APhotos

Close-Up Photography



As a rule, to focus closer the lens has to move further away from the film or sensor.

You might see your lens move when you focus on a nearby object. There is a limit on how close your camera can go, although some bridge and compact cameras can get very close, down to a few mm.



Taken on a compact camera



Handheld on a bridge camera



With a DSLR you can remove the lens and put spacers, called tubes, between the lens and camera.

A tube allows the camera to focus on much closer objects. You can put two or more tubes on together to get even closer. Image quality is quite good but most lenses are computed to give the best at farther distances so can be a little soft when really close up.

With the cheapest ones there are no connections for the camera to adjust the aperture so you have to do that manually.

But the more expensive ones have those connections built in.



SRB Close Up Lens Set

This set is made up of 4 close up filters. +1, +2, +4 and 10x. It will give you the complete range of magnificators you are ever likely to need.

Filter Thread (mm)

- 52, £5, 58£19 95 set
- 72, 77£19.95 set

10X Close Up Lens

power of 10 Diopties. This gives a maximum focus position of 10um from the front of the tens with the focus scale set to infinity. The tens should be stopped down as much as possible to get maximum depth of field.

Use the SRB stepping rings to step up or down to any lens size

SRB 58mm 10 X 229.95

Extension Tubes

Extension tubes it between the lans and the carrera body. They are supplied in sets of 3 tubes of different lengths. The tonger the extension, the greater the magnification. Calculate the magnification by dividing the local length of the lens into the total extension being used E3 100mm of extension with a 50mm lens will give 2:1 50mm of extension on a 100mm lens will give 1:2. Wide angle lenses give greater magnification but with shorter working distances.

Manual Extension Tubes

These tubes consist of front and rear bayonets which screw together, plus 3 threaced insert tubes of different lengths. The set allows manual use only Lenses with no aperture ring can only be used at full aperture.

Canon EOS£17.50 Nikon£17.50 Micro 4/3£17.50 Olympus 4'3£17.50

Camera body

Auto Extension Tubes

Supplied in sets of three Libbs of different lengths, 13mm, 21mm and 01mm. These give a total of seven different extensions. The longer the extension, the greater the magnification.

Vigital 10x MadoL

3





A bellows unit may be more convenient



T-Mount extension Tubes

These are mainly used to increase magnification when using a DSLR on microscopes or relescopes. Used with the appropriate T-Mount and T2 Reversing Ring Insert, or lens adaptor. Supplied in sets or individually (5, 10, 20 & 40mm).

T-Mount Tubes

5mm.....£14.25 10mm.....£14.25 20mm.....£14.25 40mm.....£14.25 Set of 4.....£49.95

C-Mount extension Tubes

These are available in four lengths (5, 10, 20 and 40mm) either singulary or in sets of four. The 5mm tube is also used as an adaptor to enable C-Mount lenges to be used on CS Mount Camerae. C-Mount Tubes

 Smm.
 £14.25

 10mm.
 £14.25

 20mm.
 £14.25

 40mm.
 £14.25

 Set of 4.
 £49.85

Bellows

The bellows function is an adjustable extension tube. By moving the lens further away from the body it reduces the focal distance and increases magnification. These bellows are a manual connection only meaning that focusing and exposure need to be adjusted manually.

Bellows

Nikon Fit	£39.95
Canon Fit	£19.95
Olympus OM	£39.95
Pen:ax K	£39.95
Mcro 4/3	£39.95

Manual Bellows Conversion

Bollows can beat be likened to an extension tube set with variable extension. We supply, either from stock or to order, acapters to convert existing belows units to take other cameras and lenses. We will need you to send us the belows for examination if conversion is preferred so that we can give you a quotation. Some belows (such as BPM or Helios), have interchangeable mounts and we have a range of body and lens mounts available.

Mounts for BPM Bellows

T2 (Allows came a to be fitted via T2 mount)	£ 9.25
M39 Leica enlarging lens adapter	£'9.25

Coupling Rings

Fit a telephoto lans to the comers and reverse mount a shorter focal largth long to the four, via the iller threads. This produces a multi element macro less giving a magnification equal to the ratio of their focal lengths. EG reverse mount a 50mm lens onto a 200mm lens to produce a magnification of 4:1.



46-46	62-62		
49-49	67-62		
52-52	67-87		
55-55	72-72		
58-58	77-77	 £12.95 m	



LED Ring Light

Achieve better image quality in dose up and macro photography with the use of our LED Ring lights. LED Ring lights illuminate around the lens to eliminate shacow, the main advantace is that you can pre-compose your shot with the LED Ring light.

LED-60 Macro Ring Light

- Heat free LED technology.
- Fills in shadows.
- Froduces Lright, HD-friendly soft light.
 Funs 3.5 hours on 4 x AA batteries.
- No external cables.
- · Lightweigh! and compact.

www.srb-photographic.com | 01582 661878





With this, take off the lens, attach the adapter to the camera and then the lens, backwards onto the adapter.



The image quality is very good ! However, the enlargement is high and not very adjustable.

Reversing Rings

Reversing rings fit to the camera body, between the camera and lens, leaving a screw thread lo. enable the reverse mounting of a lins.

Can be used with extension tubes or hellows to improve quality at magnifications of 1:1 or above. Great for photographing insocis, flowers, coins etc.

Wide angle longes give larger magnification but shorter working distances than standard or telephoto lenaea.



M42 £12.95 each

Sony Alpha.....£12.95 each

Micro 4/3 £ 12.95 each

Camera Body

and lens (mm)

52, 55, 58, 62

52, 55, 58, 62

67.72.77

67, 72, 77

49, 52, 55

67, 72, 77

52, 32

49, 55

55

62, 55, 68, 62,

Electronically Coupled Reversing Ring

Electronically coupled Reversing Ring

For owness of Ganon EOS wice-angle or zoom lenses, the EOS-RETRO opens up the word of extreme cose-up photography with outstanding quality. The EOS-RETRO les you mount the lens in reverse position on the camera. The ring transfers all control functions. Example: With a Canon FOS 28-105mm zoom lens in reverse position, you get an image ratio of 1.7 with a food length of 105mm from 1:7 to 2.8:1 at 28mm.



····· £249.95

Novoflex Castle Cross Focusing Rack

The CASTEL-CROSS focusing rack allows highly sensitive and smouth adjustment of the camera in the X and Y directions without loss of stability and accuracy.

Castel Cross £299.00

Novoflex Castle O

Novotiex focusing racks are indispensable accessories for macro and steracy photography. They can be mounted on any l'ipod with either a 1/4" or 3/8" throad.

Castel Q £155.00

Novoflex Castle L

The CASTEL-L has an integral camera quickrelease connector that allows quick mounting and dismantling of the camera equipment. The focusing rack can be mounted either on a tripod head, or on a C=BASE or Q-MOUNT Cuick-release connection.

Castel L £155.00









Contax/Vashica.....£12.05 each Minolta MD£12.95 each

52, 55, 58, 62, 67. 72. 77



Pentax..... £12.95 each

52, 55, 53, 32



Lenses without aperture rings will be at full aperture on y Best results are achieved with lenses with a manual aperture ring.

www.erb-photographic.com | 01582/661878







Close-up lenses are cheap and easy to use. They have different strengths, usually +1, +2 and +4, and even +10.



They screw onto the front of your lens. Ideally you should take off any filter first.



Closest with my standard lens

With +1 lens

Closest with my standard lens

With +1 lens

With +2 lens

Closest with my standard lens





You may have noticed that the sharpness and distortion deteriorate as you use stronger lenses !

But in practice these lenses are worth a try. At about £20 on eBay they are an excellent way into close-up photography.

Just remember, quality is poor at large apertures so stop down a lot.



This is my kitchen window sill



and this is the closest I can get with my standard lens

With a No. 2 Close Up lens





SRB Close Up Lens Set

This set is made up of 4 close up filters. +1, +2, +4 and 10x. It will give you the complete range of magnificators you are ever likely to need.

Filter Thread (mm)

- 52, £5, 58£19 95 set
- 72, 77£19.95 set

10X Close Up Lens

power of 10 Diopties. This gives a maximum focus position of 10um from the front of the tens with the focus scale set to infinity. The tens should be stopped down as much as possible to get maximum depth of field.

Use the SRB stepping rings to step up or down to any lens size

SRB 58mm 10 X 229.95

Extension Tubes

Extension tubes it between the lans and the carrera body. They are supplied in sets of 3 tubes of different lengths. The tonger the extension, the greater the magnification. Calculate the magnification by dividing the local length of the lens into the total extension being used E3 100mm of extension with a 50mm lens will give 2:1 50mm of extension on a 100mm lens will give 1:2. Wide angle lenses give greater magnification but with shorter working distances.

Manual Extension Tubes

These tubes consist of front and rear bayonets which screw together, plus 3 threaced insert tubes of different lengths. The set allows manual use only Lenses with no aperture ring can only be used at full aperture.

Canon EOS£17.50 Nikon£17.50 Micro 4/3£17.50 Olympus 4'3£17.50

Camera body

Auto Extension Tubes

Supplied in sets of three Libbs of different lengths, 13mm, 21mm and 01mm. These give a total of seven different extensions. The longer the extension, the greater the magnification.

Vigital 10x MadoL

3



If you want to get seriously close, with images several times larger than life size, you can use the bellows or a Raynox close-up lens.



Different models cost £30-150 and image quality is far superior to the use of cheap close-up lenses.



But the finest quality is given by macro or micro lenses.



They are computed to deliver sharp images up to life-size on the film or sensor. 1:1 magnification.



Canon and Nikon lenses are pricey. The Sigma and Tamron equivalents are as good but much less expensive.


So which is the best focal length ?

The most common for APS-C cameras is about 40mm. This is the equivalent of 60mm on a full-frame camera.

I find with this length that you need to get in really close to your subject. This can scare timid creatures and also block the light!

I suggest you look at longer lenses.

Popular lengths for full-frame cameras are 60mm 90mm 105mm and 200mm

These let you stand back a bit more from your subject. And they work just as well on APS-C cameras.

As well as being perfect for close-ups macro lenses are good as short telephotos, say for portraits. The image quality is excellent and the perspective can be nice for faces. Also, the maximum aperture is usually about f/2.8 so can give nice out-of-focus backgrounds.

Some macro lenses have image stabilisation built in, which is handy when you're using it as a telephoto, but do be aware that it doesn't work at very close distances.



If you want to photograph small creatures such as butterflies you may find it more convenient to shoot with a telephoto lens, anything from 200-500mm on a full-frame camera.

On an APS-C or Micro 4/3 camera the effect is even better.



Many modern ones focus quite near and the magnification with a long lens is very good.



You can get a big image by adding a telephoto converter, anything from 1.4X to 2X. This increases the telephoto effect yet allows you to get as close so the magnification is greater.



Do beware though that the converter must match to your lens or both lenses may be damaged. Only certain lenses are suitable.



Taken with a 400mm lens plus a 1.4X converter, effectively 560mm.

The 1.4X converter does though reduce the effective aperture by one stop.

A 2X converter doubles the focal length but loses two stops of light. Whichever method you choose to get close you'll find depth-of-field is extremely limited !



So, a major issue with macro photography is getting the picture sharp where you want it to be because depth of field is so shallow.

Also, any camera shake at these high magnifications is also magnified so holding the camera still is a problem. Image stabilisation doesn't work close up, even if the lens or camera has it.



Keeping Still



A tripod is very useful because even the tiniest camera movement will affect sharpness, either through camera shake or poor focus.



Adjusting the tripod is awkward and a camera slide can be helpful.



It fits between tripod and camera.



It fits between tripod and camera. Turning a knob gives fine control over the position of the camera.



It fits between tripod and camera. This one can move back and forth or sideways. Some tripods have columns which can be turned sideways, with the camera on the end.



Getting the camera down low can be tricky. Some tripods have a centre column that you can reverse and suspend the camera below it.



Another method of supporting your camera at ground level is a bean bag.



Ground can be messy so a bin liner is useful to keep yourself clean and dry !

Viewfinding

Composing and focusing can be more difficult then usual. A right angle finder lets you peer down from the top.



This model has two magnifications, 1x and 2x. The 2x makes it easier to focus but you only see the centre of the image.

You can also swivel it to look from the side.





Additional camera filter thread adaptors can be purchased for different filter threads from our T2 stepping rings (see below).

Right Angled View Finder

The Right Angled View Finder is ideal for close up work, copying, low and high angle work. It is also great for photo microscopy and Digiscoping, fits most DSLR cameras using adaptors supplied.

- Adjustable magnification
- 1.25x and 2.5x
- Dioptre eyepiece adjustment
- Dimensions: 56x40x93mm
- Net weight 105gms
- Supplies in protective case
- Supplied with adaptors for:
- Canon EOS, Pentax, Leica, Nikon, Sony Alpha



.....£39.95

D, C, and RMS Mounts

The D, C and RMS mounts give large amounts of magnification because of their short focal lengths. These lenses make

Mount

D, C, or RMS to M42.....£19.95

ect jet jiece ne n a

(not

A titling screen on the back of a camera makes life more comfortable for viewing at odd angles, especially when you're shooting low down.



If your DSLR has live view this can be a big bonus for focusing as you can magnify the image.



As a rule you can move the auto focus point to anywhere in the frame but often it's easier to use manual focus. This is worth practising. If you have to handhold, a useful technique is to focus manually then rock back and forth slightly until the subject is sharp before taking the picture.



Lighting

The principles of lighting are the same for close-up photography as for any other kind of picture-taking.

It depends on the subject and the effect you're after. Everything is just smaller and closer.

The only thing that has been changed here is the lighting



backlit forsidelit forcrosslit forflat forshapeformtexturecolour
The only thing that has been changed here is the lighting



backlit forsidelit forcrosslit forflat forshapeformtexturecolour

All were lit by an ordinary flashgun.

Some photographers like to use a ring flash for close-up work.



It fits around the lens. This cheap model has LEDs rather than a bright flash tube.



When the shutter opens the LEDs flash, if rather dimly, but it's bright enough if you're close in.



You can have it illuminate just one side if you wish.



The brightness is controllable as well and it runs on four batteries.



I find the light rather flat and uninteresting but it's good for filling in shadows.



ringflash

Apertures

The aperture of a lens is calculated as the focal length divided by the effective diameter of the hole. It is measured when the lens is focused at infinity. As you focus on closer objects the effective aperture becomes smaller and as a rule the difference is negligible.

But at high magnifications the difference becomes noticeable. Your automatic camera will allow for this but you may notice that the f/number may show as, say, f/3.5 instead of f/2.8 as marked on the lens.



Focus Stacking

A common way to get great depth of field is to focus about one-third into the picture and stop down a lot.









We know, though, that small apertures need longer exposure times and that apertures smaller than f/16 will lose sharpness. We know, though, that small apertures need longer exposure times and that apertures smaller than f/16 will lose sharpness.

Focus stacking lets you take a series of shots, each focused at a different distance and combine them to show the sharpest bit of each.

Take a series of exposures, each one focused on a different point.

Take a series of exposures, each one focused on a different point. Adjust the focus by moving the autofocus point or focus manually. If it's very close you can set the focus and move the camera back and forth.

Take a series of exposures, each one focused on a different point. Adjust the focus by moving the autofocus point or focus manually. If it's very close you can set the focus and move the camera back and forth. However you do it, the size of the

images will alter, so the first job is to align and resize the images as a set. You can do this most easily in full Photoshop but it is possible in Elements 11 and later.

For my first test I took four pictures, each focused at the centre of a coin

000		Open		
		Focus Stack origs 2	\$	Q Search
Favorites SPS 2014-15 ARPS Origs My Pictures Applications Downloads	ce of Lens APhotos.key e up APhotos e up APhotos copy is Stacking vards Ro…ril 2015.doc	Focus Stack Finals	 I On B f4 4628.jpg I On B f8 4629.jpg I On B f16 4630.jpg I On B f32 4631.jpg I On B f32 4631.jpg 2 f8 on centre of A 4633.jpg 3 f8 on centre of B 4634.jpg 4 f8 on centre of C 4635.jpg 5 f8 on centre of D 4636.jpg 6 f9 on front of A 4632 inc. 	
Documents APhotos Desktop All My Files			 6 f8 on front of A 4638.jpg 7 f8 on back of A 4639.jpg 8 f8 on front of B 4640.jpg 9 f8 on back of B 4641.jpg 10 f8 on front of C 4642.jpg 11 f8 on back of C4643.jpg 12 f8 on front of D 4644.jpg 	
 Devices My Book Studio ≜ 			13 f8 on back of D 4645.jpg	
Media Music Photos Movies				
Tags Red Orange Yellow Green Blue				
Purple				

Open all four shots





Choose the second one of the series, select the whole image (ctl A) and copy it (ctl C).



Now choose the <u>first</u> one of the series and "Edit - Paste Special -Paste in Place" onto it.

🖽 🖧 🔲 🇐 👶 🌐	
Layers Channels Paths	
ρKind ≑ 🖬 🔍 Τ 🛄 💾	
Normal	
Lock: 🔝 🖌 💠 🔒 🛛 Fill: 100% 🖃	
Co S Layer 1	
C Background	æ

You'll see the copied image appear as a new layer above the first one.

Layers	Channels Paths	-≡
₽ Kin	nd ≑ 🔤 🖉 T 💢 💾	
Norma	al 💠 Opacity: 100% 🖛	
Lock:	🖾 🖌 💠 🏛 🛛 Fill: 100% 🖃	
•	Layer 3	
	Eayer 2	
•	Eayer 1	
	Background	3

Now select, copy and paste the other images as well. You have four layers.

Layers Channels Paths	•≣
🔎 Kind ≑ 🖃 🖉 T 🛄 📑	
Normal Opacity: 100%	
Lock: 🔝 🖌 💠 🔒 🛛 Fill: 100% 🔽	
C Eaver 3	
C S Layer 2	
Co Stayer 1	
Background	ô

Now select, copy and paste the other *images as well. You have four layers.* Select them all.

Edit	Image	Layer	Туре	Select	F
Car	n't Undo			ЖZ	
Ste	p Forward	t	-	0÷#Z	
Ste	p Backwa	and	-	C362	
				•	n ca
Fac	ie			0-186 F	
0.0				4P.Y	
Col	e The			900	
Co	ey ny Mercer	4		0.860	
Pas	ste			₩V	
Pas	ste Specia	al		-	
Cle	ar				
Chi	eck Spelli	ng			
PIN	d and Hep	place les	ct		
Fill				10 FS	
Str	oke				
Co	ntent-Awa	ire Scale	L.	0%C	
Pup	opet Warp)			
Tre	e iransroi	m		- AL	
Aut	nsiorm In-Alian Li	an long		- r	
Aut	o-Blend L	avers			
		-,			
Def	line Brush	Preset.			
Del	ine Patter	n			
Def	ine Custo	m Shap	ð		
Pur	ge			•	
				_	
Ade	obe PDF F	resets	-		
Pre	sets Con	no other an		- 1	
nei	note clain	nections			
Col	or Setting	js	-	ожк	
Ass	ign Profil	e			
Cor	nvert to P	rofile			
Ka	doord Ph	ortouto		ANN	
Mo	ous	oncuts.	. <u>`</u>	OSEM	
MIC	100		L.	0.99 W	
Sta	rt Dictatio	n		fn fn	

Go to "Edit - Auto-Align Layers" and click on that.





Check "Auto" and click OK



It will churn away and line up the images to show this.



Now to combine the layers and show just the sharp bits ...

Can't Undo#2 D#2 D#22 Depy Depy Depy Depse Depse Depse Define Brush Preset Define Custom Shape#2 D#22 D#	Edit	Image	Layer	Туре	Selec	t
Step ForwardTWZ TWZStep BackwardTWZ TWZFadeDWFCutDXC DEXC DasteCopy MergedDXC DXC DEV Paste SpecialCheck Spelling Find and Replace TextFillDresseContent-Aware Scale Puppet WarpTOTESFree Transform Auto-Align Layers Auto-Blend LayersTOTESDefine Brush Preset Define Pattern Define Custom ShapeDefine Ketter Define ConnectionsPurgeDAdobe PDF Presets Presets Remote ConnectionsDefine Ketter Define ConnectionsColor Settings Assign Profile Convert to ProfileDefine Ketter Define ConnectionsKeyboard Shortcuts TOTEMTOTEK TOTEMStart Dictationfin fin	Car	n't Undo			ЖZ	
Step BackwardTUBZFadeTUBFCutSEXCopySEXCopySEXCopySEXPasteSEXPaste SpecialSEXCheck SpellingFind and Replace TextFillTESStrokeTOFEContent-Aware ScaleTOFEPuppet WarpSETFree TransformSETAuto-Align LayersSETAuto-Blend LayersSEPurgeFAdobe PDF PresetsPresetsPresetsSeRemote ConnectionsTOSEKColor SettingsTOSEKAssign ProfileTOSEKConvert to ProfileTOSEKStart Dictationfn fn	Ste	p Forwar	d	1	ĉ₩Z	
FadePasteCutMXXCopyMCCCopyMCCCopyMCCPastePastePasteSpecialChack SpellingFind and Replace TextFillPresStrokeTrippet WarpFree TransformSt TPres TransformSt TAuto-Align LayersMTAuto-Blend LayersPurgePurgePastesColor SettingsPSEKConvert to ProfilePSEKConvert to ProfileTOSEKKeyboard ShortoutsTOSEKStart Dictationfn fn	Ste	p Backwa	ard		C96 Z	
CutBKXCopyMergedPasteSpecialCheckSpecialCheckSpecialCheckSpecialCheckSpecialCheckSpecialCheckSpecialFillImportStrokeImportFillImportStrokeImportContent-Aware ScaleImportPuppet WarpImportFree TransformImportPuppet WarpImportFree TransformImportAuto-Align LayersImportDefine Brush PresetImportDefine Custom ShapeImportPurgeImportAdobe POF PresetsImportPresetsImportRemote ConnectionsImportColor SettingsImportAssign ProfileImportConvert to ProfileImportKeyboard ShortoutsImportStart DictationImport	Fac	ie		1	ជ៌ M F	on (
CurNEXCopyNECCopy MergedP NECPasteSEVPaste Special>Check SpellingP NECFind and Replace TextP NECFillP NECStrokeP P P P P P P P P P P P P P P P P P P						
CopyMCCopy MergedIF MCPasteMVPaste SpecialIFCheck SpellingIFFind and Replace TextIFFillIFStrokeIFContent-Aware ScaleIFPuppet WarpIFFree TransformIFTransformIFAuto-Align LayersIFAuto-Blend LayersIFDefine Brush PresetIFDefine Custom ShapeIFPurgeIFAdobe PDF PresetsIFPresetsIFRemote ConnectionsIFColor SettingsIFConvert to ProfileIFKeyboard ShortoutsIFStart DictationIf n fn	Cut	1			MCX.	
Copy MergedSTR CPasteMVPaste SpecialImage: ClearCheck SpellingFind and Replace TextFillOreStrokeOreContent-Aware ScaleNOREPuppet WarpFree TransformFree TransformMTAuto-Align LayersMTAuto-Blend LayersAuto-Blend LayersDefine Brush PresetDefine Custom ShapePurgeImage: Color SettingsAdobe POF PresetsPresetsImage: Color SettingsRemote ConnectionsOmage: Color SettingsColor SettingsImage: Color SettingsKeyboard ShortoutsNote KStart Dictationfn fn	Gaj	ру			MC.	
PasteSet vPaste Special▶Check Spelling▶Find and Replace TextFillStrokeContent-Aware ScaleContent-Aware ScalePuppet WarpFree TransformAuto-Align LayersAuto-Blend LayersDefine Brush PresetDefine PatternDefine Custom ShapePurge▶Adobe POF PresetsPresetsRemote ConnectionsColor SettingsAssign ProfileConvert to ProfileKeyboard ShortoutsStart Dictationfn fn	- Goj	py merge	a	1	LF ING C	
Passe Spectal P Clear Check Spelling Find and Replace Text P Fill P = 5 Stroke P = 5 Content-Aware Scale V P = 5 Stroke V P = 5 Content-Aware Scale V P = 5 Puppet Warp Free Transform Free Transform # T Auto-Align Layers M = 5 Auto-Blend Layers M = 5 Perfine Brush Preset Define Pattern Define Custom Shape M = 5 Purge M Adobe PDF Presets M = 5 Presets M = 5 Remote Connections D = 5 Keyboard Shortouts V D = K X = 0 = 0 Y = 0 = K Start Dictation fn fn	Pas Dav	rte Ta Pasak	-1		H V	
Check Spelling Find and Replace Text Fill ① F6 Stroke ① F6 Content-Aware Scale ℃ ① # C Puppet Warp ₩ T Free Transform ₩ T Transform ₩ T Auto-Align Layers ▶ Auto-Bland Layers ▶ Define Brush Preset ▶ Define Custom Shape ▶ Purge ▶ Adobe PDF Presets ▶ Presets ▶ Remote Connections ♪ ₱ ₱ ₺ Color Settings ♪ ₱ ₺ ₺ Keyboard Shortcuts ♡ ♪ ₱ ₺ ₭ Keyboard Shortcuts ♡ ♪ ₱ ₺ ₭ Start Dictation ƒ ₥ ₥	Cle	ne opecu ar	81		- P	
Check Spelling Find and Replace TextFill StrokeOre StrokeContent-Aware Scale Puppet Warp Free Transform Auto-Align Layers Auto-Blend Layers Auto-Blend LayersVORD ST 	Loft to					
Find and Replace TextFillOreStrokeOreContent-Aware ScaleCorePuppet WarpFree TransformFree Transform第 TTransform第 TAuto-Align Layers►Define Brush Preset►Define Pattern►Define Custom Shape►Adobe PDF Presets►Presets►Remote ConnectionsOreColor SettingsOreConvert to ProfileCoreConvert to ProfileCoreStart Dictationfn fn	Ch	ack Spelli	ng			
Fill StrokeImage: Content-Aware Scale Puppet Warp Free Transform Transform Auto-Align Layers Auto-Blend LayersImage: Content-Aware Scale Puppet Warp Pree Transform Prest Prest Define Brush Preset Define Pattern Define Custom ShapeDefine Brush Preset Define Custom ShapeImage: Content Shape PurgePurgeImage: Content Shape Presets Remote ConnectionsImage: Content Shape Presets Presets Remote ConnectionsColor Settings Assign Profile Convert to ProfileImage: Content Shape Image: Convert to ProfileKeyboard Shortcuts MenusImage: Content Shape Image: Content ShapeStart DictationImage: Content Shape	Fin	d and Re	place Tex	t		
Stroke Content-Aware Scale ℃ ⊕ # C Puppet Warp Free Transform # T Free Transform # T Transform # T Auto-Align Layers ▶ Define Brush Preset ▶ Define Pattern ▶ Define Custom Shape ▶ Adobe PDF Presets ▶ Presets ▶ Remote Connections • Color Settings • Assign Profile ℃ ⊕ # K Keyboard Shortouts ℃ ⊕ # K Start Dictation fn fn	EIII				Ô.E.	
Content-Aware Scale ℃⊕ & C Puppet Warp Free Transform Free Transform 第 T Transform # T Auto-Align Layers ▶ Auto-Bland Layers ▶ Define Brush Preset ▶ Define Pattern ▶ Purge ▶ Adobe PDF Presets ▶ Presets ▶ Remote Connections ♥ ₩ K Color Settings ♥ ₩ K Assign Profile ℃ ₱ ₺ ₭ Keyboard Shortcuts ℃ ₱ ₺ ₭ Start Dictation fn fn	Str	nke				
Content-Aware ScaleC 0 20 20 CPuppet WarpFree Transform第 TFree Transform第 TTransform# TAuto-Align Layers>Auto-Blend Layers>Define Brush Preset>Define Pattern>Define Custom Shape>Purge>Adobe PDF Presets>Presets>Remote Connections>Color Settings>Convert to ProfileC 0 20 KConvert to ProfileC 0 20 KStart Dictationfn fn						
Puppet Warp第TFree Transform第TTransform第TAuto-Align Layers▶Auto-Blend Layers▶Define Brush Preset▶Define Pattern▶Define Custom Shape▶Purge▶Adobe PDF Presets▶Presets▶Remote Connections▶Color Settings▶Color Settings▶Convert to Profile♥Keyboard Shortouts♥X 0.96 K♥Start Dictationfn fn	Co	ntent-Awa	are Scale	17	ûЖC	
Free Transform第 TTransformAuto-Align LayersAuto-Align LayersAuto-Blend LayersDefine Brush PresetDefine PatternDefine Custom ShapePurgeAdobe PDF PresetsPresetsRemote ConnectionsColor SettingsColor SettingsColor SettingsConvert to ProfileConvert to ProfileConvert to ProfileConvert to ProfileStart Dictationfn fn	Pup	opet War	D			
Transform Auto-Align Layers Auto-Bland Layers►Define Brush Preset Define Pattern Define Custom Shape►Purge Adobe PDF Presets Presets Remote Connections►Color Settings Assign Profile Convert to Profile•Keyboard Shortcuts C •℃ •Start Dictationfn fn	Fre	e Transfo	rm		ЖT	
Auto-Align Layers Auto-Blend Layers Define Brush Preset Define Pattern Define Custom Shape Purge Adobe PDF Presets Presets Remote Connections Officer Settings Color Settings Color Settings Convert to Profile Convert to Profile Xto Pack Menus Start Dictation	Tra	nsform			- ►	
Auto-Bland Layers Define Brush Preset Define Pattern Define Custom Shape Purge Adobe PDF Presets Presets Remote Connections Officer Color Settings Convert to Profile Convert to Profile Xeyboard Shortcuts Xobe Manus Start Dictation	Aut	o-Align L	ayers			
Define Brush Preset Define Patterm Define Custom Shape Purge Adobe PDF Presets Presets Remote Connections Color Settings Assign Profile Convert to Profile Convert to Profile Xeyboard Shortcuts Xthenus Start Dictation	Aut	o-Bland I	ayers			
Define Pattern Define Custom Shape Purge Adobe PDF Presets Presets Remote Connections Color Settings Assign Profile Convert to Profile Keyboard Shortouts X 0/96 K X 0/96 M Start Dictation	Def	ine Brush	Preset.			
Define Custom Shape Purge Adobe PDF Presets Presets Remote Connections Color Settings Assign Profile Convert to Profile Convert to Profile Xthenus Xthenus Xthenus Start Dictation	Def	ine Patte	m			
Purge ► Adobe PDF Presets Presets Remote Connections ► Color Settings Assign Profile Convert to Profile • Keyboard Shortcuts Menus • Start Dictation fn fn	Def	ine Custo	m Shape	a		
Adobe PDF Presets Presets Remote Connections Color Settings Assign Profile Convert to Profile Keyboard Shortcuts X 0/96 K X 0/96 K Start Dictation fn fn	Pur	'ae			•	
Adobe PDF Presets Presets Remote Connections Color Settings Assign Profile Convert to Profile Convert to Profile Keyboard Shortouts ℃ ⊕36 K Menus ℃ ⊕36 M Start Dictation fn fn						
Presets ► Remote Connections ► Color Settings ► Assign Profile ► Convert to Profile ► Keyboard Shortcuts ► Keyboard Shortcuts ► Start Dictation fn fn	Add	be PDF	Presets			
Remote Connections Color Settings Assign Profile Convert to Profile Convert to Profile Keyboard Shortcuts X 0/96 K X 0/96 M Start Dictation	Pre	sets			- ►	
Color Settings Assign Profile Convert to Profile Keyboard Shortouts Menus Start Dictation fn fn	Rer	mote Con	nections			
Assign Profile Convert to Profile Keyboard Shortcuts てからK Menus てからM Start Dictation fn fn	Col	or Setting	15		òжк	
Convert to Profile Keyboard Shortouts てか能K Menus てか能M Start Dictation fn fn	Ase	sign Profil	c			
Keyboard Shortcuts、てか96K Menus Start Dictation fn fn	Co	nvert to P	rafile			
Menus Chask Menus Chask Start Dictation fn fn	Kon	doord O	and or the		0-30 M	
Start Dictation fn fn	Me	nus	ioniouits	1	0-36 M	
Start Schutchin IIIII	Sta	rt Dictatio	00		fafa	
	SIA	T DICIMIN				

go to "Edit - Auto-Blend Layers" and click OK



Check "Stack Images" and click OK


and this is what you get !



You can see on the layer masks which bits of each image were used.





f/32 straight better at the front

f/8 four stacked better at the back

I noticed that the middle of each coin was sharp but the front and back edges were not, so I did the process again but this time with eight separate images.



f/8 eight stacked better everywhere

f/8 four stacked



f/8 eight stacked better everywhere

f/32 straight

Focus Stacking in PSE 11/12

These are not my comments ...

You can do it in Elements (at least in PSE 11) using Auto Blend Layers.

One use of Auto Blend Layer is for focus stacking, where you create huge depth of field by blending images taken at different focus points.

You need two actions. One to align the layers (different focus points changes the field of view enough to require scaling and alignment) and a second action to blend the images so that only the bits in focus from each image shows.

I had a set of six images of a rose taken at different focus points. They need to be put into a single file as layers (I shot them raw and from Lightroom brought them into PSE11 using the Elemental plug-in which has an option to import as layers). I then selected all the layers and ran the Auto Align Layers action. With them all still selected I then ran the Auto Blend Stack action and, like magic, layer masks were automatically added so that only the bits in focus show in the final image. I then cropped and tidied up the merged image.

PS Because Elements is a 32 bit program and these actions need to run in RAM memory you will run into "Not enough Memory" errors if you have a lot of layers and big files. If that happens you need to reduce the pixel dimensions of the image.



I tried a much closer subject, using a macro lens plus a 1.7x converter. This moss is only about 1cm high.





















f/ 64



Then I took 25 images using the camera slide and stacked them.

The nearest



The nearest



The furthest



The set of 25 images, showing that the focus point is changing.



The final stacked image



You'll notice some artefacts around the edges to be trimmed off.

You might use the shallow depth of field to some effect. For these three shots I changed only the focus point ... You might use the shallow depth of field to some effect. For these three shots I changed only the focus point ... You might use the shallow depth of field to some effect. For these three shots I changed only the focus point ...



You might use the shallow depth of field to some effect. For these three shots I changed only the focus point ...



The aperture was f/1.4 to get the depth of field as shallow as possible.

Out of interest, I focus stacked them but it really needs twenty or more separate shots to work properly.





Middle focus, f/1.4 Three stacked

Summary

- Some special equipment is needed but not necessarily expensive stuff
- Depth of field is VERY shallow
- You can't hold the camera steady at high magnifications. Use a support
- Lighting and composition are the same close up as in any other type of photography

© APhotos 2017