

## BLUETECHNIX Embedding Ideas

# Argos 3D -P310

**Quick Start Guide** 

Version 1







Bluetechnix

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Argos3D-P310 - Quick Start Guide

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#### Information

For further information on technology, delivery terms and conditions and prices please contact Bluetechnix (http://www.bluetechnix.com).

#### Warning

Due to technical requirements components may contain dangerous substances.



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## 1 Unboxing

#### 1.1 In the box

- Argos3D–P310
- CAT5/7 Ethernet Cable
- Quick Start Guide
- Customer Software Package CD
- Power Supply \*

#### \* Note

The power supply's operating temperature is specified from 0 to +40°C. This represents not the effective working temperature of the Argos3D–P310 sensor!

#### 1.2 Opening your Argos3D–P310

To access the connector compartment unscrew the two screws on the Argos3D-P310 front and take off the connector compartment lid.







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#### 1.3 Connecting your Argos3D–P310

#### **1.4 Connector Overview**

- a. Ethernet (RJ45) 10/100Base-T
- b. GPIO: Output 1-2
- c. GPIO: Output 3-4
- d. GPIO: Input 1-2
- e. RS232/485
- f. CAN
- g. Connector for external modulation

- h. Configuration DIP-Switch
- i. Trigger I/O and RS232
- j. Power Supply(Pin#1: +12V to +30V, Pin#2: GND)
- k. BOOT button
- I. RESET button
- m. Micro B USB



Figure 1-2: Argos3D–P310 connectors and interfaces

#### Note

Please follow the next steps in the right order to get your 'Argos3D' up and running correctly.



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#### **1.4.1** Connecting the power supply

To ensure, that your Argos3D–P310 works correctly, connect the 'Argos3D' to a **12-30V DC** power supply using connector **(a)** and wait for approximately 20 seconds until the camera boots up.

#### Pin assignment on the power connector (a): Pin #1: +12V to +30V, Pin#2: GND

#### Note

The power supply connector is protected against wrong polarity but the 'Argos3D' will not work in case you don't use the correct polarity! If the Argos3D–P310 doesn't work please check the power supply polarity first!

#### **1.4.2** Connecting the Ethernet Cable

Plug in the Ethernet cable (b) and connect your Argos3D–P310 to your PC.



Figure 1-3: Argos3D–P310 with connected power supply and Ethernet cable



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## 2 Downloading the Evaluation Software

Please log in to our support website at <u>https://support.bluetechnix.com/</u> and download the Argos3D-P310 customer software package CD. This package also includes the Bluetechnix ToF-Suite V3.2

#### 2.1 Support website





#### Figure 2-1: Download Evaluation Package

#### 2.2 Login Screen

Log In	
Dear valued customer,	
Thank you for purchasir you haven't done so ye password below.	ng Bluetechnix software. Please note that to enter this site you will need to create an account. If t, please <u>sign up here.</u> If you already have an account, you may log in using your email address an
For documentation and	support please click here.
Login Details	
Email addross	
Password	
	Login

Figure 2-2: Login screen



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#### 2.3 Register as new customer

If you don't have a valid customer login you can create a new account at <u>https://support.bluetechnix.com/software/CreateUser.aspx</u>

→ C [ Bl Ne De: Th, fas	https://support.blu uetechnix Sub	etechnix.at/software/CreateUs	er.aspx	숬	0	=	
Bli Ne De Th fas	uetechnix Sub	version Access Man					
Bl Ne De Th fas	uetechnix Sub	version Access Man					
Ne De Th fas			agement System				
De Th fas	w User Information						
	Dear valued customer, Thank you for purchasing from Bluetechnix. Please read the instructions below so we are able to create your account as fast as possible.						
To mu tha rep	be able to download a ltiple accounts for a s at all accounts of a co positories.	software from Bluetechnix' ser ingle company if for example r mpany share the same acces:	vers, you will need to create an account. It is possible to create more than one employee needs to download software. Please note s rights. It is not possible to restrict certain employees to specific				
Thi uni	is system is not live a til you are actually abl	nd even if you see that you a e to access them via SVN.	re allowed to access specific repositories, there is a one hour delay				
Ple	ease note that this is a ssword attempts,)	a monitored system. If abusive are detected, your account w	e actions (trying to access locked repositories, dictionary/brute forc vill be suspended.	e			
Up	on registration, this sy	stem performs basic checks o	on your data and will then inform you of the result.				
If y cus	you purchased our pro stomer number. ser Details	ducts through a distributor ar	nd therefore have no customer number, please click <u>here</u> to request	a			
	First name * 「		1				
	Last name *		]				
	Company name *		]				
	Email address *						
	Phone number						
	Customer number * [						
	Password *		No customer number				
F	Password (verify) * [						
	L		1				
		Register					
I			Deals to the laster of				
			Back to the login pa	ge			

Figure 2-3: Registration form



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#### 2.4 Prepare your Network Interface Card (NIC)

Once you have connected your Argos3D–P310 to a Network Interface Card (NIC) of your PC give this NIC the IP-Address 192.168.0.1 with a subnet mask of 255.255.255.0.

No driver must be installed on your PC!

The Argos3D–P310 uses IP-Address 192.168.0.10 with subnet mask 255.255.255.0.



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## 3 Start using your Argos3D–P310 with 'BltTofSuite'

Browse to the directory where you previously saved the BltTofSuite software zip file. Unzip the software.

Using this software you can simply display the depth image and the amplitude image of the Argos3D–P310. For a detailed introduction to the software, please read the 'Bluetechnix ToF Suite - Quick Start Guide'

Place the Argos3D–P310 on your desk approximately 50 cm in front of you.



Figure 3-1: Sample scenario with Argos3D-P310

Go to the directory where you unzipped the software and start the "*BltTofSuite.exe*". Connect to the Argos3D-P310 using the network configuration listed in 2.4. After the connection is established, you should see something like the screenshot below.



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Bluetechnix ToF Visualizer V3.0.0		
Shortcuts		
Dist	Amp	
Data analysis		<b>2</b> h
Name: Mouse hover: (#, #):	Click/Selection: (#, #):	Sliding over 30 frames: (0)
Dist: Amp:	Current val:	Avg: 0.0 StdDev: 0.0
Display ? Dist Amp	Basic registers	? Get
Channel 0 ÷ 1 ÷	Integration time [Us]	Set Get A BLUETECHNIX
Mirror	Frame rate [Hz]	40 Set Get Embedding Ideas
Color map min 00 0   Color map max 1500 2500	Extended registers	hex ?
	DeviceType -	0xa9c1 🔽 Set Get
Data header information		?
Fps produced [Hz] 40.0	Frame # 98	47 Temp. led [°C] / [°F] 43/75
Fps received [Hz] 40,3	Frames not drawn 27	Temp. main [°C] / [°F] 54/86
Fps displayed [Hz] 40,2		Parse error header/data 0/0

Figure 3-2: BltTofSuite screenshot



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## 4 System Requirements & Support

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An Argos3D–P310 enabled application is required in order to use this 'Argos3D' device.

Connect to a system with:

- Operating System: Microsoft Windows XP/7/Vista
- 32 bit (x68) or 64 bit (x64) processor
- Dual-core 2 GHz or faster CPU
- Dedicated Ethernet port
- 2GByte RAM

#### 4.1 Bluetechnix ToF Suite

Visualizer is a .NET application and needs the **.NET framework 4.0** which is available from Microsoft for all actual Windows versions.

#### 4.2 Support

For answers to common questions, troubleshooting steps and further documentation visit our Bluetechnix support website or using the direct link: <u>https://support.bluetechnix.at/wiki/Argos\_3D\_-\_P310</u>



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## 5 Product History

#### 5.1 Version Information

#### 5.1.1 Argos3D-P310

Version	Release date	Firmware Version
X-Grade	Aug 2014	V0.4.0
X-Grade	Oct 2014	V1.0.0

Table 5.1: Overview Argos3D–P310 product changes

Additional information can be found at http://support.bluetechnix.com

#### 5.2 Anomalies

Version	Date	Description
0.0.0		No anomalies reported yet.

Table 5.2: Product anomalies

Additional information can be found at http://support.bluetechnix.com

#### 5.3 Document Revision History

Version	Date	Document Revision
0	20140807	First draft
1	20141003	Added firmware version 1.0.0

Table 5.3: Revision history

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