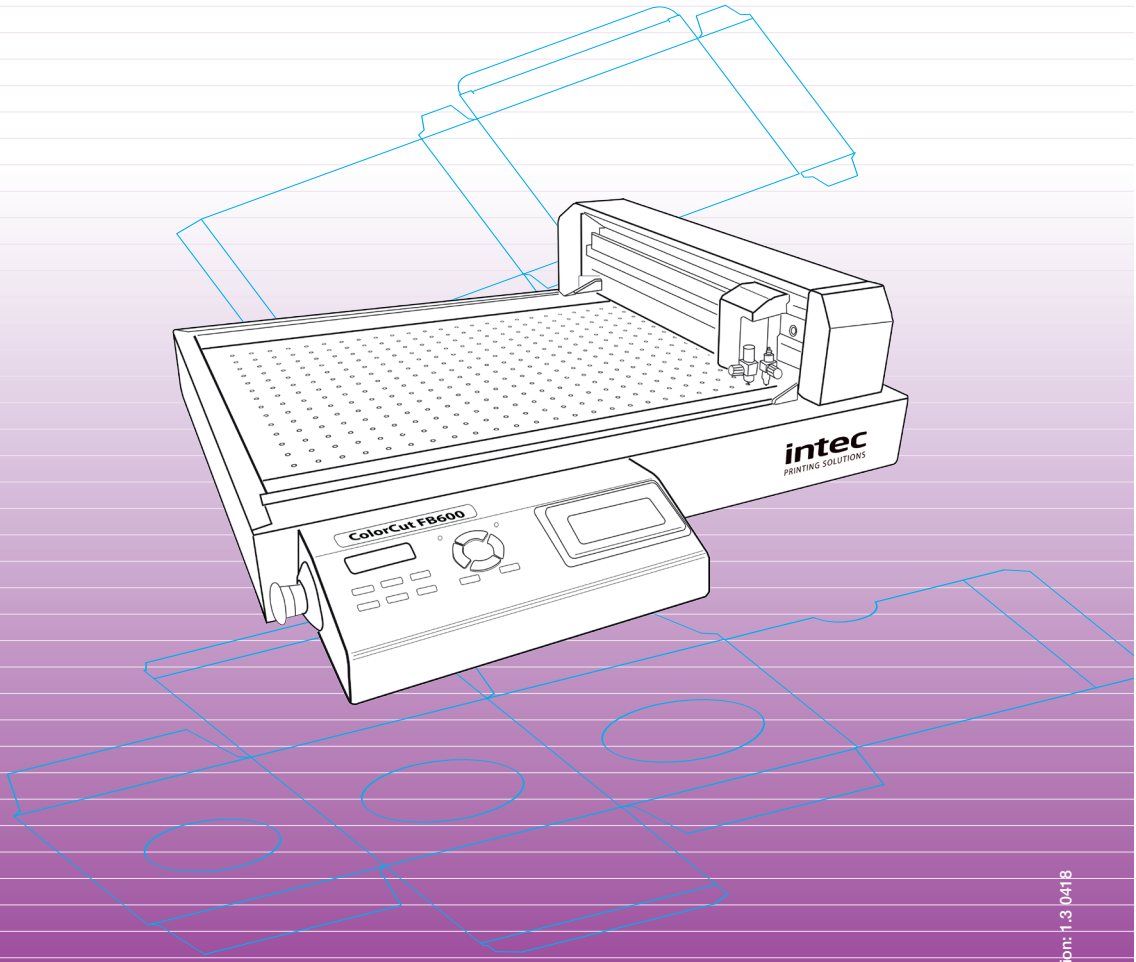
intec PRINTING SOLUTIONS | colorCUT

Dual Tool, Flatbed Digital Die-Cutters

ColorCut FB520 / FB600 / FB900 and FB1060 Series

Installation Guide - English



Revision: 1.3 0418

Contents

Chapter 1

1.1 INTRODUCTION

INTEC COLORCUT FLATBED - DIGITAL CUTTING SOLUTION

The Intec ColorCut FB600/FB900 and FB1060 series of flatbed cutters are designed primarily to card and packaging materials effectively. It is also used for cutting, vinyl, thin film, adhesive labels and magnetic media.

There are also additional functions for die cutting sheet material, using perforated and dashed cut features, and the use of additional tools such as creasing which enables folding on suitable card materials without the fibres on the board breaking when the materials is folded.

The ColorCut solution consists of 2 parts:

Hardware

An Intec Digital Cutting Engine

An Integrated Optical Sensor for automatic registration mark sensing

A Stand (option for FB520)

A Vacuum Pump to provide suction for vacuum table.

A Vacuum connection hose

and

Software

The ColorCut Pro cutter control software is a professional direct plug-in for Illustrator or CorelDRAW and enables you cut lines or paths created from Adobe Illustrator or CorelDRAW.

Your files must contain four reference marks, known as SMARTmarks (described later in this manual).

The optical sensor integrated into your ColorCut hardware detects the SMARTmark in a fraction of a second and adapts the cut path to any variations in the origin, scale or skew distortion of the print.

The software runs with the operating systems Windows 7, 8, 10.

Most of old Windows XP computers can be used, but not all of them.

Please use this guide to set up your ColorCut and to assist you in designing and cutting your files.

1.2 SPECIFICATIONS

INTEC COLORCUT FLATBED - SPECIFICATIONS

The Intec ColorCut FB520/FB600/FB900 and FB1060 series of flatbed cutters vary primarily by the size of the cutting area.

Model	Maximum Media Area	Effective Contour Cutting Area	Stand
ColorCut FB520	350 x 520mm	330 x 488mm	Optional
ColorCut FB600	470 x 630mm	450 x 600mm	Yes
ColorCut FB900	620 x 930mm	600 x 900mm	Yes
ColorCut FB1060	780 x 1080mm	760 x 1060mm	Yes

In addition to the primary difference in workspace area and the cutting area. The Intec ColorCut FB520/FB600/FB900 and FB1060 flatbed cutters have different vacuum control systems to provide media hold-down during cutting.

Model	Air Pump Vacuum Power	Vacuum Control	Accoustic Cover
ColorCut FB520	400W	400W Fixed	Optional
ColorCut FB600	750W	Variable dependant on media: 375W, 450W, 525W, 600W, 675W and 750W max	Yes
ColorCut FB900	750W		Yes
ColorCut FB1060	750W		Yes

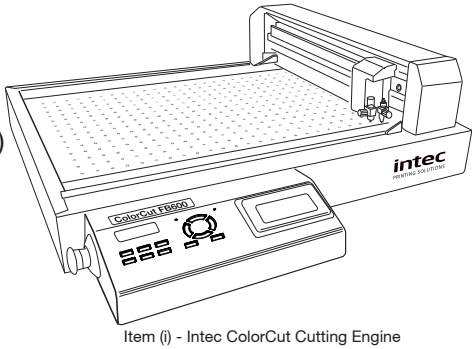
The variable power can be used to reduce vacuum for lighter thinner materials to avoid distortion of the material, and the higher power can be used for difficult or laminated materials that may not normally lay flat due to a low level of curl.

1.3 UNPACKING Contents of the ColorCut (Overview)

Your Intec ColorCut is packed in 1 box.

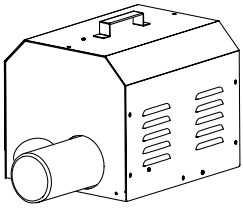
The box contains :

The Intec ColorCut Cutting Engine. (Item (i))
The ColorCut Vacuum Pump (ii)
The Vacuum Pump Connector Hose (iii)
The Accessories box (iv)
And the ColorCut Stand (v)



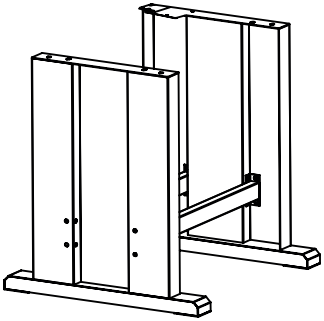
Item (i) - Intec ColorCut Cutting Engine

The ColorCut Vacuum Pump (and Vacuum Hose) provide the vacuum to hold down your media on the cutting table.



Item (ii) - ColorCut Vacuum Pump (and Acoustic Silencer)

The Stand* provides a perfect ergonomic working height for your cutter.



Item (iii) - Intec ColorCut Stand (FB520, FB600, FB900, FB1060)

The final items found inside the accessories box, include the power cable and USB cable plus a disk containing your ColorCut Pro Software (and Dongle), and the SignMaster Pro Software (Optional). A Blade Holder, a selection of Cutting Blades, a Calibration Pen Tool and a Creasing Blade.

Item (iv) - Manuals, USB & Power Cables

*Optional on FB520

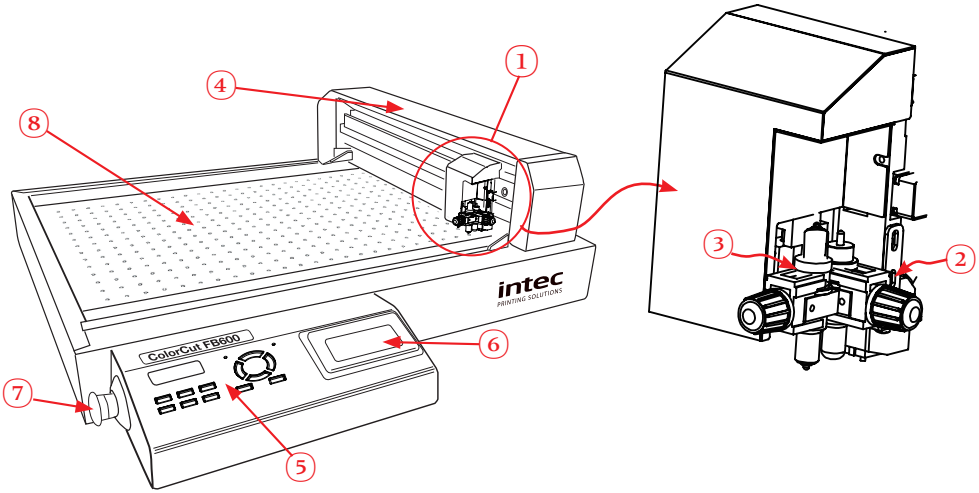
1.4 UNPACKING Contents of ColorCut Flatbed (Detailed)

The Intec ColorCut FB600/FB900 and FB1060 series of flatbed cutters are designed primarily to cut and crease card and packaging materials effectively.

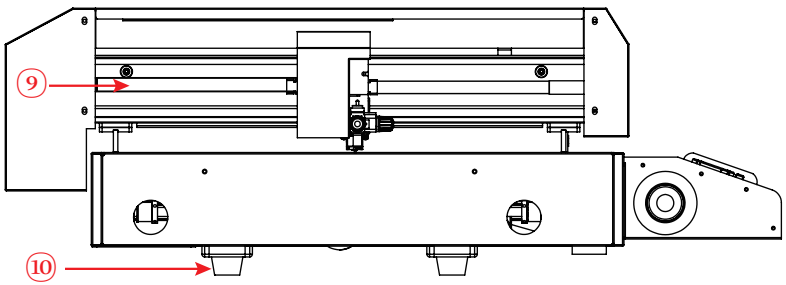
Item	Qty	Description / Purpose
Intec Flatbed Cutter	1	Main Cutting Engine
Vacuum Air Pump	1	Air fan that provides Vacuum
Hose	1	Connects Vacuum Pump to Cutting Engine
Hose Connector*	2	Connects Hose to Vacuum Pump and to cutting engine.(FB520 Only)
Software (ColorCut Pro)	1	ColorCut Pro cutting control software - Direct plug-in for Illustrator or CorelDRAW
Software (SignMaster Pro)	1	(Optional) Stand-alone package for artwork design and cutting line creation
Blade Holder	1	Used for loading the blades in Tool Holder 1 on the cutting head.
Pen Tool	1	Used in the calibration process for aligning the sensor to the cutting position
Creasing Tool	1	Ball Bearing-based tool to crease the media without breaking the fibres
Blades	3	1 x 30^{O} Blade (Yellow) 1 x 45^{O} Blade (Red) 1 x 60^{O} Blade (Blue)
Circlip Knife	6	3 x 45^{O} Circlip Knife for thicker media (Red) 3 x 60^{O} Circlip Knife for thicker media (Blue)
Self Healing Cutting Mat (Green)	1	Mainly used for cutting (Labels and Swing tickets)
Felt Creasing & Cutting Mat	1	Used to improve creasing effect - Typically packaging - (cutting and creasing)
USB Cable	1	For connection to the computer
Silencer for Vacuum pump	1	Reduce noise for Vacuum pump FB600 /FB900/ FB060 (only)
Power Cable	2*	1 for Digital Cutting Engine *1 for Vacuum Pump (Not required FB520 /220v)
M3 Six Angle Wrench		Backup tool
M2 Six Angle Wrench		Used to adjust the height of the creasing ball
10A Fuse		/

Please use this guide to set up your ColorCut and to assist you in designing and cutting your files.

1.5 IDENTIFYING KEY FEATURES of your ColorCut Flatbed

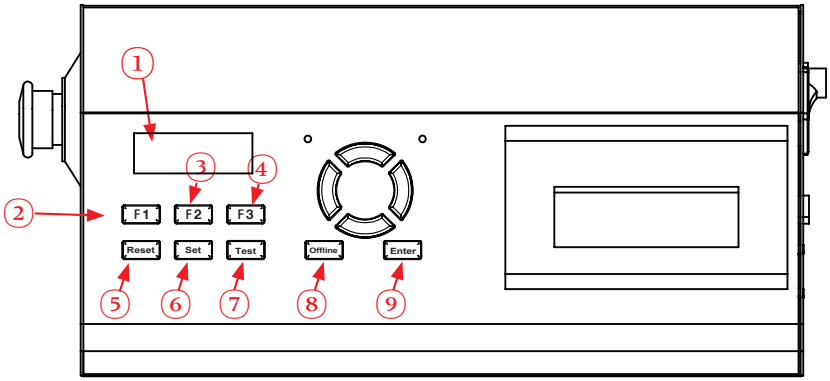


1. Tool Carriage..... Drives the cutter blade/pen/creasing tool forward/backward.
2. Tool Holder 1..... Holds the cutter blade tool and drives it up/down.
3. Tool Holder 2..... Holds the pen/creasing tool and drives it up/down
4. Beam..... Holds the tool carriage; moves left/right.
5. Control Panel..... Used to set and use the cutter's various functions.
6. Tool Recess .....Recess for holding tools
7. Emergency Switch... In case of emergency, turn off the power.
8. Cutting Area..... Vacuum bed and Contour Cutting Area.



9. Belt..... Drives the tool carriage forwards and backwards
10. Stabilisation feet.....Footing for machine when not using the stand.

1.6 THE CONTROL PANEL (Overview of Navigation)



① **LED Display** Displays information and menu parameters.

② **F1** Toggles the vacuum pump function on/off

③ **F2** (⌂) HOME - Returns back to the main screen.

(When you scroll through, or set the parameters. Pressing the (F2) key leaves the menu list and returns to the default screen.
(Default Home screen displays: Speed2 and Force2 - (The Creasing Tool)

④ **F3** Toggles the sensor light.(Carriage sensor LED, scan mark).

⑤ **Reset** Pressing the Reset Key, will reset your ColorCut engine and the carriage will return to the mechanical origin,the vacuum will be turned off and the LED display will show the default home screen (Speed2 and Force2).

⑥ **Set** **Set**tings - Scrolls through the machine settings/parameters.

SPEED2 / FORCE2 - Controls the speed and force of a tool holder 2.
(Generally used to hold the creasing tool).

SPEED1 / FORCE1 - Control the speed and force of a tool holder 1.
(Generally holds the blade for cutting).

CAR X/Y - Sets the distance between tool holder 1 and tool holder 2.
(After initial setting, this does not generally change*).

Work Mode - Cut Plotter - Enables both tool holder 1 and tool holder 2.
- Draw Plotter - Enables tool holder 1 (blade/cut) only.

BaudRate - 38400, (Computer and Cutter communication setting)
Typically you do not need to change this parameter.

XP/YP - Scaling for the X direction and Y direction.
Set at the factory, and typically does not need to be changed.

Clear Parm - Restores ALL factory default settings.

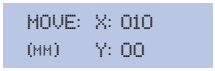
VER - Displays the current installed version of firmware.

⑦ **Test** Performs a test cut to check whether the currently selected cutting conditions are compatible with the media loaded. Tool 2 creases a square at 45° rotation, then Tool 1 cuts a square around it.

THE CONTROL PANEL (Overview of Navigation)

⑧ **Offline**

When the Default Home screen is displayed (Speed2/Force2), the ***OFFLINE*** key takes the cutter offline and enables you to move the carriage and beam. When the cutter is offline, the DISPLAY will show ->

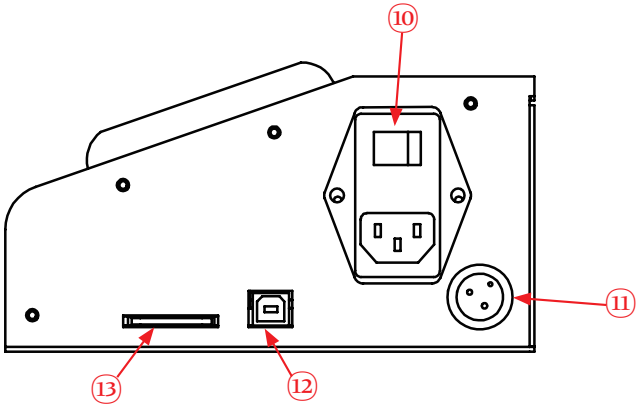


Only in this mode can you move the carriage - remember after moving the carriage, if you want to define the new carriage position as the new ORIGIN, you must press ENTER twice.

(But also note: While the cutter is OFFLINE, you can NOT send a job)

⑨ **Enter**

After setting a function or condition at the control panel, press the [ENTER] key to register your setting

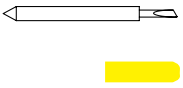
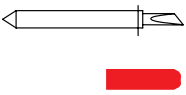
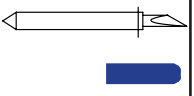
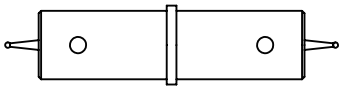
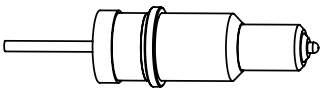


⑩ **Power switch**	Turns the ColorCut Digital Cutter ON/OFF.
⑪ **Air pump jack**	The control cable connector for the Vacuum pump.
⑫ **USB interface connector**	Used to connect the cutter to a computer via the USB interface.
⑬ **SDcard interface connector**	At present this feature is unavailable.

Chapter 2

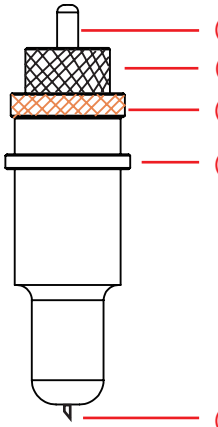
2.1 CUTTER BLADES (An overview of Blade types)

Your cutter comes with a selection of blades. The blades are packed in a foam packing material, in addition to this there is a colored rubber protective cap. The yellow caps indicate 30°, red caps indicate a 45° blade while the blue caps are 60° blades. Be careful when handling the blade as the cutting end is very sharp. Blades are selected for different applications, a guide is shown below:

Name	Image	Angle	Blade Diameter	Features and Application
Blade		30°	1mm	For Film, very soft material, thin label material.
		45°	1mm	Typically for labels, stickers, and thin paper/card,
		60°	1mm	For thick media. The sharply angled tip provides a longer cutting edge. Suitable for cutting media from 0.5 to 1.5 mm thick.*
Cir-clip Knife		45°	1.4mm	Most packing board up to 500 micron. Cir-clip provides better pressure and improves blade direction changes on dense media. Suitable for cutting media from 0.25 to 0.5 mm thick
		60°	1.4mm	For cutting high-intensity reflective film, magnetic media or thick media. The sharply angled tip provides a longer cutting edge. Suitable for cutting media from 0.5 to 1.5 mm thick.* For cutting sandblast rubber.
Creasing Blade				Bearing-based creasing ball, double-ended for different width creasing. Suitable for media ≤500g Cardboard, corrugated paper
Pen Holder				Used at setup, to calibrate the offset between the Optical Registration Mark sensor (Red light) and the centre of Tool1 (The blade).

* Maximum cutting depth is defined by the machine type rather than the blade (which is 600 microns)

2.2 THE BLADE HOLDER - an introduction



1 Pin
2 Blade Depth Adjustment
3 Lock
4 Flange
5 Exposed Blade

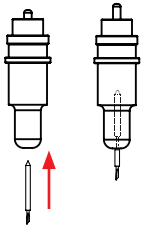
When handling cutter blades, be careful to avoid cutting your fingers or other parts of your body.

2.3 Replacing the blade

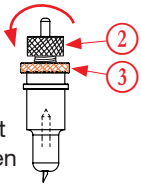
The blade is a consumable item, and you'll always get the best quality cut with a newer blade. Please replace with a new blade when the cut quality reduces.

For Standard blades
(Without the cir-clip)

1. Push the blade into the bottom of the blade holder.



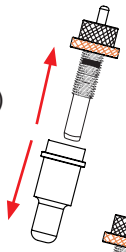
2. Adjust the amount of exposed (visible) blade tip to a suitable length by rotating (2) the "Adjustment depth knob" and then tighten the lock (3).



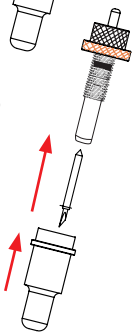
3. Press the push-pin (1) to remove the blade from the blade holder when replacing blade

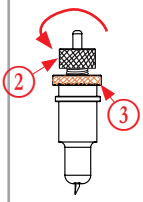
For Cir-Clip Blades

1. Unscrew the lower (cover) part of the blade holder.



2. Insert the Cir-clip blade into the inner blade holder. Then replace the outer cover of the blade holder;





3. Adjust the amount of exposed (visible) blade tip to a suitable length by rotating (2) the "Adjustment depth knob" and then tighten the lock (3).

4. Replace the blade by following the steps above (Note you can not push the pin as you do with standard blades as the cir-clip prevents the blade being removed.

2.4 BLADE LENGTH - (Adjustment)

Blade Depth is a major factor in how well the machine cuts and, and along with the downforce/pressure, determines how cleanly the material cuts and easy or difficult it will be to weed the material. Too much blade depth is as bad as not enough.

TOP TIP

If you have enough blade sticking out to clearly see and feel the tip, it's probably too far out. Most new Intec Flatbed cutter owners improperly install the blade with too much of it protruding from the holder. Set it so that you can barely see the tip.

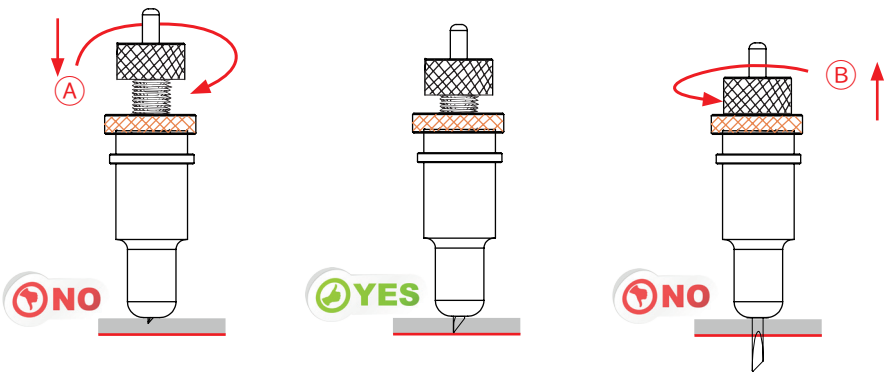
Then take the blade holder and manually drag it across a sheet of card or label that you wish to cut, making a box pattern or square.

Card: Lay a scrap piece of material on a hard work surface with 2 sheets of copier paper underneath, (not on a nice table in case you cut through paper underneath). With the blade holder in your hand press down and cut a circle in the material. Press down using a moderate amount of force while you cut the circle.
You will not be able to cut through the second sheet of paper when the blade depth is set correctly. If it cuts through the second sheet then the depth is too much and you need to retract the blade.

Labels: Lay a scrap piece of material on a hard work surface (not on a nice table in case you cut through the backing). With the blade holder in your hand press down and cut a circle in the material. Press down using a moderate amount of force while you cut the circle.
Adjust the blade length so that only traces of the blade appear on the backing sheet when a cutting test is performed. You will not be able to cut through the material backing when the blade depth is set correctly. If it cuts through the backing then the depth is too much and you need to retract the blade.

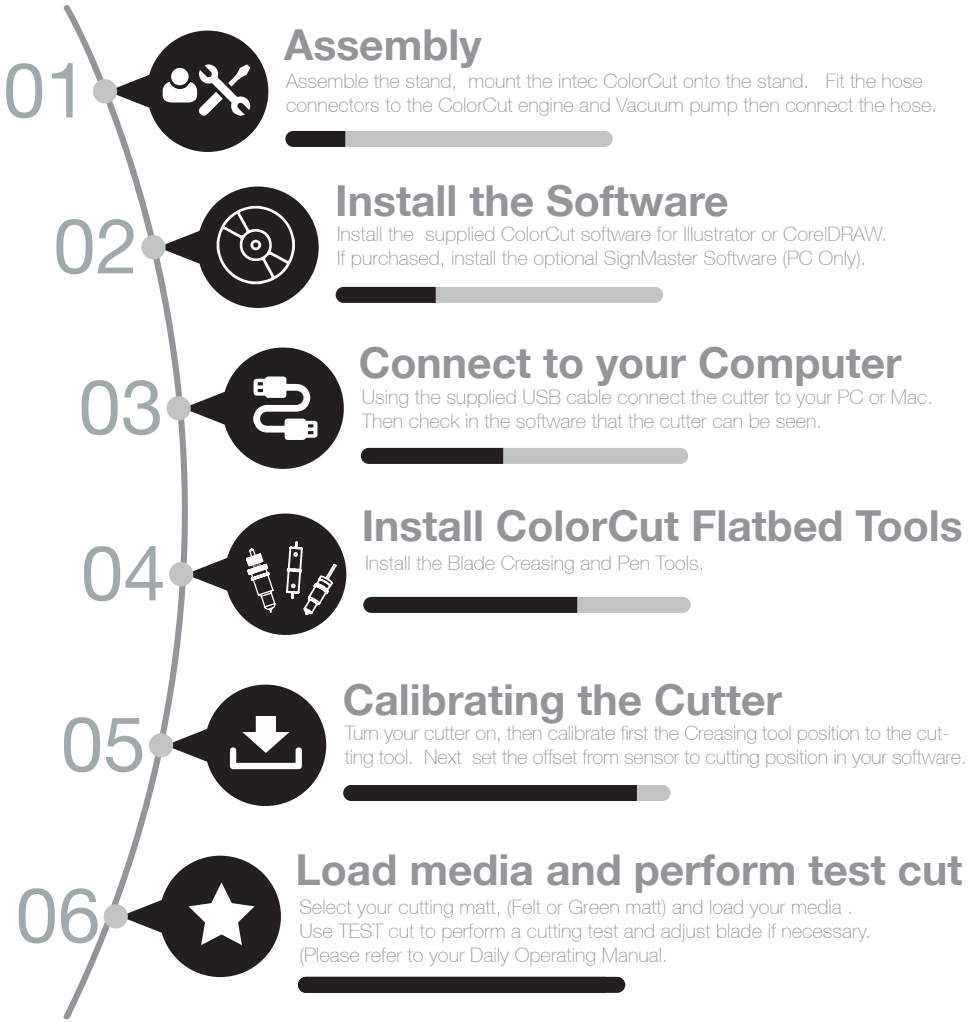
The blade length is adjusted by turning the blade adjustment knob.

- To extend the cutter blade, turn the knob in the Ⓐ direction.
- To retract the cutter blade, turn the knob in the Ⓑ direction.



INSTALLATION overview

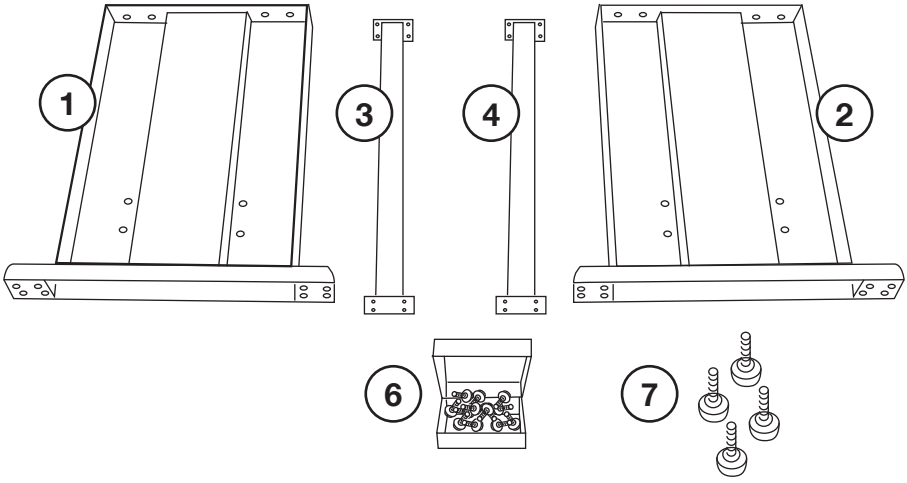
INSTALLATION START



INSTALLATION FINISHED

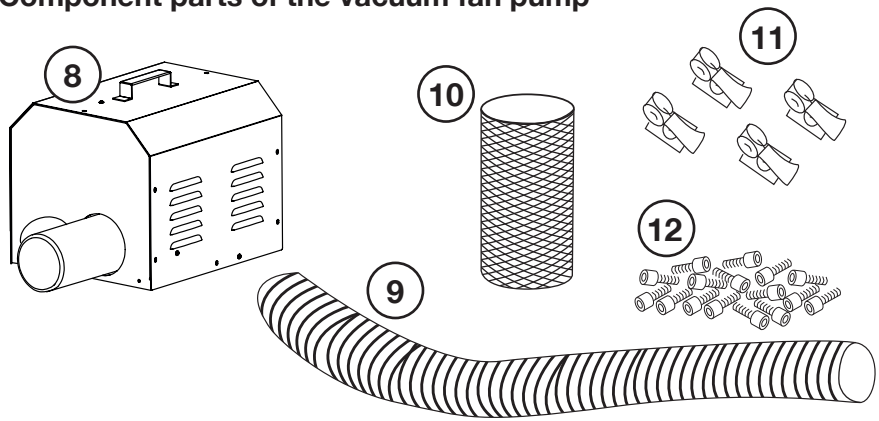
3.2 Assembling the Stand, Cutter and Vacuum Pump

Component parts of the stand



1. Left side panel/leg	**3.** Front cross member	**6.** Castors x 4 free-wheel
2. Right side panel/leg	**4.** Rear cross member	**7.** Bolt, washers, fixings

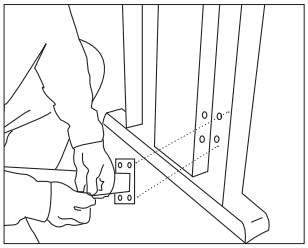
Component parts of the vacuum fan pump



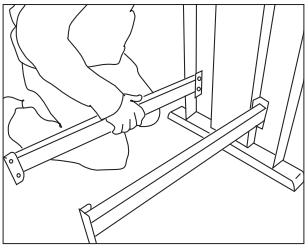
8. Acoustic pump	**10.** Acoustic	**12.** Silver Allen bolts x 16
9. Flexible hose	**11.** Castors x 4 locked-wheel	

3.3 Assembly of the Stand and Connecting the Vacuum Pump

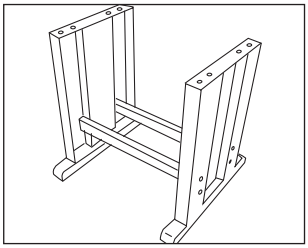
Assembly of stand



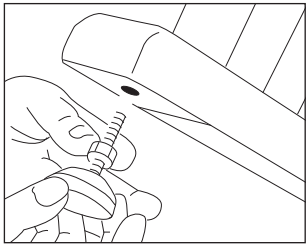
Locate one side panel, both cross members and Bolts



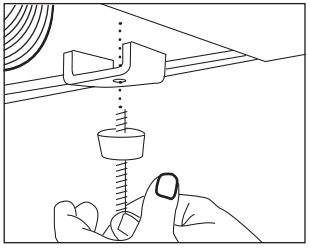
Using the black bolts to attach the cross members.



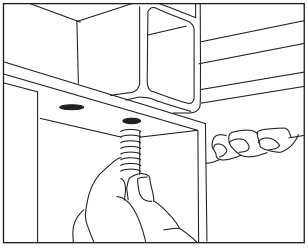
Then attach the other side panel using same method.



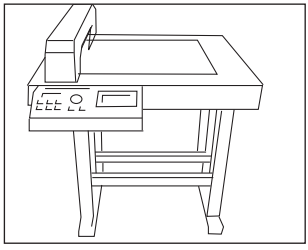
Screw the stand feet into the bottom of side panels



Remove the Rubber feet from the base of Flatbed.

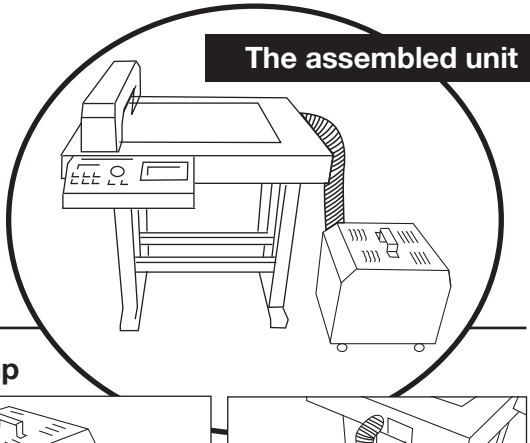


Locate the Flatbed on the stand and fix with bolts.

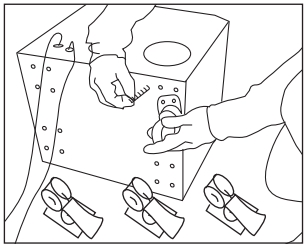


Tighten all bolts with Allen key supplied.

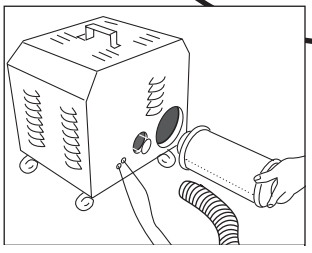
The assembled unit



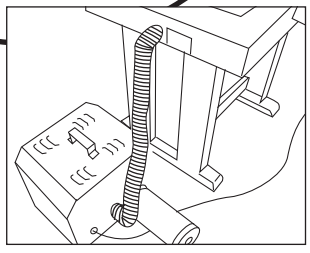
Assembly of vacuum fan/pump



Locate the casters and attach to base of Air Pump



Attach Silencer
(Not FB520 models)



Connect vacuum hose
(FB520 use supplied connectors)

3.4.1 Software Installation - Intec ColorCut Pro

ColorCut Pro Overview

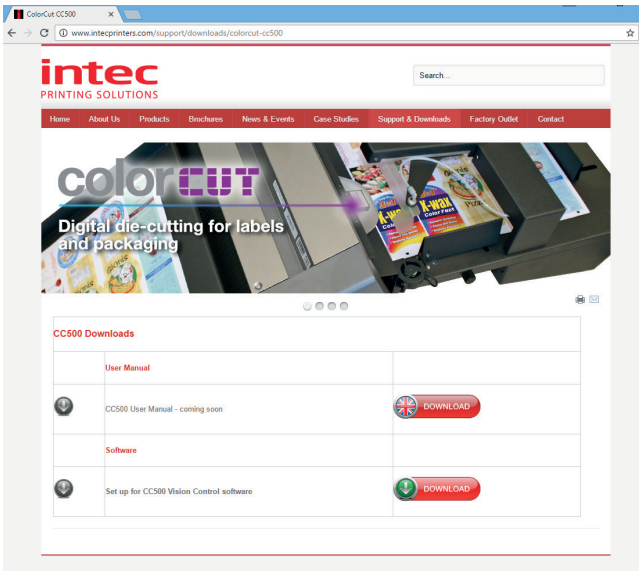
The Intec ColorCut Pro software is a professional cutting package that works directly from Illustrator or CorelDRAW. The plug-in requires Adobe Illustrator® or CorelDRAW® to be installed, and does not currently work with any other vector imaging programs.

Intec ColorCut Pro™ gives you the ability to send projects you've designed in Adobe Illustrator® or CorelDRAW® straight to your Intec ColorCut Flatbed. The plug-in allows experienced Illustrator® or CorelDRAW® users to skip SignMaster® enabling a much faster entry into using your Intec ColorCut with no need to learn a new application.

Intec ColorCut Pro Software for your Intec ColorCut Flatbed is supplied on the included CD, however it may also be downloaded from our website http://www.intecprinters.com/support/downloads/colorcut-FB_Series

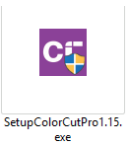
Please note:

If you do not own Illustrator or CorelDRAW, the optional SignMaster Pro program can be purchased which will handle all your design needs and provide digital die-cutting file management. (See 3.4.2 for Installation of SignMaster Pro).



ColorCut Pro Installation

Please run the installation program:
SetupColorCutPro.exe



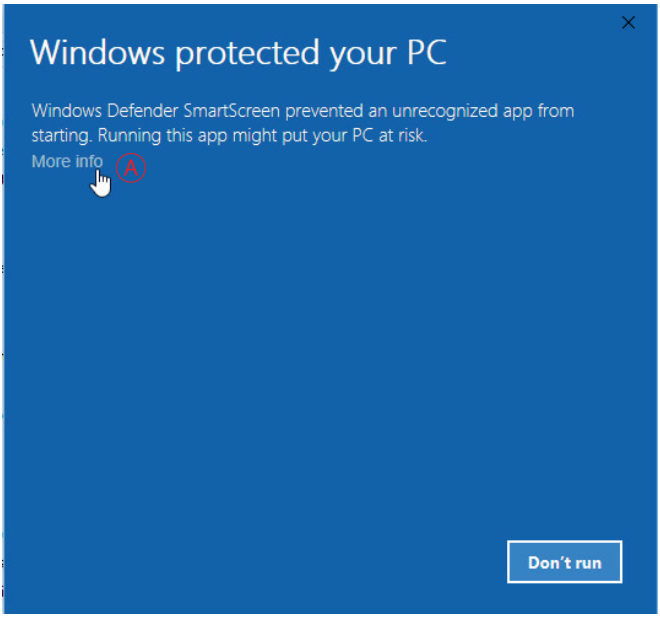
The setup program requires various confirmations for the installation of the program.

On some computers you could be asked the system administrator's password to execute the installation, in the case you do not have this information; contact the technician who administrates your system.

3.4.1 Software Installation - Intec ColorCut Pro (Cont.)

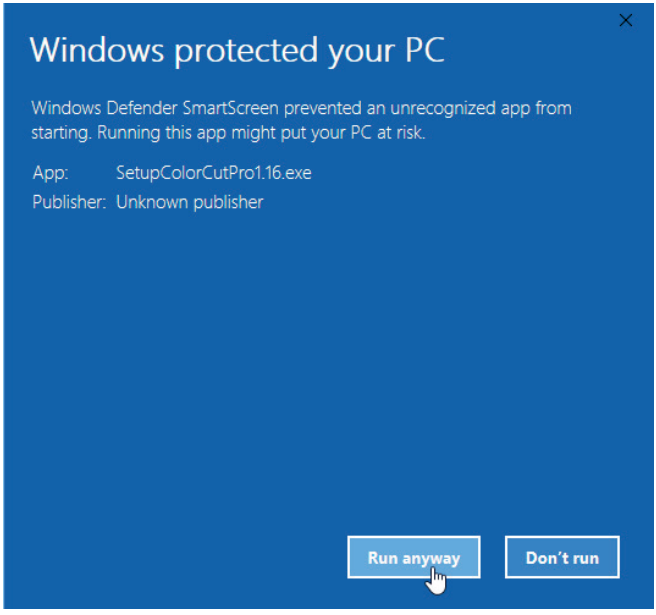
In some instances, (depending on your PC configuration) Windows 10 users 'may' see a security warning appear, as this is not a Microsoft application.

Do not worry, this is perfectly normal. Click more info Ⓐ.



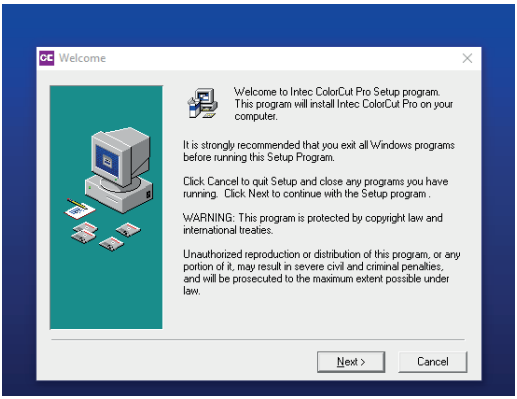
The dialogue box will confirm the App. you are installing is the ColorCut Pro App.

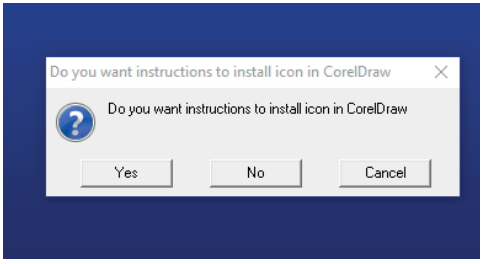
Click [RUN ANYWAY]



3.4.1 Software Installation - Intec ColorCut Pro (Cont.)

To start the installation of the ColorCut Pro software, simply click the [NEXT>] button.





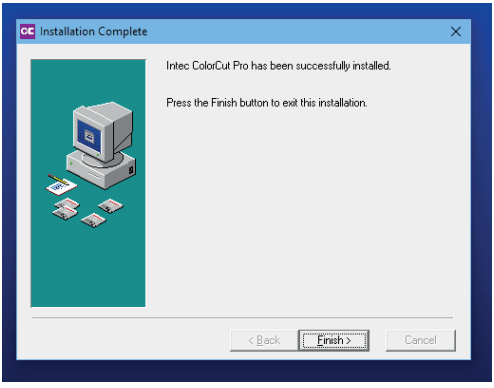
By default the ColorCut Pro software will automatically install into Adobe Illustrator if it is installed on your computer.

If you have Adobe Illustrator, then the installation has completed and click [NO] on the dialogue box asking you if you wish to review the CorelDRAW installation instructions.

If you have CorelDRAW, SKIP to the next page.

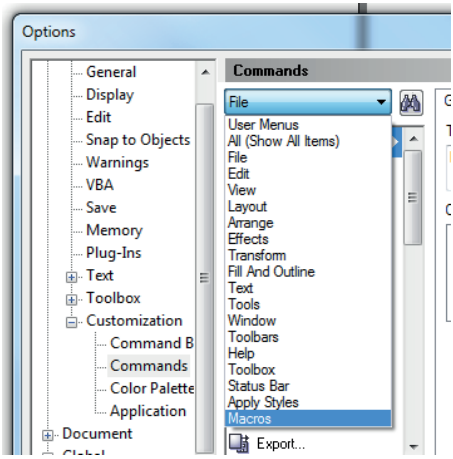
If you have Adobe Illustrator, then the installation has finished and you should now advance to Step 3.4.2 (Installing SignMaster Pro) if you purchased the optional SignMaster Pro software.

If you do not have SignMaster Pro, then skip to section 3.5 (Connecting to your computer) in this manual.



Intec ColorCut Pro - for CorelDRAW (Cont)

As part of the ColorCut Pro installation, the plug-in's to CorelDRAW are installed, however you need to add a short cut into CorelDRAW.



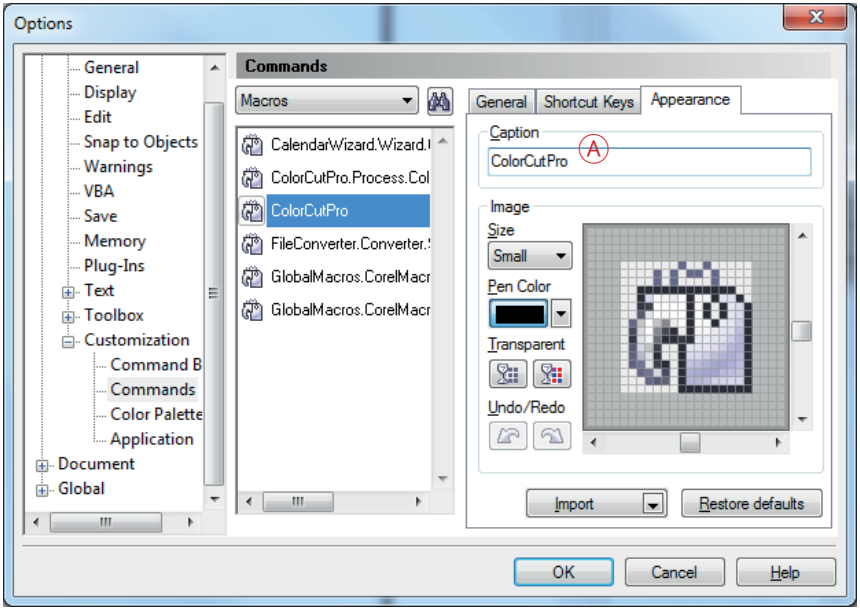
Open CorelDRAW then click on the **Tools** menu, and select **Options.**

From the Options dialogue box, select: **Customisation** and under this, click **Commands**
In the panel on the right, select **macros** from the drop down.

select either : colorcutpro.process.colorcutproall
or
colorcutpro.process.colorcutpro

The '**all**' version exports the entire drawing however the desired way to work is with layers, and the '**non all**' version exports just the current layer. We recommend unless specifically want to export the entire drawing, or if you don't know the answer select the 'non-all' version.

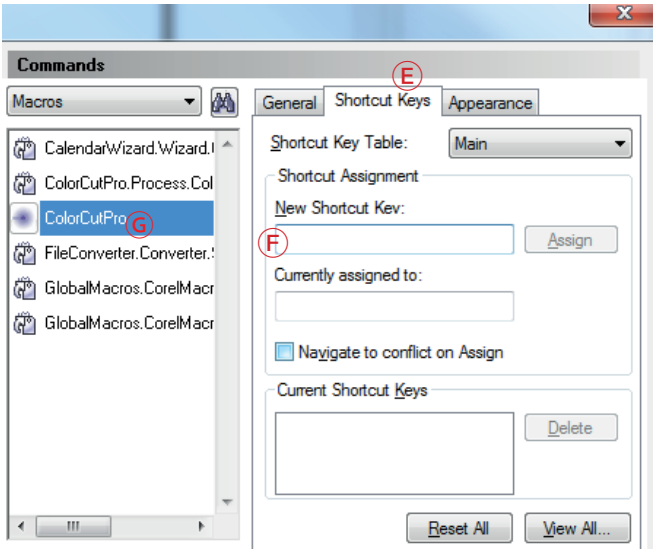
This is quite a long name, so, on the appearance menu (Under caption), Ⓐ change the name to ColorCutPro. This is the name that will appear on the menu.



Intec ColorCut Pro - for CorelDRAW (Cont)

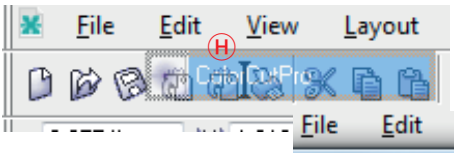
Back on the ShortCut keys Tab (E).

Place the mouse cursor at (F) (New Shortcut Key) and click then hold down the Alt key and type C.



Next you need to add the ColorCutPro icon to your tool bar.

Click on the ColorCutPro Command (G) from the Macro list, press and hold the left mouse button and drag the ICON next to the printer icon on the tool bar (H) and release.



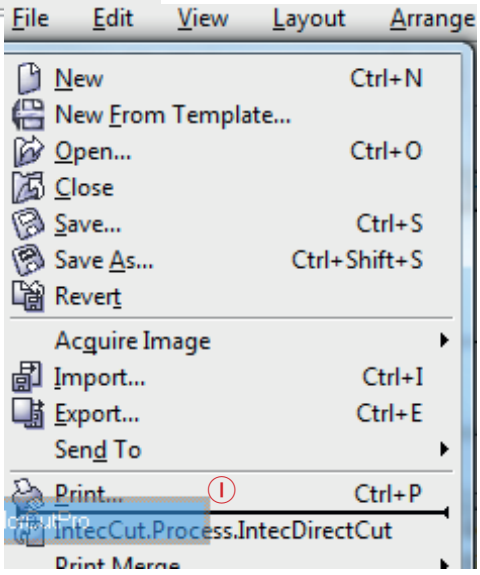
Next we want to simply add the ColorCutPro plugin to your FILE MENU next to the PRINT item.

Press and hold on the Command name again at point (G), CLICK and HOLD the left mouse button and DRAG the icon until you position the mouse over [FILE] Menu, which will pop open the file menu.

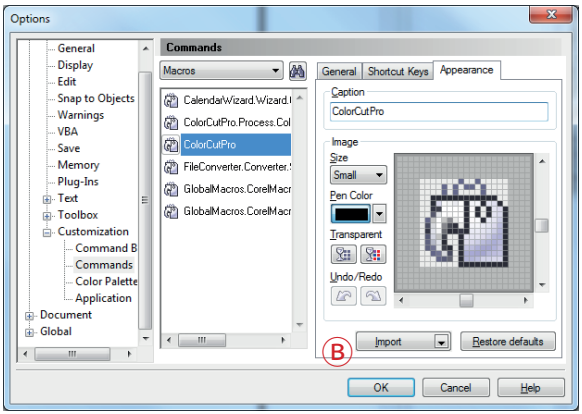
Then move the mouse to next to the print button (I) without releasing it and then let go of the mouse button.

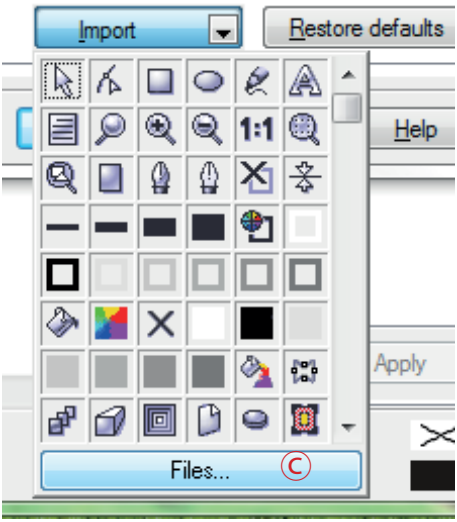
You should now see the ColorCutPRO menu option appear.

Installation of CorelDRAW is now complete.



From the same Appearance TAB , click on[Import] Ⓑ





From the [Import] drop down, select [FILES] Ⓒ at the bottom.

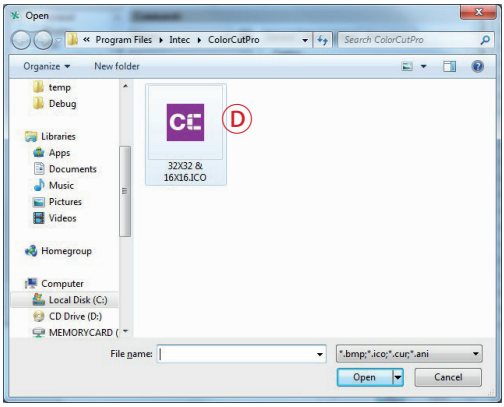
navigate to :

(For 32bit users of CorelDRAW)

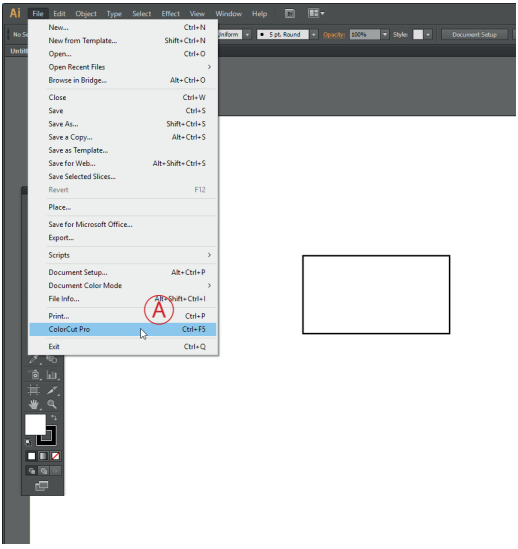
C:\Program Files (x86)\Intec\ColorCutPro

or (Fro 64bit users of CorelDRAW)
C:\Program Files\Intec\ColorCutPro

and select the icon as shown below Ⓓ.



Activating ColorCut Pro



The first time you open the ColorCut Pro plug-in, you will need to activate it before you can use it.

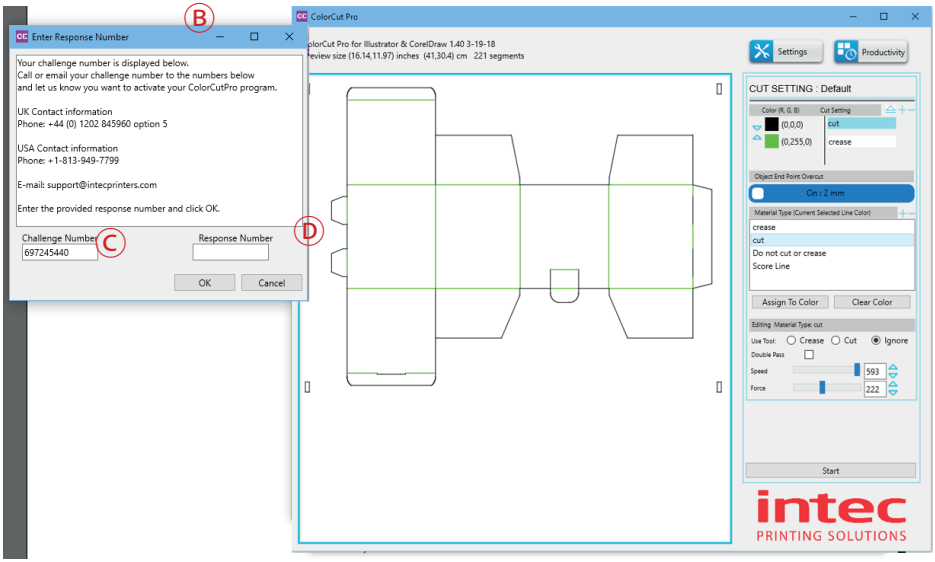
Open a new file, and draw a line. (Alternatively - Open the SAMPLE MUGBOX file supplied on the Installer CD in the SAMPLES folder. Then select the CUTLINE layer.)

From the [FILE] menu, select the [ColorCut Pro] item Ⓐ.

NOTE: ColorCut Pro only interprets vector lines, so if you opened an artwork file ensure you have a layer selected with vector lines - not your artwork layer.

Upon first launch, the ACTIVATION screen Ⓑ will appear. It will display a Challenge Number Ⓒ which is unique to your software Installation. You will need to either email this number to Intec Support, or call one of the activation numbers as shown in the dialogue box.

The team will either email back the response code, or provide it directly over the telephone (Typically this is only a 4 or 5 digit code).



Enter the response code into the RESPONSE CODE section of the dialogue box Ⓓ. Your application is now active and ready to use.

3.4.2 Software Installation - SignMaster Pro

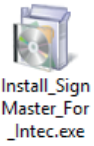
If you purchased the optional SignMaster Pro software, follow this guide on how to install your software. If you didn't purchase SignMaster Pro, then skip to the next section 3.5 (Connecting your computer).

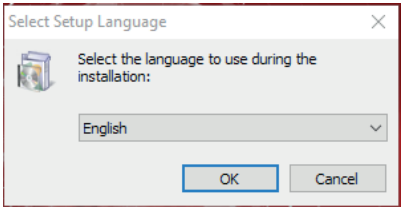
The optional SignMaster PRO for Intec software for your Intec ColorCut Flatbed is supplied on the included CD, however it may also be downloaded from our website http://www.intecprinters.com/support/downloads/colorcut-FB_Series

Please note:

SignMaster Pro is an option, so you require a valid license to be able to install the software. Please do not download the software if you do not have a license as you will be unable to use it.

Please run the installation program:
Install_SignMaster_For_Intec.exe

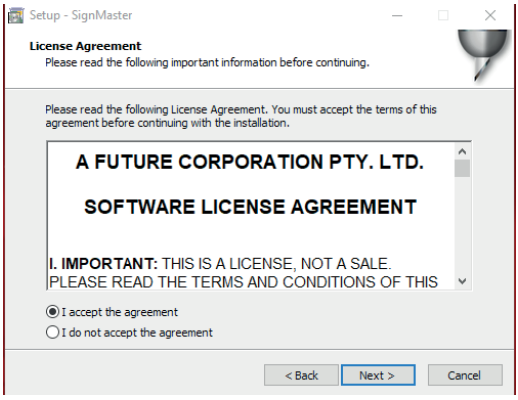




The setup program requires various confirmations for the installation of the program.

On some computers you could be asked the system administrator's password to execute the installation, in the case you do not have this information; contact the technician who administrates your system.

Simply click the [NEXT>] button.



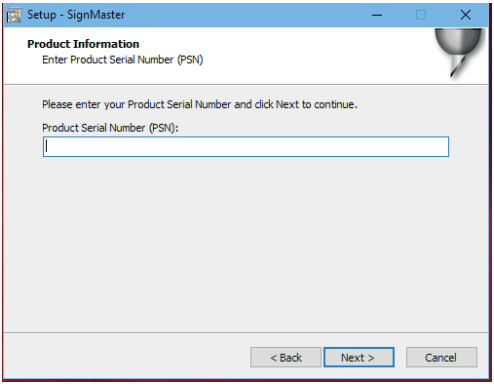
SignMaster Pro is provided by Future Corporation, click to accept their License agreement.

Then click [NEXT] to start the installation.

Each copy of SignMaster Pro is licensed for use on a single computer.

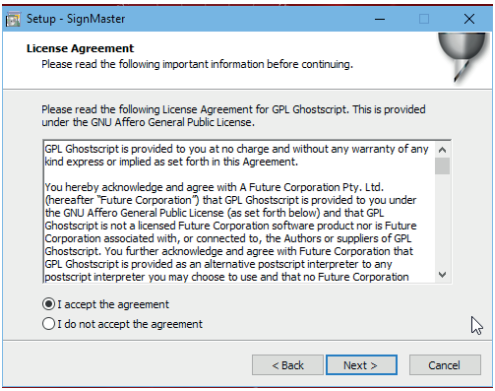
In the box for your Software CD, you will find your product serial number.

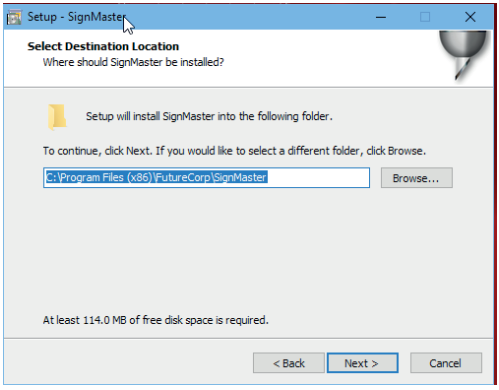
Key this number in now.



SignMaster Pro uses the GPL Ghostscript libraries to generate previews and enable you to import Graphic images, you must accept the Ghostscript license terms..

Click the [NEXT] button to agree and continue.



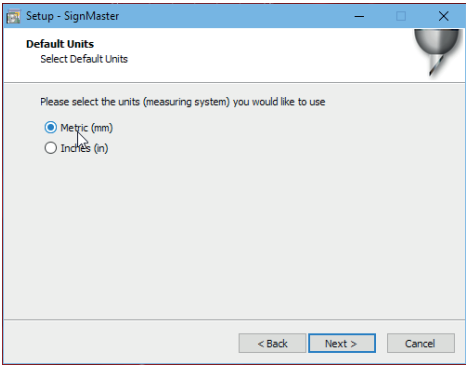


SignMaster Pro will next prompt you for the installation directory. There is no need to change this.

Click the [NEXT] button to continue.

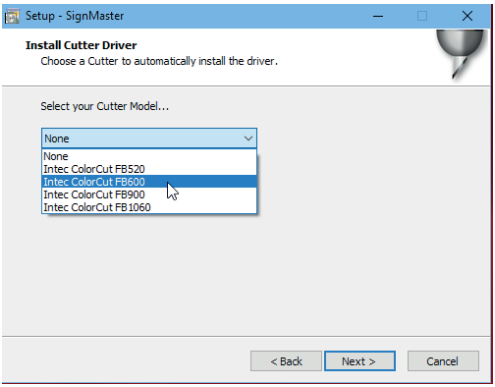
Next select the Default unit display to be used in the application. (Note this can be changed later in the application if required).

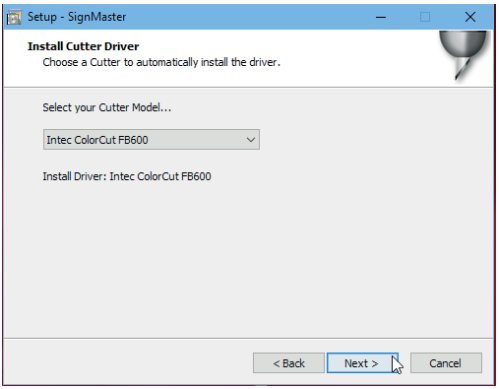
Click the [NEXT] button to continue.



Next SignMaster Pro will ask you to confirm which Intec ColorCut Flatbed you have purchased, and wish to use the software with.

Select your Cutter from the drop down menu.



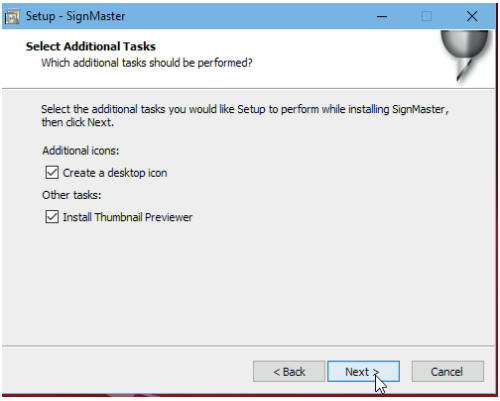


Confirm your Cutter is selected then..

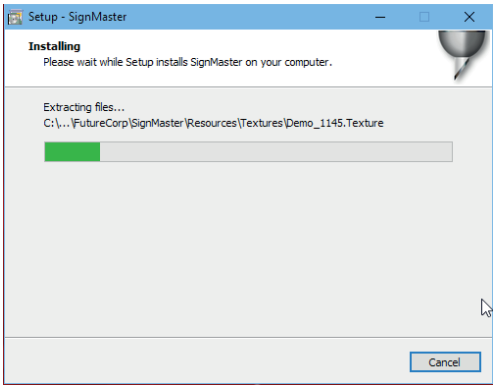
Click the [NEXT] button to continue.

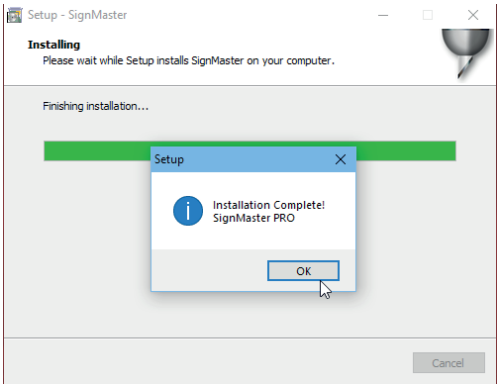
Finally you will be asked to confirm if you want the SignMaster Pro application added to the desktop and the start menu.

Click the [NEXT] button to start the install.



SignMaster Pro will install your application onto your computer. Please wait until the installation process is finished.





When the installation process is complete you will see a dialogue box to confirm installation complete.

Click the [OK] button to continue.

Click the [FINISH] button to exit the installer and launch the application for the first time.

SIGNMASTER PRO software (Activating the software)

The first time SignMaster Pro is launched, you will need to ACTIVATE the software.

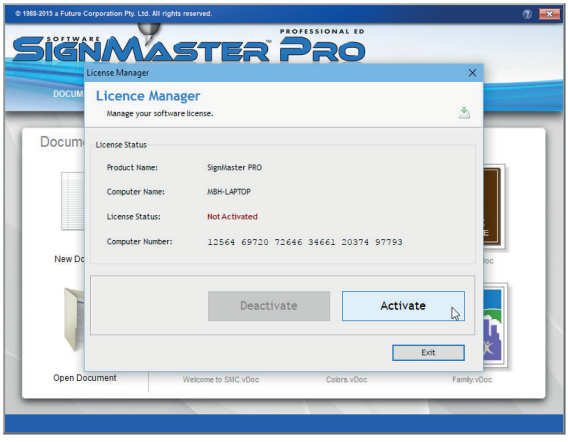
When you launch for the first time you will see the SignMaster Pro splash screen appear for a few seconds.... then....

You will see a dialogue box informing you that your software is NOT ACTIVATED.

Click the [**ACTIVATE**] button.

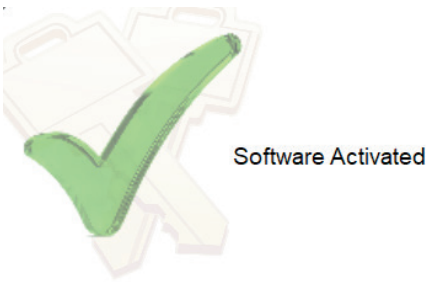
SignMaster Pro requires an active Internet connection to Activate your software online. A unique code is generated for your PC, and this is assigned to the license number you entered during installation.

Click the [**ACTIVATE**] button to activate your software.



STARTING UP THE SIGNMASTER PRO SOFTWARE

Once your computer has been activated, a green tick will appear along with a message confirming activation was successful and your SignMaster Pro's features are fully enabled.



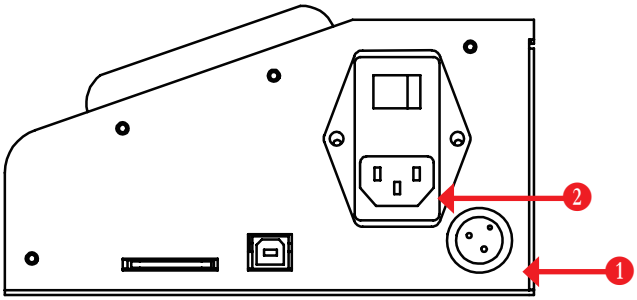
Close the additional pop up window confirming that the software is activated.

You are now ready to use the SignMaster Pro application.

3.5 Connecting and powering on the cutter.

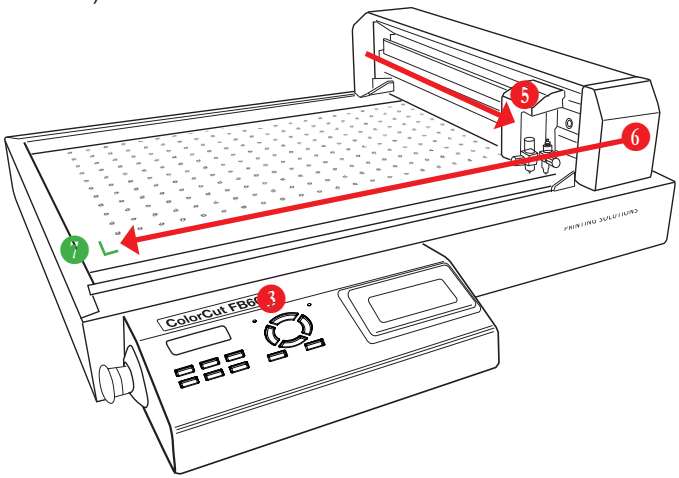
Turning the cutter on (The Initialisation Process)

1. Connect the control cable for the Vacuum Pump to the Vacuum Pump control jack on the side of the control panel 1. Securely plug the power cord into the mains socket 2 on the control panel and connect to an electrical outlet of the specified voltage.



2. Turn on the power.

3. The green power lamp 3 on the control panel will light, the LCD display 4 will illuminate. Next the Intec ColorCut Flatbed digital cutter will move the Tool Carriage 5 to the closest point as shown in the figure below and then the beam 6 will move to the ZERO point (furthest left point as indicated with the green 7 mark below) .



These operations are part of the initialisation process; once the Tool Carriage has moved to the front point and the beam to the furthest left point (The cutter has determined the ZERO Origin point), and the display will change to MOVE X:0 Y:0 and the cutter is ready for use.

Connecting to your computer

Both the Intec ColorCut Pro software and the SignMaster Pro software have the USB drivers built into the cutter software. There is no need to install any addition drivers.

Please note, that operation can not be guaranteed in the following circumstances:

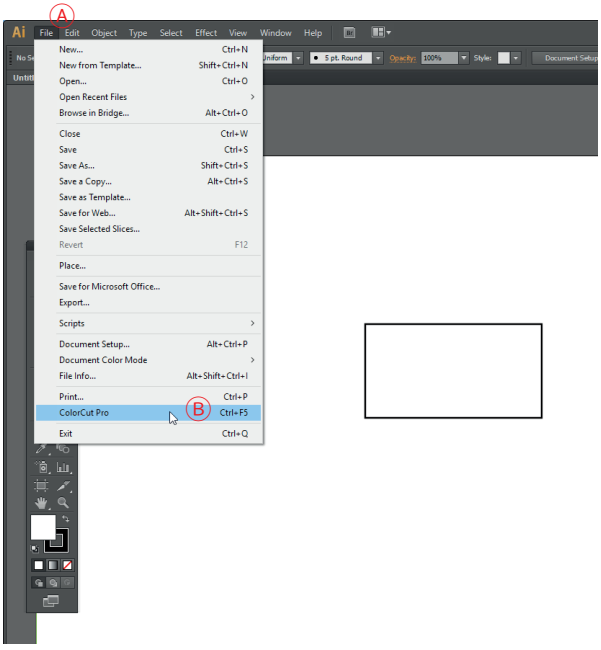
1) When connection is made through a USB hub or an add-on USB board.

2) When you are using a custom-built computer that has been modified.

For optimal results, please ensure the following:

- Do not connect or disconnect the USB cable while you are installing the SignMaster Pro or Intec ColorPro software.
- Do not connect or disconnect the USB cable while starting up the computer.
- Do not connect or disconnect the USB cable while switching on the cutter.
- Do not disconnect the USB cable within a 5 second period of connecting it. (It does not always recognise the fact it was subsequently disconnected and won't reconnect again until you power-cycle both devices)
- Do not disconnect or connect the USB cable while you are cutting a job, or while data is being transferred.
- Do not connect multiple Intec ColorCut engines to a single computer.

ColorCut Pro - USB Connection confirmation



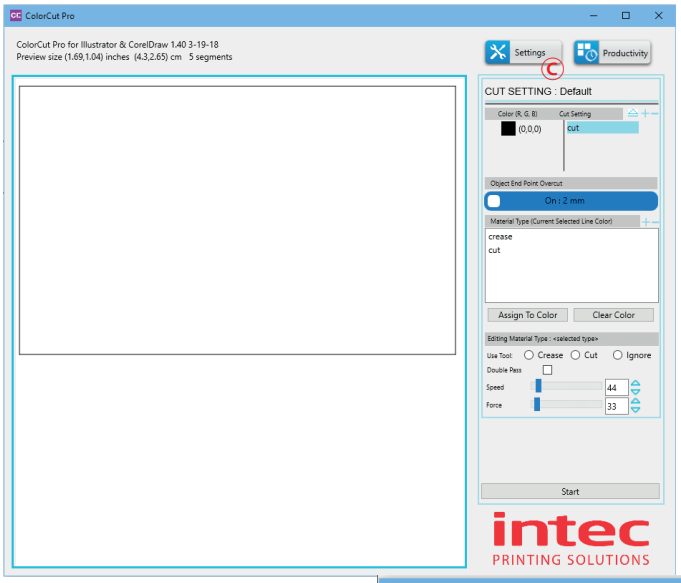
Adobe Illustrator or CorelDRAW users can check the connection is successful using the ColorCut Pro application following these steps:

1) Open a NEW document in Illustrator or CorelDRAW.

2) Draw a single line or square. (You require a line vector on the page for ColorCut Pro to launch)

3) From the File menu Ⓐ, select the ColorCut PRO item Ⓑ to launch ColorCut Pro

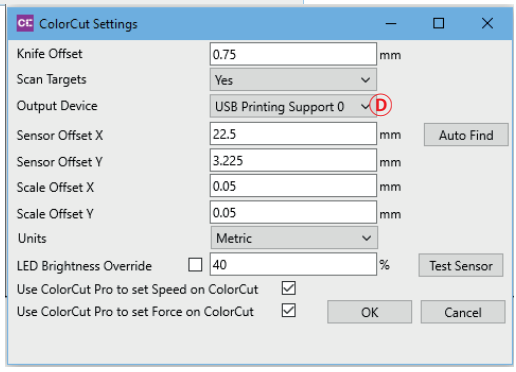
3.6 ColorCut Pro - USB Connection confirmation (Cont)



4) When the ColorCut Pro application launches, click on the SETTINGS button Ⓒ.

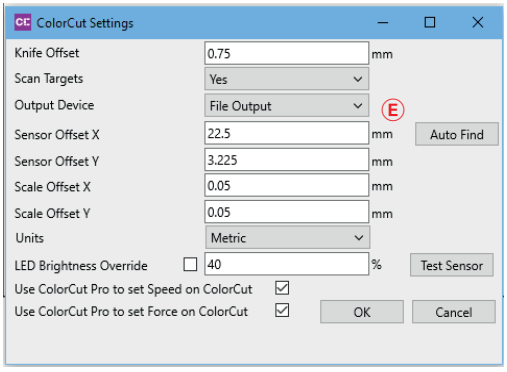
The ColorCut Pro [**Settings**] dialogue box will appear. A number of options and settings can be viewed or changed here.

IF the connection is successful then under the Output Device option Ⓓ you will see the term USB Printing Support.



Alternatively, IF the [**OUTPUT DEVICE**] option shows, [**File Output]** Ⓔ then the USB connection has not been recognised.

Switch off the cutter and wait 10 secs. Unplug the USB cable from your computer, and try a different port, then switch back on the ColorCut engine. Wait unit the Carriage arm has stopped moving and try again.

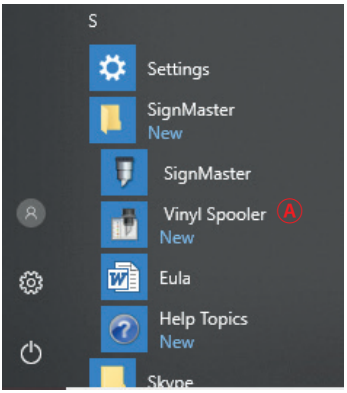


Now refer to Step 3.6 (Installing Tools)

3.6 SignMaster Pro - Connection confirmation

How to check connection with SignMaster Pro

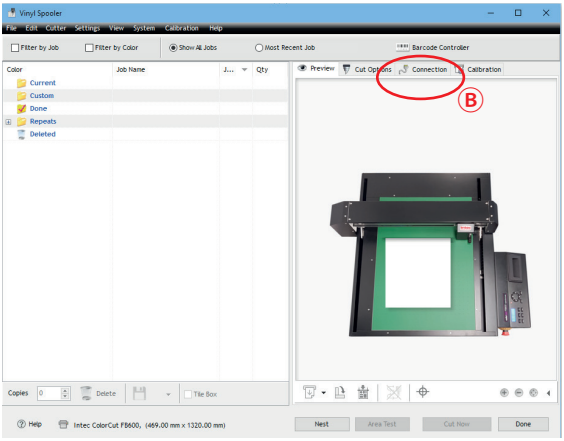
SignMaster Pro users can check the connection is successful using the Vinyl Spooler application that is supplied with SignMaster Pro.



From your Windows START menu, navigate to the SignMaster folder, and select the Vinyl Spooler application Ⓐ.

The Vinyl Spooler dialogue box will appear. A number of options and settings can be viewed or changed here. In the right panel, towards the top you will see 4 tabs.

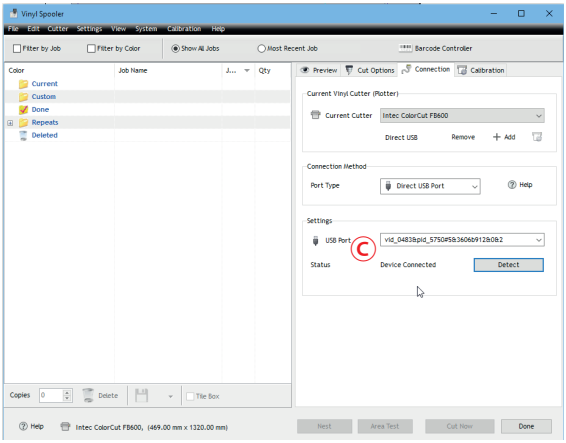
Select Ⓑ [**Connection**].



IF the connection is successful then under the USB Port option Ⓒ you will see an string of characters starting with *vid_0483&pid_xxxxxx*. Below this, you will see the term **STATUS**.

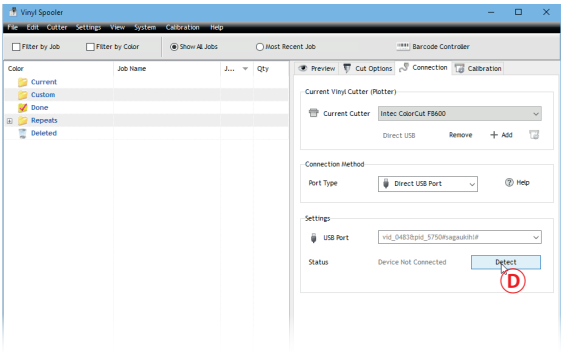
If connection was successful the **Status** will show as **Device Connected** . If your device is connected then please skip to Step 3.6 (Installing Tools)

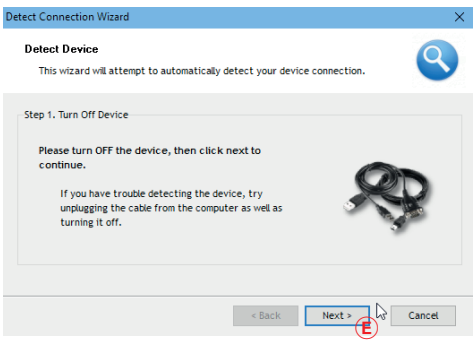
If **Status** shows **Device Not Connected**, then please follow the next steps.



3.6 SignMaster Pro - Connection confirmation (Cont)

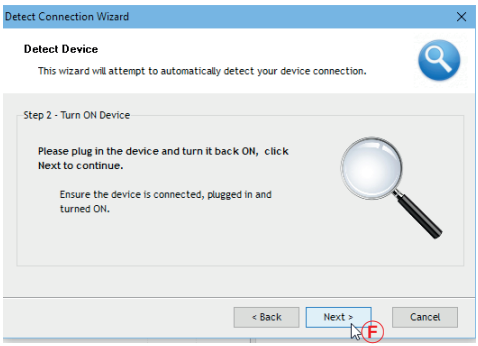
To the right of the *Device Not Connected* message click the [**DETECT**] button Ⓓ.

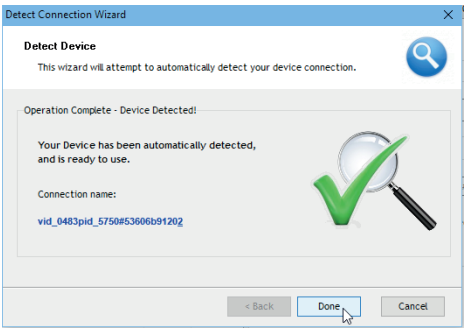




The 'Detect Connection Wizard will launch' Turn off the Intec ColorCut Flatbed cutter and click [**Next**] Ⓔ to continue.

Now Turn the Intec ColorCut Flatbed Cutter back on and click [**Next**] Ⓕ to continue.



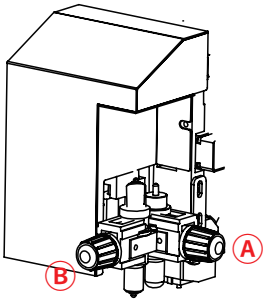


Your Intec ColorCut Flatbed cutter should now be detected, and your can continue to step 3.6 (Installing the Tools).

3.6 Installing Tools in your ColorCut

The tool carriage is mounted on the beam that travels across the cutting area.

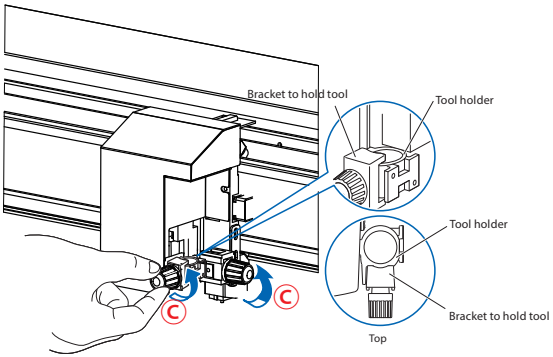
It contains 2 tool holders enabling 2 different tools to be mounted at the same time for different operations'

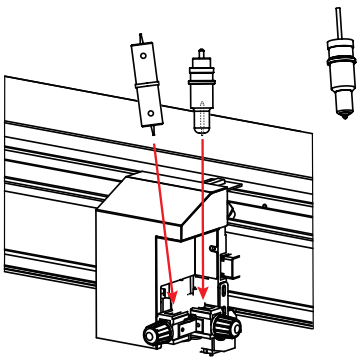


The Tool Holder Ⓐ closest to the Beam, holds TOOL1, typically the cutting blade.

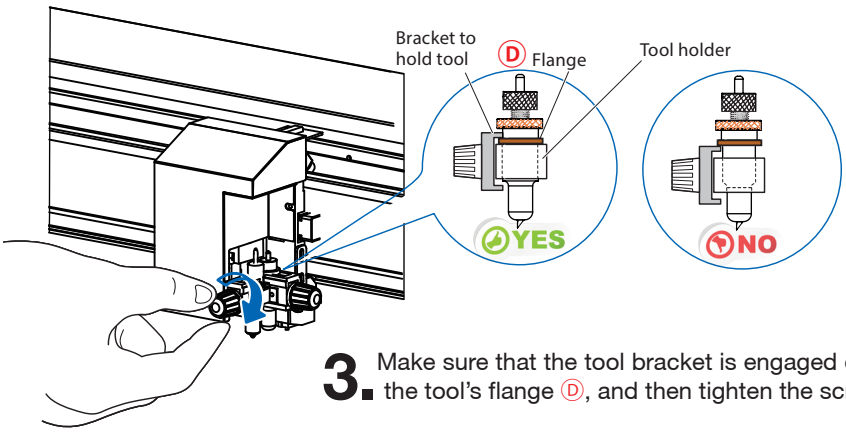
The tool holder furthest away from the beam Ⓑ holds TOOL2 (typically the Creasing Tool).

1. To install a tool into your Intec ColorCut Flatbed, loosen the tool holder's thumb screw Ⓒ sufficiently to enable a blade holder / creasing tool or calibration pen to be inserted up to its flange.





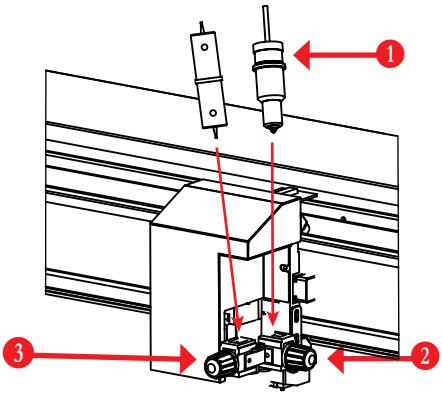
2. Push the tool, i.e. the Blade Holder, Creasing Tool or Calibration Pen all the way into the tool holder until its flange completely touches the upper part of the holder..



3. Make sure that the tool bracket is engaged on top of the tool's flange Ⓓ, and then tighten the screw.

3.7 Calibration of the Creasing Tool to the Cutting Tool

The Intec ColorCut Flatbed engine is fitted with two tools. Before using your cutter for the first time, you must align the two tools together, so that cut lines and creases are in alignment with each other. Please follow the steps below to calibrate the Cutting Tool to the Creasing Tool.



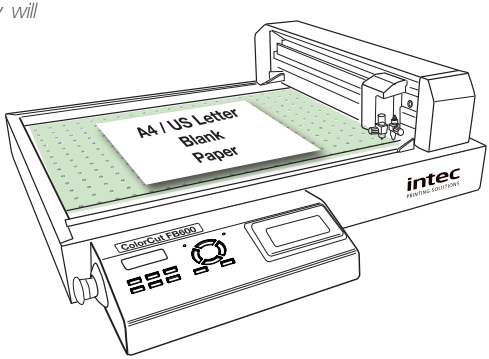
1. Place the Calibration Pen Tool 1. In to Tool Holder 1 2. (Normally the position for the Blade Holder). Then place the creasing tool into Tool holder 2 3.

2. Check the LCD panel, and ensure, that the LCD display shows **-->**

```
MOVE: X: 010
(MM)  Y: 00
```

(If the display shows Speed2:xx and Force2:xx then, press the [**OffLine**] *key, the display will change to MOVE X:xx and Y:xx.*

Using the **Left / Right keys** move the carriage so that you can place a sheet of paper on the cutting bed.



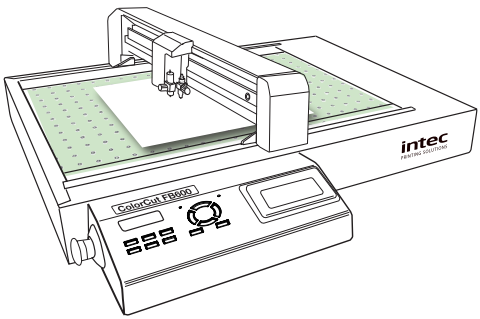
3. Place a Blank sheet of A4 / US Letter paper in the middle of the cutting table.

Turn on the vacuum hold, by pressing the [**F1**]key on the control panel.

4. Ensure, that the LCD display shows **MOVE X: and Y:** .

(If the display shows Speed2:xx and Force2:xx then, press the [**OffLine**] *key, and the display will change back to MOVE X:xx and Y:xx.*

Using the **Left / Right** keys move the beam over the sheet of paper, then using the **Up / Down** keys, move the Tool Carriage to the middle of the piece of paper.



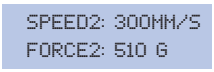
With the Tool Carriage in the middle of the sheet of paper, press the [**ENTER**] key twice to set a new ORIGIN point (when done the display will show Speed2/Force2).

(When you press ENTER key the second time, TOOL2 will briefly activate to confirm).

3.7 Calibration of the Creasing Tool to the Cutting Tool (cont)

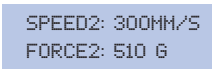
5. Set the pressure for the Creasing Tool so that it is easy to see the crease.
(In step 4 you pressed [**Enter**] twice so the display should now show Speed2:xx Force2:xx. - If the display is showing MOVE X: xx , Y:xx, then press the [***Offline***] key to bring the cutter back online.)

Use the UP / DOWN keys to set the speed. (to 300mm/s))
Use the Left / Right keys to set the Force. (to 510 g)



The press the {**ENTER**] key to accept the settings.

6. Set the appropriate pressure for the Calibration Pen Tool *(not too much pressure or you may break the pen).*



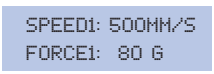
With the display showing Speed2:300 / Force2:510.

Press the [**SET**] key.

The LCD display will now change to show SPEED1:xx FORCE1:xx .

Use the UP / DOWN keys to set the speed. (to 500mm/s))

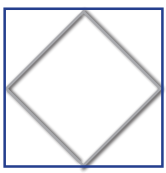
Use the Left / Right keys to set the Force. (to 80 g)



The press the {**ENTER**] key to accept the settings

7. Now press [TEST] to make a test cut.

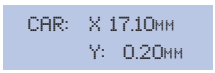
8. Tool1 (The Calibration Pen) will draw a BOX.
Tool2 (The Creasing Tool) will crease a box at 45^{o} rotation .



*When it has finished drawing the box and creasing the second box, press the [**Offline**] key, to display the **MOVE X: Y**; mode and use the **Left/RIGHT** arrow keys to move the beam and tool carriage.*

If both tools are aligned the creased box will fit perfectly inside the DRAWN box. If they are not, use the 'CAR: X: xx Y:xx ' menu as detailed following to adjust the alignment.

9. With the display 'MOVE X:xx, Y:xx' showing, press [**Offline**] to show the values for SPEED2/FORCE2 (This is the default HOME screen). Now press [**Set**] to change the LCD display to show SPEED1 / FORCE1. Now press [**Set**] Again, to display 'CAR :' -->



Using the arrow keys, (Up / Down) to adjust the X value to move the position Left or Right across the Table. Use the Left/Right keys to adjust the value of the Y parameter to move the position towards the operator or away from the operator. *Press the [**Enter**] key to accept your values.*

*When finished press the [**F2**] button to return the Ready/Settings display.*

Repeat from Step.4 until you achieve a perfect fit between the two tools.

*(Remember to select a new origin each time to avoid making a test in the same position. Do this by using the MOVE menu, to move the tool carriage over your paper and pressing [**Enter**] twice to select the new origin)*

3.8 Calibration of the Sensor Offset to the Cutting Blade

The Intec ColorCut Flatbed engine includes an ARMS system (AutoMatic Registration Mark Sensor). ARMS, uses an optical sensor to automatically detect Registration marks, enabling accurate cutting and a suitable program (such as ColorCut Pro, or SignMaster Pro) to adapt cutting lines and compensate for any scale or skew errors.

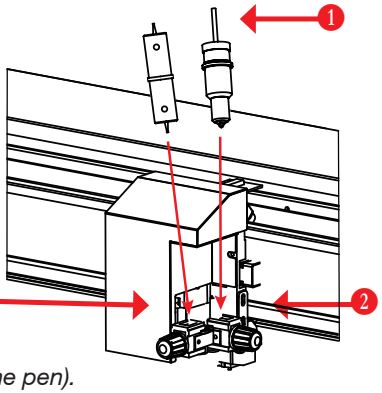
The ARMS sensor is mounted just behind the cutting blade holder and your software application must be calibrated to offset (distance) from the Sensor to the cutting blade

Each software application must have the offset calibrated. Therefore if you are cutting with ColorCut Pro directly from Illustrator or CorelDRAW, you will need to follow the guide on setting the Sensor Offset for ColorCut Pro.

Alternatively, if you are using SignMaster Pro, you will need to follow that guide.

NOTE: The sensor offset value is stored within the software application, so if you plan to use both packages, you must calibrate the sensor in both packages in order for them to both cut accurately.

Both applications use the PEN CALIBRATION TOOL. The pen tool is used to draw lines that are used to define to point of the cutter blade, then the ARMS sensor reads these back and the software calculates the offset automatically for you.



1. Place the Calibration Pen Tool 1. In to Tool Holder 1 2. (Normally the position for the Blade Holder). Then place the creasing tool into Tool Holder 2 3.

2. Set the appropriate pressure for the Calibration Pen Tool

(Not too much pressure or you may break the pen).

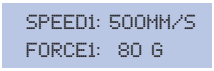
With the LCD panel showing the values for SPEED2/FORCE2 (This is the default HOME screen). Press [**Set**] to change the LCD display to show SPEED1 / FORCE1.

Press the [**SET**] key.

The LCD display will now change to show SPEED1:xx FORCE1:xx .

Use the UP / DOWN keys to set the speed. (to 500mm/s))

Use the Left / Right keys to set the Force. (to 80 g)



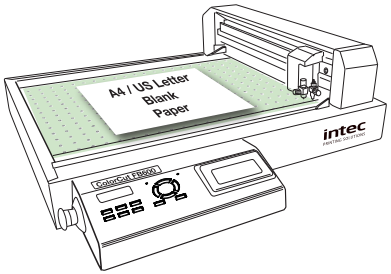
*When finished press the [**Enter**] key to accept the settings, then press the [**F2**] button to return the Ready/Settings display.* (LCD display shows SPEED2/FORCE2)

Now follow the steps for your Software application:
ColorCut Pro, or SignMaster Pro (Or both).

ColorCut Pro - Setting the Sensor Offset to the Blade

1. Check the LCD panel, *If the display shows the Speed2:xx and Force2:xx option then press the* [**Offline**] *key, to change the display to show MOVE X:xx and Y:xx.*

Using the **Left / Right keys** move the carriage so that you can place a sheet of paper on the cutting bed.

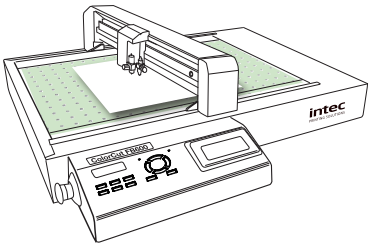


2. Place a Blank sheet of A4 / US Letter paper in the middle of the cutting table.

Turn on the vacuum hold, by pressing the [**F1**]key on the control panel.

3. Ensure, that the LCD display shows **MOVE X: and Y:** .

(If the display shows Speed2:xx and Force2:xx then, press the [**Offline**] *key, and the display will change back to MOVE X:xx and Y:xx.*



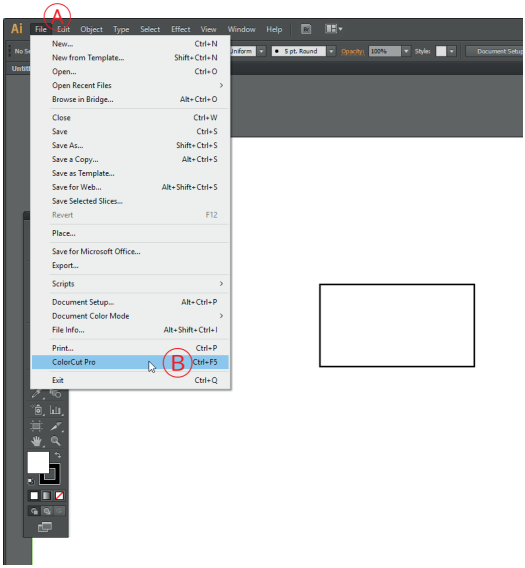
Using the **Left / Right** keys move the beam over the sheet of paper, then using the **Up / Down** keys, move the Tool carriage to the middle of the piece of paper.

With the Tool Carriage in the middle of the sheet of paper, press the [**ENTER**] key twice to set a new ORIGIN point (When done the display will show Speed2/Force2).

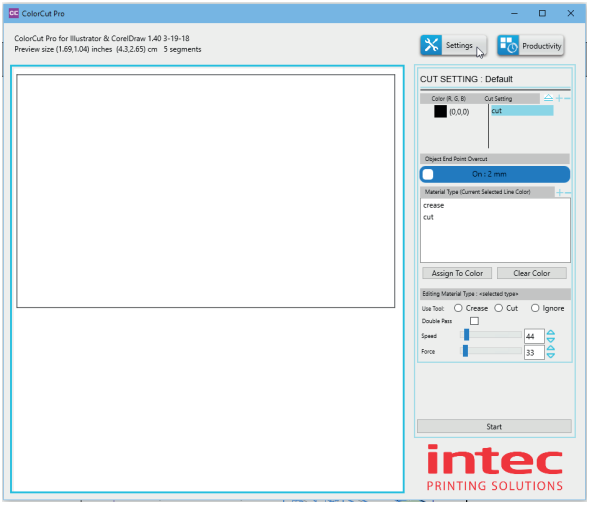
(When you press ENTER key the second time, TOOL2 will briefly activate to confirm).

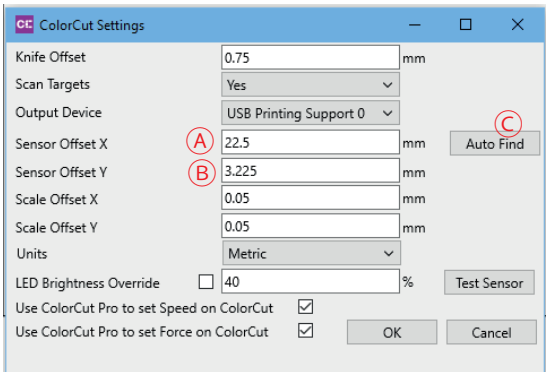
4. Open a NEW document in Illustrator or CorelDRAW and Draw a single line or square. (You require a line vector on the page for ColorCut Pro to launch)

Then from the File menu Ⓐ, select the ColorCut PRO item Ⓑ to launch ColorCut Pro application.



5. At the top right side of the ColorCut Pro application, click on the [**SETTINGS**] button.



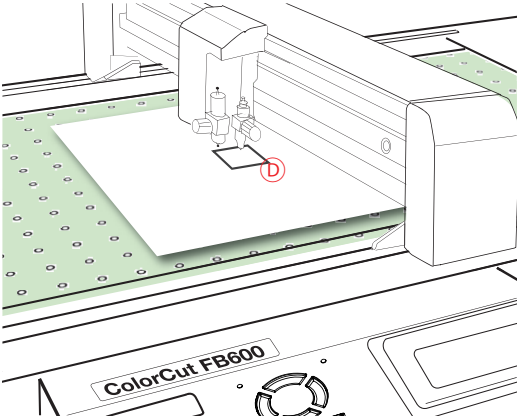


6. The ColorCut Settings dialogue box will appear. Here you can manually enter the Sensor offset Ⓐ Ⓑ

Or automatically set it by clicking the [**AutoFind**] button Ⓒ.

7. After clicking the [**AutoFind**] button, the Intec ColorCut, will use the Pen Calibration Tool, to repeatedly draw a box, with a thick frame Ⓓ. After drawing the box, it will then scan the frame, and automatically enter the values into your Sensor Offset X and Y settings.

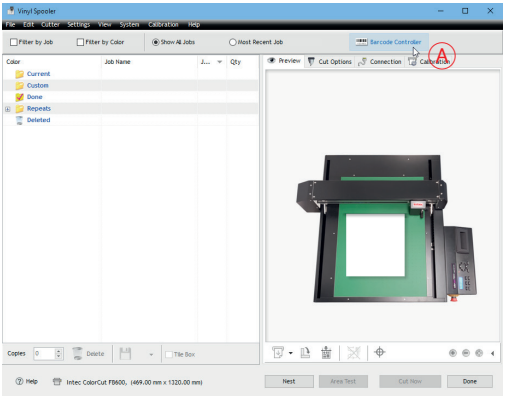
You can now close this window, the calibration for ColorCut Pro is now complete.



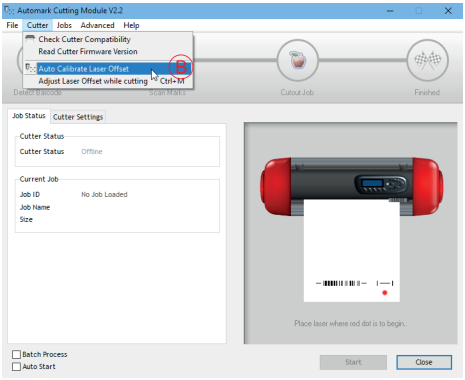
SignMaster Pro - Setting the Sensor Offset

1. Open the SignMaster Pro - Vinyl Cutter application screen.

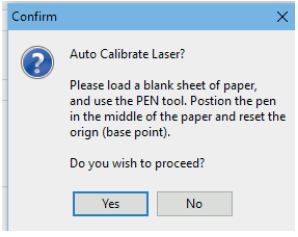
From the top right of the screen, select the **[BARCODE CONTROLLER]** button.



2. From the Barcode Controller dialogue box, select the **Cutter** menu, and from this menu select **Auto Calibrate Laser Offset** Ⓑ

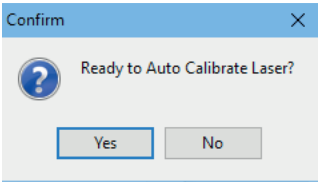


3. The Confirm dialogue box will appear asking you to load a piece of paper on the Flatbed, and position pen tool in the centre of the paper. Remember to press the [**ENTER**] key twice to set the origin.

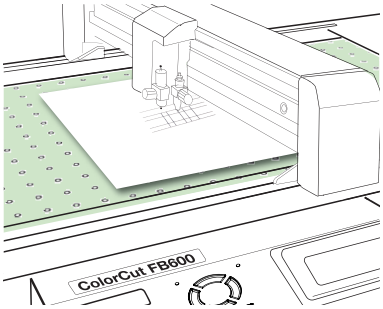


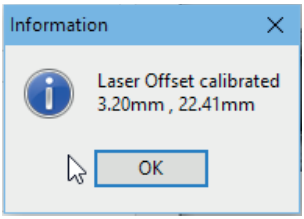
4. When you click Yes, you will be asked if you are ready to continue to Auto-Calibrate the laser.

Press [***YES***] to continue.



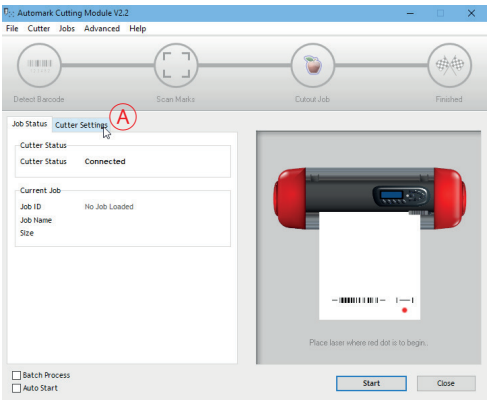
5. A row of lines will be drawn by the ColorCut engine using the Calibration Pen, next the sensor will read these. Then, a series of lines at 90^{O} will be drawn. The scanner will then read these.

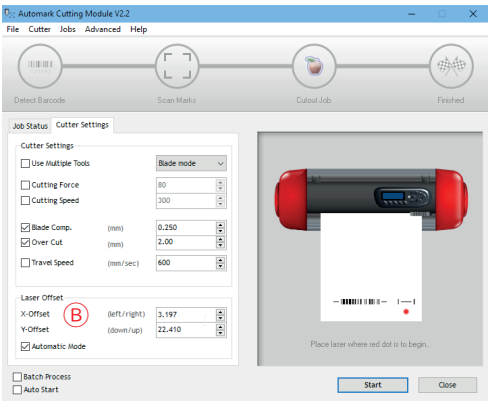




6. From the the difference between the position of the pen and how far the carriage had to move so the sensor could see the lines, SignMaster can determine your Laser Offset. The value is stored and then displayed upon the screen. Click [**OK**] to Finish.

7. If you wish to check that the values were entered, then click on the [Cutter Settings] Tab Ⓐ.





8. You can see the values (and manually edit them if you wish) Ⓑ under the section Laser Offset.

Your Cutter is now calibrated to cut accurately. But before cutting ensure you set the Knife offset to the correct value for the Blade you have fitted in the cutter.

Refer to your SignMaster Manual on the supplied CD for a guide on how to use SignMaster.