

FLUKE Thermal Imaging Scanner - QUICKSTART INSTRUCTIONS

Thank-you for borrowing Zero Carbon Haddenham's Thermal Imaging Scanner. You can download the full instruction manual at <https://zeroch.org/wp-content/uploads/2021/11/Fluke-TiS-Imager-Manual.pdf> or read on for quickstart instructions!

In the bag you should find the yellow scanner itself as well as a charger, a USB cable and a USB card reader. The scanner should have been supplied fully charged. We recommend you leave the scanner set to use the FLUKE IS2 format and use the SmartView software (freely downloadable for Microsoft Windows) to analyse and export the images you create. However, you can set the scanner to save images in Windows Bitmap format which is universally readable. See the note at the bottom of the document for how to do this.

Switching on the scanner



1. Looking at the screen press and hold the F2 button for two seconds until you hear a two-tone bleep. The scanner will now be powered on.
2. Swing the hinged grey lens cover fully up so it rests on top of the scanner
3. Point the scanner at the area to be scanned and adjust the focus wheel to give the sharpest image possible. *Note that a thermal scanner will not produce a standard 'sharp' image as a camera would.*
4. Press the green trigger once and the scanner screen will capture the image.
5. If you are not happy with the image, you can press the F3 Cancel button or simply click the trigger once more to reset the scanner. When you are happy with an image, you can press the F1 Store button to save the image onto the SD memory card in the scanner.

If the scanner is left for about 5 minutes when switched on it will go to sleep. Awaken it by pressing the F2 button once.

When you have finished using the scanner remember to switch it off by pressing and holding the F2 button until the scanner beeps and the screen goes blank.

There is no need to recharge the scanner before returning it – but if the battery runs out during your use you will of course need to do so. The battery level indicator is shown on the top left of the screen when the scanner is switched on. The battery connector is beneath the grey cover on the side of the scanner. It will take about 2 hours to fully recharge the battery. During charging the screen will display a large battery symbol and green charging bars cycling on and off. When all the green bars are steady, the scanner is fully charged.

Tips for use

- Before using the scanner we recommend you install the SmartView software and ensure you can capture some test images and transfer them to your PC for viewing before taking any final images you need.
- We expect you will be using this to look for hotspots and heat 'leakage' around windows, doors, roofs at your home. This is best performed on a cold evening with any heating source (central heating, stove etc.) turned well up so that a good distinction can be seen between the cold (blue) parts of the images and the hot (red). This will make it easier to distinguish areas which are warmer than expected.
- Beware that you can get reflections from wet and/or shiny surface such as windows. For this reason it is best to use the scanner at an angle to any windows and doors to prevent reflections of the user from contaminating the image.
- If you have just opened a door, a rush of warm air to the outside may skew the readings for a while so allow time for any changes like this to stabilise.
- The scanner uses a form of auto-exposure based on the temperature detected in the small cursor in the centre of the screen. To see the best range of temperatures visible it is best to try to centre the scanner on an spot of intermediate temperature. This will even out the colour range across the image from dark blue (cold) to white (hot).

- You can also use the scanner inside the house to look for areas of wall which are colder than expected.

Retrieving and viewing your images

The images are saved onto an SD memory card which is inserted into the slot under the grey cover on the side of the scanner.



1. To release the card push it once in the direction of insertion and release, You should hear a click and the card will pop out.
2. Take the card out and insert it in the card reader as shown below. IT WILL ONLY FIT IN THIS WAY ROUND. The card will only go in as far as shown in the picture so do not try and force it in further!
3. Connect the USB cable between the connector at the rear of the card reader and your PC. The PC should detect the card reader and the card as a new device.
4. Browse to the new device and copy the files you have saved. These will be found in a folder called TI_00000 within the IMAGES folder.
When you have finished copying the files, please leave the SD card in the card reader when you return the scanner to us.

Download the FLUKE SmartView software from:

<https://assets.fluke.com/SmartView/TUpdates/Setup.exe>

This will allow you to view, annotate and export the images as required on your PC.

We do not offer support or assistance with using the FLUKE SmartView software which you will have to work out how to use for yourself. If you are unable to do this but require a report document based on the images you have taken, please let us know when you return the scanner and we can supply a report for you for an additional donation to Zero Carbon Haddenham.



Setting the scanner to save files in Windows bitmap format (optional)

We recommend you leave the scanner set to use the FLUKE IS2 format and use the SmartView software to analyse and export the images you create. This is because there is a lot more information about temperatures and the scanner recorded in the IS2 format. **If you want us to prepare a report based on your images please do NOT change the scanner to use bitmap format.** If however you prefer to set the scanner to save files in Windows bitmap format which can be viewed on most computers without additional software, follow these instructions:

To change the file format to Windows bitmap:

1. Press F2 repeatedly until File Format appears over softkey F3.
2. Press the F3 button - now labelled File Format.
3. Press F1 to set the bitmap (.bmp) file format.

Returning the scanner

Make sure you have closed the lens cover and switched off the scanner. Pack it back into the canvas bag together with the card reader, USB cable, charger. There is no need to replace the SD memory card back in the scanner as we will need to format it ready for the next user. If you have any useful images which you would like to share with us, please send them to info@zeroch.org so we can use them in our publicity.

If you have identified door frames or windows which are draughty or leaking heat, you may be able to replace seals fairly easily. DIY minded people should contact us for some sources for new seals and gaskets