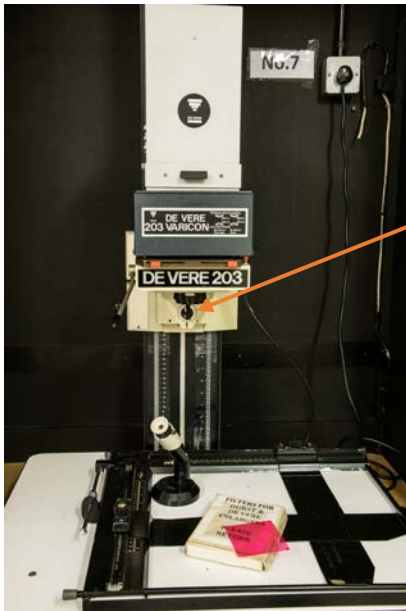
Push release bar to raise enlarger head and return negative holder squarely into enlarger. Allow enlarger head to drop and hold tray in place

Turn on Timer



With aperture set to f5.6 set timer to 2 seconds. For aperture at f8 set timer to 5 seconds

Adjust Enlarger Lens Aperture



Location of lens



Window will light up when enlarger turns on. Turn lens dial initially to f2.8 then for making test strips to f5.6 or f8

Adjust Size and Focus of Projected Image



Undo locks situated at back of baseboard and turn both dials simultaneously to set enlarger head height (size of projection) and approx. focus. Lock right hand adjustment dial only when done.

Fine Tune Focusing

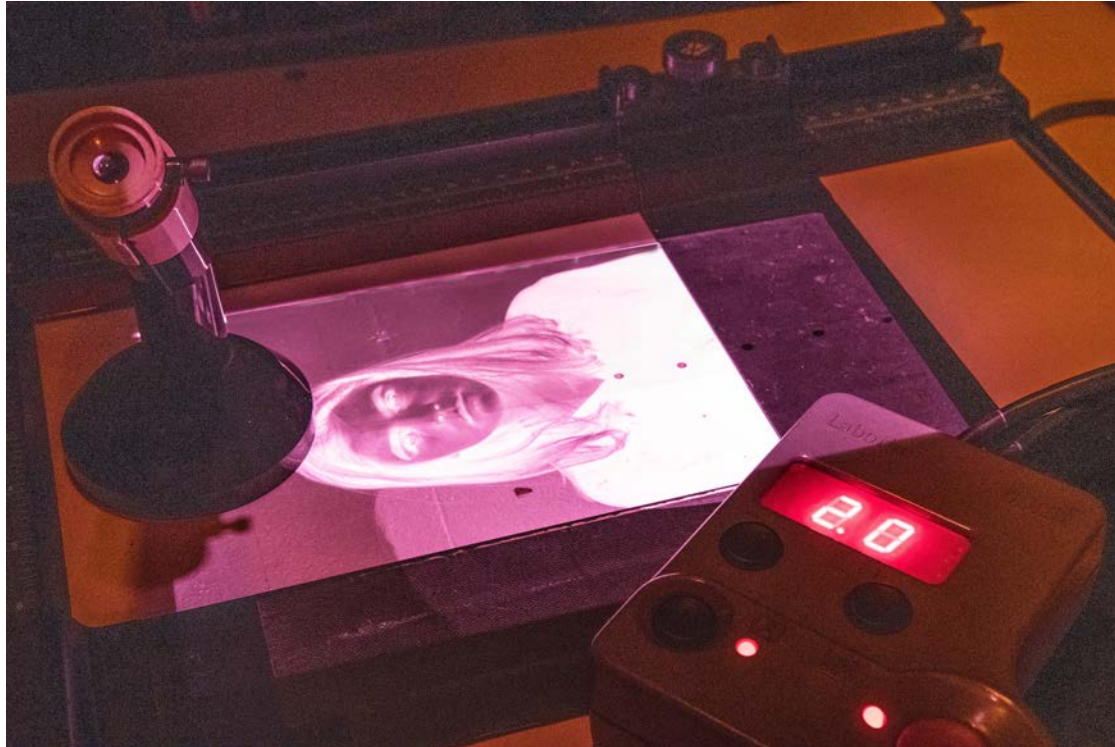
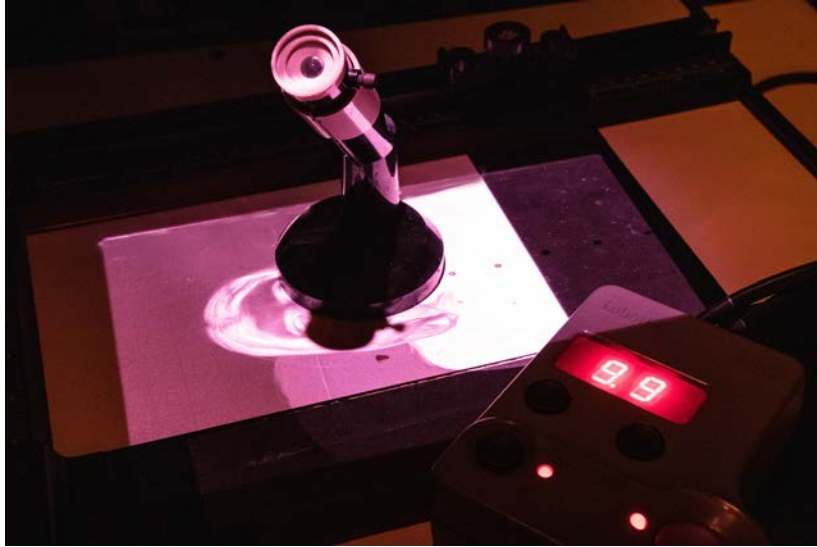


Image should now be overlapping edges of easel blade.
Adjust image focus by eye first using left hand dial.

Using Focus Finder



Place focus finder in centre of image and look into eye piece taking care not to block light hitting focus finder mirror

What you will see should be the grain of the film, which looks like grains of sand on sand paper. You may not see an image. Adjust the focus dial very gently until these dots/grains are clearly visible. When done tighten left adjuster dial lock



Do Series of Test Strips to Determine Exposure



Set the aperture on the lens to f5.6. Set the timer to 2 seconds. Move a dense piece of card across the photographic paper being careful not to move it. This forms a series of test strips getting darker each time you move the card. This will help determine the best exposure.

You will end up with something that looks like this. To save paper use cut strips rather than a whole sheet of paper. Technical staff help you with this to ensure paper is not too small.



Using the Print Processor



You will not use trays and chemicals for your first darkroom workshop. We have an Ilford 2150 Processor that puts your image through chemicals, washes and dries it to a high quality in 2-3 minutes

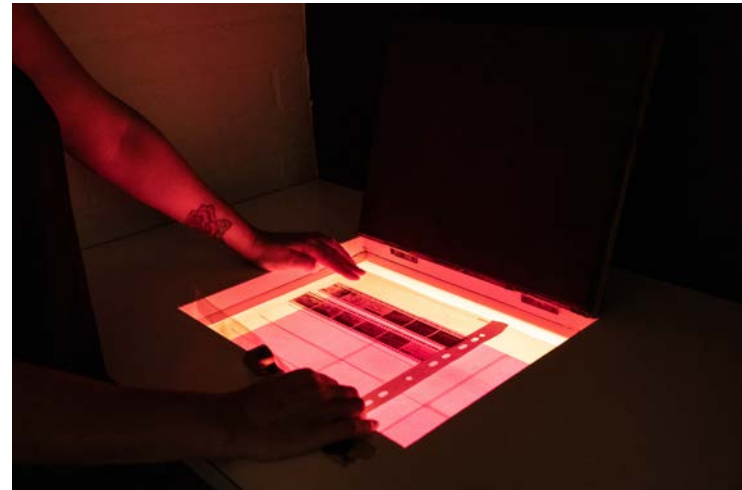
Feed sheets into processor emulsion side down short edge first. Wait for the audible signal before feeding in the next sheet. Technical staff will give full details how to use in the workshop



Contact Sheets



A contact sheet is a small print of each of your negatives on one sheet of photo paper. This can help you choose which image to print. This is done by laying all your negatives emulsion side up on our contact printer in the corner of the darkroom. Photo staff will show you how to use this in your workshop





Happy Printing

