

Introduction

True Focus is primarily intended to relieve a situation caused by wanting to use auto-focus while having to continually make compositional changes. To be able to exploit True Focus correctly, a few important points should be considered in order to obtain a full understanding of how and when to use it.

The H4D user manuals have a great deal of information on True Focus. Please read carefully pages 31 to 39 inclusive.

Please also examine the '[AF-T with Depth of Field PDF](#)' to see exactly what you could expect from the lenses in the Hasselblad range.

What variables contribute to True Focus corrections?

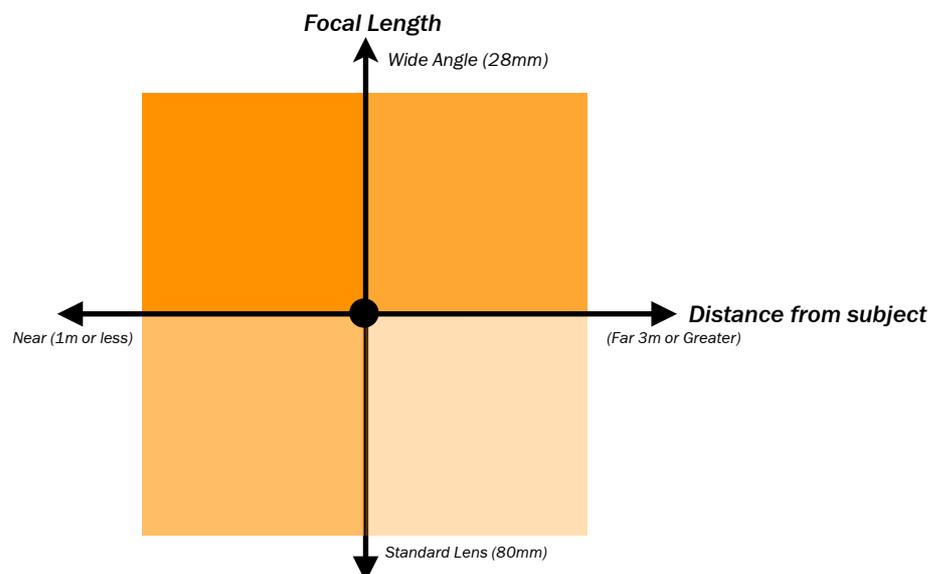
Basically, there are four variables to pay attention to and they are listed below. The closer you remain to the ideal situation with regard to these variables, the more noticeable the effect of True Focus will be. The variables are...

1. Proximity of camera to subject
2. Focal length of lens
3. Aperture setting
4. Movement of camera and/or subject after setting the True Focus point

Taking these points in order:

- a. The closer you are to the subject, the worse the original problem becomes. Consequently, the need for True Focus solution becomes greater and its application thereby becomes more noticeable.
- b. Short focal length ('wideangle') lenses naturally decrease camera to subject distances and therefore, following the point in (a), produce a greater need for True Focus adjustments.
- c. Smaller apertures increase the depth of field and therefore would lessen the need for a True Focus solution. However, smaller apertures produce a different visual effect, so True Focus therefore allows the exploitation of shallow depth of field without the fear of unwanted focus restrictions.
- d. The mechanics of True Focus uses, amongst other things, camera to subject distances to calculate the required amount of adjustment. It therefore follows that if the camera or the subject move after the initial setting has been made, the calculations will not be applicable anymore. So, to ensure the optimum correction, both the photographer and the subject should restrict movement as much as possible. Please note that with some lenses (particularly longer length lenses) just a few centimetres movement can essentially make the True Focus adjustment unnoticeable.

If we wish to summarise the above graphically, below shows a simple chart that shows the strength or visibility of the TF correction. The **darker the orange**, the stronger or more visible the TF correction will be. For example, a wide angle lens at a near distance will have the greatest TF correction...



Using True Focus in Practice

The H4D has a new button on the back of the camera labelled **True Focus**. This replaces the AE-L (Auto Exposure Lock) button as seen on previous models. The AE-L button is now in the position of the USER button. Both buttons can be similarly customised as before.

On the **Default settings**, the H4D can be setup to use True Focus in two ways. Firstly in AF-S mode, the camera will behave exactly as before on H3D models. However, pressing the True Focus button will allow True Focus operation for **one shot**.

In the second mode, the H4D is set to **AF-T** in the Autofocus selection menu and then True Focus is permanently enabled. Both Methods are described below.

PLEASE NOTE - In this implementation of True Focus, the sensors in the H4D are only programmed to detect movement of the camera about its own axis. ie. Imagine the camera fixed to a tripod but free to rotate left to right, up or down or a combination of the two. Similar to Tilt and Swing movements on a technical camera.

Lateral movement, ie. side to side (shift) or rise and fall are **NOT** detectable by the H4D sensors.

Please bear this in mind when focussing and then subsequently recomposing. If you feel that True Focus is not operating correctly, test the methods below on a tripod first.

Method 1

Follow the steps below to demonstrate True Focus in this method...

1. Set the H4D to the default profile by pressing the ON-OFF / Profiles button once and choosing the Default profile...



Here the camera will automatically be set in AF-S mode and the True Focus button set to **True Focus**.

2. Aim the central AF points at the area of the subject you wish to be in focus and press the True Focus button. Release the True Focus button **once you have AF confirmation** from the two arrows in the viewfinder. The TF logo will animate in the viewfinder...



If the TF logo does not illuminate, press and hold the True Focus button again, until it is shown.

3. Recompose your image, and press the shutter release. The AF drive applies the correction, after the mirror has been raised to the UP position, **NOT** as the camera is rotated / recomposed.
4. The camera automatically returns to AF-S mode for the next capture, unless the True Focus button is pressed again.

Method 2

Follow the steps below to demonstrate True Focus in this method...

1. Change the auto focussing mode to AF-T in the H4D menu...



NB - In this mode, operation of the AF drive by half pressing the shutter is automatically disabled. All Auto Focus commands are made by the True Focus button.

2. Aim the central AF points at the area of the subject you wish to be in focus and press the True Focus button. Release the True Focus button **once you have AF confirmation** from the two arrows in the viewfinder. The TF logo will animate in the viewfinder...



3. Recompose your image, and press the shutter release. The H4D will make a beep sound to indicate a True Focus correction. The AF drive applies the correction, after the mirror has been raised to the UP position, NOT as the camera is rotated.
4. Further captures can be taken with the new True Focus setting, as long as the situation remains very similar. The new focus is set according to the **first capture** and does not change until the True Focus button is pressed again. It therefore follows that any major deviance from the original situation should be regarded as a new situation and therefore would require a new True Focus setting.

If so, follow the steps from point 2. above.

Image Examples

To help you show True Focus in operation, here are two examples that you could copy. One with the HCD28 and with the HC80. Both captures are taken with a fully open aperture to maximise the before and after difference of True Focus.

Image 1, HCD28, f4, Distance 1 Meter from Subject

In the following example, the subject is the road sign on the right of the frame...

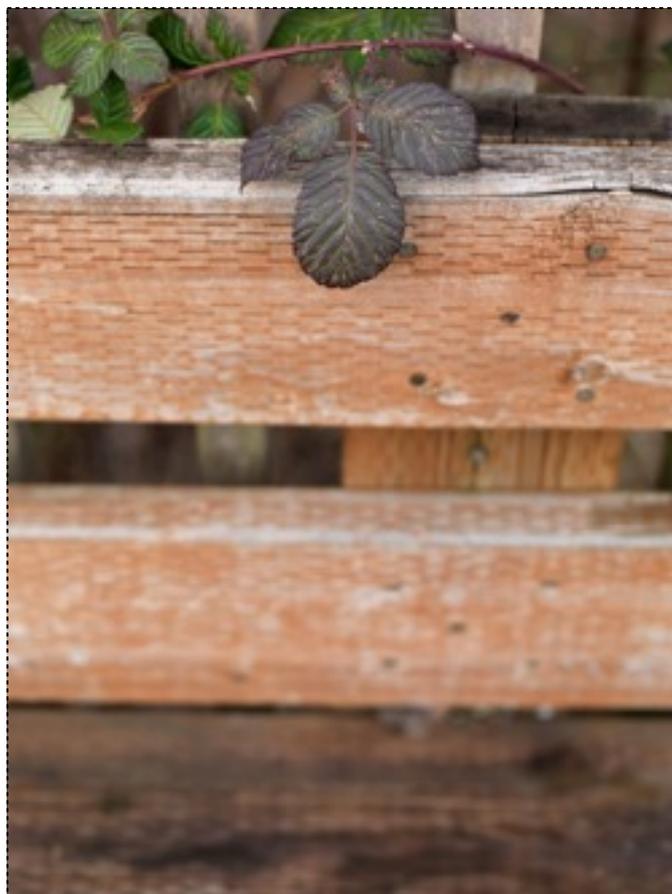


If we take a look at a 100% view of the sign, we can see that with AF-T on the sign is focussed correctly, but unsharp with AF-T off...



Image 2, HC80, f4, Distance 1 Meter from Subject

In the following example the subject is the leaf at the top of the frame....



If we take a look at a 100% view of the leaf we can see that with AF-T on the leaf is focussed correctly, but unsharp with AF-T off...



Conclusion

We hope the above guide has shown the benefits of True Focus, two ways of using it and two images which are easily replicated.

When demonstrating True Focus please remember the following points..

1. That focal length, distance to subject and aperture all affect the level of True Focus Correction
2. That the H4D sensors can only detect tilt, swing or a combination of the two, NOT lateral movement
3. That if the photographer changes their distance to the subject too much after the True Focus measurement, that the correction may not be visible or be incorrect.

