



Getting Started

"VisionBox Daytona"

Version 1.1 – August 2020





Welcome

Congrats on your new VisionBox Daytona! In this "Getting Started" guide, we will show you all necessary steps to get the VisionBox ready for first operation.

What you need

- USB keyboard
- USB mouse
- Monitor: The maximum supported resolution is 3840 × 2160 at 60 Hz. To connect the DP Port with a DVI, HDMI or VGA monitor, an active adapter is needed.
- Optional: Ethernet cable and Internet connection
- Power supply 24V, minimum 3A







Before you start...



Note: ESD protection is required for installation and service on terminals.



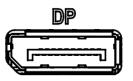
Attach your USB keyboard and mouse

Attach your USB keyboard and mouse to the USB ports. The VisionBox Daytona provides two USB 3.0 type A ports.



Connect your monitor

Connect your monitor to the DisplayPort of the VisionBox Daytona. As described in the introduction the maximum supported resolution is 3840 × 2160 at 60 Hz. To connect the DP Port with a DVI, HDMI or VGA monitor, an active adapter is needed.

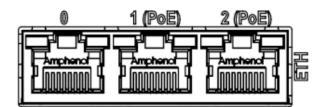






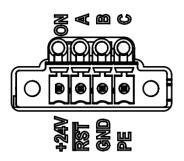
Prepare the Ethernet connection

Optional: Connect the VisionBox to your local network. You can attach the Ethernet cable to one of the Ethernet ports. Ethernet ports 1 and 2 can provide power to PoE devices using the IEEE 802.3af/at standard. All Ethernet ports of the VisionBox Daytona are set to DHCP by default.



Power on the VisionBox Daytona

Connect the Daytona to the power supply (24V, minimum 3A). Now you can power on the box. Mating external plug component: Phoenix Contact **MC 1,5/4-STF-3,5** (order no. 1847071)







First login

For the first login you need to know username and password. This device is preconfigured with two user accounts, namely "root" and "visionbox". The password for both accounts is "vision".

Usernames and passwords VisionBox Daytona		
Username	Password	
root	vision	
visionbox	vision	

Set up your system

After the first login, you should proceed with the following steps to set up your system:

Update the package list

If the VisionBox is connected to the internet, you can update the package list with the following command:

apt-get update

Change your password

We recommend changing the password of both accounts. You can do this with "passwd":

passwd Enter new UNIX password: Retype new UNIX password: passwd: password updated successfully





Good to know...

The operating system (OS) for the VisionBox Daytona is based on Ubuntu 18.04 LTS "Bionic Beaver". The root file system includes a suitable Linux kernel, customized configuration files and the IMAGO Linux SDK. The OS is normally preinstalled by IMAGO on the MMC flash (/dev/mmcblk0p1). The root file system can also be installed on the SD card (/dev/mmcblk2p1).

IMAGO releases the OS of the VisionBox Daytona as a complete preconfigured image. The image is a tar.gz archive which contains the root file system. Each image has a unique version number. The version number can be found in the file name of the image and in the OS hostname.

Example: The file name of the image is ubuntu1804_daytona_v1.0_a.tar.gz:

ubuntu1804	-> Ubuntu 18.04
daytona	-> IMAGO VisionBox DAYTONA
v1 .0	-> Image version
a	-> Image variant

The corresponding OS hostname for this example is DAYTONAv1-0a.

Please note that some software components are not part of the OS image and are installed separately:

- Bootloader
- Linux Device Tree
- FPGA Firmware

For further information about the operating system's version history, please have a look at the corresponding release notes.





What's next?

Register at our IMAGO Download Portal:

<u>https://www.imago-technologies.com/support</u>

Read the VisionBox Daytona Hardware Manual:

- https://imago-technologies.sharefile.com/f/fo05b830-18c4-4f4a-945b-9a863dca097c
- Get more technical data about your new device

Read the SDK Documentation:

• <u>https://api.imago.tech/</u>

Learn how to use the integrated RTCC:

- <u>https://api.imago.tech/VIB_Interface/</u>
- The Real-Time Communication Controller (RTCC) is the central device controlling the different interfaces. The major part of the controller is implemented by a FPGA. It provides user-programmable logic and internal units operating independent from the operating system. Many time-critical applications can be realized without using a real-time operating system.
- A little example program can be found on the camera under: \opt\ImagoTechnologies\SDK\examples\FirstTest_Linux\

VisionBox Daytona at the IMAGO Download Portal:

• https://imago-technologies.sharefile.com/f/fo3825ad-c41d-4765-afba-4551bb79561b

Finally, if you have any open questions, the IMAGO support team is happy to assist you in any cases. For direct contact to the support, please use our ticket system:

<u>https://imago.freshdesk.com</u>





Document History

Revision	Date	Changes	Initials
1.0	Nov-2019	First version	av
1.1	Aug-2020	Updated chapter "What´s next"	av