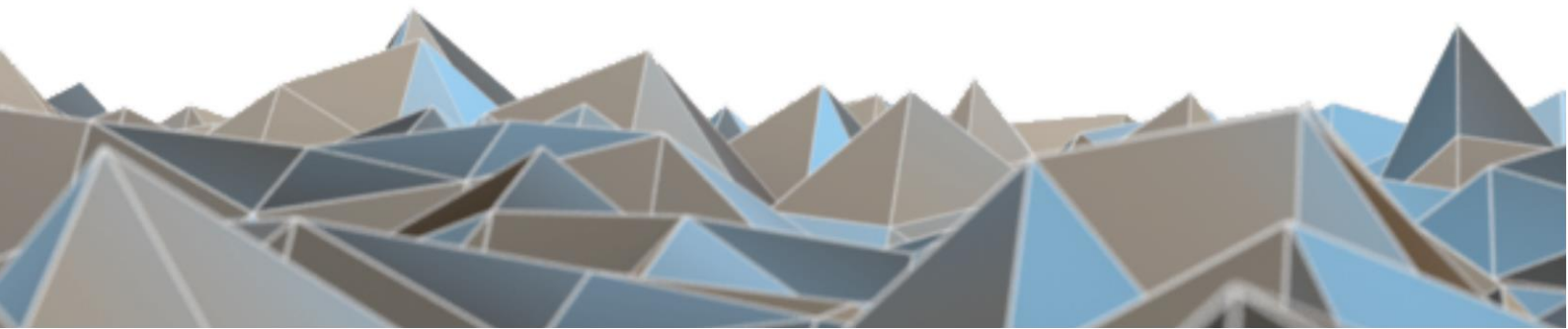


BLUETECHNIX
Embedding Ideas

Argos3D- P100

Firmware Update Guide

Version 1.1





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Argos®^{3D} – P100 – Assembly Guide

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1 General Information

1.1 Symbols Used

This guide makes use of a few symbols and conventions:



Warning

Indicates a situation which, if not avoided, could result in minor or moderate injury and/or property damage or damage to the device.



Caution

Indicates a situation which, if not avoided, may result in minor damage to the device, in malfunction of the device or in data loss.



Note

Notes provide information on special issues related to the device or provide information that will make operation of the device easier.

Procedures

A procedure always starts with an headline

1. The number indicates the step number of a certain procedure you are expected to follow. Steps are numbered sequentially.

This sign ➤ indicates an expected result of your action.

References



This symbol indicates a cross reference to a different chapter of this manual or to an external document.

2 Overview

Updater Software Version	Module	From	To	Comment
1.1	Argos3D-P100	2013.02.26nexus_usb_0x26022013_dist_blu e	20150729_Argos3D-P100_v2.3.0.bin	Distance Offsets, Temp.Comp . Coefficients are adopted
1.1	Argos3D-P100	20140924_Argos3D-P100_v2.0.0.bin	20150729_Argos3D-P100_v2.3.0.bin	Protected Registers, Distance Offsets are adopted
1.2	Argos3D-P100	2013.02.26nexus_usb_0x26022013_dist_blu e	20151028_Argos3D-P100_v2.3.1.bin	Distance Offsets, Temp.Comp . Coefficients are adopted
1.2	Argos3D-P100	20140924_Argos3D-P100_v2.0.0.bin	20151028_Argos3D-P100_v2.3.1.bin	Protected Registers, Distance Offsets are adopted

Table 2-1 Update Overview

3 Setup

The following is needed for updating the Argos3D-P100 firmware:

1. Micro-USB-Cable for connecting the PC,
2. Power Supply (5V @ 2.5A),
3. the Argos3D-P100 to be updated.

Figure 3-1 shows the setup.



Figure 3-1 Argos3D-P100 Firmware Update Setup

4 PC-Software

In the directory with this document is the software application and all of the needed libraries. In order to start the software, double click the *Argos3D-P100_Updater_vX.X.exe*

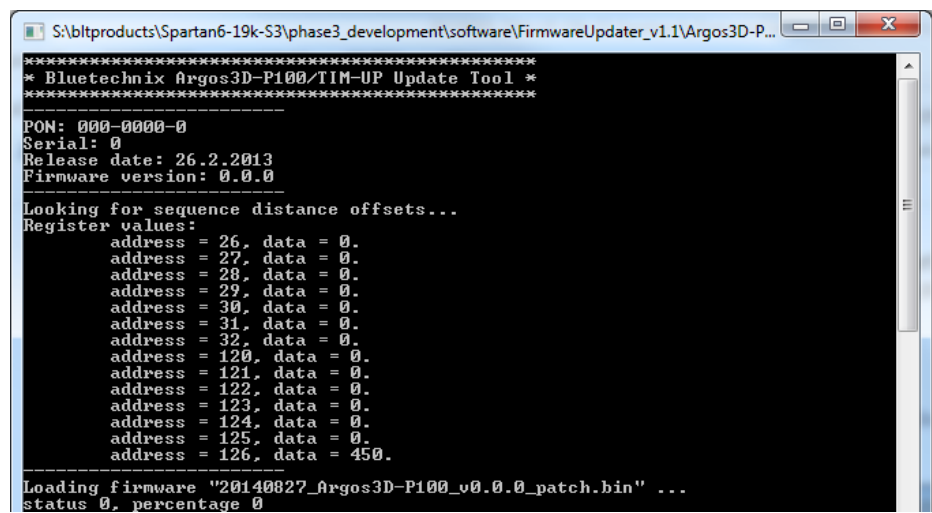
5 Firmware Update

After the setup in chapter 3 was successfully done and the device is powered up, the firmware update can be accomplished as described in the following sections.

5.1 Update from v0.0.0 (Release date 26.02.2013)

Argos3D-P100 Firmware Update

1. Start the PC-Software, wait several seconds.
➤ (Note: The actual PON, serial and register values may differ from the shown values.)



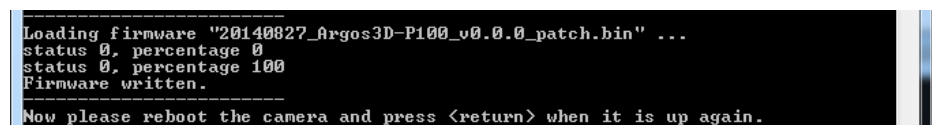
```

*****
* Bluetechnix Argos3D-P100/TIM-UP Update Tool *
*****
PON: 000-0000-0
Serial: 0
Release date: 26.2.2013
Firmware version: 0.0.0
Looking for sequence distance offsets...
Register values:
address = 26, data = 0.
address = 27, data = 0.
address = 28, data = 0.
address = 29, data = 0.
address = 30, data = 0.
address = 31, data = 0.
address = 32, data = 0.
address = 120, data = 0.
address = 121, data = 0.
address = 122, data = 0.
address = 123, data = 0.
address = 124, data = 0.
address = 125, data = 0.
address = 126, data = 450.
Loading firmware "20140827_Argos3D-P100_v0.0.0_patch.bin" ...
status 0, percentage 0

```

Figure 5-1 Update from v0.0.0 Output Step 1

2. Wait several seconds.
➤



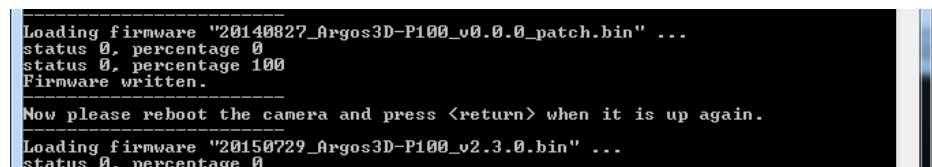
```

Loading firmware "20140827_Argos3D-P100_v0.0.0_patch.bin" ...
status 0, percentage 0
status 0, percentage 100
Firmware written.
Now please reboot the camera and press <return> when it is up again.

```

Figure 5-2 Update from v0.0.0 Output Step 2

3. Disconnect the USB cable and the power supply completely, afterwards reconnect both. Hit <return> approximately 3 seconds after reconnection.
➤



```

Loading firmware "20140827_Argos3D-P100_v0.0.0_patch.bin" ...
status 0, percentage 0
status 0, percentage 100
Firmware written.
Now please reboot the camera and press <return> when it is up again.
Loading firmware "20150729_Argos3D-P100_v2.3.0.bin" ...
status 0, percentage 0

```

Figure 5-3 Update from v0.0.0 Output Step 3

4. Wait several seconds.



```
-----
Loading firmware "20150729_Argos3D-P100_v2.3.0.bin" ...
status 0, percentage 0
status 0, percentage 100
Firmware written.
-----
Now please reboot the camera and press <return> when it is up again (note the bl
inking LEDs).
```

Figure 5-4 Update from v0.0.0 Output Step 4

5. Disconnect the USB cable and the power supply completely, afterwards reconnect both. Hit <return> approximately 3 seconds after reconnection.

► (Note: The output "Data written ..." is replaced by "No register data to be written.", if all register values have been 0 in step 1.

(Note: PON and Serial must be as in step 1.)

(Note: "Release date" and „Firmware version" must match the release date and firmware version of the new firmware.)

```
-----
Now please reboot the camera and press <return> when it is up again (note the bl
inking LEDs).
-----
Data written: address = 26, data = 0.
Data written: address = 27, data = 0.
Data written: address = 28, data = 0.
Data written: address = 29, data = 0.
Data written: address = 30, data = 0.
Data written: address = 31, data = 0.
Data written: address = 32, data = 0.
Data written: address = 120, data = 0.
Data written: address = 121, data = 0.
Data written: address = 122, data = 0.
Data written: address = 123, data = 0.
Data written: address = 124, data = 0.
Data written: address = 125, data = 0.
Data written: address = 126, data = 450.
Protected registers successfully saved.
Register map successfully reset.
-----
PON: 000-0000-0
Serial: 0
Release date: 29.7.2015
Firmware version: 2.3.0
-----
Closing connection...
Firmware update done.
-----
Hit
    q to quit.
    r to repeat.
```

Figure 5-5 Update from v0.0.0 Output Step 5

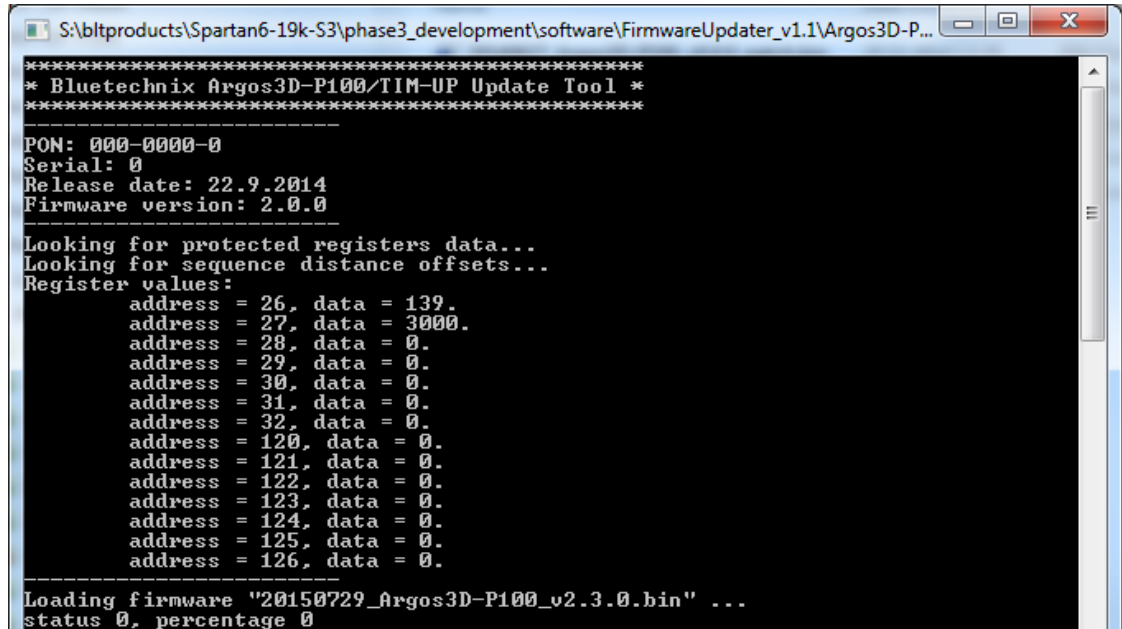
6. At this point the firmware update is done and another Argos3D-P100 can be connected. By entering "r" and <return> the procedure is restarted at step 1.

5.2 Update from v2.0.0 (Release date 22.09.2014)

Argos3D-P100 Firmware Update

1. Start the PC-Software, wait several seconds.

➤ (Note: The actual PON, serial and register values may differ from the shown values.)



```
*****
* Bluetechnix Argos3D-P100/TIM-UP Update Tool *
*****
-----
PON: 000-0000-0
Serial: 0
Release date: 22.9.2014
Firmware version: 2.0.0
-----
Looking for protected registers data...
Looking for sequence distance offsets...
Register values:
address = 26, data = 139.
address = 27, data = 3000.
address = 28, data = 0.
address = 29, data = 0.
address = 30, data = 0.
address = 31, data = 0.
address = 32, data = 0.
address = 120, data = 0.
address = 121, data = 0.
address = 122, data = 0.
address = 123, data = 0.
address = 124, data = 0.
address = 125, data = 0.
address = 126, data = 0.
-----
Loading firmware "20150729_Argos3D-P100_v2.3.0.bin" ...
status 0, percentage 0
```

Figure 5-6 Update from v2.0.0 Output Step 1

2. Wait several seconds.

➤

```
-----
Loading firmware "20150729_Argos3D-P100_v2.3.0.bin" ...
status 0, percentage 0
status 0, percentage 100
Firmware written.
-----
Now please reboot the camera and press <return> when it is up again (note the bl
inking LEDs).
```

Figure 5-7 Update from v2.0.0 Output Step 2

3. Disconnect the USB cable and the power supply completely, afterwards reconnect both. Hit

<return> approximately 3 seconds after reconnection.

► (Note: The output “Data written ...” is replaced by “No register data to be written.”, if all register values have been 0 in step 1.

(Note: PON and Serial must be as in step 1.)

(Note: “Release date” and „Firmware version” must match the release date and firmware version of the new

```
-----
Now please reboot the camera and press <return> when it is up again <note the bl
inking LEDs>.
-----
Data written: address = 26, data = 139.
Data written: address = 27, data = 3000.
Data written: address = 28, data = 0.
Data written: address = 29, data = 0.
Data written: address = 30, data = 0.
Data written: address = 31, data = 0.
Data written: address = 32, data = 0.
Data written: address = 120, data = 0.
Data written: address = 121, data = 0.
Data written: address = 122, data = 0.
Data written: address = 123, data = 0.
Data written: address = 124, data = 0.
Data written: address = 125, data = 0.
Data written: address = 126, data = 0.
Protected registers successfully saved.
Register map successfully reset.
-----
PON: 000-0000-0
Serial: 0
Release date: 29.7.2015
Firmware version: 2.3.0
-----
Closing connection...
Firmware update done.
-----
Hit
    q to quit.
    r to repeat.
```

Figure 5-8 Update from v2.0.0 Output Step 3

firmware.)

4. At this point the firmware update is done and another Argos3D-P100 can be connected. By entering “r” and <return> the procedure is restarted at step 1.

6 Errors

The following sections describe some errors and possible solutions.

6.1 Path to Firmware

Error Message

```
Loading firmware ...  
Error -1  
(File not found.)  
Hit <return> to quit.
```

Error Cause

The firmware file cannot be found.

Error Correction

The firmware file needs to be located in the same directory as the executable of the PC-Software.
Furthermore, the firmware needs to be named like stated in Table 2-1 Update Overview in column **To**.

6.2 Connection Error

Error Message

```
...  
Error: -6  
Repeat (r) or quit (q)?
```

Error Cause

Connection to the device could not be established.

Error Correction

This error can occur if a connection attempt was made while the device is in its boot process. In that case, just repeat to try to connect. In general, it is good to wait approximately 3 seconds after connecting the power supply before connecting via the PC-Software.
Should this error remain constantly, check the used USB-Slot and the USB-cable.

6.3 Not Supported Firmware

Error Message

```
Firmware not supported.  
Hit <return> to quit.
```

Error Cause

The firmware residing on the device before the update differs from the firmware as stated in Table 2-1 Update Overview column **From**.

Error Correction

No update can be performed.

7 Product History

7.1 Document Revision History

Version	Date	Document Revision
1	2015 08 05	First release V1.0 of the Document
1.1	2015 10 29	Support for updater software version 1.2 added
1.2	2015 10 30	Translated to English language

Table 7-1: Revision history