

How to install a driver for a SummaCut SE



Introduction

This document describes how to install the software necessary to drive the a SummaCut SE series roll-cutter.

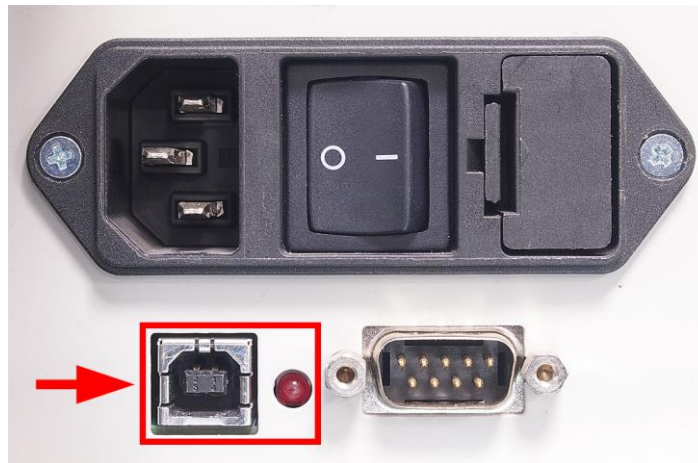
A **design software** is needed to create a design. Popular design programs are CorelDRAW, Adobe Illustrator, Inkscape, ... Design software is not supplied from Summa.

The contours in the job created with one of those design software's need to be sent to the cutter. Before the contours can be sent, the contours need to be converted in commands understood by the cutter (DM/PL commands). This is accomplished by the software **WinPlot**. WinPlot then needs to send the commands to the cutter using a communication port. Depending on the communication interfaces available, and/or the interface used to drive the cutter, different **driver software** needs to be installed.

Transferring the job from the design software to the cutting software can be done by means of a **plug-in**.









Driver software

USB Interface



Firmware revision

To be able to use the USB interface with a computer running Windows 10 the firmware has to be on revision 16. This can be checked from the front panel:


- Press  .
'VELOCITY' will appear on the LCD.
- Press  .
'SYSTEM SETUP' will be displayed.
- Press  .
'CONFIDENCE' will be shown.
- Use  or  to scroll through the menu until 'ROM REVISION' is reached.
- Press  .
The firmware version and revision will be displayed, e.g. "MD-9910 rev.012" indicating the firmware version MD9910, and revision 12.
- Press  .
The date the firmware was released is displayed.
- Press  two times to exit the configuration menu.

USB Driver install

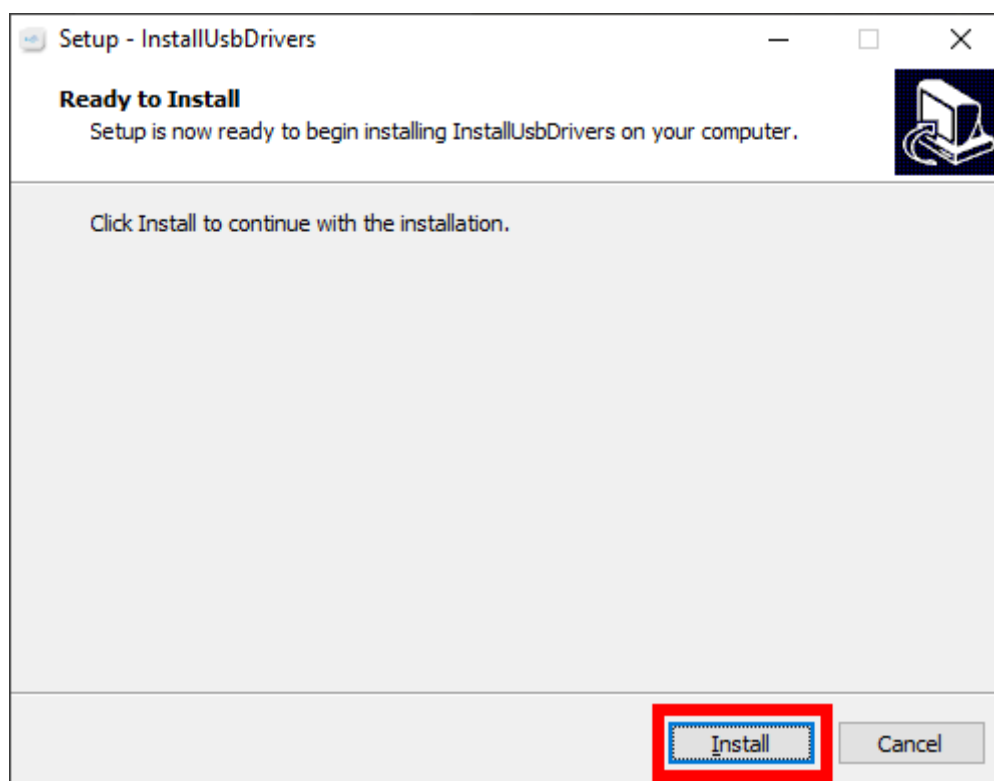
To be able to use the USB interface, a USB driver needs to be installed. This driver is available from the support page of the Summa website:

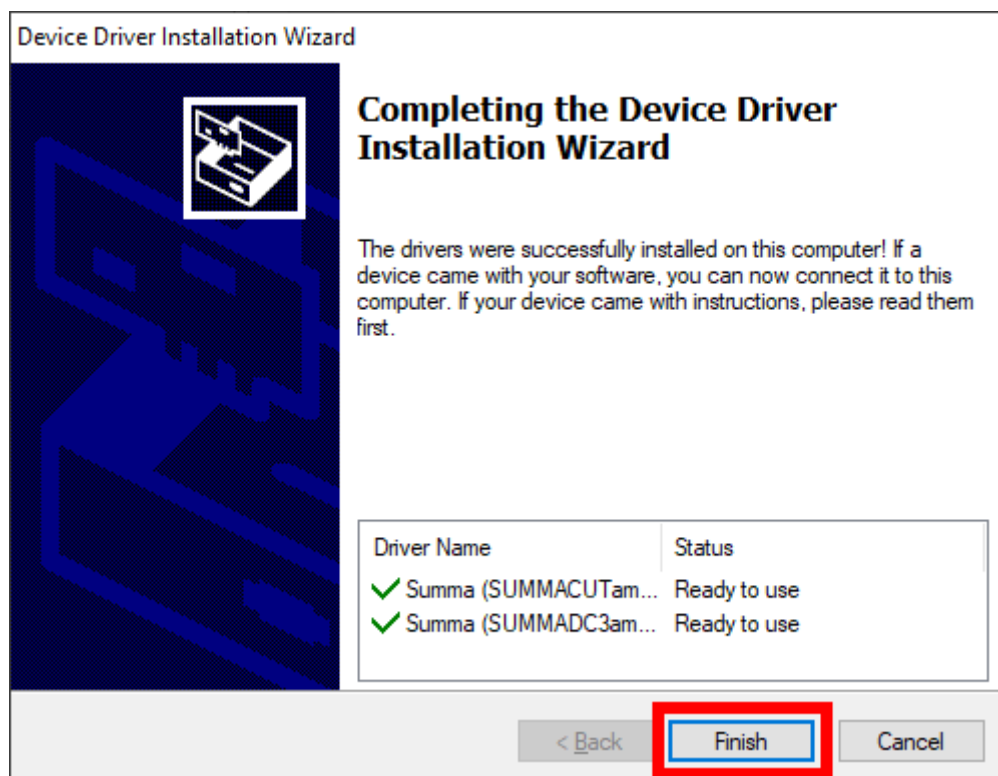
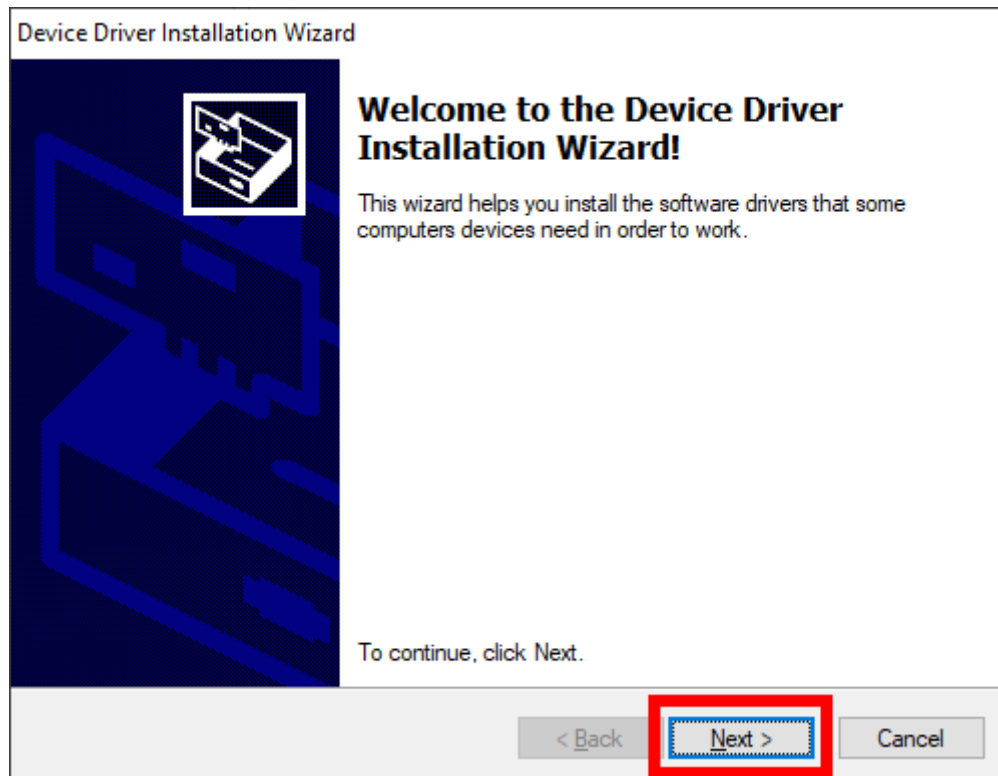
<https://www.summa.com/en/support/software-firmware/>

Vinyl Cutters

USB Drivers	Description	Version	Date
 USB Cutter driver	USB driver for Windows 7, 8, 8.1, 10, 11	10.0 & 7.0	18-06-2020
 OPOS-CAM USB driver	USB Camera driver for Windows 7, 8, 8.1, 10, 11	1.0.136	08-05-2014

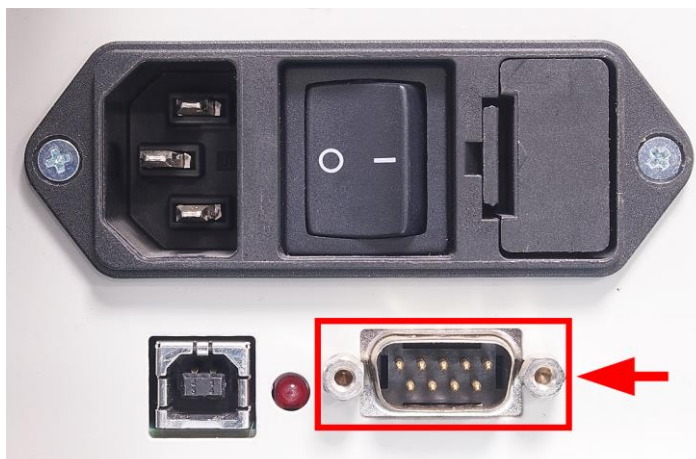
Download the USB driver. Double click on the downloaded driver to start the install process. Follow the install wizard to complete the install.





In the software driving the machine, the communication port used to send the data to the cutter needs to be set to the USB port.

Serial Interface



When the cutter is connected using the serial interface, you do not need a driver, you have to set the correct settings in the cutting software.

Using a serial to USB adapter



In case the cutter is connected to the computer using a USB-RS232 adapter, the USB driver for this adapter needs to be installed (and not the one from Summa), and in the software driving the cutter, the serial port this adapter is emulating should be selected. You will also need to use the serial cable delivered with the machine (reference 423-183) to connect the adapter to the cutter.

Serial interface cable wiring



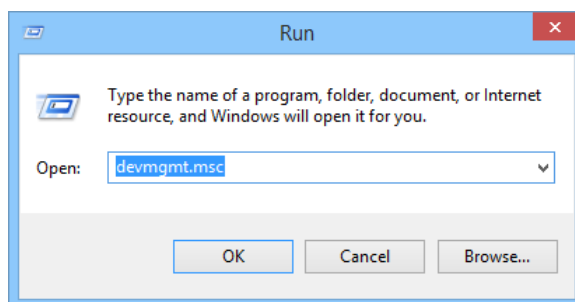
The serial interface cable reference 423-183 is wired as in below table:

Connector A DB9F		Color		Connector B DB9F
3	_____	Black	_____	2
2	_____	Brown	_____	3
5	_____	Red	_____	5
8	_____	Orange	_____	4
7	_____	Yellow	_____	6
4	_____	Green	_____	8
6	_____	Bleu	_____	7
Shell	_____	Drain	_____	Shell

Procedure to determine serial port emulation of the adapter

Press and hold , press .

Enter the text “devmgmt.msc” in the dialog box:



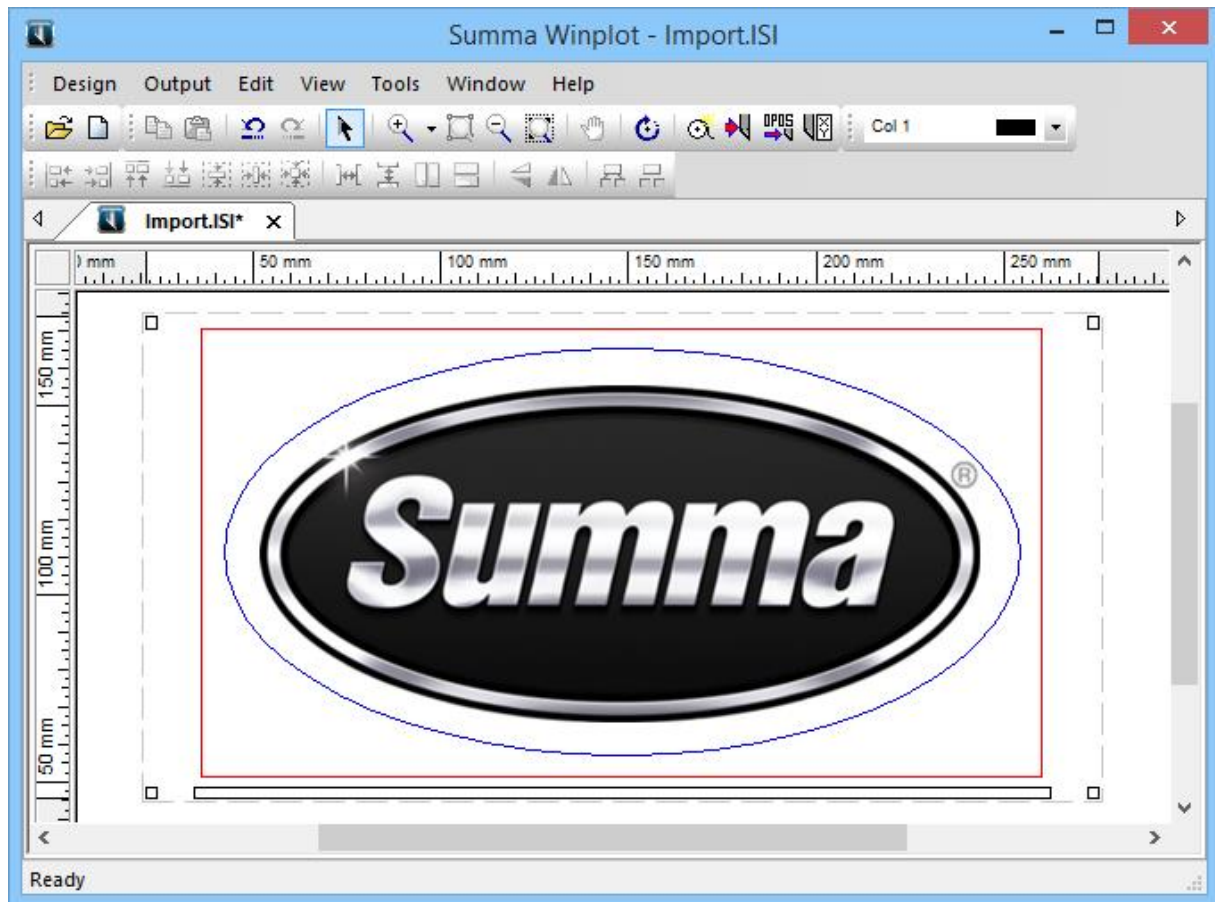
This opens the Device Manager.

Open the branch “Ports (COM & LPT)”.

Check for the entry representing the USB to RS232 adapter. This entry displays the communication port this adapter is emulating. This communication port needs to be used in the application driving the machine.



WinPlot




From Windows Vista on, we work with a program called *WinPlot*.

This program can import EPS, AI and PDF files and then send data to the cutter. Most design programs are able to generate files in one of those formats.

We do not work with a 'Windows based printer driver'.





The program *WinPlot* can be downloaded from the Summa support website:

<https://www.summa.com/en/support/software-firmware/>

 WinPlot	Cutting program that imports EPS, AI and PDF files: positioning, rotating and scaling possibilities. Supports Vista/7/8/10 32-bit & 64-bit, and is compatible with all Summa brand cutters.	11.8.0.0	08-05-2019
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This program works as a 'cutter driver', and converts the design created and exported in APS, AI or PDF format in commands understood by the cutter.

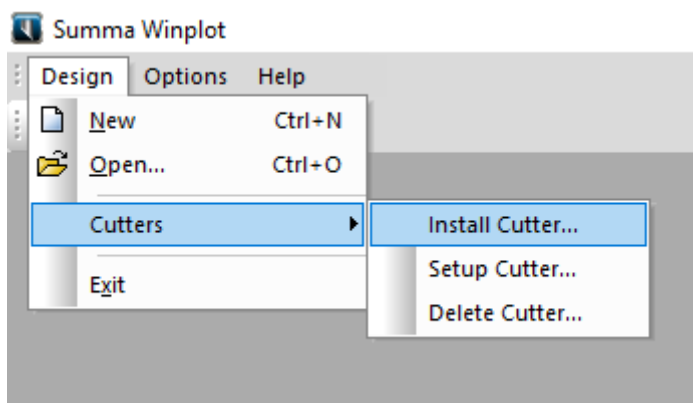
The manual with the detailed instruction how to use WinPlot can be downloaded from the manuals section of the support page on the Summa website.

WinPlot	Version	Date
 English	07	31-03-2016
 Français	07	31-03-2016
 Deutsch	07	31-03-2016
 Nederlands	07	31-03-2016

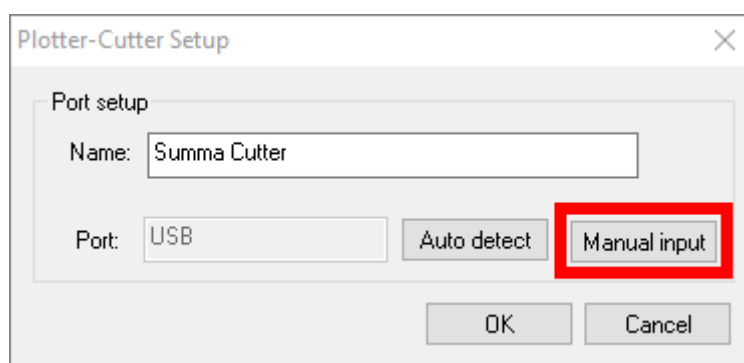
Configuration

To configure *WinPlot* for use of a serial port with a Summa Cutter do the following:

- Start *WinPlot* with no document, or close any open document.
- Click [Design] – [Cutters] – [Install Cutter].
This option will not be available when there is a document open in WinPlot.



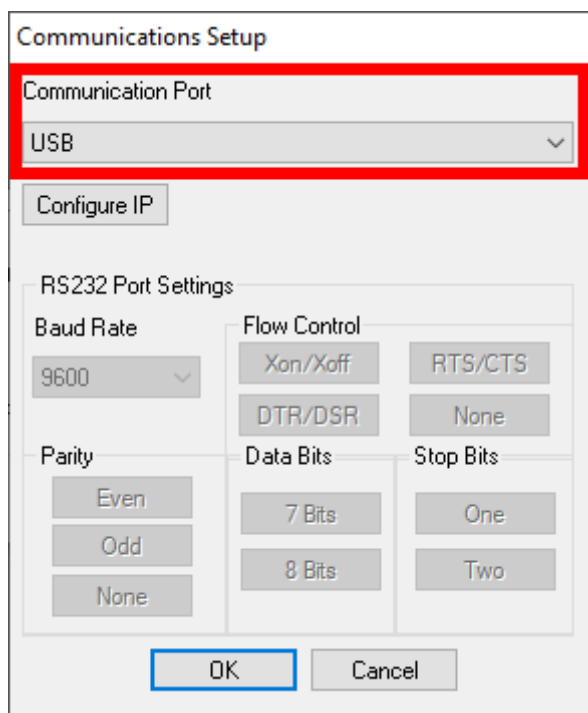
- In the *Plotter-Cutter Setup* dialog click [Manual input].



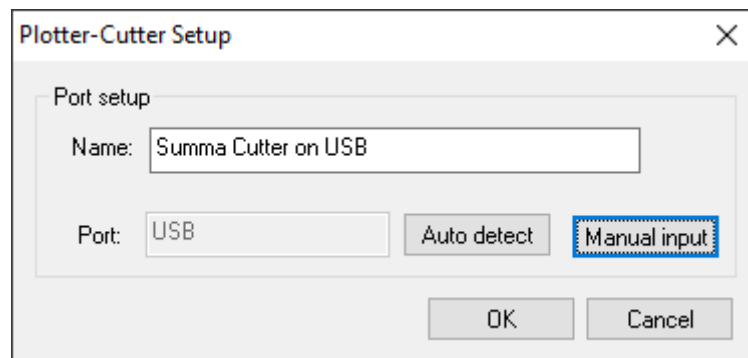
USB Port

To configure *WinPlot* for use of the USB interface with a Summa Cutter do the following:

- In the *Communication Setup* dialog set the options as in the picture below: in the Communication Port drop down box, select USB.



- Clicking the [OK] button returns you to the *Plotter-Cutter Setup* dialog. There you can optionally change the name of the installed cutter.

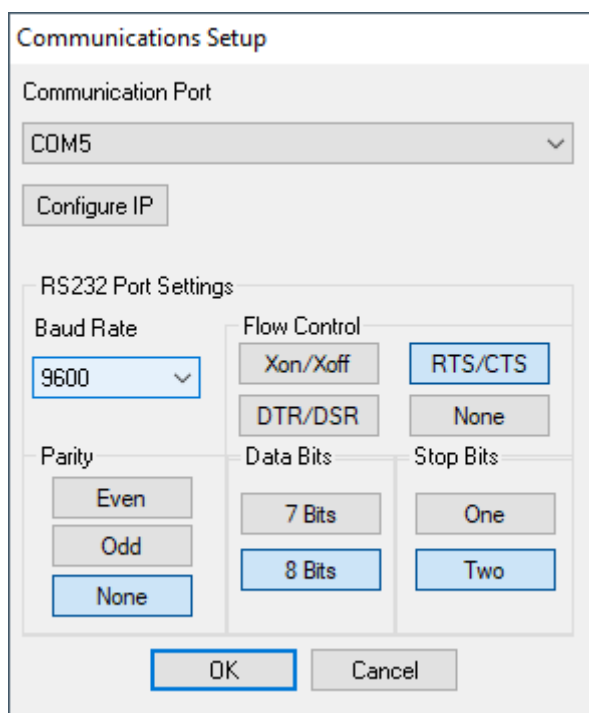


- Click [OK] again to finalize the configuration.

Serial Port

To configure *WinPlot* for use of a serial port with a Summa Cutter do the following:

- In the *Communication Setup* dialog set the options as in the picture below.
Select the serial port to which the cutter is connected to, e.g. COM5, from the Communication Port drop down box.
By default, Summa Cutters are configured as follows:
Baudrate : 9600
Parity : None
Data Bits : 8
Stop Bits : Two
Flow Control : RTS/CTS
The serial port parameters (RS232 Port Settings) should match the configuration of the cutter.



Communications Setup

Communication Port
COM5

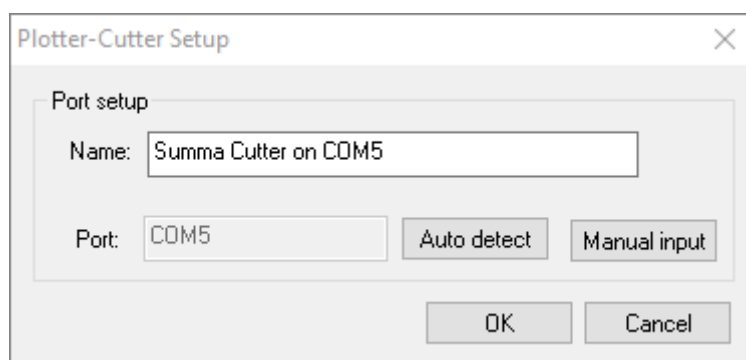
Configure IP

RS232 Port Settings

Baud Rate 9600	Flow Control Xon/Xoff DTR/DSR RTS/CTS None
Parity Even Odd None	Data Bits 7 Bits 8 Bits Stop Bits One Two

OK Cancel

- Clicking the [OK] button returns you to the *Plotter-Cutter Setup* dialog. There you can optionally change the name of the installed cutter.
























- Click [OK] again to finalize the configuration.

Serial Port Configuration of the Cutter

It is not necessary to load media in the cutter to change the parameters.

Use the below steps to change the serial port configuration of the cutter:

- Power on the cutter.
- Press  .
'VELOCITY' will appear on the LCD.
- Press  .
'SYSTEM SETUP' will appear on the LCD.
- Press  .
'CONFIDENCE' will appear on the LCD.
- Use  to scroll through the menu until 'BAUDRATE' is reached.
- Press  .
*'*9600' will now appear on the LCD. Note the value may be different depending on the current speed the baud rate was set.*
- Press  or  to change the baud rate to the desired speed. Available options are: 2400, 4800, 9600, 19200, 38400, 57600.
- Press  to confirm.
An '' will appear in front of the value indicating the new active value.*

- Press  .
- Press  to set the parity parameter.
'PARITY' will appear on the LCD.
- Press  .
*"*NONE" will appear on the LCD. Note this may be different depending on the previously selected parity setting.*
- Press  or  to change the parity setting. Available options are: NONE, MARK, EVEN, ODD.
- Press  to confirm.
An "" will appear in front of the value indicating the new active value.*
- Press  .
- Press  to set the handshake parameter.
'RTS/DTR' will appear on the LCD.
- Press  .
*"*TOGGLE" will appear on the LCD. Note this may be different depending on the previously selected handshake setting.*
- Press  or  to change the handshake setting. Available options are: TOGGLE, ALWAYS HIGH.
- Press  to confirm.
An "" will appear in front of the value indicating the new active value.*
- Press  twice to return to set the machine back online.

Available serial communication parameters:


- BAUD RATE: 2400, 4800, *9600, 19200, 38400
- PARITY: *NONE, MARK, EVEN, ODD
- RTS/DTS: *TOGGLE, HIGH

The * indicates the default values.

Plug-ins

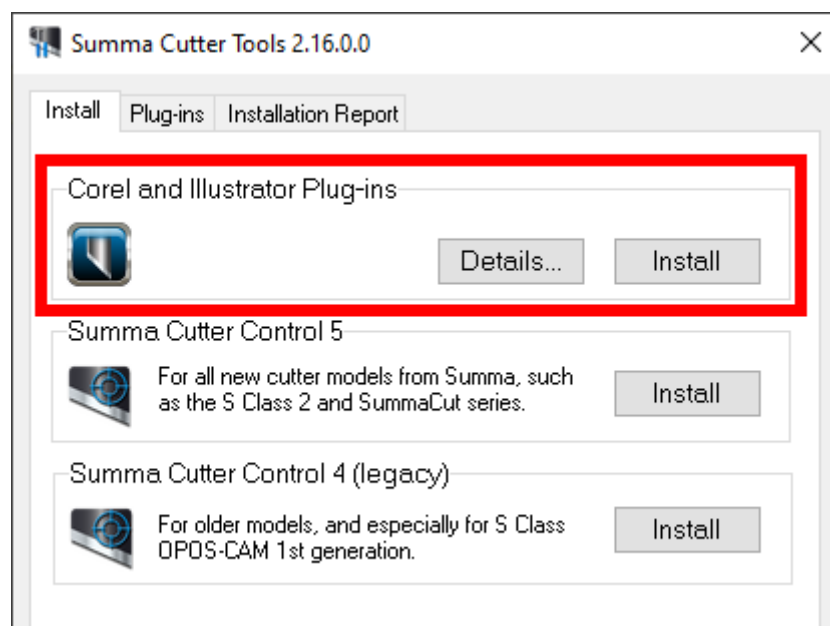
There exists also a *plug-in* for Corel 12->2020 and Illustrator CS1->CC->2021

The *plug-in* can be installed from the software tool *Summa Cutter Tools*, which is available from the support page on the Summa website.

 Summa Cutter Tools	Software bundle including all cutting related tools including: > Summa Cutter Control 4.20.0.0 Software interface for adjusting parameters on Summa legacy cutter, including speed, mode, pressure, blade offset and much more. Supports Vista/Win 7/Win 8/10 > Plug-in for CorelDRAW 12 - 2022 and Adobe Illustrator CS - CC 2022 Plug-in for CorelDRAW & Illustrator to use with Winplot 6.6 or higher.	2.18	21-03-2022
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These gets rid of the hassle to export a job from the designing software, and importing the job in WinPlot.


Close the design software, then click on the [Install] button to have the plug-ins installed for the supported versions of CorelDRAW and/or Adobe Illustrator.




Keep in mind not all versions of CorelDRAW support plug-ins: only the Graphics Suite supports plug-ins:

CorelDRAW®

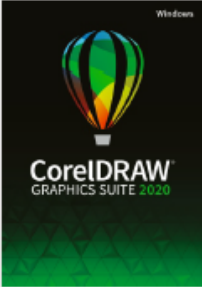
Product Family Comparison



For occasional graphics users and creative consumers



For graphics hobbyists and home businesses



For graphics professionals in small to large businesses

Main Applications			Most Popular
CorelDRAW® 2020	✓* CorelDRAW Essentials 2020	✓* CorelDRAW Standard 2020	✓
Corel PHOTO-PAINT™ 2020		✓* Corel PHOTO-PAINT Standard 2020	✓
Corel Font Manager™ 2020			✓
CAPTURE™			✓
CorelDRAW.app™			✓
Corel AfterShot™ 3 HDR			✓
Key Features & Tools (Highlights)			
Bitmap-to-vector tracing	(✓) Quick Trace (one-click tracing)	✓ PowerTRACE™	✓ PowerTRACE™ (Advanced with AI technology)
Bevel tool, Shadow tool, Spiral, Smooth and Smear tool		✓	✓
Clone Tool, Artistic Media		✓	✓
Alignment guides, Guidelines docker		✓	✓
Symmetry drawing mode, Block Shadow tool, Impact tool, Pointillizer, PhotoCocktail			✓
Object styles, Color styles, Color harmonies			✓
Professional Print options (CMYK features, Composite, Color separations, Postscript, Prepress tabs, large print preview)			✓
Advanced page layout: left & right master pages, custom placeholder text			✓
Enhanced Color management, Color proofing option, spot color support on output			✓
Collaboration tools**			✓
Automation support (VSTA, VBA), Macro Manager			✓

Once the plug-in is installed, the design can be sent to WinPlot from the toolbar (CorelDRAW) or from the File submenu (Adobe Illustrator):

CorelDRAW

Four options are available:

- Add OPOS registration marks around the design
- Send the complete design to WinPlot
- Send only the selected objects to WinPlot
- Export the design to the AI format

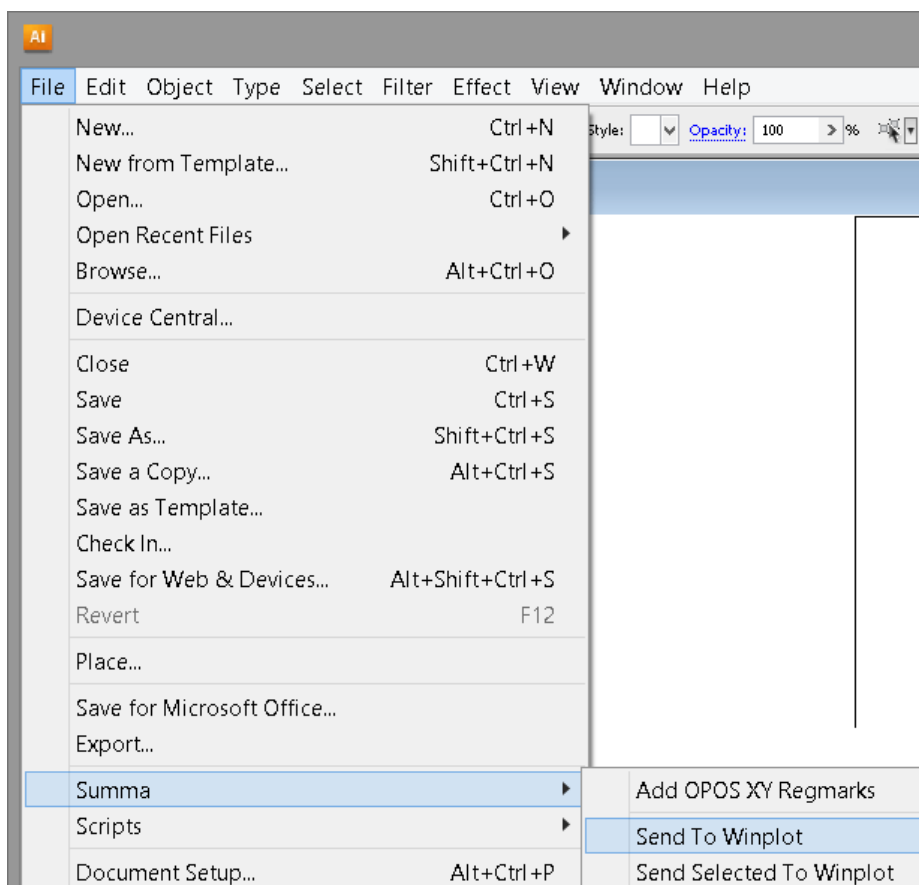
This option can be used when WinPlot is not installed on the computer used to create the design.



Adobe Illustrator

Three options are available:

- Add OPOS registration marks around the design
- Send the complete design to WinPlot
- Send only the selected objects to WinPlot

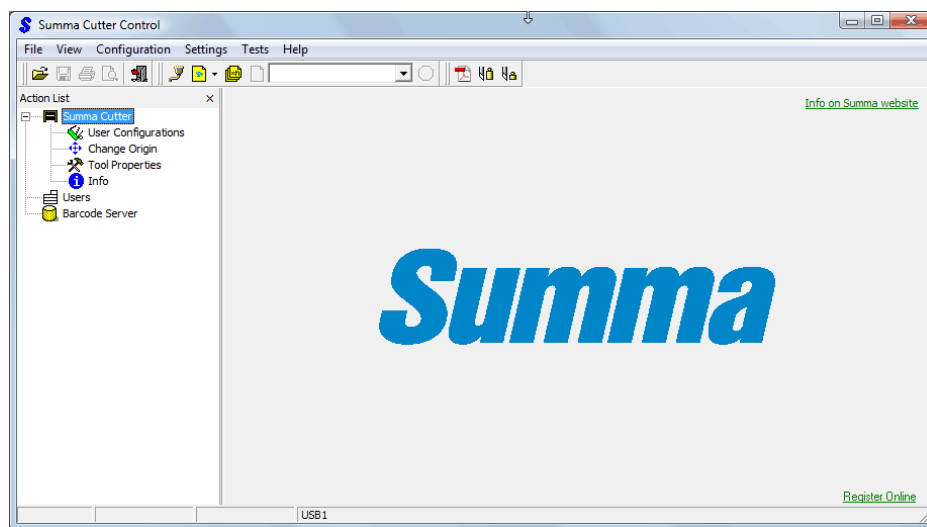


Summa Cutter Control 4


The Summa Cutter Control program basically has the same functions as the control panel.

The program Summa Cutter Control 4 (Legacy) can be used to:

- Control all parameters of the cutter
- Perform tests
- Send files to the cutter
- Upgrade the firmware of the cutter
- Work as a barcode server



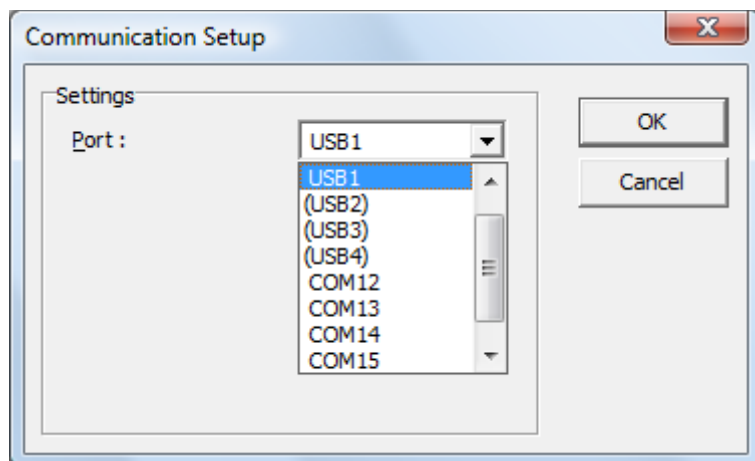
Summa Cutter Control can be installed from the software tool *Summa Cutter Tools*, which is available from the support page on the Summa website.

 Summa Cutter Tools	<p>Software bundle including all cutting related tools including:</p> <ul style="list-style-type: none"> ➤ Summa Cutter Control 4.20.0.0 Software interface for adjusting parameters on Summa legacy cutter, including speed, mode, pressure, blade offset and much more. Supports Vista/Win 7/Win 8/10. ➤ Plug-in for CorelDRAW 12 - 2022 and Adobe Illustrator CS - CC 2022 Plug-in for CorelDRAW & Illustrator to use with Winplot 6.6 or higher. 	<p>2.18</p>	<p>21-03-2022</p>
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Before the program can be used, the communication interface needs to be selected and configured to match the connection type (USB or RS232) and communication parameters.

The cutter has to be connected to the computer, and switched on.

Click [Configuration] – [Port], and select the port the cutter is connected to:



The USB ports between brackets are not active, indicating there is no cutter using this port.

Revised June 15, 2022