



# USB FLAT BOX SOFTWARE USER GUIDE

version 1.2.0 | November 2019

GNU Linux

Ubuntu (amd64) | Ubuntu Mate (arm64) | Raspbian (arm32)



## SOFTWARE INSTALLATION

- Download from the ARTESKY website <https://www.telescopi-artesky.it> the setup file for GNU Linux choosing the desired distribution (Ubuntu)
- In order to install the application, extract the **setup\_artesky-flat\_1.2.0.0\_XXX\_XXX.tar.xz** package using the graphical tools provided by the desktop environment or typing on terminal:

```
tar xf ../setup_artesky-flat_1.2.0.0_XXX_XXX.tar.xz
```

- The software licenses are available onto the installation folder (license\_artesky.txt e license\_qt.txt)

## UNINSTALL ARTESKY FLAT BOX APPLICATION

- Delete the directory created during the software installation (installation\_folder) using the graphical tool provided by the desktop environment or typing on terminal:

```
rm -r ./installation_folder
```

## PRELIMINARY OPERATIONS

- Plug the ARTESKY Flat Box using the provided cable.
- Plug the ARTESKY Flat Box to the PC using the provided USB cable. The ARTESKY USB Flat Box will be automatically installed by the operative system.
- Open a terminal and go into the software installation folder. Then, typing:

```
sudo ./artesky-flat
```

the administration password will be required. Insert it and then press enter. If the application does not star, please type:


```
chmod +x ./artesky-flat
```


```
sudo ./artesky-flat
```



- Select the “Info” tab and choose the application language between English, Italian, French, Spanish, Chinese and Japanese. The selected language is saved for next application usage. This feature is not present on Windows XP OS.

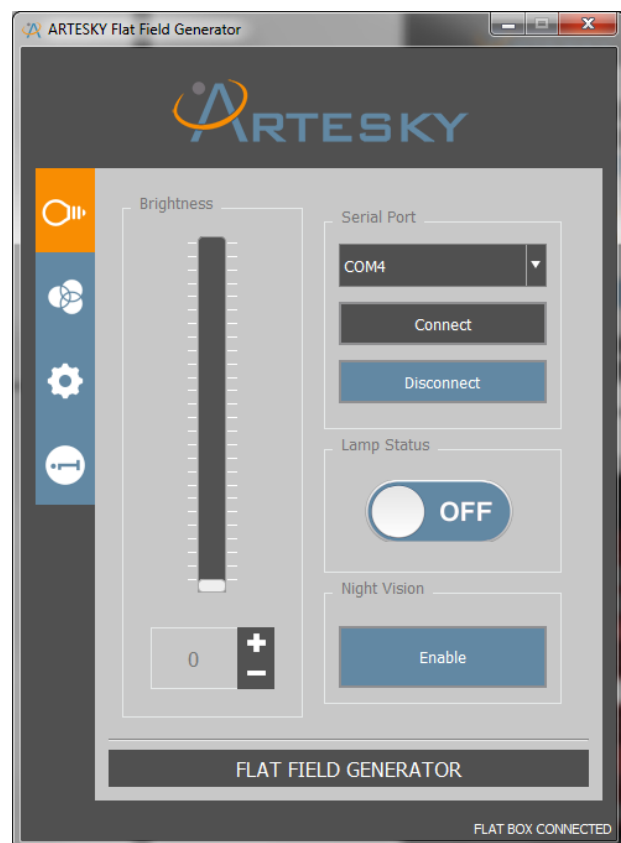


- Select the “Flat Field Generator”  tab and choose the serial port using the “Serial Port” group combo box.

If the serial port name of the ARTESKY usb flat box is unknown, select the “Settings”  tab and click on “Connect Now” button. If there is only one ARTESKY usb flat box connected to the PC, the application automatically connects to it identifying the relative serial port name.



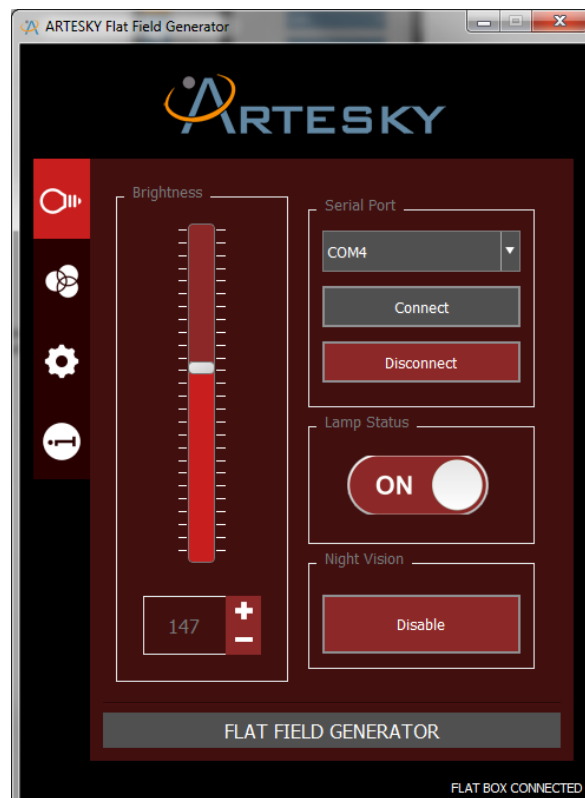
- When the ARTESKY usb flat box is connected, the “Connect” button will be disabled and the connection status will be shown onto the status bar.



- Using the toggle button, switch on/off the ARTESKY Flat Box lamp. Using the “Brightness” slider is thus possible to change the lamp light intensity. The light intensity level in ADC units is reported under the slider.



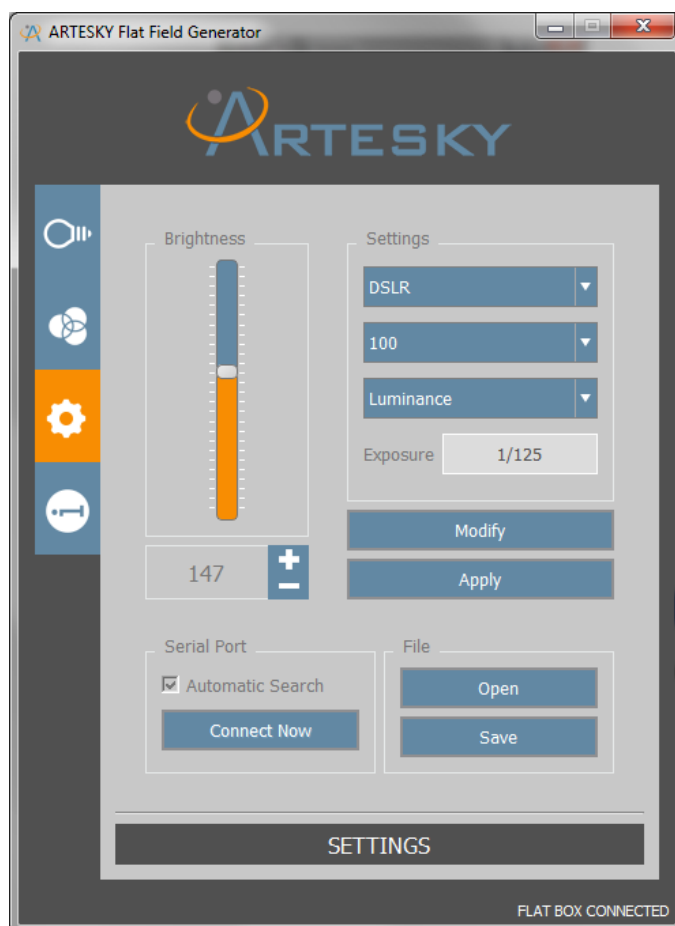
- Press on “Enable” to enable night vision colors theme. Again, press on disable in order to go back to normal color theme.



## ARTESKY FLAT BOX FILTERS CONFIGURATION



- Open the “Settings” tab . Select from “Settings” group if your camera is a reflex (DSLR) or a CCD camera. Then, select you ISO/binning setting and the filter are you using.
- Using the slider in order to set the lamp light brightness to the appropriate value
- Click on “Modify” in order to enable the “Exposure” setting. Then, write the camera exposure time value on the “Exposure” text field and press “Apply”.
- Repeat the procedure for each filter and ISO/binning settings you need.
- The Flat Box Filter configuration are deleted when the application is closed. In order to prevent data loss, please save your configuration on file using the “Open” and “Save” button of the File group.



## ARTESKY FLAT BOX FILTERS UTILITY





- Click on “Filters” tab and select the desired camera configuration:
  - Model: DSLR or CCD
  - ISO/binning setting
  - Filter type

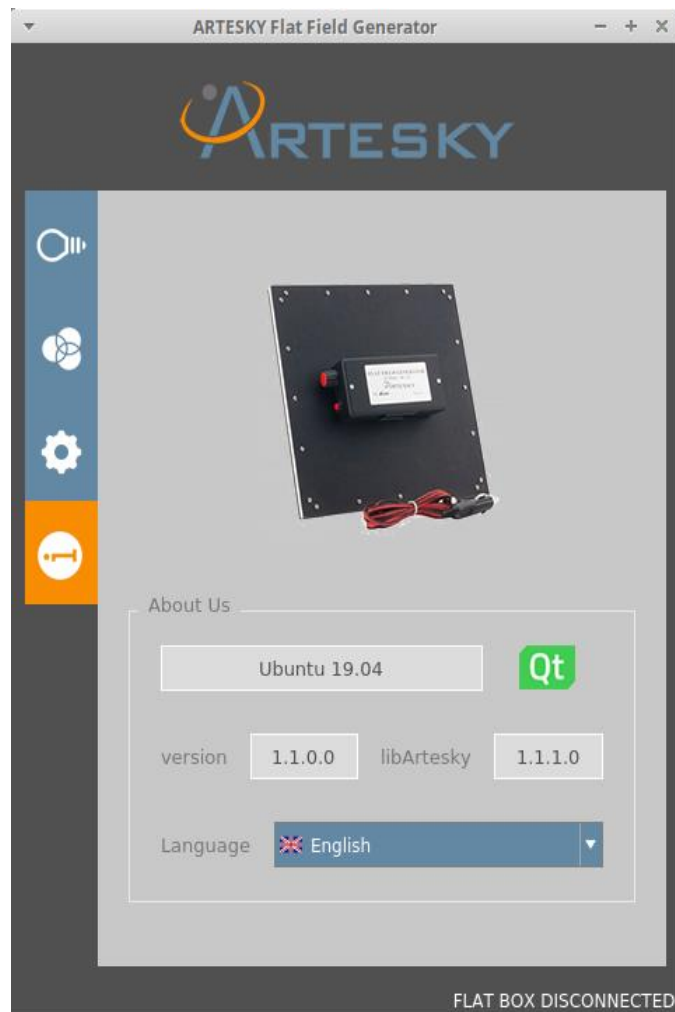
Then click on “Apply” button. Thus, the lamp automatically set its brightness to the configured value

- The brightness level in ADC units as well as the expected exposure time is shown into the “Info” group text fields.



## ARTESKY FLAT BOX INFO

- Click on “Info” tab  . The current Operating System, the application version and libArtesky version are reported.
- Click onto Qt icon  in order to show the Qt license and version.



## SYSTEM REQUIREMENTS

Minimum requirements for the ARTESKY Flat Box application version 1.2.0 follow:

<i>Operative System</i>	Ubuntu 18.04 (amd64), Ubuntu Mate 18.10 (arm64), Raspbian 9.9 (arm32)
<i>Architecture</i>	32-bit / 64-bit
<i>CPU</i>	300 MHz Pentium
<i>RAM</i>	128 MB
<i>Interface</i>	USB 2.0
<i>Screen Resolution</i>	1024 x 768
<i>Disk Space (MB)</i>	55 MB