

EBS-50 Flash Tool README

NOTE: The EBS-50 flash tool will wipe all the settings from your EBS-50 device. PRODUCT DATABASE CONNECTION, LOCAL DATABASE FILES, TEMPLATE FILES, CLOUD DASHBOARD CONNECTION AND NETWORK SETUP WILL BE REMOVED

1 Flashing the EBS-50

- Turn off the power to the EBS-50
- Attach your EBS-50 to a Windows 10 or 11 PC using the micro-USB port on the EBS-50. DO NOT YET POWER THE EBS-50
- Download the flash file from our website (<https://www.opticon.com/support/Display%20Solutions/EBS-50/EBS-50%20flash%20tool.zip>)
- Unpack the contents, and use a tool like Command Prompt or PowerShell (the latter is my favorite for this process) to move to the ebs-50-IBGV0111 folder you just unpacked.
- Type the command `uuu.exe ebs-50.uuu` on Command Prompt, or the command `.\uuu.exe .\ebs-50.uuu` on PowerShell

Command Prompt

```
Microsoft Windows [Version 10.0.19045.2846]
(c) Microsoft Corporation. All rights reserved.

C:\Users\jürgen>cd Downloads\ebs-50-IBGV0111

C:\Users\jürgen\Downloads\ebs-50-IBGV0111>uuu.exe ebs-50.uuu
```

Figure 1: Example for Command Prompt

Windows PowerShell

```
Windows PowerShell
Copyright (C) Microsoft Corporation. All rights reserved.

Try the new cross-platform PowerShell https://aka.ms/pscore6

PS C:\Users\jürgen> cd .\Downloads\ebs-50-IBGV0111\
PS C:\Users\jürgen\Downloads\ebs-50-IBGV0111> .\uuu.exe .\ebs-50.uuu
```

Figure 2: Example for PowerShell

- Press Enter and the following prompt appears:

```
uuu (Universal Update Utility) for nxp imx chips -- libuuu_1.4.139-0-g1a8f760

Wait for Known USB Device Appear...
```

- While pressing on the small button next to the power plug, power on your EBS-50. Keep the button pressed until the device is recognized by your PC and starts its update process:

```
uuu (Universal Update Utility) for nxp imx chips -- libuuu_1.4.139-0-g1a8f760

Success 0    Failure 0

2:32    6/10 [==>                8%                ] FB: flash -raw2sparse rootfs1 .\files\ebs-50-IBGV0111.ext4
```

(This screen should appear within five seconds after powering up the device)

- This progress bar will walk through a 10-step installation loop.

- Once it is done, the EBS-50 will reboot and configure its first boot set-up routine. **DO NOT REMOVE POWER FROM THE DEVICE**, or you may corrupt the settings and need to restart the entire flashing progress.
- After a couple of boots (your PC will probably play USB plug/unplug jingles and list messages like “setting up device” or “new network detected”) the unit will appear in your EBSFinder tool again. A good indicator that setup is fully complete is when the channel is set to 11 and the LAN ID is ‘0000’ (four numbers).
- Try connecting to <https://192.168.100.5>. If it works correctly, try its ethernet port address too.

1.1 Troubleshooting if the device is not recognized

Normally on Windows 10 and 11 the WinUSB driver is already available, but it is not uncommon that the device driver is still missing. To check if the driver is actually present, boot up the EBS-50 in debug mode: plug in the micro-USB cable, apply power while pressing the small black button next to the power port. You may hear a sound notification from Windows recognizing a new device on the USB port.

Open Device Manager (press Win+R, type “devmgmt.msc” and press enter) and check if under Universal Serial Bus devices you see a device called “USB download gadget”:

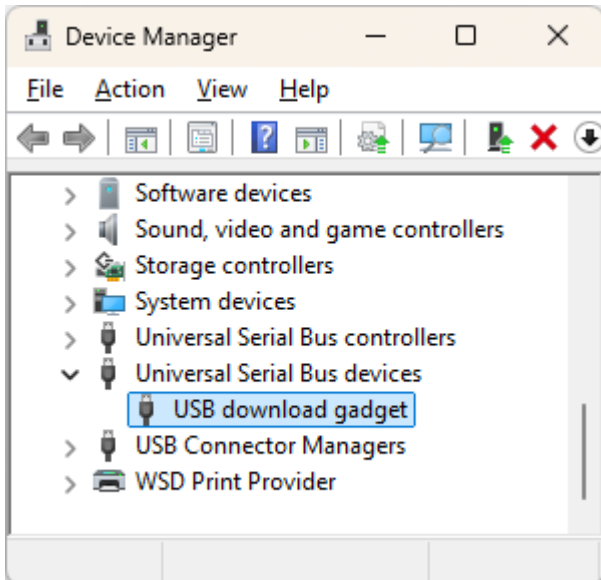


Figure 3: device correctly identified

If you see it, your drivers are installed correctly and you can start flashing the device.

If you don't see it, it's probably listed under Unknown devices and the driver is missing.

In the flash tool package, there is a driver install tool called “zadig-2.5.exe”. Run it, press “Options” → “List all devices” and select the device from the list. If you don't know which device is the EBS-50, simply unplug the USB-A end from your PC (the EBS-50 will remain in bootloader mode) and run “List all devices” a second time. Now your list should be one device shorter.

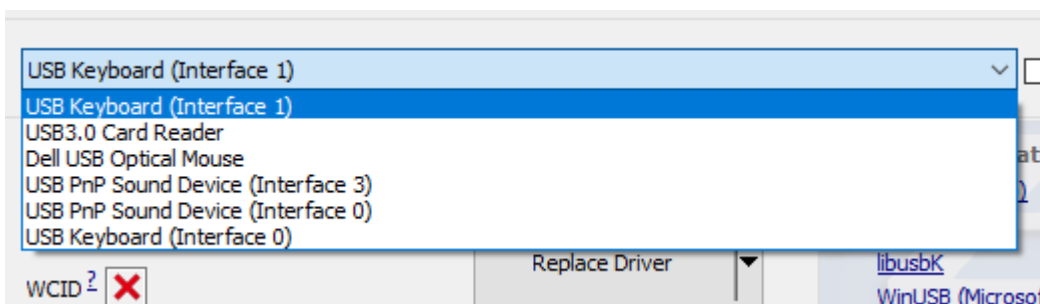


Figure 4: Enumerated USB devices without EBS-50 connected

Plug the micro USB back in the EBS-50 and run “List all devices” again. The new device is the one you want to select:

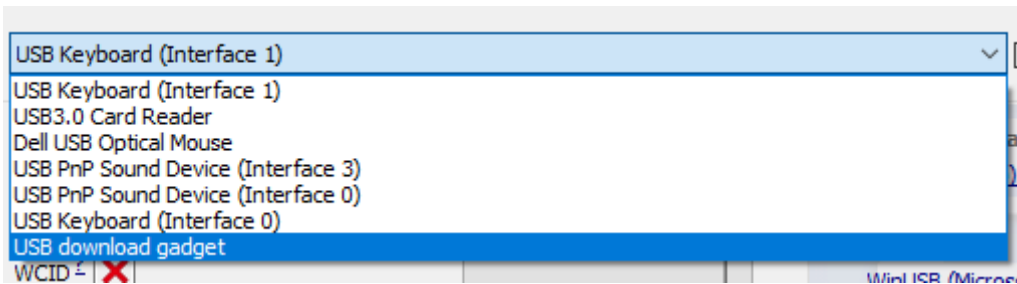
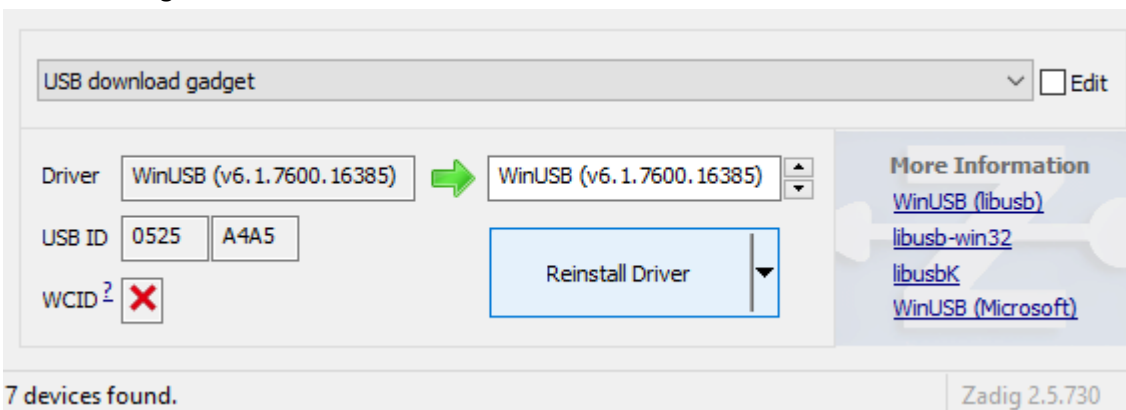


Figure 5: Enumerated USB devices with EBS-50 connected

Now tell Zadig to install the driver “WinUSB” for this device.



The EBS-50 will now be properly recognized by Windows and can be accessed by the flash tool.