User

MANUAL

Pentax KP/K1/K1ii/645Z
ASCOM Driver

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Revision Sheet

Release No.	Date	Revision Description
Rev. 1.0	7/20/2025	Initial Release

USER'S MANUAL

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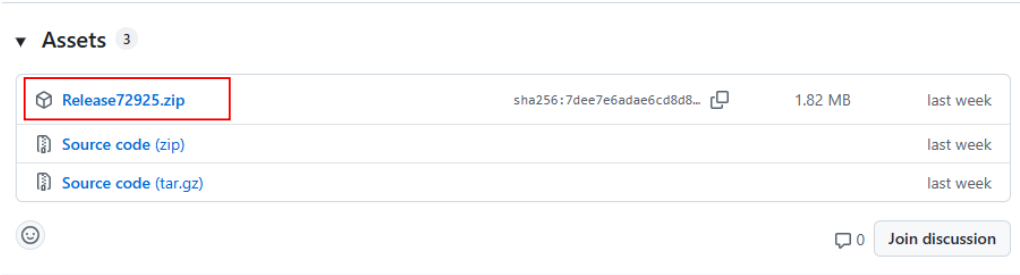
A. GETTING STARTED WITH SHARPCAP

1.1 Driver Installation

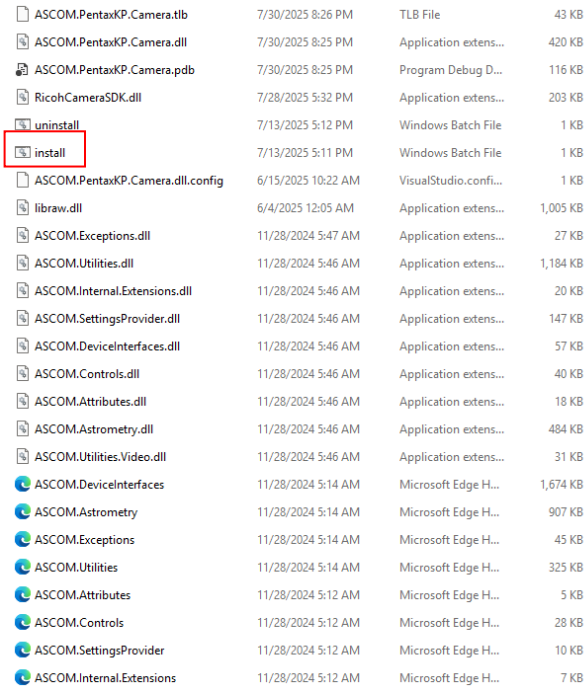
Download and install ASCOM. You should get this version if possible:
ASCOMPlatform702.4675.exe

From:
https://github.com/ASCOMInitiative/ASCOMPlatform/releases/download/v7.0.2/AscomPlatform702.4675.exe

Next, download and unzip the Pentax KP ASCOM Driver:
Releases · richromano/ASCOMPentaxCameraDriver



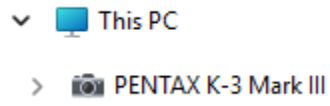
Place the latest release to a long term location. This is the location the software will run from. Run install.bat by double clicking on it.



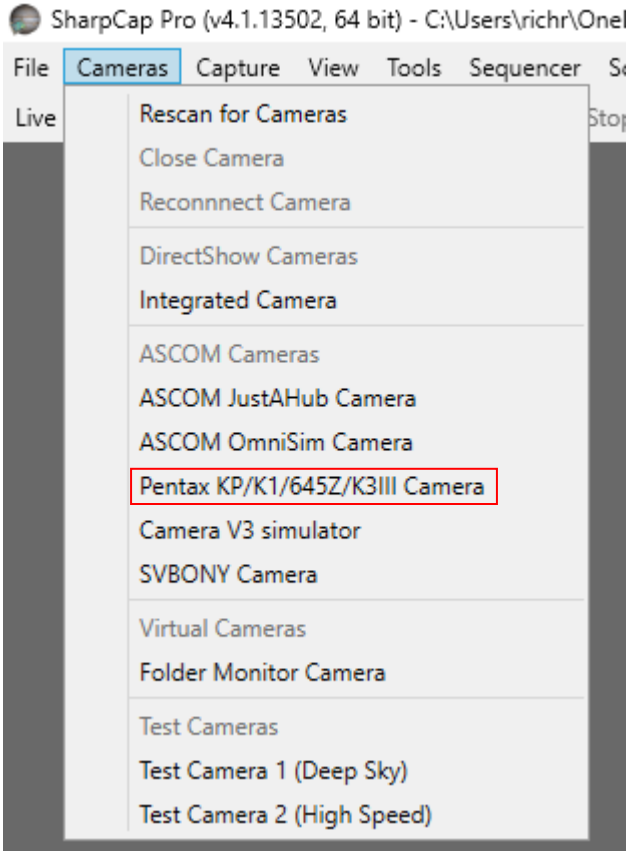
1.2 SharpCap Installation and First Steps

Download and install Sharpcap 64bit:
https://d.sharpcap.co.uk/download.html?version=4.1.13484.0&arch=x64

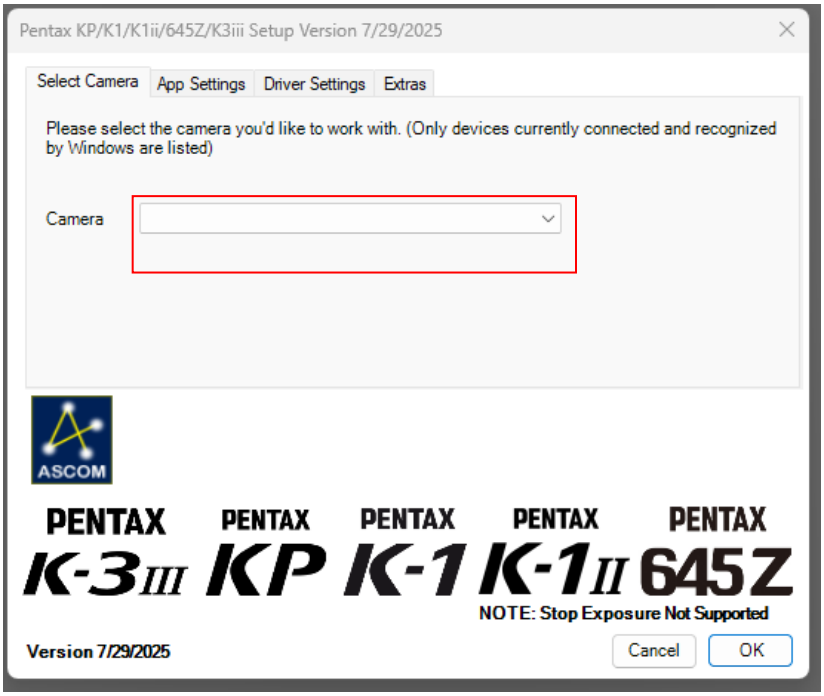
Turn on your camera and make sure the USB mode is set to MTP/PTP mode. Set the Camera to M mode. You can set the shutter to Electronic Shutter if desired. Connect your camera to the computer and make sure it is recognized as a camera.

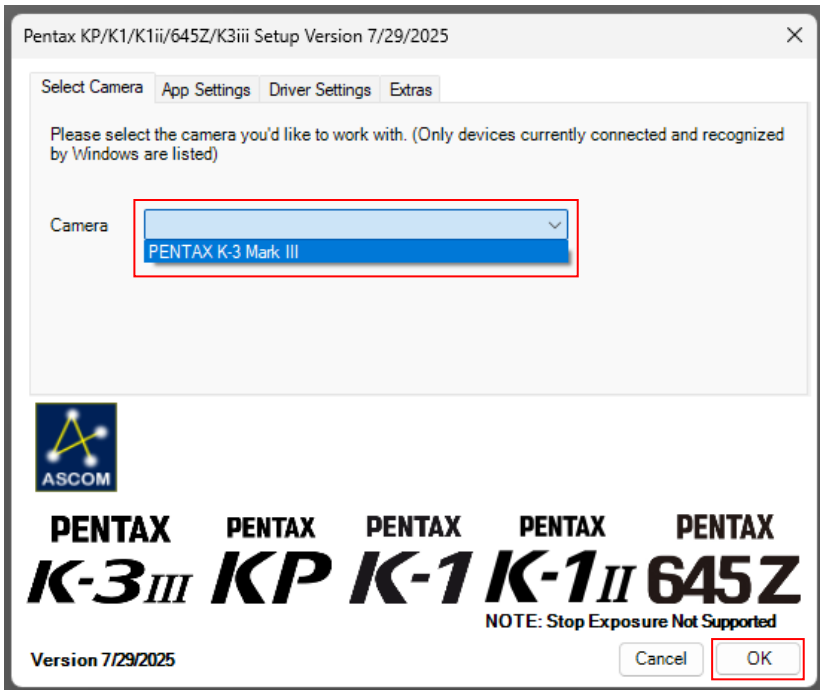


Open Sharpcap. Select the Camera menu and you should see Pentax KP/K1/645Z.

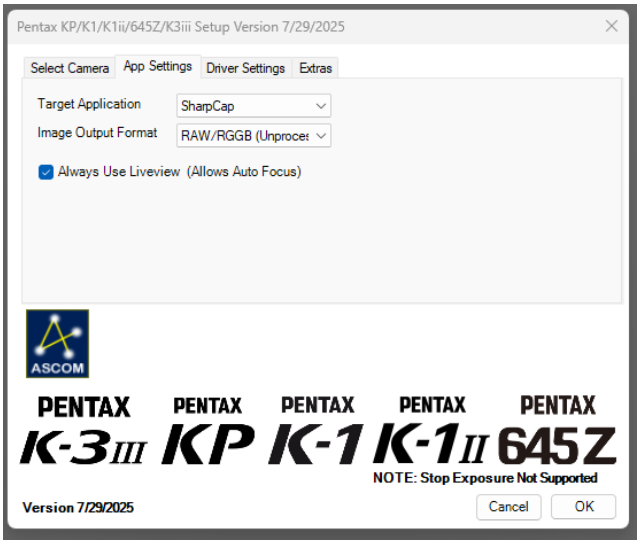


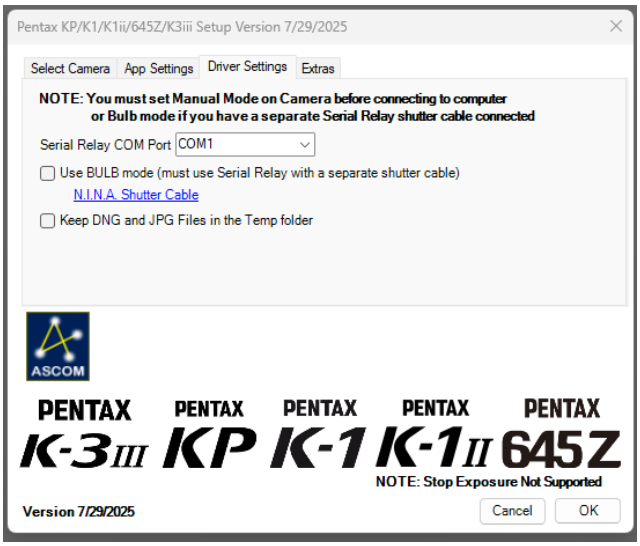
Select Pentax KP/K1/645Z and a dialog box should show up. Inside the dialog you should see a drop down where you can select your Camera.

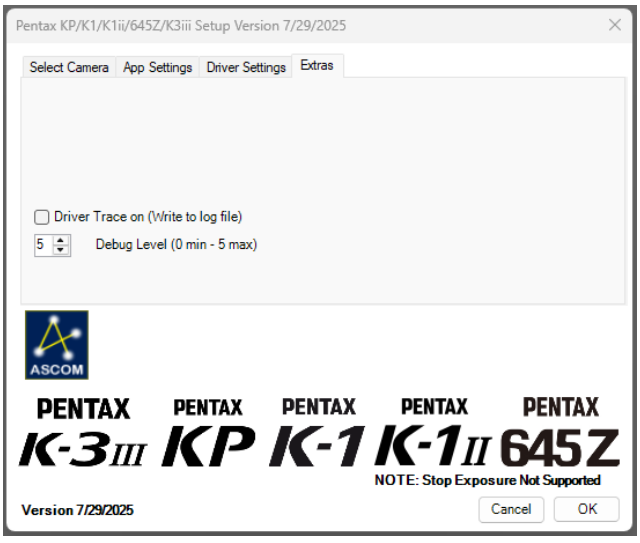




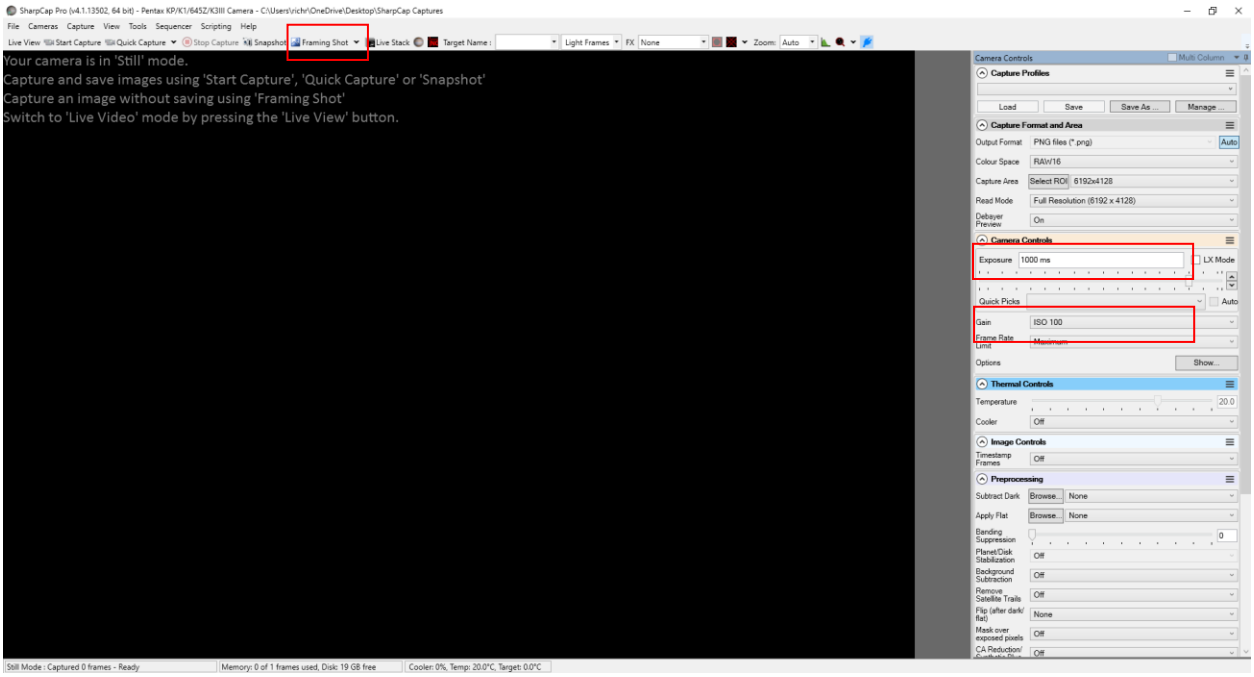
You can review each of the other settings pages as shown here. However, you should just accept the default settings given when you first install (the defaults are shown again here in case you want to reset them). Then press OK.


Pentax KP/K1/K1ii/645Z/K3iii Setup Version 7/29/2025
Select Camera
App Settings
Driver Settings
Extras
Target Application
SharpCap
Image Output Format
RAW/RGGB (Unproces
Always Use Liveview (Allows Auto Focus)
ASCOM
PENTAX K-3 III
PENTAX KP
PENTAX K-1
PENTAX K-1 II
PENTAX 645Z
NOTE: Stop Exposure Not Supported
Version 7/29/2025
Cancel
OK


Pentax KP/K1/K1ii/645Z/K3iii Setup Version 7/29/2025
Select Camera
App Settings
Driver Settings
Extras
NOTE: You must set Manual Mode on Camera before connecting to computer
or Bulb mode if you have a separate Serial Relay shutter cable connected
Serial Relay COM Port
COM1
Use BULB mode (must use Serial Relay with a separate shutter cable)
N.I.N.A. Shutter Cable
Keep DNG and JPG Files in the Temp folder
ASCOM
PENTAX K-3 III
PENTAX KP
PENTAX K-1
PENTAX K-1 II
PENTAX 645Z
NOTE: Stop Exposure Not Supported
Version 7/29/2025
Cancel
OK


Pentax KP/K1/K1ii/645Z/K3iii Setup Version 7/29/2025
Select Camera
App Settings
Driver Settings
Extras
Driver Trace on (Write to log file)
5
Debug Level (0 min - 5 max)
ASCOM
PENTAX K-3 III
PENTAX KP
PENTAX K-1
PENTAX K-1 II
PENTAX 645Z
NOTE: Stop Exposure Not Supported
Version 7/29/2025
Cancel
OK

After pressing Okay, you should see the following Window.

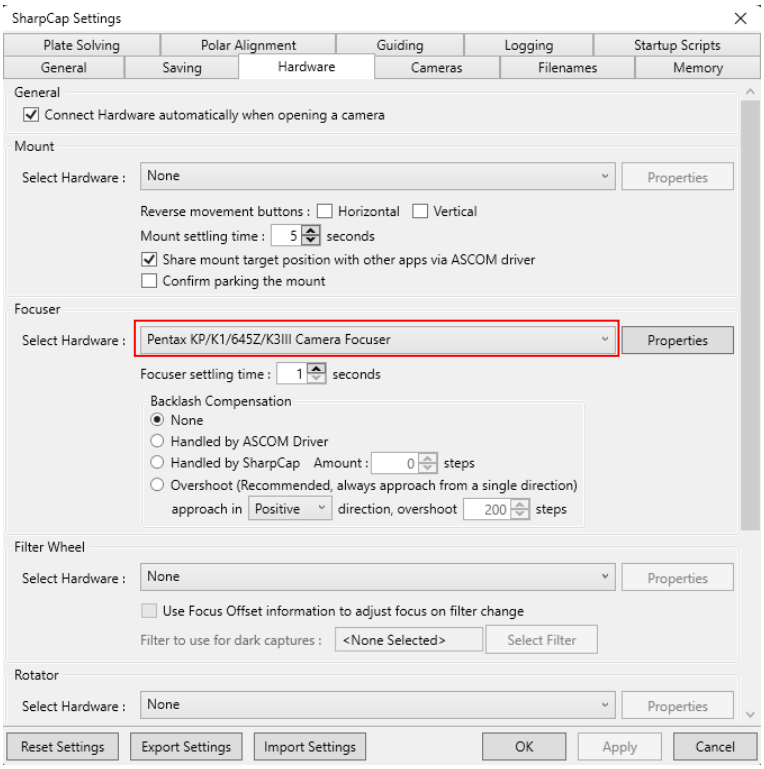


Take a picture by pressing the Framing Shot button. This should show an image. You can adjust the gain and the ISO using the other two buttons. You can then take more framing shots.

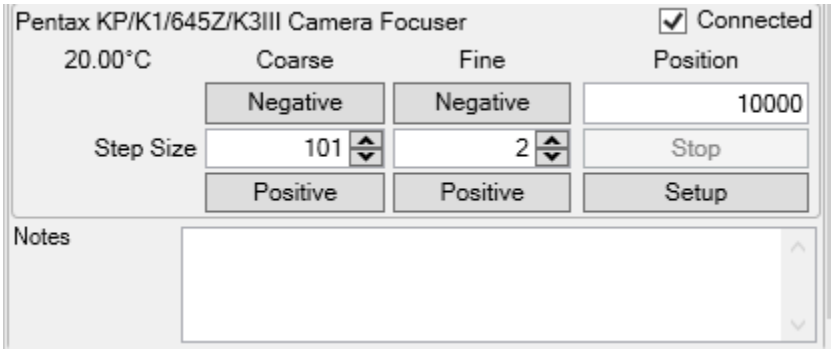
1.3 SharpCap Focuser Installation

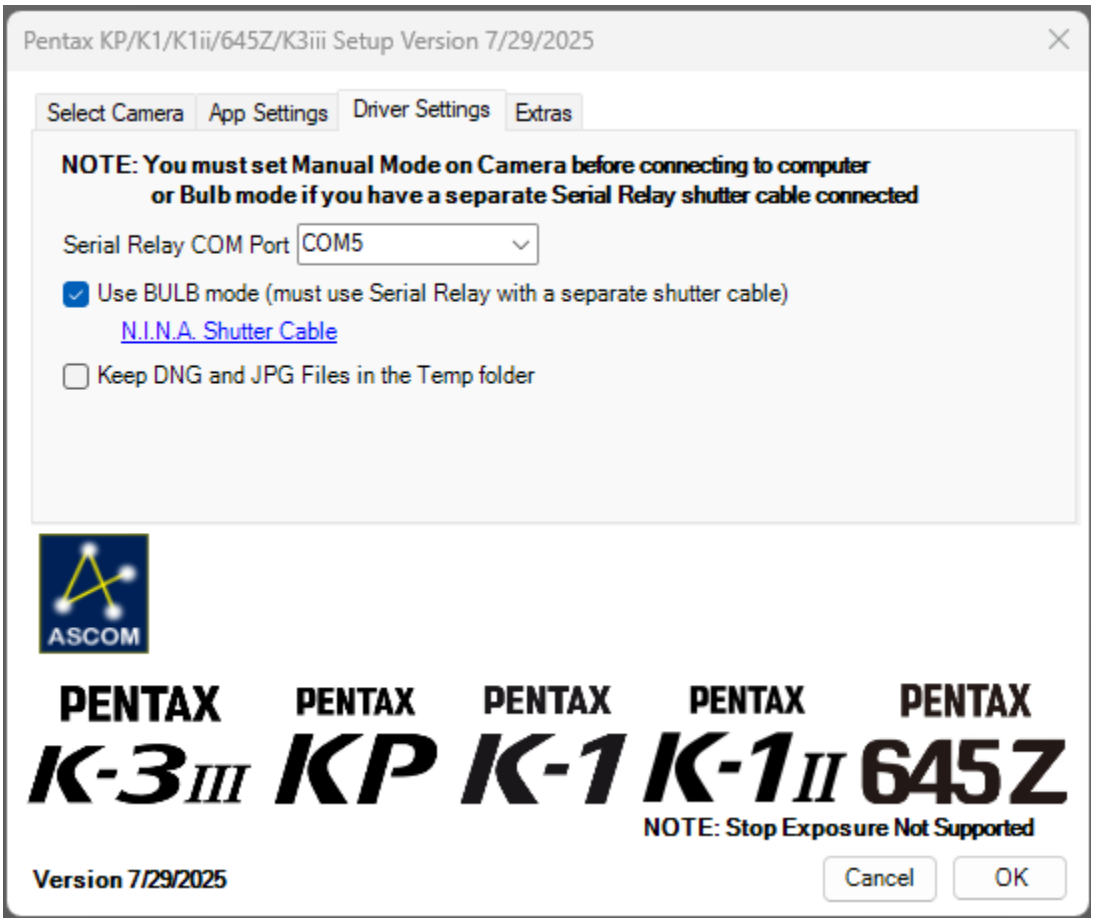
There is a Pentax Focuser that is included in the driver installation. In SharpCap select the File-> SharpCap Settings. You will see the following:

First select the Hardware pane and the in the drop down menu in the Focuser pick the Pentax Focuser. There are no Properties to set and you can leave the other values at their defaults. Sharpcap will automatically connect the focuser when the Camera is opened. (You must close and reopen the camera to connect the first time).



With the Focuser connected you will see an extra window in the lower right corner of Sharpcap. You can control the Focuser manual from there. There are also several ways to automatically focus the camera. For the Focuser to work you need to have the camera in AF mode with an autofocus lens.



1.4 Live View With SharpCap

1.5 Bulb Mode With SharpCap