

Workshop4 IDE

USER GUIDE

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1. Description

This document describes how to install and configure Workshop4 IDE. The software installer can downloaded from its <u>product page</u> on **4D Systems** website.

It is highly recommended to follow this document prior to the other ones.

2. Requirements

The following are required for the installation of Workshop4:

- Windows PC (Windows XP to Windows 10)
 - Windows 7+ is ideal
- Workshop4 IDE Installer

Note: Some older operating systems such as ME and Vista have not been tested for some time due to availability, however should still work. It is also possible to run Workshop4 under a VM on Linux or Mac, however it is up to the user to set this up.

Listed are tools that are recommended during development:

- uUSB-PA5
- gen4-PA
- 4D Programming Cable

All are available from **4D Systems**. These hardware tools are used to update the PmmC of 4D Labs processors. Additionally, these are used to program the module using a selection of powerful environments offered by Workshop4 IDE.

These environments are Designer, ViSi, ViSi-Genie and Serial. These are discussed in the manual titled:

Workshop4 IDE User Guide

3. Download the Installer

The installer can be downloaded on its <u>product page</u> from **4D Systems** website.

The link to the installer can be found on the Downloads section of the page.

Besides the software installer, useful documentations are also available.

4. Run the Installer

After acquiring a copy of the installer, you should be able to run it simply by double clicking the file.

The installation starts by verifying the contents of the setup package.

InstallAv	vare Wizard X
۲	The InstallAware Wizard is verifying the contents of this setup package. This may take a moment.
	Cancel
	Cancel

Once done, the installer will open Terms and Conditions window.

🔹 4D Workshop 4 IDE - InstallAware Wizard —	\times
License Agreement Please carefully read the following license agreement.	
4D SYSTEMS PTY LTD TERMS AND CONDITIONS	^
Customer Acknowledgement. The Customer acknowledges	
agreement with these Terms and Conditions by order of downloading	
software product from 4D Systems Pty Ltd. 4D Systems Pty Ltd is the	
trading name of 4D Systems Pty Ltd. This contract is between the	
entity named 'the Customer' and 4D Systems Pty. Ltd. All software is	
supplied on these terms and conditions only and no person in the	
employment or otherwise as agent for 4D Systems has any authority	
to supply software on any other terms and conditions or to vary these	¥
\square [<u>a</u> ccept the terms of the license agreement	
InstallAware	
< <u>B</u> ack <u>N</u> ext > Cancel	

Please read the agreement carefully then tick the checkbox and click on **Next** to continue.

🐵 4D Workshop 4 IDE - InstallAware Wizard		—		\times
Destination Folder Select folder where setup will install files.			-	5
Install 4D Workshop 4 IDE to:				
C:\Program Files (x86)\4D Labs\4D Worksho	p 4 IDE	Chan	ge	
Destination Folder Required Disk Space: Remaining Disk Space:		437,3 178,99		
InstallAware	< Back	Next >	Can	icel

The installer will let you select the installation directory. You can skip this step and simply click on Next.

You have an option to install the application for all users or only for the current user, hence yourself. Simple click on **Next** to continue.

🐵 4D Workshop 4 IDE - InstallAware Wizard	—		×
Select Program Folder Select the location where you would like to create new shortcuts.			5
Setup will add program shortcuts to the Program Folder listed below. a new folder name, or accept the suggested name. Click Next to cor		iy type	
Program Folder:			
4D Workshop 4 IDE			
Install this application for:			
< Back Next	t >	Car	ncel

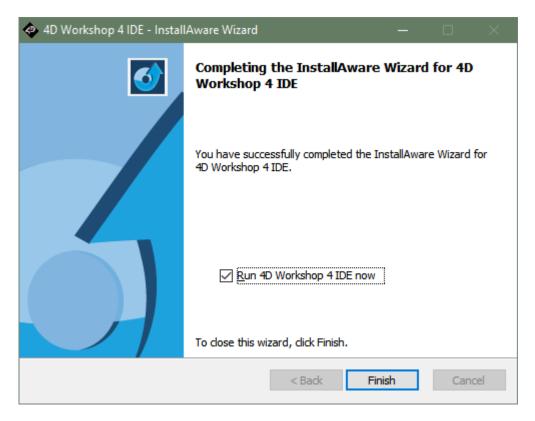
If all is set and done to your liking simply continue from this screen by clicking on **Next**. Otherwise, click on **Back** to change what you've set.

🚸 4D Workshop 4 IDE - InstallAware Wizard 🛛 🚽 🖂 🔀				
3	Completing the InstallAware Wizard for 4D Workshop 4 IDE			
	The InstallAware Wizard is now ready to configure 4D Workshop 4 IDE on this computer.			
	- Click Next to begin configuration			
	- Click Back to change settings			
	- Click Cancel to exit			
	< Back Next > Cancel			

Simply wait for the installation to finish.

4D Worksho	op 4 IDE - InstallAware Wizard — 🛛	×
-	4D Workshop 4 IDE ram features you selected are being configured.	5
1 6	Please wait while the InstallAware Wizard installs 4D Workshop 4 IDE. This may take several minutes.	
	Status: Folder: C:\Program Files (x86)\4D Labs\4D Workshop 4 IDE\SysImages\Buttons\Slider01\Aqua\Scaled\	
InstallAware —	< <u>B</u> ack <u>N</u> ext > Ca	ncel

After the installation, you are given an option to run Workshop4 IDE after closing the installation window. If you wanted to do so, leave a check mark on the checkbox. Click on **Finish.**



Besides the last window from the installer, a text editor session will open a **README.TXT** file. This file contains the change log and known issues.

ERADME.TXT - Notepad —		×
File Edit Format View Help		
Known Issues		
1. On a display with Aero active, the Genie object inspector sometimes has thicker lines around the selected parameter.		
This is a manifestation of a Windows Aero design issue. It may be possible to fix but it will take time.		
2. If 'Crouzet USB adaptor' is inserted Workshop will not start. The adapter does not appear to like 'normal' attempts		
to open it as a comms port. Remove the adapter before starting Workshop.		
3. Windows may produce a 'This program might not have installed correctly' message, the correct answer is 'This program		
installed correctly'. Hopefully this will be fixed in a future release of Windows.		
4. As of version 4.3.0.0 Workshop installs all the serial libraries, and additional support routines, into C:\Program Files (x86)\Arduinc	o	
\libraries.		
If you have already installed these libraries in another location you will need to remove them from the other location.		
Workshop 4 Change log		
Workshop 4.3.0.10		
Fixed Crash when creating text file		
Fixed Incorrect help and autocomplete for some functions when using Gen4 Picaso.		
Added New Picaso Lite displays.		
Workshop 4.3.0.8		
Fixed Paste of strings containing cr/lf results in project that cannot be opened later.		
Changed location of 'hints' to always be to the lower right of the cursor		
Fixed Corrupted screen if opening Magic project from explorer and Magic not licensed.		
Fixed Form and Object names lost if Genie Magic code open and object inspector undocked and docked again.		
Fixed Sounds editor 'reorganising' the order of sounds on entry and during insert.		
Fixed Graphs not produced correctly if non-Solid patterned Lines, Triangles, Rectangles or Panels used		
Fixed Pasting text containing CR/LF into objects causes project to be unopenable later		
Fixed 'Save as Opens Both' option caues crash with certain file types		
Fixed Genie Magic not showing code editing buttons.		
Fixed Genie Spectrum displaying on 'all forms'		
Fixed I/O error 103 with very large font sizes.		
Fixed Vertical scales on other than first firm generated incorrectly		
Fixed Copy/Paste of Winbutton to different project with image loses image		
Fixed Custom digits not being generated properly when digits=10		
Fixed Colour picker allowing non numeric values to be entered causing crash		
Added Arduino generation from within Workshop for Goldelox, Picaso and Diablo Serial		
Added New Diplays		
Added Diablo16 R19 PmmC with new functions		
4Dcompiler 2.8.0.5		

5. Programming Tools Driver Installation

You can find the links of the drivers for each recommended USB to TTL programming solutions on their product pages.

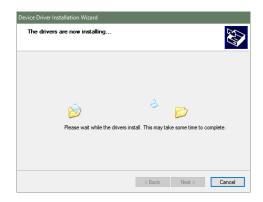
5.1. CP210x VCP Driver

This is used for **4D Programming Cable**, **uUSB-PA5-II** and **gen4-PA**. This driver can be downloaded <u>here</u>.

After downloading successfully, save the zipped file into a folder on your system and unzip the file. Launch the appropriate installer based on your computer's architecture.



Continue with the installation prompts by clicking on **Next**.



The installation should finish shortly.



5.2. FTDI VCP Driver

The installer for this driver can be found <u>here</u>. This driver is used solely for **uUSB-PA** which has been superseded by the **uUSB-PA5-II**.

After downloading, save the zipped file into a folder on your system and unzip the file. Launch the installer afterwards.

💭 FTDI CDM Drivers		Х
	FTDI CDM Drivers Click Extract' to unpack version 2.12.24 of FTDI's Windows driver package and launch the installer.	
	< Back Extract Cancel	

Accept the agreement and continue with the installation prompts by clicking on **Next**.

Device Driver In License Ag	stallation Wizard reement	Ð
×.	To continue, accept the following license agreement. To read the entire agreement, use the scroll bar or press the Page Down Key. IMPORTANT NOTICE: PLEASE READ CAREFULLY BEFORE INSTALLING THE RELEVANT SOFTWARE: This homeon agreement (Licence) is a legal agreement between you (Licencee or you and Lixur Technology Devices International Limited of 2 Seaward Place, Certuino Business Park, Glasgow G41 1HH. Sociated (UK Company Number S105464) (Licenseo row lefor use of driver software provided by the Licensor(Software). BY INSTALLING OR USING THIS SOFTWARE: YOU AGREE TO THE I accept this agreement Save As I accept this agreement Save As	•
	< Back Next > C	ancel

The installation should finish quickly afterwards.

Device Driver Installation Wizard				
	Completing the De Installation Wizard			
	The drivers were successfully in:	stalled on this computer.		
	You can now connect your device to this computer. If your device came with instructions, please read them first.			
	Driver Name	Status		
	✓ FTDI CDM Driver Packa			
	✓ FTDI CDM Driver Packa	Ready to use		
	< <u>B</u> ack	Finish Cancel		

6. MicroSD Card Format

The microSD card shall be FAT16-formatted for processors other than Goldelox which uses RAW mode. It is recommended to use Workshop4's built-in utility, RMPet when formatting and partitioning a microSD card. Particularly when using uSD cards with capacity greater than 4GB.

File	Home	View	Tools	Widgets	Comms	Project
0			רַפֵּין	נ <mark>ו</mark>		
uSD Tester	PmmC PmmC Loader	RMPet	Terminal 9600	Terminal 115200	Touch	4DGL uVGA Lin

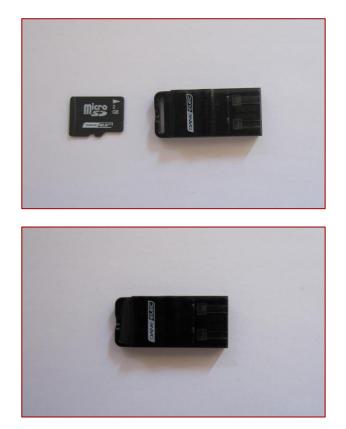
The software provides detailed information on the uSD card's current status an easy way to partition the uSD card while considering the read disturb protection of uSD cards.

Drive: E Drive Information Partitioned Drive Capacity:- Bytes:- 3, Sectors:-	3.68 GB 951,034,368 7,716,864	Partition 1 or drive if not Formatted:- F Capacity:- 3,934,51 Freespace:- 3,934,50 Cluster Size:-	FAT 32 19,296	partitio	he drive you wish to alter the on information of To remove the partition table > Click 'Delete Partition Table' To create a partition table > Select the size you want allocated to the FAT16 Partition
Delete Partition 1 Partition table # Type 1 FAT32(C) 2 Empty(0)	Se First 8,192	ctors Size 7,700,992 (3.67 GB) 0. (0 Butes)			 Click Create partition To format the drive as FAT16 Select the desired cluster size or leave as the default (maximum) size Click Format To Resize a partition table Delete the partition table as
2 Empty(0) 0 0 (0 Bytes) Create Partition Table Note: 1st partition starts at sector 16384 to ensure read disturb protection mechanisms will operate Cluster size:- 64K Note: Best performance is obtained when using the maximum possible cluster size. Format Warning! No data will be preserved during this operation.					 Delete the partition table as per the above Create a partition table with the new size Note: You do not need to partition or format cards which are going to be used only in RAW mode, on or Goldelox products.

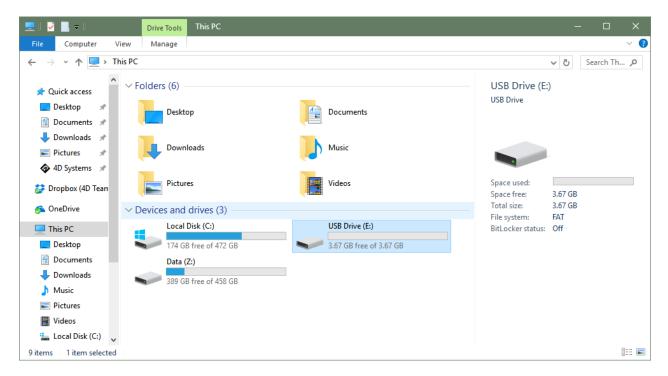
For a more detailed instruction on how to use this utility, please refer to 4D Systems' application note titled:

General Partitioning a micro-SD into FAT and RAW Components

Alternatively, you can simply format your microSD card on your windows PC. Simply mount your microSD card using a USB adaptor and plug the adaptor into the USB port of your PC.



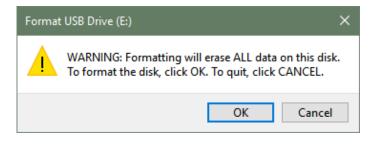
Afterwards, check if it mounted successfully. Here, it is shown as drive E:.



Right Click on it then select **Format.** A window similar to the one below should open.

Format USB Drive (E:) X	
Capacity: 3.67 GB \checkmark	
File system FAT ~	Select FAT file system
Allocation unit size Default allocation size	Keep Default allocation size
Restore device defaults	
Volume label	Optionally, define a name
Format options	Keep Quick Format checked
Start Close	Then click Start

A windows prompts for confirmation. Click **OK** to proceed.



Wait until formatting completes.



Congratulations! You've successfully setup everything you need with Workshop4 IDE

7. Revision History

Revision	Revision Content	Revision Date
2.0	Updated Formatting and Contents	01/05/2017
S 2.0	Updated hyperlinks, 4D Systems	25/07/2017

8. Legal Notice

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