FORMAX®

Cut-True DDC20

Digital Label Cutter

11/2026

OPERATOR MANUAL

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What You Can Do With This Machine

The new Cut-True DDC20 ‘on demand’ digital sheet label cutter is a compact, lightweight desktop cutter designed to provide automatic sheet label cutting for digital print production users, with NO die’s or setup costs.

Combining reliable label-sheet feeding with an instant job retrieval system the DDC20 provides effortless, yet precise, kiss-cut label and decal cutting at fast speeds.

Created for users wishing to enter into sheet label production, the DDC20 uses the standard Cut-True ecosystem and cut files which are uniform across the range, providing an excellent upgrade path for users as they grown in their business.

Leading features:

- Digitally cut any shape labels at up to 31.5 in/sec
- Feeder takes up to 120 sheets
- Digital process means no more costly dies
- Cut closer to media edges with the ‘Dual Grip’ feed system
- Cut-True Pro - Production Studio software included
- Paper stacker holds 13x19, 12x18, 8.5 x 14,8.5x11 and custom sizes for a maximum cutting length of 483 mm x 330 mm width
- * QR code/Job Library retrieves associated cut files - even for mixed job batch sessions or rotated sheets
- Pagemark registration delivers accuracy - enabled via included Cut-True Pro software
- Run jobs from computer or from a USB drive

Complete standalone operation - even with a stack of mixed jobs

- HELD mode in Cut-True Pro stores job parameters in a custom cut file that can be transferred via USB to the cutter, enabling standalone operation without a PC and making it ideal for repeat jobs that can be easily executed by any user at any time
- ‘Dual Grip’ feed system holds the media on both sides of the cutting head, allowing for precise edge cuts closer than most other cutters
- QR codes and PageMarks are generated as part of the included Cut-True Pro software plugin which integrates with vector artwork created in Adobe® Illustrator® and CorelDRAW®
- The DDC20 features a unique ‘Y’ feed path that draws media in and reverses it back out on the cutting bed, ensuring smooth, uninterrupted feeding, while the digital cutting head, adjustable through Cut-True Pro software, applies up to 500g of pressure to cut through even the thickest label stocks
- The DDC20 features a user-friendly 2-line monochrome LCD control panel with tactile buttons for adjusting speed and cut force, a space-saving, clip-on exit tray for compact storage, and advanced control options via software for precise cutting performance in any office or print shop
- Machine offers a production advantage by instantly retrieving the associated cut file for each sheet design on the fly, enabling seamless, uninterrupted cutting of varied job stacks.

To operate your Cut-True machine and set up processing jobs, you will need a computer. This manual provides an introduction to the Cut-True Pro Software Suite, which is used for creating files and controlling your cutter. Additionally, it outlines the hardware requirements for your workstation.

Workstation Hardware Requirements

Compatible Vector Programs

	Adobe Illustrator® *	**CorelDRAW® ****
PC Windows	CS6; CC CC 2018 - CC 2026	 2018 - 2026
Mac OS	CC 2022 - CC 2026	

*Does not support illegal copies of Adobe Illustrator

**Full version only. Does not support “Home and Student”, “Essentials” edition or illegal copies of CorelDRAW

1. Multicore Intel processor with 64-bit support
2. Windows 10 Professional / Windows 11 Professional x64 bit
3. 4 GB of RAM (8 GB recommended (As supplied with Cut-True Pro Server Station)
4. Minimum display resolution: 1024x900
5. Recommended Display Resolution: 1280x960 or higher.
   (Screens with resolutions such as: 1152x900, 1024x900, 1280x960, 1440x900, 1440x960, 1440x1024, 1440x1080, 1600x900, 1600x1080, 1600x1280, 1920x1080 or higher)
6. 2x available USB Ports (Note KB & Mouse often use a port each so factor this in)

Compatible OS Versions

PC Windows 10 or 11 Pro – 64bit

Mac OS version 10.11 (El Capitan) - Mac OS version 26 (Tahoe)

Introduction

Introduction to Cut-True Pro Software

To cut your projects with the Cut-True DDC20 cutter, you need to be able to design your artwork and then apply lines that you designate for Half-Cut/Kiss-Cut. Projects and artwork can be created using either Adobe Illustrator on Mac or PC, or CorelDRAW on PC.

Cut-True Pro is a plug-in that provides you the ability to send projects that you have designed in Adobe Illustrator® or CorelDRAW® directly to your Cut-True cutter with no need to convert them to a different format.

After you install Cut-True Pro™ (including Cut-True Pro - Production Studio) you will be provided with a new option within your Adobe Illustrator® or CorelDRAW® software program enabling you to send vector lines from your software to your Cut-True DDC20 cutter. During the installation, Cut-True Pro will also add an option that enables you to automatically add Page Registration Marks (Refered to as PageMARKs in this manual) for print & cut jobs, these are scanned automatically using the Cut-True DDC20's Vision3 CCD sensor, providing origin, scale, skew and rotation information. In addition Cut-True Pro will add an option for you to assign Job numbers or QR Codes to your cut jobs, enabling you to build a library of cut job files which can be used with a stand alone version of Cut-True Pro known as Cut-True Pro - Production Studio (or Job Server).

Files can be cut directly from your graphics application using the Cut-True Pro plug-in, or using the Cut-True Pro - Production Studio version of software, which can be launched separately either on the same or a different computer. Cut-True Pro - Production Studio is a simple interface that enables other individuals within your company the ability to directly cut jobs at any time without requiring Adobe Illustrator or CorelDRAW, and without having to re-open the original file. Directly cutting files using the Cut-True Pro app is the recommended way to cut files for users with constantly changing cut files and designs, or where frequent changes to the speed or force functions are desired (i.e. because of changing media). The DDC20 also adds a new way for users to cut files - The Held Mode. The Held Mode allows users to wrap up all their cut settings within Cut-True Pro Production Studio and save these as a fully featured CCH (Cut-True Held file), this file can be transferred to a USB stick and when inserted into the cutter, the file can be cut at any time with no PC connected.

The Held Mode, is only recommended, where users are repeating the same job/template multiple times, and do not need to change settings such as speed or force, as these are embedded within the file, when frequently changing design / speed or Force the use of Direct mode to send the files directly to the cutter is recommended to avoid the need to consistently remove and replace the USB stick.

The Cut-True Pro plug-in does not currently work with any other vector imaging programs aside from those listed in the Compatibility section below.

Files may be cut directly from PC Graphics applications using Cut-True Pro's plug-in or using the by using Cut-True Pro - Production Studio (PC only). Mac users can design their jobs, add cutting registration marks, assign Job numbers, add QR Codes and add jobs to the Cut-True Pro Job library using the Cut-True Pro Mac Client. The Mac workstation is not used to cut the files, Mac jobs are sent to the Cut-True Pro job library on a remote PC for cutting directly or for the Cut-True Pro Production studio software to create Held Mode cut files for later use.

Compatibility

The plug-in requires Adobe Illustrator® (Mac or PC) or CorelDRAW® (PC only) to be installed on the computer in question. The Cut-True Pro™ software does not include the Adobe Illustrator® or CorelDRAW® software.

Cut-True Pro - Production Studio (The main application) is PC only. This is the application that communicates with cutter and will directly cut designs or can be used to created held mode cut files (*.cch files) that can be transferred along with all the cutting parameter settings directly to the cutter. This can be launched in two ways:

Cut-True Pro (Direct Plug-in): The Cut-True Pro plug-in can be accessed and launched from inside Illustrator or CorelDRAW - just under your Print command. When starting Cut-True Pro directly from Illustrator or CorelDRAW, it works just like the Print command. When the Cut-True Pro option is selected from the File drop-down menu in your graphics application, the vector lines on the currently selected layer are directly exported into the Cut-True Pro cutting window. Once exported to Cut-True Pro, simply choose the action for each colored line in your design e.g. Cut, Ignore and click start. Cutting will commence immediately. This is a very simple way to cut directly from your file.

Continued on next page...

Intoduction, continued

Where access to the original artwork files is not practical, such as where a different user wishes to cut the job, it is recommend jobs are created with a job number and/or QR code. Adding a Job Number will automatically add the Cut file to the Cut-True Pro Job library, thereby enabling the job to be cut using Cut-True Pro - Production Studio software (detailed below), either on the directly by using the same computer or a different computer and also enables the job to be cut in held mode and stored on a USB drive within the cutter itself.

Cut-True Pro - Production Studio (Job Server) Launched from the Start Menu on your computer. Identical to the main application that launches from inside Illustrator or CorelDRAW, Cut-True Pro (Job Server) will open with no cutting file or job selected. Instead cut files are retrieved from the Cut-True Job library by entering the job number or scanning the QR Code on the printed sheets and then cut the file. The Job Server version of Cut-True Pro is stand alone, thus will cut files or jobs created and saved to the Cut-True Pro Job library using the Cut-True Pro add PageMarks & QR code feature (detailed below). Both in Direct or Job Server mode, users can choose speed, force and other cutting related controls and can set productivity options such as number of copies to cut. Cut-True Pro standalone can also be used to wrap up all those settings into a *CCH file, a Cut-True Pro HELD mode file, this file can be saved to a USB drive and cut at any time on the cutter without the need to be directly connected to Cut-True Pro.

Within Illustrator (Mac or PC) or CorelDRAW (PC only) you will find 2 additional functions:

Cut-True Pro ADD PageMARKs is a utility that automatically adds cutting registration marks to your artwork. (Known as PageMARKs). Illustrator or CorelDRAW files with PageMARKs can be cut directly from Illustrator or Corel Draw by using the Cut-True Pro application.

Cut-True Pro ADD PageMARKs & QR code is a utility that enables users to assign a Job number and a QR code to their artwork so that is may be cut at a later date. The QR code is automatically generated and the job number and placed on your artwork. Once a QR code has been assigned to your artwork, the cutting file is sent (in the background) to the Cut-True job library for use later with the main Cut-True Pro (Job Server) application. With Job numbers and QR codes, files can be printed (or sent to RIP's (like a Fiery) and printed at a later date). The sheets can be cut using the Cut-True Pro (Job Server) version which can be done on a separate PC and does not require the original file to be opened. The design to be cut is retrieved automatically as the user enters the job number or the cutter reads the QR code. This is ideal for larger companies looking to separate design and finishing (Cutting) of jobs.

Cut-True Pro for Mac Users

Mac users can design and generate jobs on Mac workstations using Cut-True Pro's Job library feature.

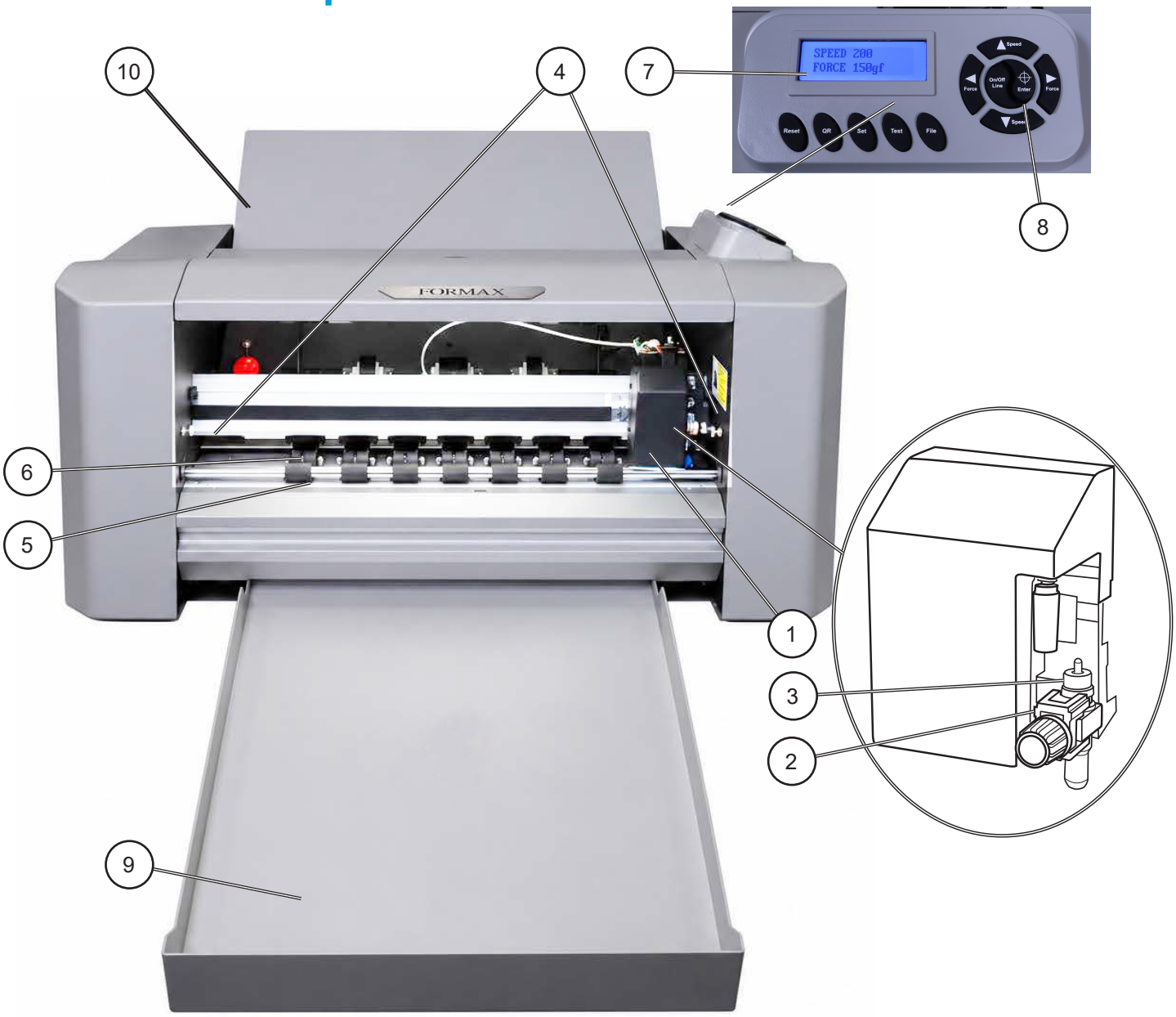
NOTE: The main Cut-True Pro (Production Studio) cutting application is PC only, so Mac users can design their artwork on the Mac and use a PC to connect to the cutter for the cutting of the jobs. Please be aware whilst held mode files can only be created by the PC based Cut-True Pro (Production Studio) application, MAC users do need to be able to have access a PC for Directly cutting their files, (or access to a PC Windows environment within their MAC to run the Cut-True Production Studio software and create the HELD mode files.

Mac users can design and cut files using 3 different approaches:

1. You can use the Mac Cut-True Pro feature 'Cut-True Pro ADD PageMARKs'; this utility will add the registration marks necessary to cut your file. You should then save your design as an illustrator file that can be opened on the PC which is connected to the cutter. (If you save the files in Illustrator format, you must have Illustrator also installed on the PC to open Illustrator files). You can then use Cut-True Pro in direct mode and then cut directly from the PC version of Illustrator.
2. Connect a PC to your cutter and install Cut-True Pro - Production Studio, on the PC (on the same network as the MAC), configure the Cut-True Pro Job Library feature to act as a cut job library server for your Mac.
3. Using either a PC or by running MAC Parallel or similar virtual PC Windows environment, install Cut-True Pro - Production Studio, on the PC environment (on the same network as the MAC), configure the Cut-True Pro Job Library feature to act as a cut job library server for your Mac then use the Cut-True Pro Production Studio software to generate held mode cut files for saving to a USB stick for cutting when not connected to a computer – or if the cutter is in a completely different location.

Use your Mac to create your artwork and then use the Mac Cut-True Pro feature 'Cut-True Pro ADD PageMARKs & QR Code'. (On MAC, this feature is found in the Illustrator main menu, just under the Print command). This feature enables Mac users to design on their Mac and then when the 'Add PageMARKs & QR Code' feature is selected from the Illustrator menu, Cut-True Pro will assign a Job number and a QR Code to the artwork, the cut file is automatically sent (in the background), to the Cut-True Pro Job library server on your PC so that is may be cut at a later date. This enables Mac designers to design efficiently on their MAC and allows Print Production operators to cut the Mac designed jobs from the remote PC connected to the cutter using the Job Server and Job Library feature.

Guide To Components



1 Tool Carriage
2 Tool Holder
3 Blade Holder
4 'Dual Grip' Roller levers
5 Main Feed Roller
6 Secondary Grip Roller
7 LCD Panel
8 Hard Keys
9 Exit Tray
10 Media Support

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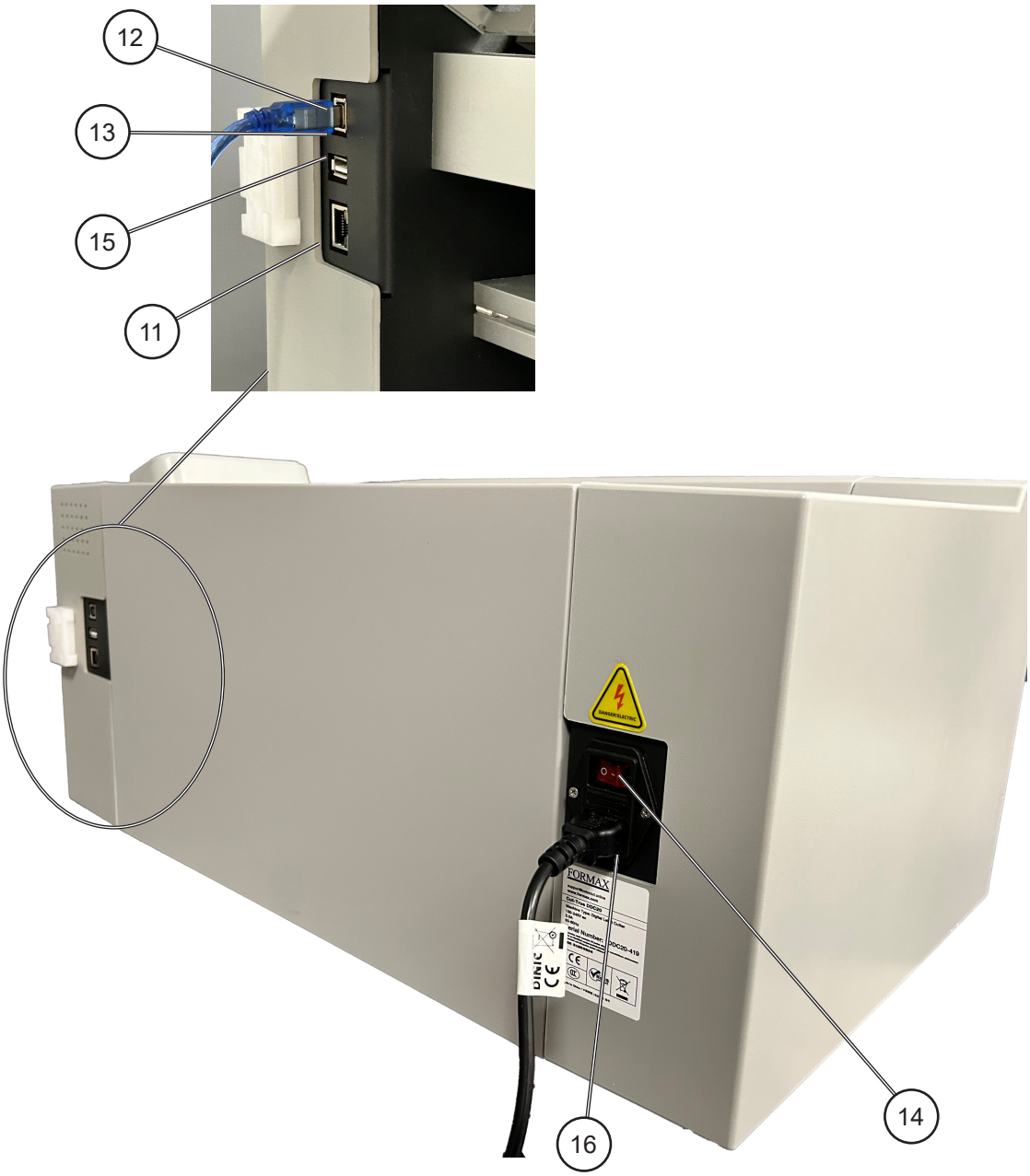
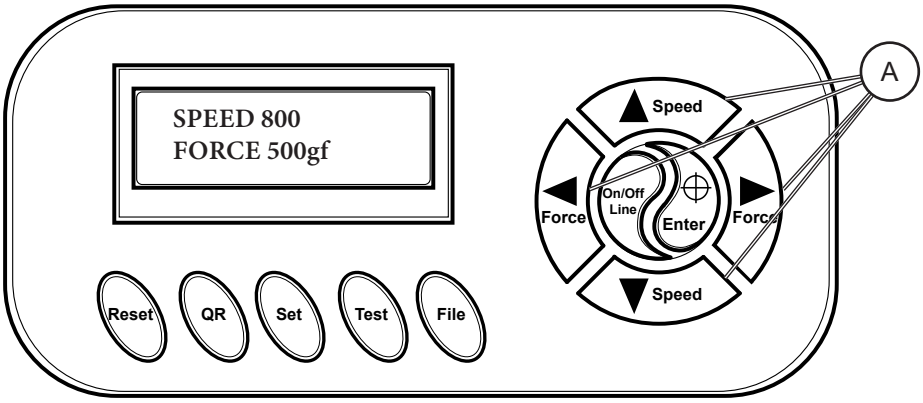
Guide To Components, continued



11 Cable Clamp
12 USB Interface Socket
13 USB Port
14 Power Switch
15 Ethernet Socket
16 Mains Socket

User Interface Cut-True DDC20



When you power on the DDC20 cutter, the Speed and Force for the cutting control is displayed and can be adjusted using the hard keys [A].

The LCD display shows Tool information, machine online/offline status and settings. When the machine is in Offline mode, all functions can be controlled using the hard buttons. Hard buttons help navigate through menus, make selections and adjust settings.

Please find below details of the function for each hard button.



Places the Cutter online ready to cut jobs. Pressing the button again will take the cutter offline and jobs can not be sent.
The default Online mode screen displays Tool Speed and Force. Pressing the Online/ Offline key allows access to menu list.

Offline mode screen displays X and Y axis location (default coordinates for both axis display X and Y=0.0000).



Pressing the [ENTER] button will accept the setting shown on the LCD panel when changing the menu options.



Increases the cutting speed when main screen is displayed. (Range 0-800 mm/s)

In Offline mode moves the Tool Carriage to the Right side.



Decreases the cutting speed when main screen is displayed. (Range 0-800 mm/s)

In Offline mode moves the Tool Carriage to the Left side.



Reduces the cutting force when main screen is displayed. (Range 0-500 g/f)

In Offline mode moves the front Dual Grip rollers forward.



Increases the cutting force when main screen is displayed. (Range 0-500 g/f)

In Offline mode moves the front Dual Grip rollers backward.

Continued on next page...

User Interface Cut-True DDC20, continued



Pressing the [RESET] button will reboot the machine. It can be pressed when a new file needs to be set or if a jam occurs.

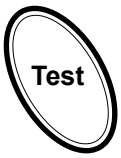


Press this and use the arrow buttons to select quantity of sheets you want to run and read the QR code.



Pressing the [SET] button in Offline mode allows to access Options and Settings menu.

In Offline mode [SET] button acts as a backwards button navigating through the menu options.



Pressing the [TEST] button will perform test cut checking the blade depth/force settings.

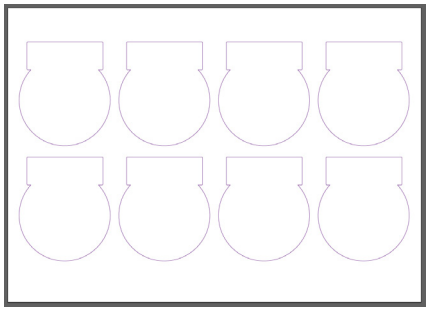
In Offline mode [TEST] button acts as a forward button navigating through the menu options.



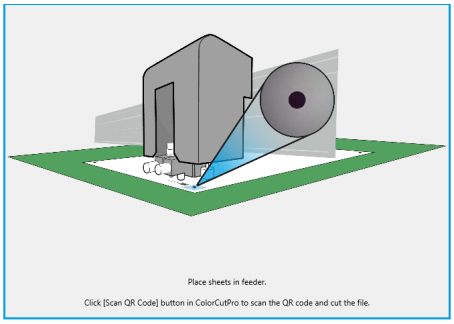
Press the [File] button to navigate and select files when a USB storage key is inserted.

Cut-True Pro Main Interface

Job Preview Window



Cut-True Pro Direct Mode



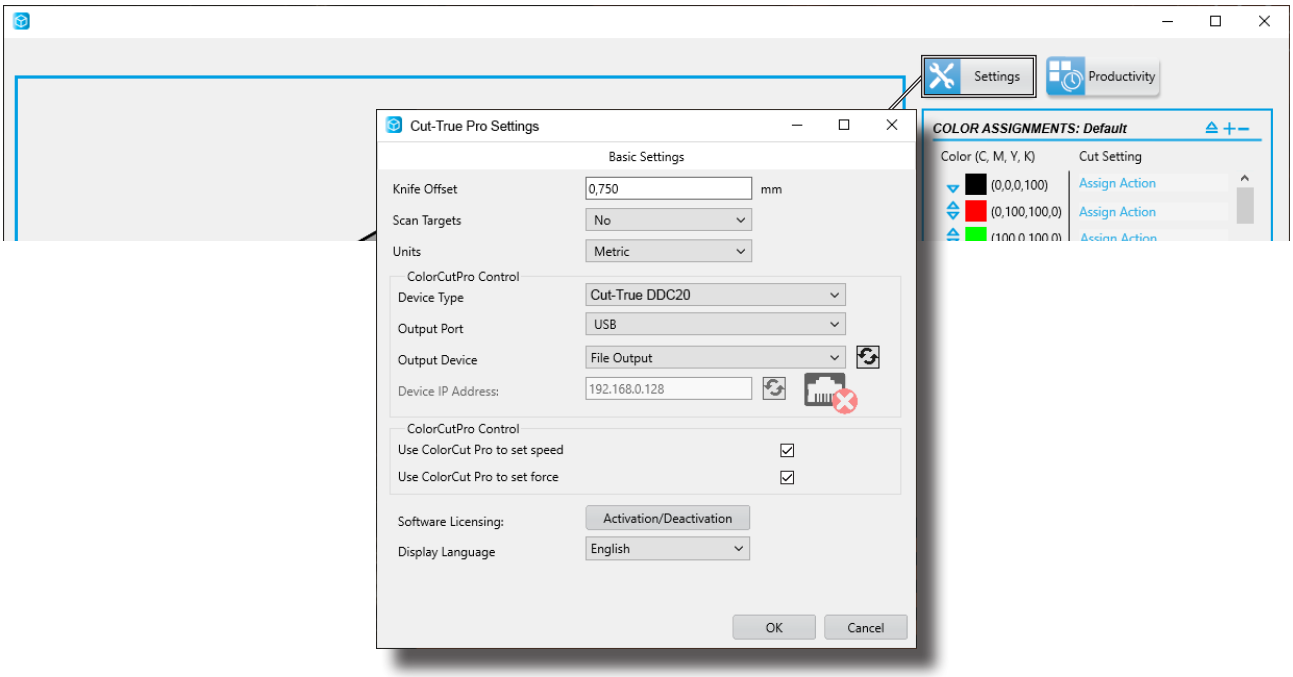
Cut-True Pro Job Server Mode

When launching Cut-True Pro in Direct mode a preview of the cutting profile on the selected layer will be shown in the Job Preview Window.

When launching Cut-True Pro in Job Server mode an information graphic will be displayed in the Job Preview Window. This will be updated with the Cut Job file preview once you have manually entered the Job number or scanned the Barcode.

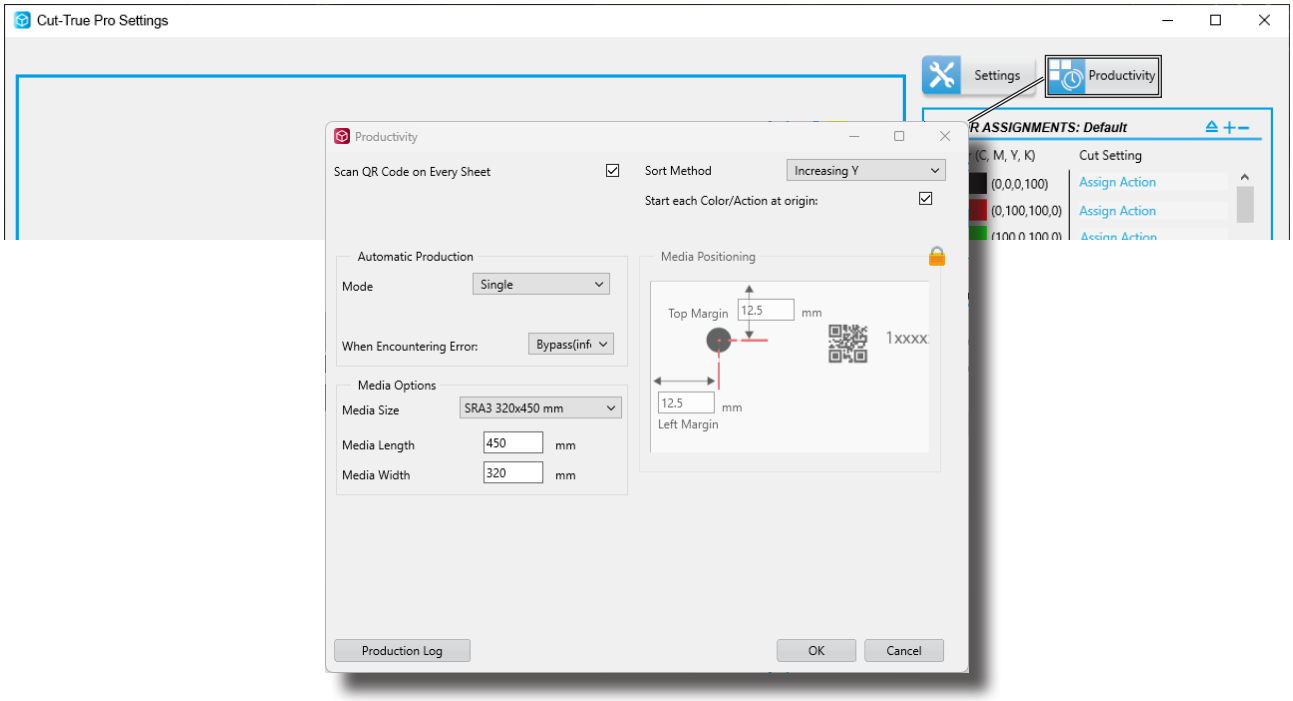
Settings

The Settings Button will display the Settings Window as shown below, which allows you adjust general settings such as knife offset, target scanning, units, etc.



Productivity

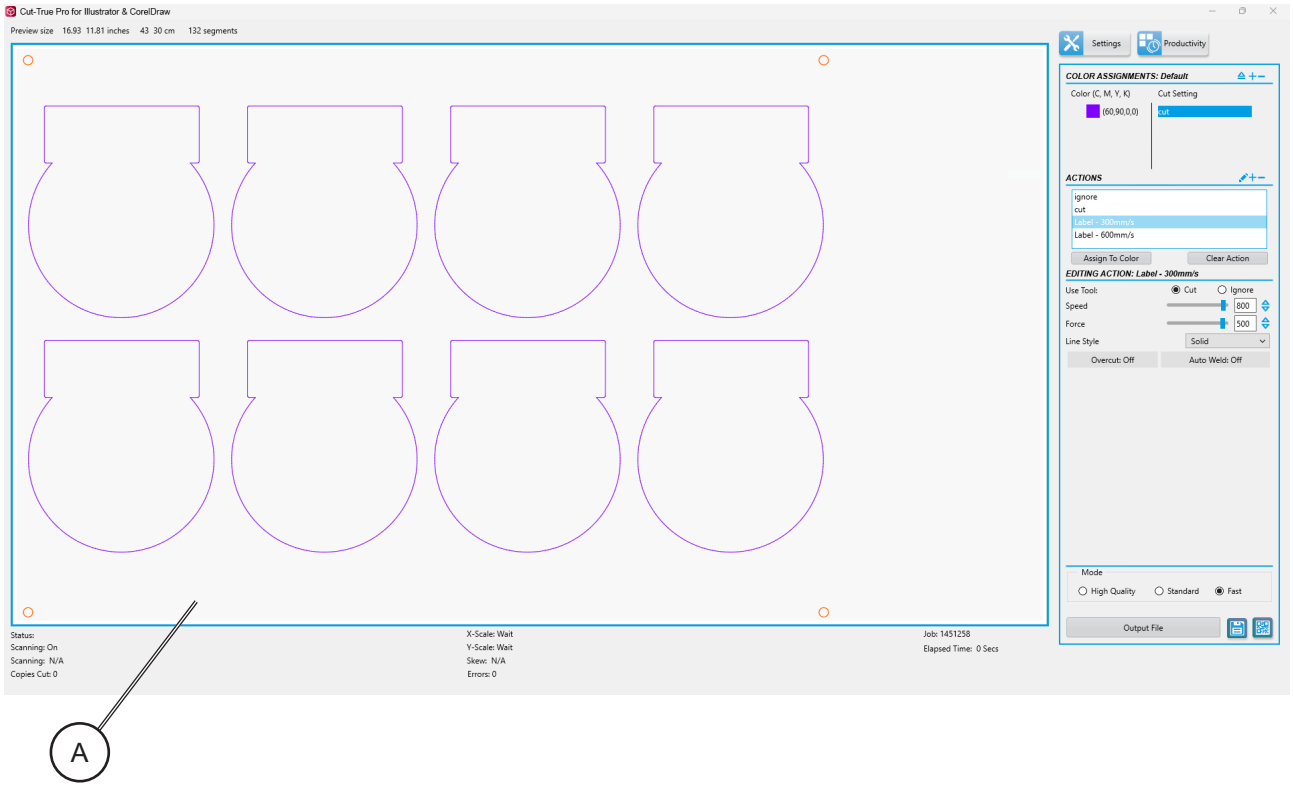
The [Productivity] Button will display the Productivity Window, required for setting the Media size loaded in the Auto-Sheet feeder and the default margin of the 1st PageMark (These are required for correct scanning of the PageMARKs & QR code). The Productivity options also enabling optimization of features that affect the cutters productivity, including the ability to handle single sheets, copies or continuous mode.

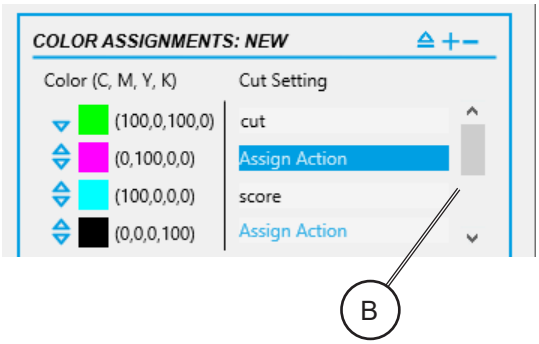


Cut Settings

Cut-True Pro displays a preview of the file to be cut in the Job Preview Window [A]. If the cut file contains different line colors then each color is matched to one of the 8 primary colors that Cut-True Pro recognises (See section “Line Colors recognised by Cut-True Pro”). The cutting lines are displayed in their respective colors, with each color listed in the Color Assignments window.

Next to each color, a Cut Setting/Action will be shown. The software will remember previous Cut Setting assignments applied to a color from the last time the Color was assigned. (If a Color has not previously been used, the assignment may be blank).





If there are more colors than shown on the list, use the scroll bar [B] to see the additional colors.

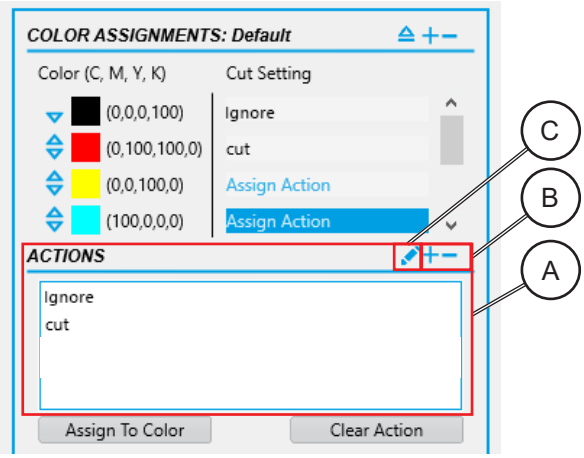
The sequence/order in which the actions are completed is the order in which the colors are shown in the Cut Settings list.

It is recommended to perform Scoring operations before cutting your substrate. If necessary the order can be changed by using the arrow symbols next to each color. The Up arrow will move a color up the list.

NOTE: Remember colors at the top of the list will be processed first.

Actions

You can create Actions for each process/task you wish the cutter to perform in Actions panel [A].

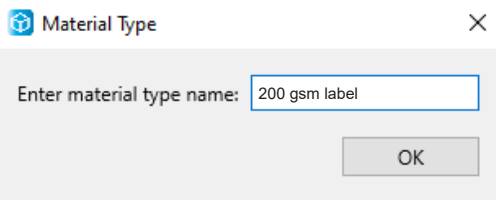


An Action is a profile consisting of the following saved settings being used:

- Cutting Tool (Cut or Ignore)
- Speed of Tool
- Force/Pressure applied by Tool
- Type of Line (Solid or Dashed)

As you get used to your DDC20 and the different materials you cut, you can start to save these profiles for different cutting forces or speeds dependant on the media types.

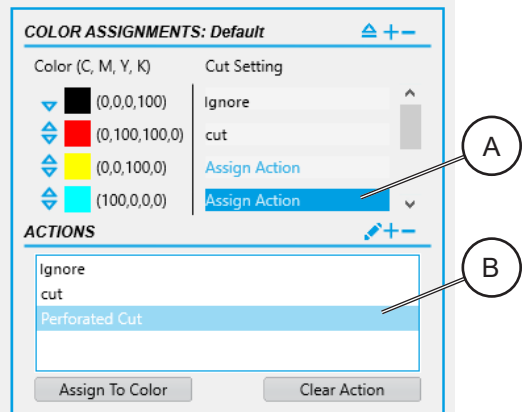
The Actions Window [A] shows a list of all the pre-defined settings/profiles you have created that you can use or employ. You can click the [+/-] symbol [B] to add a new Action. If you wish to rename the Action, click on Pencil symbol [C] and enter new action name, then click [OK].



After clicking the [+] symbol you will be prompted to enter the name you wish to call your Action.

Click [OK] and then follow the instructions in following sections.

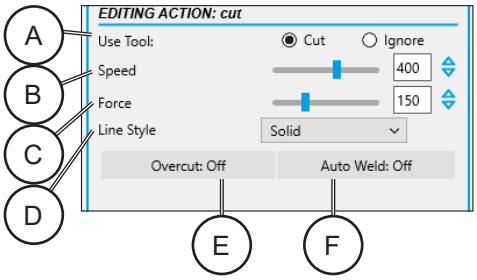
Assigning an Action to a Color (or clearing one)



1. To assign an Action to a colored line, select the Line Color you want to assign the action to in the Cut Setting Panel, in this example we will click on the Cyan/light Blue color [A]. (Click on the “Assign Action”, next to the Color).
2. Then select the Action you wish to be applied (in this case we selected a new action we created called ‘Perforated Cut’ [B]).
3. Finally click the [Assign To Color] button.
   The name of the selected action will appear next to the Line Color.
4. To change an action, follow the same steps, Click on the right side of the Color Settings (on the currently assigned action name). Then select the new Action you wish to apply and click [Assign To Color].
5. To Clear a Action from a Cut setting, Click on the right side of the Color Settings (on the currently assigned action name). And click [Clear Action].

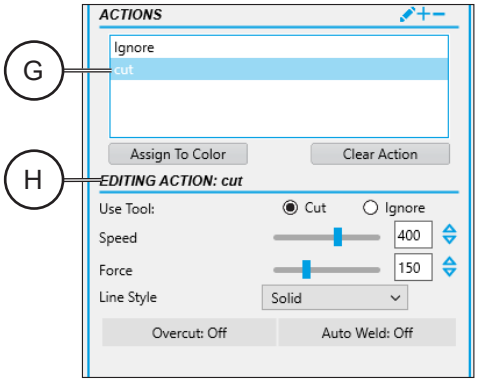
The Editing Action Window

The Editing Action Window displays the parameters used for the Action selected. You can check,review and edit the settings to suit the action and any changes will be applied to the Action immediately on the next cut.



Each Action, includes the following adjustable settings:

- Tool Used [A]
- Speed of the tool during cutting [B]
- Force/Pressure applied during cutting [C]
- Line Style (Solid or dashed/perforated) [D]
- Overcut [E]
- Auto Weld [F]



When creating a new Action, first create a new name (See section “Actions”).

To edit Action select it’s name from the list in the Action Window. When a Action is highlighted (in this case you can see we have highlighted the action ‘cut’ [G]). The name of the selected Action ‘cut’ can be seen in the top of the Editing Action section [H].

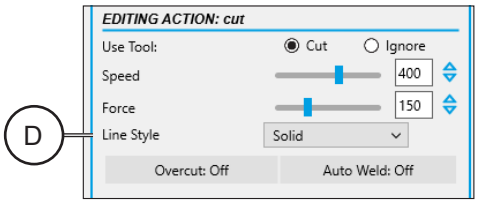
All parameters displayed in the section below combine to create the profile for the Action “cut”.

You can edit these values if required to adjust the profile to suit your requirements.

Selecting the Tool (Cutting/Ignore)

The Use Tool [A] to be used is shown (in this case the radio button for cut is selected). You can choose the Cutting Tool (the Tool positioned closest to the Carriage Beam on the Tool Carriage). Or you can choose to Ignore the line for cutting.

The Ignore feature is useful if you realise that your cut file includes some lines you did not intend to cut. (All other features such as speed or force will also be ignored if you select Ignore).



Selecting the Line Style of the Cut

The parameter Line Style [D] controls the type of line that will be cut. By default this is a Solid line. However, you can change the line style to a Dashed Line for a perforated cut.

Changing the Line Style will update the preview in the Job Preview Window (if the Action is assigned to one of the Line Colors in the job preview) so you can see the Line change to a dashed line.

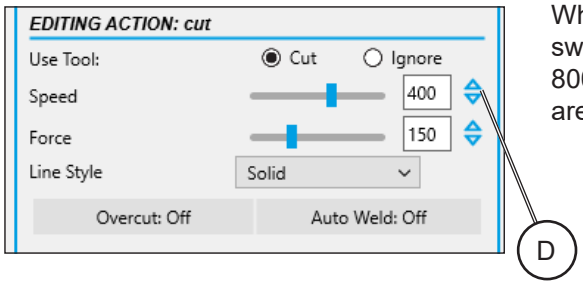
You can set the distance of the knife down (cut) and the knife up (gap) so this feature can also be used to create tags to hold elements in the sheet.

Dashed line (Adjustable) - creates cuts based on Cut length as a Priority and a gap. When the Gap is specified, the software aims to keep the Cut Length the same while also making sure the cuts align with the object. It does this by adjusting the gap so that the number of line lengths in a object line stays consistent for cutting.

Dashed line (Exact) - maintains the Cut Length and Gap as specified. This can result in some long lines appearing to have inconsistent line lengths. For example, if Cut Length is set to 50 mm and the Gap of 0.5 mm, a 230 mm line may have 4 cuts of 50 mm and one cut of 30 mm, but gaps between the cuts will be 0.5 mm

Speed of Cut

The parameter Speed [D] controls the speed of the carriage while cutting your design/project. The available range is 7 mm/s - 800 mm/s.

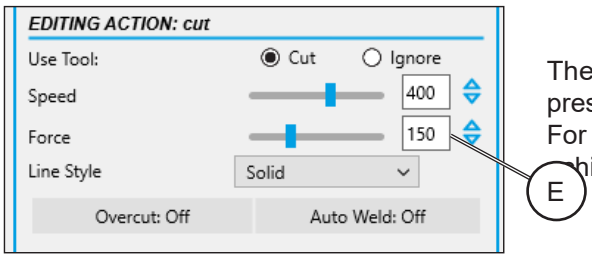


When cutting projects with predominantly straight lines and sweeping curves, high speeds can be used for example 650 - 800 mm/s. However for small delicate shapes slower speeds are recommended.

It is possible to create multiple actions with different speeds. You can then apply the different actions to various elements within your cutting design (the design will need to be created using different line colors to allow you to identify each element) This makes Cut-True Pro highly versatile as it enables you to assign multiple different speed profiles within one cut file using the different line colors.

Force of the Cut

The parameter Force [E] controls the force applied by the tool. The range available is 0 - 500 g.



- A cutting force of 250-350 g should be sufficient.

The most optimal cutting results are achieved when using pressure to help cut, not by extending the amount of blade. For the best results, you require the smallest amount of blade achievable.

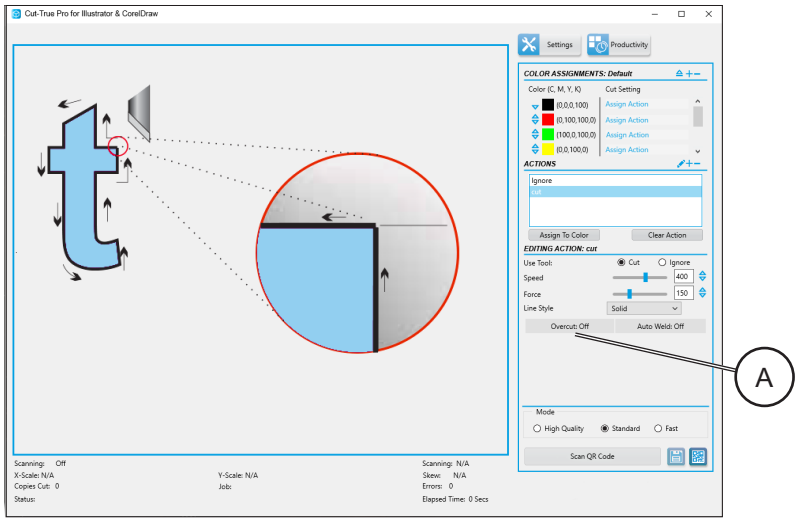
NOTE: Cutting with too much blade, will reduce the life of the blade and cause excessive wear on the cutting strip.

Please take care to observe the above guide lines for cutting force.

Overcut

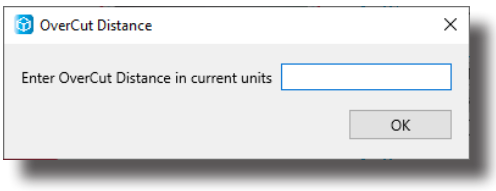
OverCut extends the cutline at the end of an object line (or curve) at the point where the blade would normally be lifted.

This way it makes sure that the design is completely cut. Due to a variety of tolerances without the OverCut function, the cut line may not be completely closed causing unwanted Tags on die-cut items or difficulties when weeding label media.



The default setting for Overcut is “Off” [A].

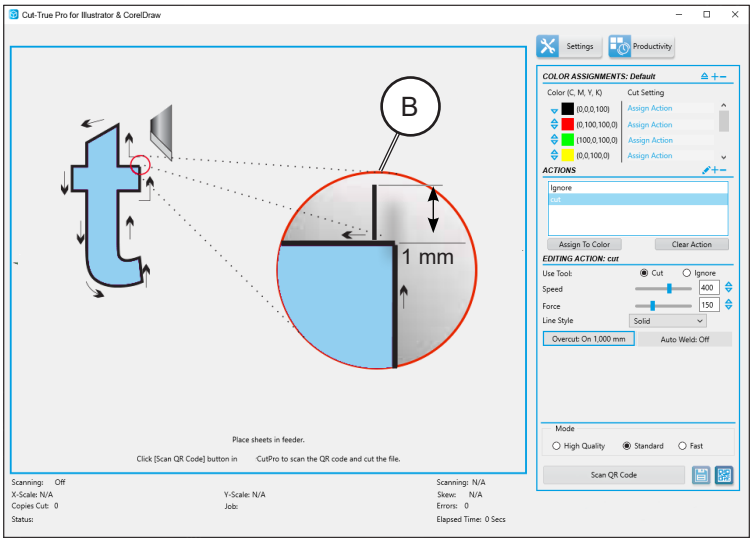
To Activate OverCut, click on the Blue button on the right side of the OverCut section and a dialogue box will appear asking you what value you wish to set OverCut to.



Set the OverCut value to approx. the width of the blade (for labels) or approx 1 mm for Card based projects.

Continued on next page...

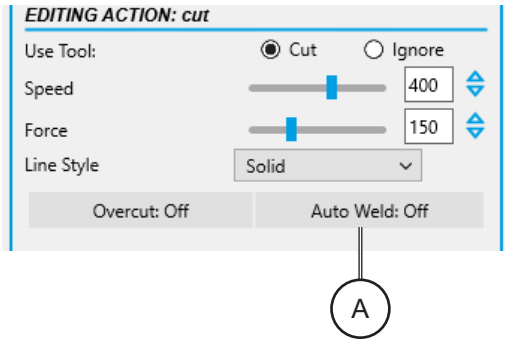
Overcut, continued



With OverCut enabled the blade will overcut the endpoint of the object prior to lifting [B].

NOTE: If cutting complete shapes and 1 mm is insufficient, it may be necessary to increase the value to 2 or 3 mm.

Auto Weld

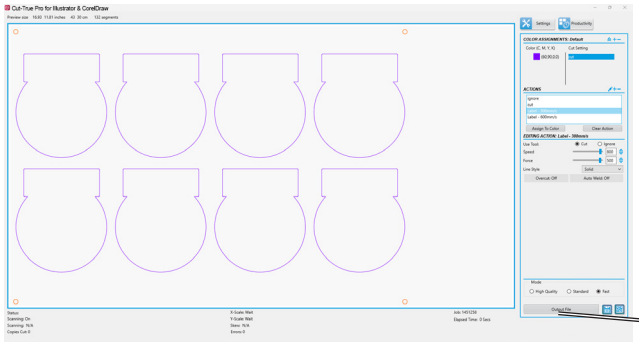


The Auto Weld [A] function serves as an indispensable tool for rectifying errors in artwork where lines are disjointed.

This function is especially useful for keeping the cutter head from rising while transitioning from the end of one line to the start of another, essentially combining these segments into a single continuous cut. By seamlessly connecting these lines, Auto Weld not only saves time but also ensures a smoother and more precise cutting process.

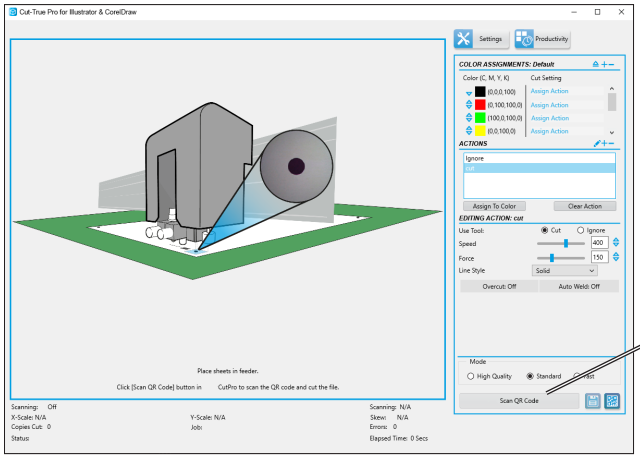
Start/Scan QR Code

The [Start] or [Scan QR Code] control is a dynamic button which changes based upon the mode you are working in.



If you have opened the Cutting file directly from your Graphics application, or you have manually entered a Job ID (See section “Enter a Job number to retrieve the Cut Job file directly”) to manually load a job to be cut, the Job preview area will show the job which will be sent to the cutter, and the button will display ‘Start’ [A] enabling you to start cutting.

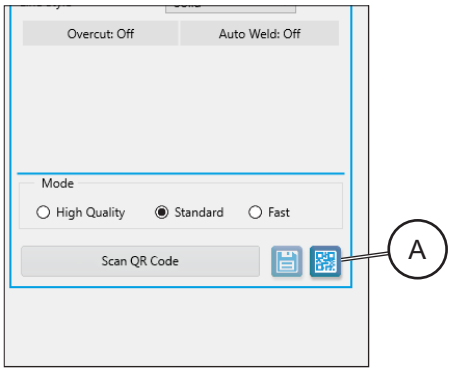
This is also known as Direct Cutting Mode.



Alternatively, if you have opened Cut-True Pro Stand Alone (Job Server Mode) there will be no preview of a job in the preview area.

In Job Server mode the button will show ‘Scan QR Code’ [B], which when clicked, will load a sheet and scan the QR code to retrieve the job and load it into the cutting preview area, then start cutting as defined in the Productivity set-up.

Switch Modes



The QR code icon [A] enables you to change the mode of the current instance of Cut-True Pro.

Clicking the icon, when no job is shown in the preview window (When the Cut-True is in Job Server Mode), enables you to manually enter a QR code to pre-load the job.

This enables you to check line/action assignments prior to large productions. See section “Retrieving Jobs from the Job Library (Job Server Mode)”).

Clicking the Icon, when a Job is loaded in the Preview Window (the cutter is in Direct Cutting Mode) switches to Job Server mode (ready to Scan a QR code).

Turning On / Off the Main Power



1. Make sure that the DDC20 power cord is plugged into the wall outlet.
2. Set main power switch on to ON position [A].

Launching Cut-True Pro

There are two different ways to Launch Cut-True Pro Production Studio. Cut-True Pro - Production Studio is the full version of Cut-True Pro, and is used to cut your files. It can be used in two different ways, you can select the most suitable method for your working environment.

1. Cut-True Pro (Direct Plug-in) is launched Directly from your graphics application. Launching Cut-True Pro, directly from your Graphics application will transfer the currently open design file (specifically the currently selected layer) directly to Cut-True Pro for cutting. This enables you to cut the file you are working on (or open a previously saved file). This way of working is ideal for testing a design or where the cutting will be handled by the same person that makes the artwork.

NOTE: When working in Cut-True Pro (Direct) mode, as Cut-True Pro is launched directly from the graphic application it requires either Adobe Illustrator or CorelDRAW installed on the computer that will do the cutting. In addition the operator will need to locate the file to cut and to be able to use the graphics application in order to launch Cut-True Pro. For this reason we typically recommend using the stand-alone mode of Cut-True Pro - Production Studio, also known as Cut-True Pro Job Server mode.

2. Cut-True Pro (Job Server Mode) does not need a graphics application installed on the computer. It also does not require you to locate the original graphics file. In addition the simplified interface is designed to be used by any operator (typically a Print Finisher with no specific computer or Graphic Applications skills) by providing a [Start/Scan QR Code] button to start operation.

When using Cut-True Pro in Job server mode your files must already have been created and have PageMARKS and a Job Number/QR Code added during the design stage. When the ‘Add Job Number & QR Code’ feature is carried out by the designer, the cutting lines are saved automatically for all users in the Job library folder.

When using Cut-True Pro - Production Studio (Job Server Mode), Cut-True Pro is launched on its own (stand alone) on your computer from the Windows Start Menu. The appropriate cutting file is retrieved by the operator entering the job number or can be retrieved automatically as the DDC20 scans the QR Code.

Using Cut-True Pro - Production Studio in (Job Server) mode streamlines the cutting process and retrieves cut files for you making cutting much easier. It is the recommended way of working for busy designers so they can find the files quickly and especially in companies where the cutter operator is a different person to the graphic designer, or where a different computer will be used for the cutting such as in MAC environments.

NOTE: When working in Cut-True Pro - Production Studio (Job Server) mode, as Cut-True Pro will retrieve the cutting files from the job library for you, it is important that your files were created with a Job Number and QR Code using the ‘Cut-True Pro ‘Add PageMARKS and QR Code’ feature in the design process from your Graphics Application.

The following sections of this manual details how to launch Cut-True Pro - Production Studio to cut your files using either method.

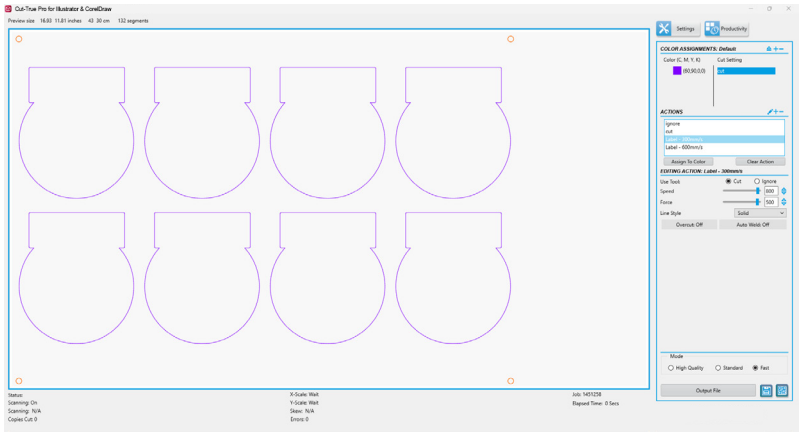
Direct Mode

Selecting the Cutline Layer

It is important to note that when you launch Cut-True Pro - Production Studio, the software will examine the currently selected ‘Layer’ in your graphics application and isolate all vector lines and curves on the page.

You may see an Error Message if there are artwork elements or images on the layer selected when you launch Cut-True Pro. Therefore by drawing the cutting profile and the artwork graphic on separate layers you may simplify the process.

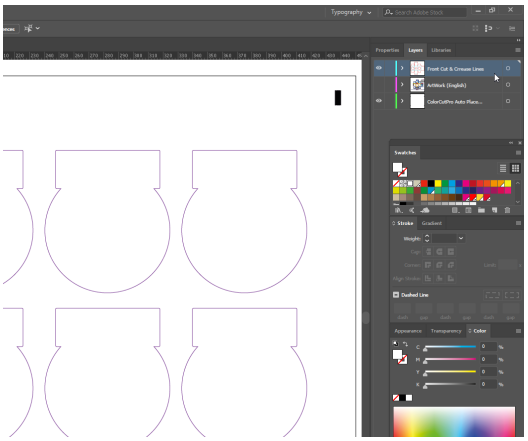
In this example the graphic layer is active; this drawing is ready for printing.



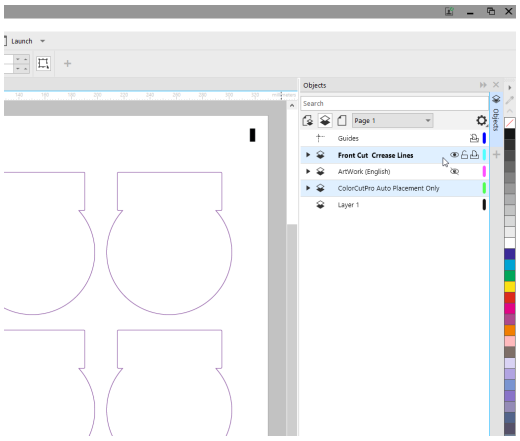
NOTE: Launching Cut-True Pro with this layer selected will generate an error as Cut-True Pro does not know how to handle graphics to a Cutter

Select the layer for the cutting

Ensure only the vector lines you wish to send to your Cut-True cutter are on the layer selected before launching Cut-True Pro. In the example below, the layer is ready for you to launch Cut-True Pro.



Adobe Illustrator



CorelDRAW

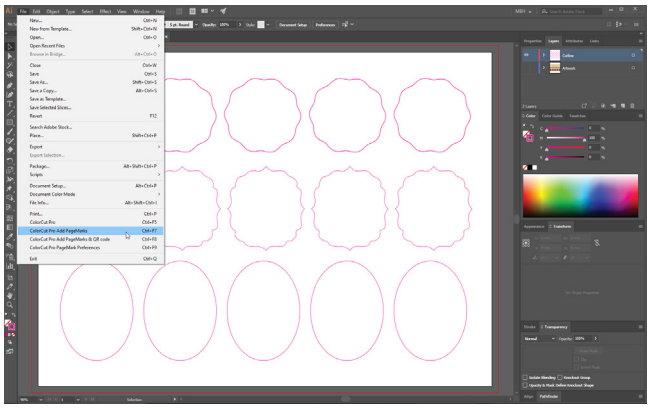
NOTE: Although most of the screen-shots shown in the manual are from Adobe Illustrator, CorelDRAW (as shown above right) uses object layers enabling you to separate the cut lines & artwork to different layers

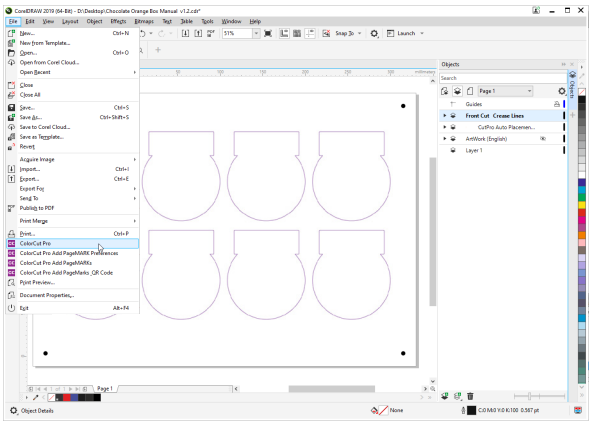
Continued on next page...

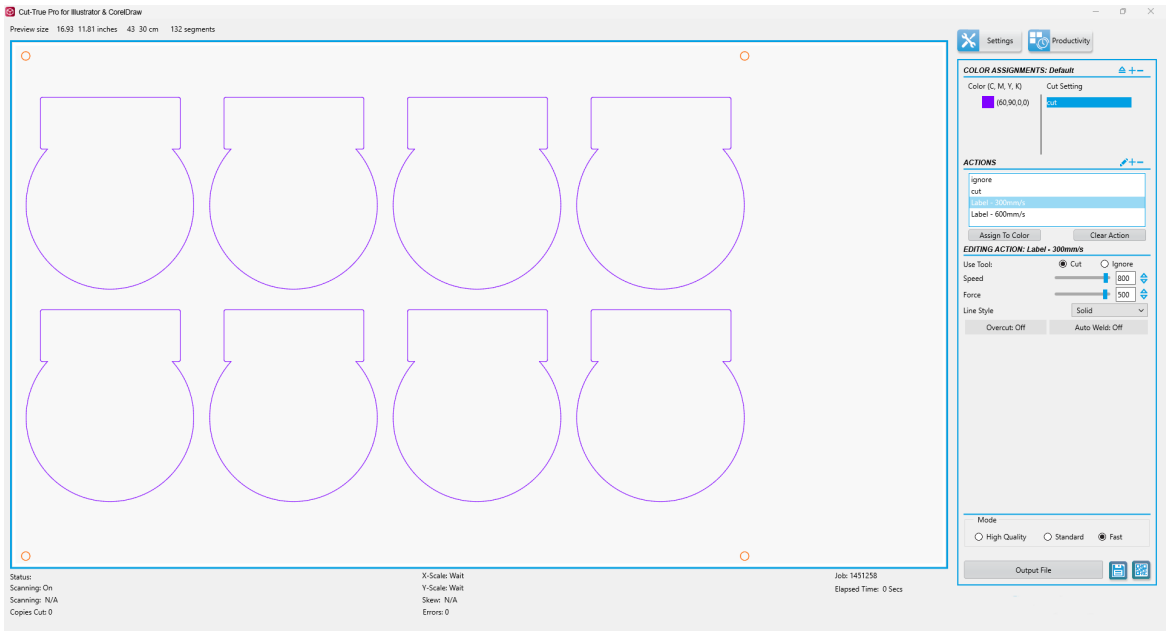
Direct Mode, continued

Launching Cut-True Pro (Direct Mode)

After selecting the layer you wish to send to the Cut-True DDC20 Cutter, select Cut-True Pro from the File menu. Both Adobe Illustrator and CorelDRAW can be seen below with the Cutline selected and then Cut-True Pro selected from the [File] drop-down menu.







The Cut-True Pro splash screen will briefly appear, then the main Cut-True Pro application will be displayed. You will see a preview of the cutting profile from the Currently Selected Layer in the window.

The Cut-True Pro - Production Studio application handles all the functions for the automation of the digital cutting process. When launching Cut-True Pro in Direct Mode, Cut-True Pro transfers the currently selected layer containing contour cut lines from Adobe Illustrator or CorelDRAW directly into Cut-True Pro.

Specific parts of the software panel are dedicated to controlling how the different tools in your Cut-True are controlled and can be customised by action.

For an overview of the options available to set the proper cutting parameters, please see below:

Before cutting for the first time, ensure that you have set up your Cut-True in the [Settings] dialogue box. Prior to first use, Cut-True Pro must have the Sensor offset aligned and you must set the correct Blade offset.

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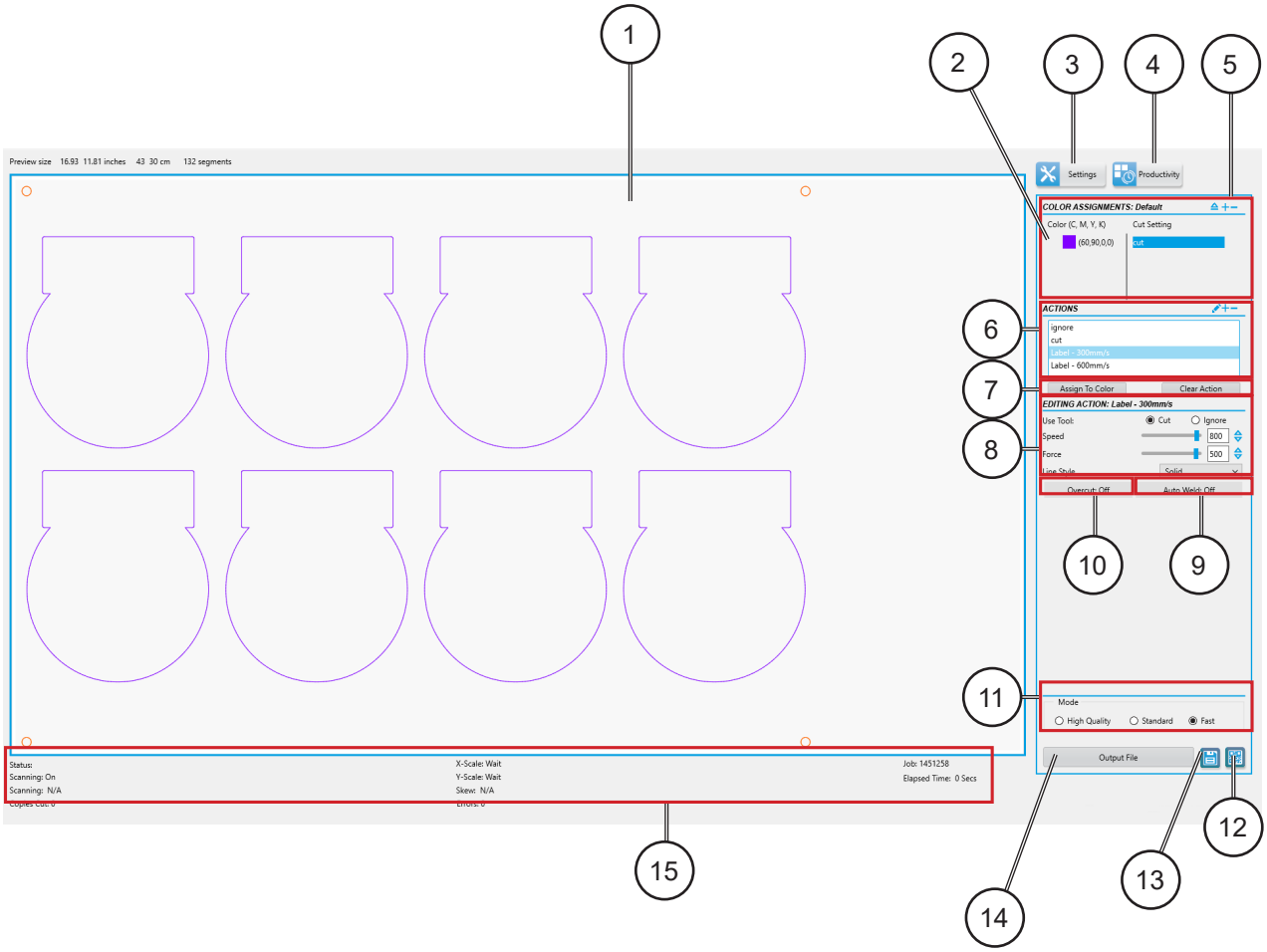
Direct Mode, continued

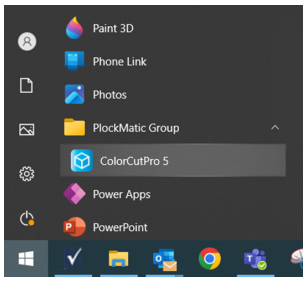
Overview of the Cut-True Pro Main Screen (Direct Mode)



1	Preview of selected cut job	9	Auto Weld option
2	Change Cutting order	10	OverCut option
3	Settings	11	Quality Mode
4	Productivity Options	12	Switch to Job Server mode (Access QR code mode & Job Library)
5	Colors available in job & actions	13	Save cutting file
6	Pre-Set Action	14	Start Cutting
7	Assigning an action to a color	15	Status bar
8	Edit Material/Action setting		

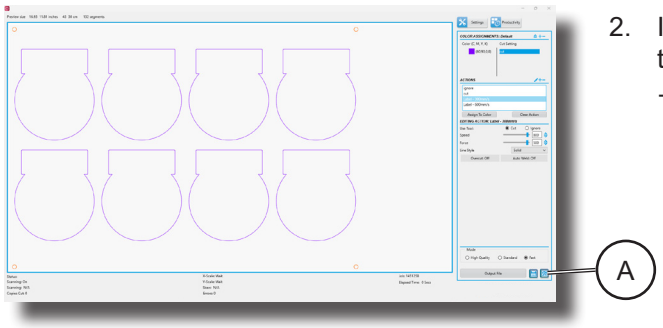
Job Server Mode

There are 2 ways to launch the Cut-True Pro (Job Server) version of Cut-True Pro.



1. Open the Cut-True Pro (Job Server) from Start menu
   - Open the Windows [START] menu, and select Cut-True Pro from the Programs/Formax Group folder*.
   - The Cut-True Pro splash screen will briefly appear then the main Cut-True Pro application will be displayed In the preview window, an informational image will appear showing you where to position a job (if manually positioning). Once a job is retrieved by scanning a QR Code or by entering a job number, the preview of the loaded job will then be displayed.

   *The folder path may alter.



2. If you are already running Cut-True Pro (Direct mode) then open from Cut-True Pro (Direct)
   - If you already have Cut-True Pro (Direct) open, you can switch to Job Server mode, by clicking the QR Code icon [A].

Overview of the Cut-True Pro Main Screen (Job Server Mode)

The Cut-True Pro - Production Studio application handles all the functions for the automation of the digital cutting process. When launched in Job Server Mode, Cut-True Pro will load Cut Job files from the Job Server Library by either by scanning the printed QR code on the artwork or keying in the Job number (also printed on the artwork). No additional software is required to load or open the cut files.

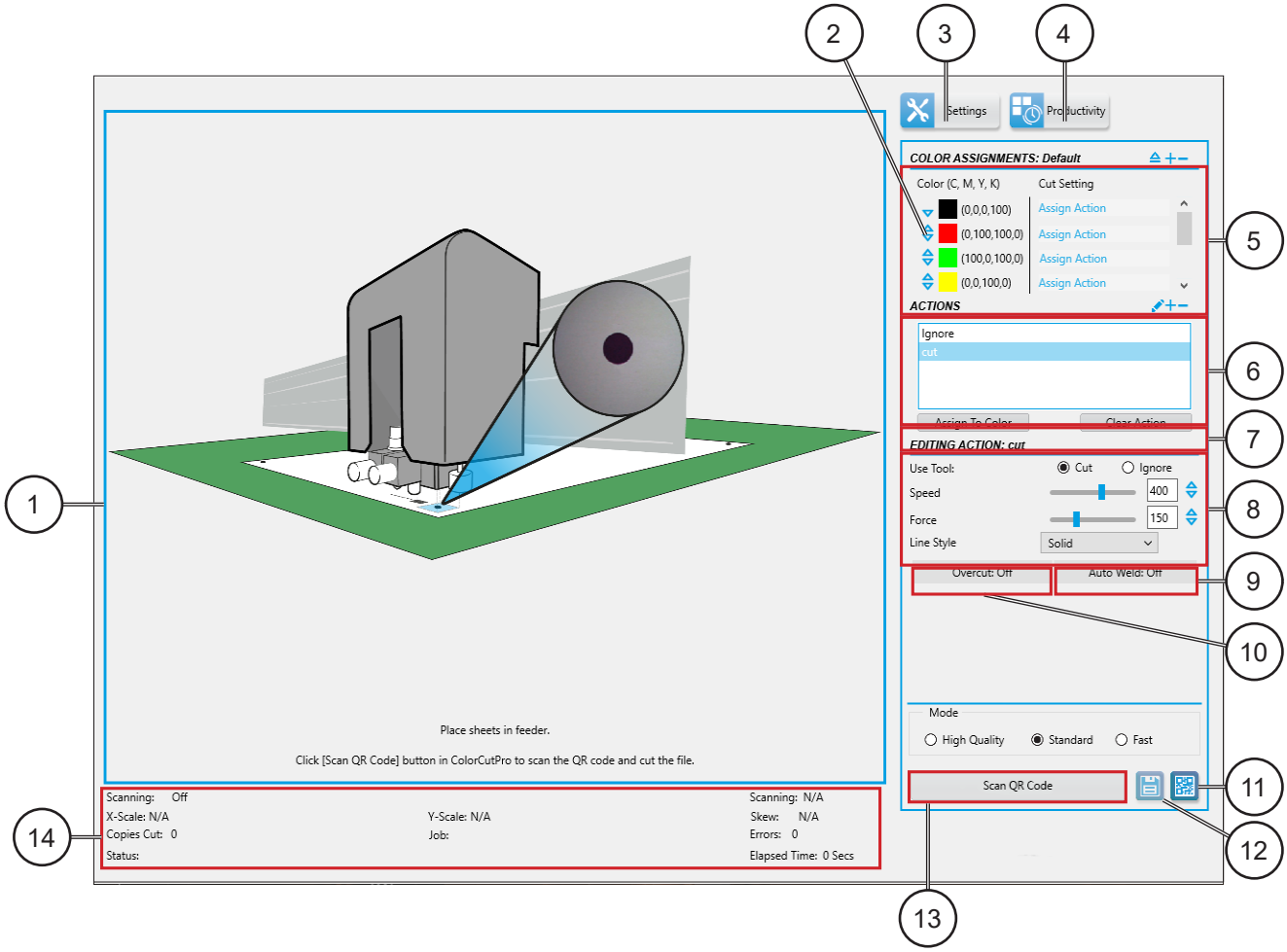
The screen options and layout are almost identical to the Cut-True Pro (Direct Mode), with the exception of items. 1, 5, 15 & 14 detailed below. For an overview of the options available to set the proper cutting parameters, please see next page.

NOTE: Before cutting for the first time, ensure that you have set up your Cut-True in the [Settings] dialogue box. Prior to first use Cut-True Pro must have the correct Blade offset.

Continued on next page...

Job Server Mode, continued

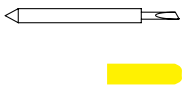
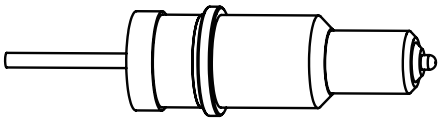
Overview of the Cut-True Pro Main Screen (Job Server Mode), continued



1	Preview of selected cut job	8	Edit Material/Action setting
2	Change Cutting order	9	Auto Weld option
3	Settings	10	OverCut option
4	Productivity Options	11	Switch to Job Server mode (Access QR code mode & Job Library)
5	Colours available in job & actions	12	Save cutting file
6	Pre-Set Action	13	Start Cutting
7	Assigning an action to a color	14	Status bar

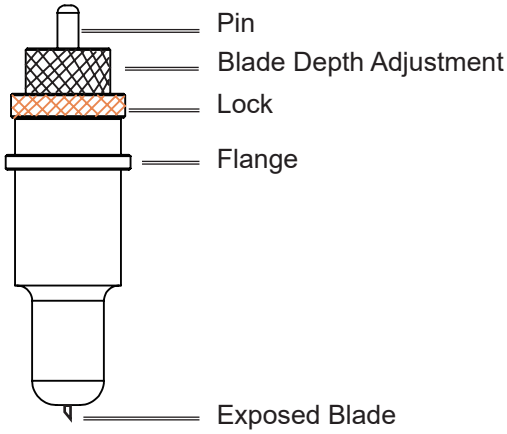
Cutter Blades (An overview of Blade types)

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°	1 mm	For Film, very soft material, thin label material.
		45°	1 mm	Typically for labels, stickers, and very thin paper/card
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 and pressure available rather than the blade (which is 350 microns for the DDC20)

The Blade Holder



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

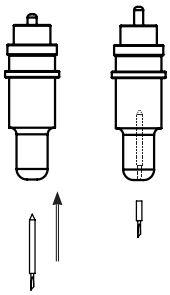
Replacing the blade

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.

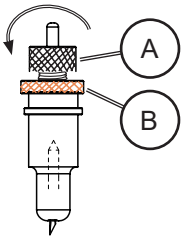
For Standard blades

(Without the circlip)

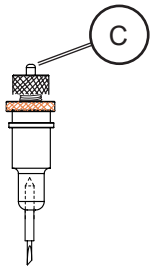
1. Push the blade into the bottom of the blade holder.



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

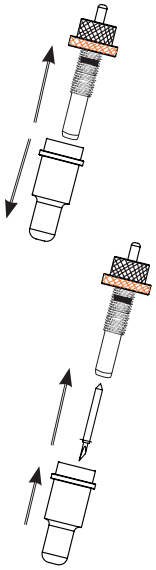


3. Press the push-pin [C] to remove the blade from the blade holder when replacing blade.

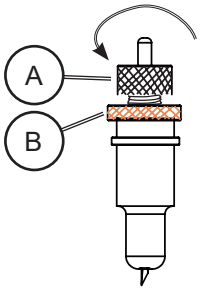


For CirClip Blades

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



2. Insert the Circlip 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 the Adjustment depth knob [A] and then tighten the lock [B].

4. Replace the blade by following the steps above

NOTE: You cannot push the pin as you do with standard blades as the circlip prevents the blade being removed.

Blade Adjustment

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

NOTE: If you have enough blade sticking out to clearly see and feel the tip, it's probably too far out. Most new DDC20 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.

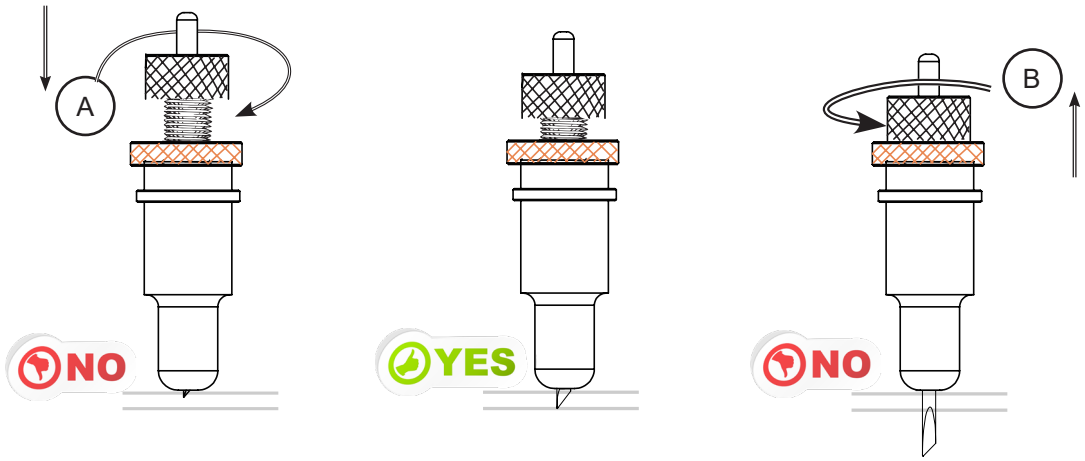
Labels:

1. Lay a scrap piece of material on a hard work surface (not on a nice table in case you cut through the backing).
2. With the blade holder in your hand, press down and cut a circle in the material.
3. Press down using a moderate amount of force while you cut the circle.
4. Adjust the blade depth so that only traces of the blade's cut 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 A.
- To retract the cutter blade, turn the knob in the direction B.

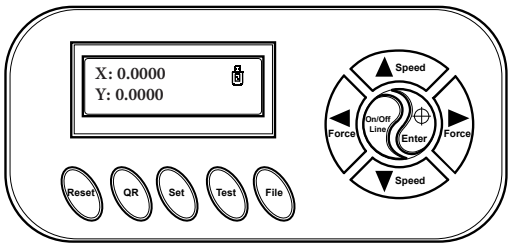


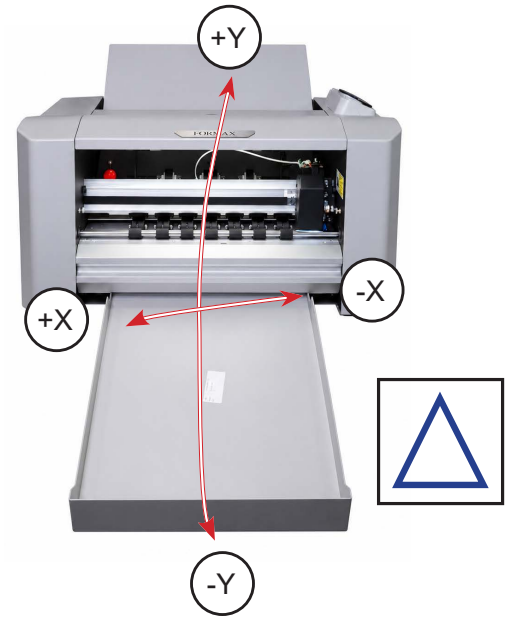
Test Cut

The Test Cut function allows you to check your blade depth/force settings on your Cut-True DDC20 cutter and perform calibration of Align Tool2 to Tool1.

After the Blade tool has been loaded and you have manually adjusted the blade depth to a level you believe is correct. Place a sheet of your media, and perform a test cut, following the instructions below. Then adjust the blade and pressure accordingly. Checking and adjusting the settings for your specific media prior to a production saves time and eliminates waste.

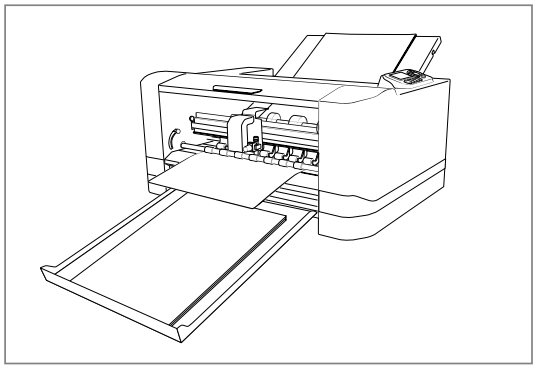
NOTE: Test Cut is very useful for checking your blade depth and the pressure/force used during cutting, prior to starting a job.
After the Blade tool has been loaded and you have manually adjusted the blade depth to a level you believe is correct. Load a sheet of your media, and perform a test cut, following the instructions below. Then adjust the blade and pressure accordingly. Checking and adjusting the settings for your specific media prior to a production saves time and eliminates waste.





Performing a Test Cut to check depth/force:

1. Place a blank sheet of paper into the feed tray - SRA3 recommended.
2. Press [TEST] button. The DDC20 will now cut a Triangle Shape using Tool1 (The blade).
3. Press [ENTER] button.
4. If after performing the test cut the cut is too deep or not deep enough, adjust the force and press [TEST] again. This will move the head to the left and perform another test cut with the new force
5. Once cut is at desired depth, press [ENTER] and the machine will eject the sheet.
6. When new settings are applied, repeat the test cut until the desired cut is achieved. There is no need to move the carriage while performing a new test cut since the carriage will shift to the left side each time a new test cut is performed.



NOTE: The minimum level of exposed blade will provide the best quality on sharp inverted turns and extend your cutting strip life. Too much Blade, will result in the Blade cutting through your media and cutting into the cutting strip. This will reduce your blade life, create poor quality cutting on sharp inverted turns and damage the cutting strip reducing the cutting strip life.

Configuring the Cut-True Pro Plug-in

In addition to setting the cutter model upon first use, it is important to set/check the configuration settings for the software. Among the settings there are several that are important to understand to get the best results from your Cut-True Flatbed cutter.

These are:

Knife Offset: A range of blades fit DDC20 cutter and different blades may alter the way corners and shapes are cut. It is important that each time the blade is changed you set the correct Blade offset for the new blade fitted. This is because different sized blades turn on a different axis. Further information on Knife Offset can be found further on in this section of the manual. The value should be 0.25 for standard (Label) blades.

Scan Targets: This tells the Cut-True Pro software that it should look for the registration PageMARKs and adjust the position and compensate the cutting lines for scale and skew errors on the printed sheet. This provides very accurate cutting in conjunction with images or artwork on the sheet. Default setting: Yes

NOTE: Alternatively it is also possible to cut sheets that are blank or do not contain PageMARKs. This can be useful when it is not necessary to register the cut line to a specific place on the media i.e. when cutting shapes out of blank media such as hearts from red card on Valentines Day, or Face Shields/Visors from Clear Polyester material.

When cutting without marks, the origin is manually set by the user on the cutter and it does not take into account skew, scale or mis-positioning of the sheet. (Not recommended if artwork is on the media). For this reason we normally recommend that a user should use 'Scan Targets', in conjunction with PageMARKs on their artwork.

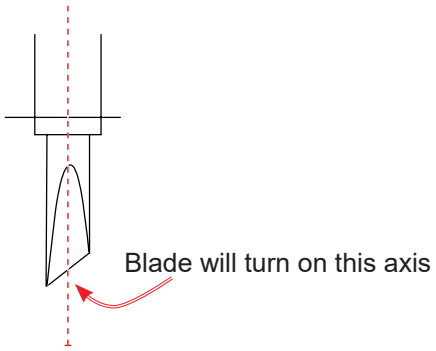
Device Type: This adjusts the Cut-True Pro application's appearance and screens to match your cutter model. Ensure this is set to the appropriate model for your cutter.

Output Device: This shows where your Cut file will be sent to. When the DDC20 cutter is detected on the USB port this should show USB Device. If it shows File Output then the Cutter can not be seen, check your connection and that the cutter is ON-LINE and ready.

Vision Sensor Offset: Cutter is fitted with a Vison3 registration sensor to detect PageMARKs but this is in a different position to the centre of the blade. Therefore it is important to tell the software the 'offset' between the blade and the sensor itself. This can be manually set however to make life easier, the Auto Find feature will automatically it. It is important to have these values set for DDC20 cutter otherwise you will not cut accurately. It is also detailed in the following pages for your reference.

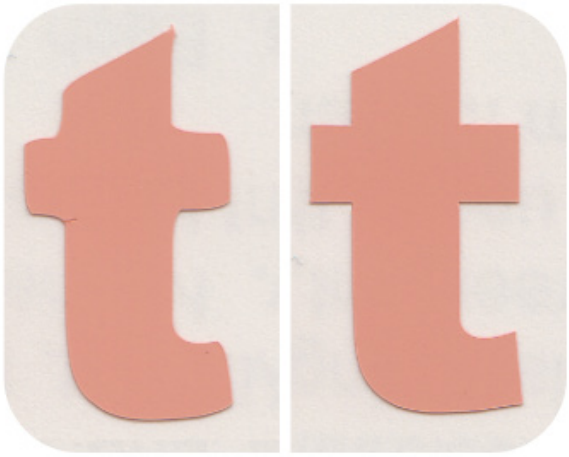
Blade Adjustment

The Cut-True series of cutters use a contour-cutting blade (sometimes referred to as a ‘drag knife’) to accurately cut shapes. The blade revolves/rotates around its centre as the carriage moves following the cutting path and as the Tool Carriage changes direction.



When the blade reaches a corner its axial centre (the point around which it rotates) arrives before the cutting point and unless there is some means of causing it to do so, the cutting part of the blade would never reach the corner and would start to turn as the cutter changed direction thus creating a radius instead of a sharp corner.

No Blade offset compensation



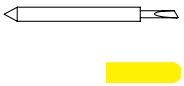
Knife Offset compensation applied

Cut-True Digital cut engines have a built in routine to maneuver the blade in a way that compensates for this, it is known as Knife Offset.

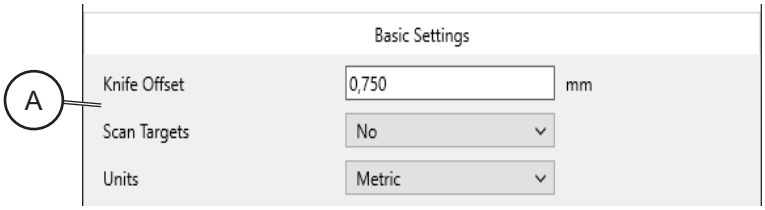
Setting this correctly and checking it each time you change blades is important because supplies a range of blades to enable the cutting of different media and various thickness’s. Some blades have a thicker shaft than others. This means the distance from the blade’s centre to the cutting point (the Knife Offset) will be different depending upon the blade. The Knife Offset value is used by the software to compensate for the distance from the point at which a blade cuts to the point around which it rotates.

Choosing the Correct Blade for the Job

Each packet of Blades shows the Knife Offset on the front of the packet. Nominally the standard Yellow, Red and Blue blades that are 1 mm, use a 0.25 mm Knife offset.

Name	Image	Angle	Blade Diameter	Knife Offset	Features and Application
Blade		30°	1 mm	0.25 mm	For Film, very soft material, thin label material.
		45°	1 mm	0.25 mm	Typically for labels, stickers, and very thin paper/card

NOTE: Remember to check and set the Knife Offset when changing blades.



1. Click the [Settings] button on the main Cut-True Pro screen to display the Cut-True Settings Dialogue box.
2. Enter the value in Knife Offset text field [A].
3. Click [OK] to save the settings.

Scan Targets

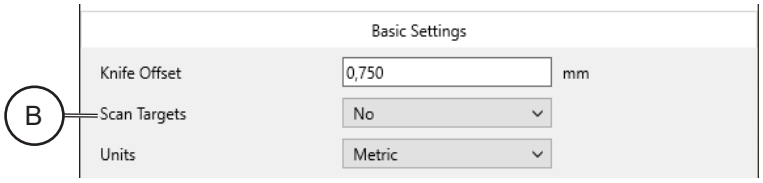
Due to a potential variability when printing sheets, it is possible that a printing device may not consistently start/position the image in exactly the same position on every sheet. In addition some printers may scale or distort the image. Further accuracy issues can occur if you do not position your sheets perfectly squarely on the cutting table.

1

If your image starts in a different position on varying sheets or suffers from image distortion created by your printer, it is possible the cutter may not cut in accordance with the printed design.

To eliminate imaging issues and enable faster positioning of your sheets on the cutting bed the Cut-True Pro software can be set to read PageMARKs added to your printed sheet enabling it to precisely locate the origin of your artwork. In addition the positioning data read from the printed PageMARKs is used to compensate for scale or skew of up to 3 mm coming from your digital printer, or up to 5 mm rotation from sheet placement. Your cut lines are then automatically adapted by Cut-True Pro to compensate for these issues, delivering precise and accurate cutting for all your jobs.

However, when cutting shapes with no need for alignment (such as blank media) the cutter can be set to disable the scanning of these registration targets.



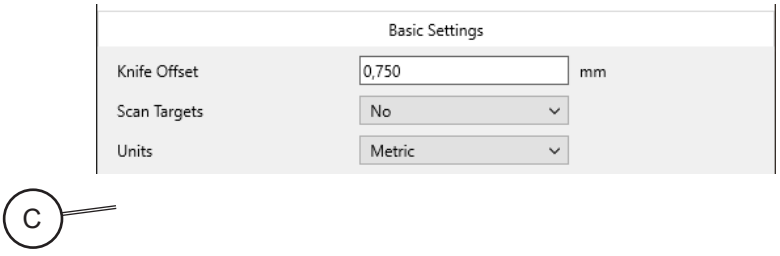
1. Set Scan Targets [B] to Yes to ensure the PageMARKs are scanned and any positioning or printing errors are corrected (this is the recommended mode).
2. Set Scan Targets [B] to No for the alternative mode of operation where the origin is set manually using the cutter control panel and the PageMARKs are not scanned. (This option is used for cutting blank sheets where registration or alignment of the cut to the image on the sheet is not important).

NOTE: Positional accuracy cannot be assured if you set the cutter to not scan for PageMARKs.

The graphics should be designed in accordance with the guide in this manual on PageMARK creation (See section “Registration Pagemarks”). Only the specific PageMARKs detailed will provide origin reference, scale, skew and rotation references for the Cut-True software so it can adjust your cutting line appropriately for accurate cutting.

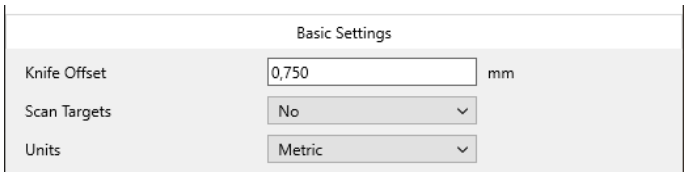
Device Type

This setting shows the current output type of Cutter connected. The main screen and controls for Cut-True Pro will change based upon the Device Type [C] selected and not all features will be available as detailed in this manual unless you have selected the cutter type to match your Model.



Output Device

This setting shows the current Output Device [D] connected. When the Cut-True DDC20 is connected this should read ‘USB Printing Support: x’, where ‘x’ is your cutter type, or ‘Ethernet Direct connect’ (If it is ON-LINE).

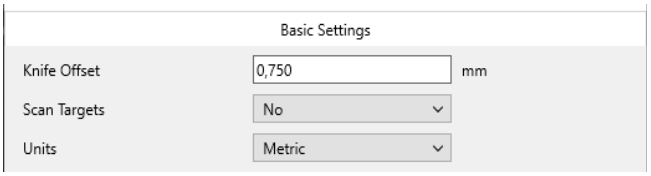


If the Cut-True Pro software cannot sense the DDC20 cutter on the connection of your computer, then this will show: “File Output”.

In such circumstances, check your connection to your computer and power cycle DDC20 cutter. (Ensure it is off for 45 seconds to enable the cache to flush).



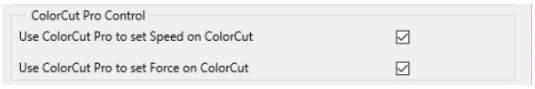
Units of Measurement



Cut-True Pro can be operated in Metric (mm) or Inches (Imperial). Use the Units control to set the measurement units to your preference.

Choosing where to set Speed and Force

Cut-True Pro allows you to define the Speed and Force Settings for each which is important especially if you wish to cut with different pressures in one job (i.e. a high force to cut through an element and a light force to apply a score to the element).

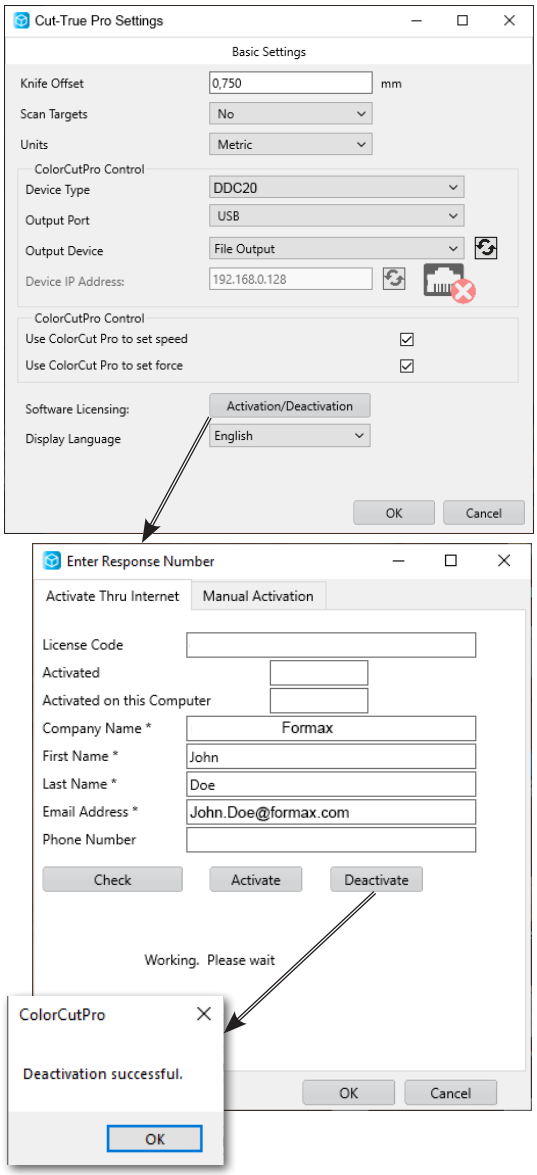


Alternatively large sweeping curves may be cut quickly however complicated delicate shapes can be drawn using different colored line so you can associate a different speed for each line.

To achieve this the speed and force settings must be controlled by Cut-True Pro. Ensure that the check boxes are enable to ensure Cut-True Pro can control your cutters speed and force.

NOTE: If you wish to ignore the Speed and Force Settings set under Cut-True Pro’s options, unchecking these boxes will stop the Speed and Force settings being sent to your cutter. When these options are not checked all artwork lines being cut will be controlled by the settings shown on the LCD panel of the Cutter itself. You can change the values by selecting the Tool directly on the LCD panel and using the Hard keys to adjust speed or force as shown on the panel.

Activation/Deactivating Cut-True Pro License



Cut-True Pro is activated and licensed through an online license server. You receive a license capable of 2 activations. One is for your ArtWork PC, one is a remote cutting computer (in case you do not wish to use your design PC (or the same person) to perform your cutting tasks. The MAC client does not require a license.

To move Cut-True Pro to a different computer, you must first deactivate it on your current computer before installing it on the new one.

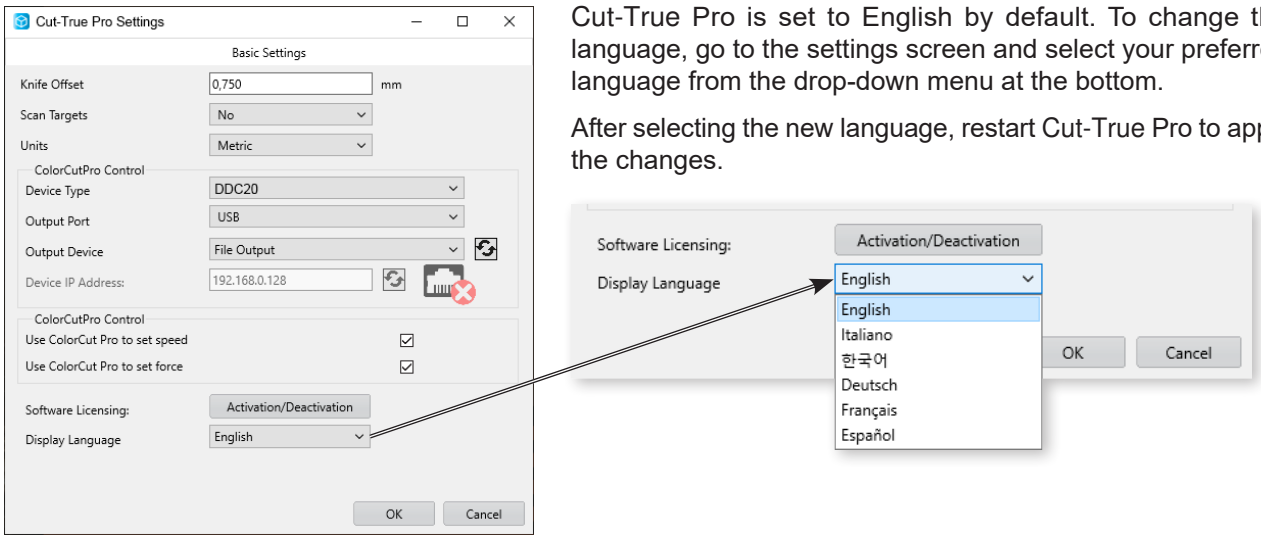
If you do not deactivate your Cut-True Pro license, the online activation server will reach its activation limit for your license code, preventing you from licensing a new computer. As a result, Cut-True Pro won't run. To resolve this, either deactivate the previous installation or purchase an additional license.

Deactivating Cut-True Pro

After clicking the [Activation/Deactivation] button, the license activation screen will appear. To deactivate your license, click the [Deactivate] button. This will connect to the online license server, deactivate the license on your computer, and free up a license code for reactivation on the same or another computer.

NOTE: If an internet connection is unavailable, you will not be able to deactivate your license until an online connection is restored.

Display Language

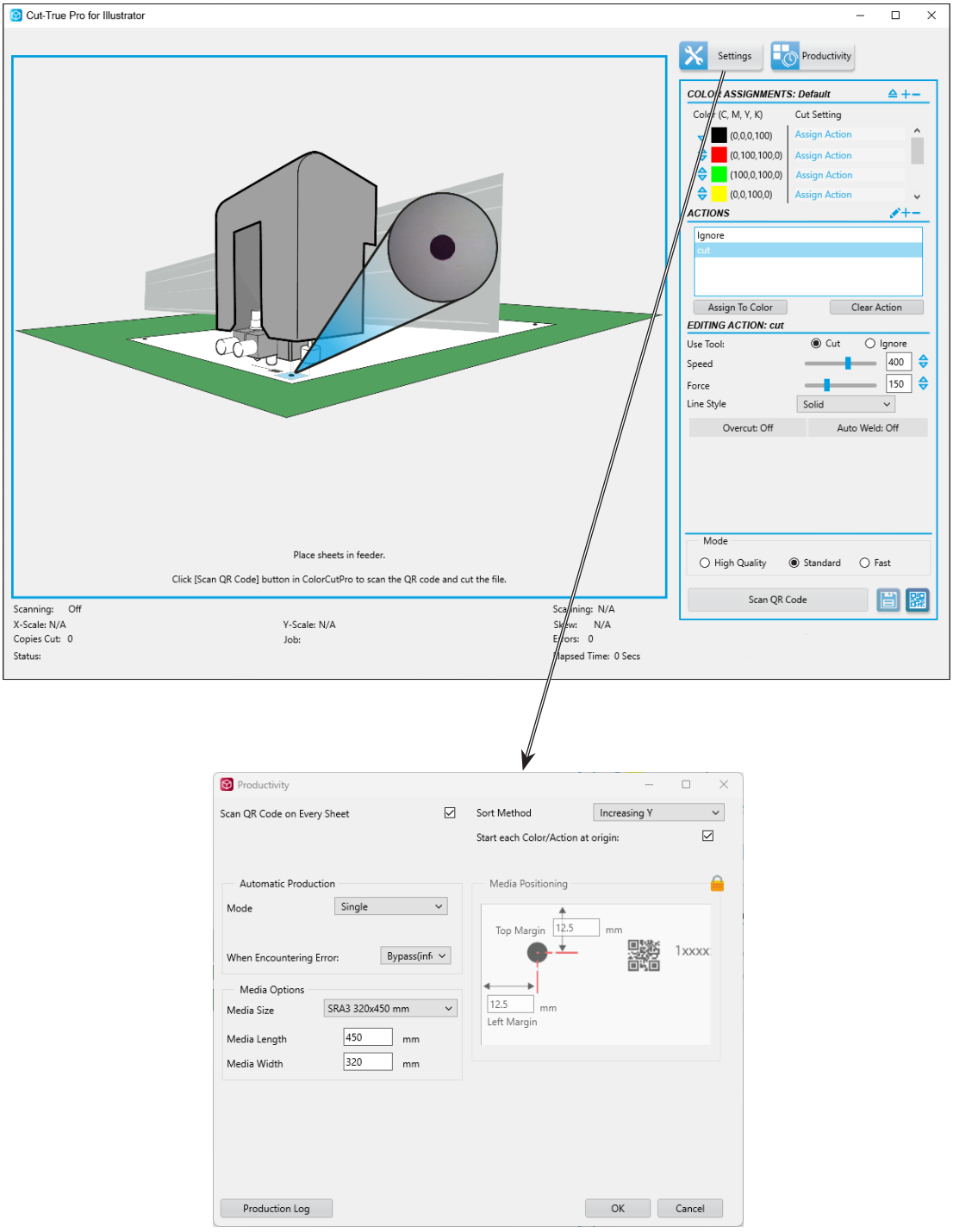


Cut-True Pro is set to English by default. To change the language, go to the settings screen and select your preferred language from the drop-down menu at the bottom.

After selecting the new language, restart Cut-True Pro to apply the changes.

Productivity Options

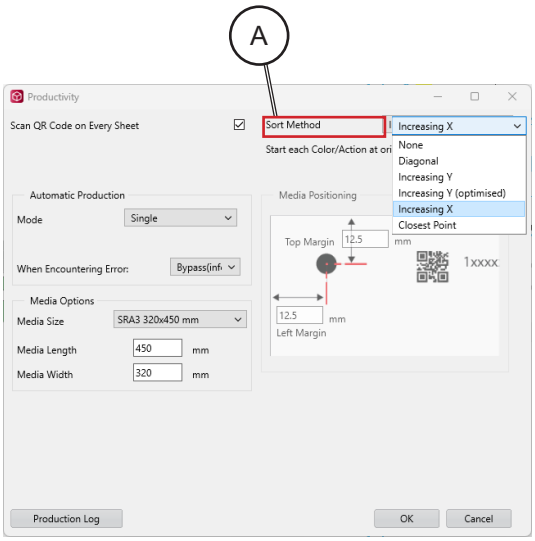
In addition to the configuration settings there are additional settings that can influence your productivity and furthermore enable automated batch production. These settings are all grouped under the [Productivity] menu.



The ‘Sort Method’, ‘Scan For QR Code on every sheet’, ‘After Scanning QR Code ask before Cutting’, Automatic Production control: ‘Mode’, ‘Copies’ and ‘Media Size’ Control options are available at any time and apply to all jobs when the cutter is set to Media Positioning - AutoSheet Feeder.

Sort Method

The Sort Method setting [A] changes how the cutter moves from the end of one cut to the beginning of the next.

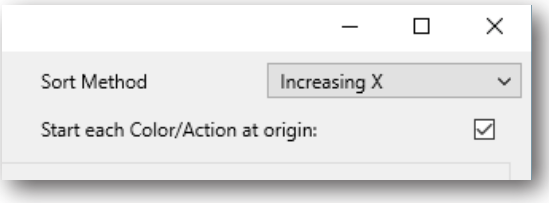


The Cut-True Pro software can operate in 6 modes:

1. **None:** No sort to the cutting is employed and the software will cut in the order it read the lines into the application.
2. **Diagonal:** Aimed to reduce cut times based on the principle that while moving between cuts, both the X, Y motors may be used. If both motors are used the travel speed is higher. Diagonal sort gives weighting to close movements that engage both motors. (Sometimes but not always producing diagonal travel paths).
3. **Increasing Y:** Cuts all lines starting from the top of the sheet, working down the sheet (along the Y axis only).
4. **Increasing Y (optimised):** A combination of Increasing Y and Closest point sort methods. It will check the closest 4 objects for the most efficient start position then honours increasing Y.
5. **Increasing X:** Cuts the longest straight cut first on the X axis only. A predictable cutting sort method but not always the fastest.
6. **Closest point:** The order of the cutting is sorted such that the Cut-True will cut closest to 4th PageMARK first. At the end of each cut, Cut-True will continue cutting from the next closest point trying to avoid long circuitous travel paths.

There is no wrong setting; however Increasing Y is best for most profiles.

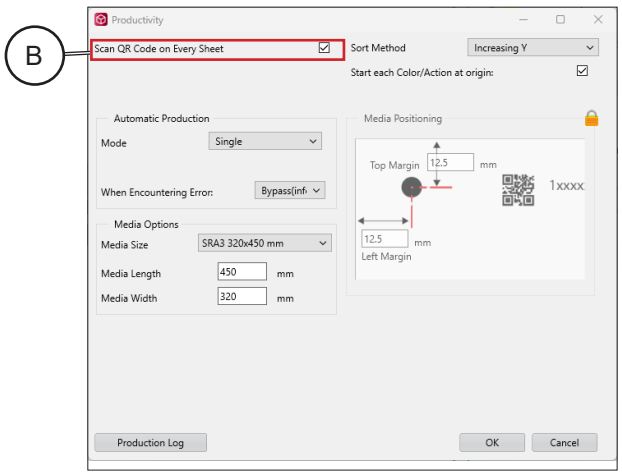
However if you are experiencing a peculiar cutting problem, changing between the options can change the direction of the blade and may help eliminate issues.



NOTE: Typically it is recommended to use the sort method “Increasing Y” for optimum output path.

When using Increasing Y, it is recommended to ensure ‘Start Each Color at Origin’ is checked. If more than 1 color/action is used (such as first Creasing), this will ensure Cut-True Pro to start the cut sequence at the top of the sheet.

Scan for QR Code on every sheet



This is a useful feature which allows users to choose if the Cut-True Pro software should scan for a QR Code code on every sheet.

Cut-True will load the job to cut as follows:

- In Direct mode, by using the selected/open file in Illustrator or CorelDRAW
- In Job Server mode - from scanning the QR Code or from the job number keyed.

When ‘Scan Qr Code on every sheet’ box is checked [B]; after cutting the first job the DDC20 will automatically eject your sheet and Cut-True Pro will clear the job in the preview screen the load the next sheet of media in the auto-sheet feeder and scan the QR code to check which cutting file should be used.

Continued on next page...

Scan for QR Code on every sheet, continued

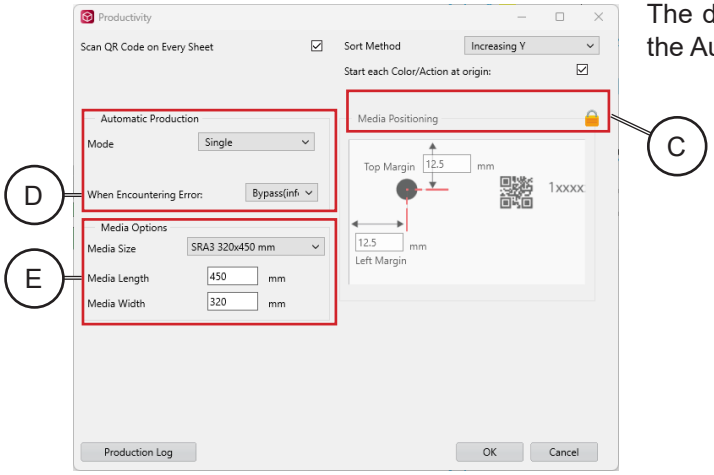
In **Job Library mode** this function is recommended and can very useful when different/mixed jobs are placed in the auto-sheet feeder, as each cut file will be retrieved automatically. In addition by scanning each QR Code, Cut-True Pro, will detect if a sheet has been accidentally loaded in the wrong orientation, or rotated around 180 degrees, and automatically rotate your cutting file to match the way you loaded the sheet. This ensures each sheet is cut correctly, even if different jobs have been mixed in the auto-feeder, or if you loaded the sheets the wrong way around. (This only works if you use QR codes on the sheets).

When operating in **Direct Mode** (cutting directly from the application without QR codes on the printed sheet). You should disable 'Scan QR Code on every sheet' [B] then after cutting the currently loaded job Cut-True will keep the current cut file loaded and cut the same file again on the next sheet loaded by the auto-sheet feeder. Otherwise you may need to return to your Graphics Application and resend the file from the Graphics application.

You can also retrieve jobs by manually keying in the job number (printed at the end of the sheet), If you plan to cut multiple sheets of the same job, you may wish to manually enter the job number and remove the step of scanning the QR Code (which can save a small amount of time. However, if you skip reading the QR Code on each sheet, while cutting time is reduced by approx. 1/2 sec per sheet (which is the length of time required to scan the QR Code) - Cut-True Pro will no longer recognise if Mixed Jobs are loaded into the feeder (or if a job is accidentally placed in the wrong orientation).

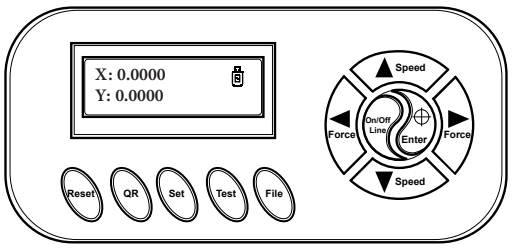
NOTE: If you enable 'Scan QR Code on every sheet' [B] and the sheets do not contain QR Code codes, the DDC20 will error and the cutter will stop. Therefore it is only recommended to enable the scanning of QR Codes if you have placed QR Codes on each sheet.

Media Positioning



The default setting for Media Positioning [C] is to use the Auto-Sheet feeder.

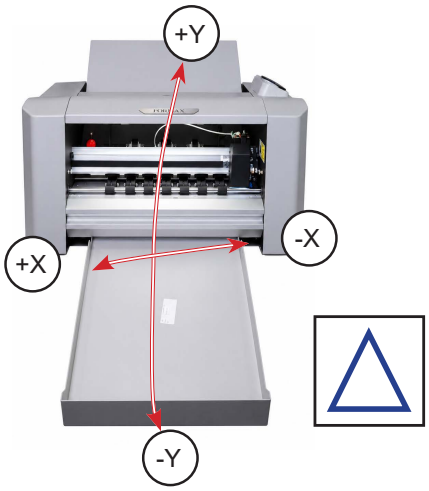
The Auto-Sheet Feeder, will load sheets following the Automatic Production Profile [D] and the Media size (See section "Media Options" [E]). In most cases it is recommend you use the Auto-Sheet feeder. However, as previously detailed, the Manual mode is designed for manually feeding odd shaped media from the front of the cutter which does not include Targets.



To use the DDC20 in Manual media positioning mode:

1. Set "Scan Targets" to No within the Settings options. (See section "Scan Targets")
2. Switch the cutter to the Offline mode on the DDC20 LCD Panel and Manually load a sheet from the front, using the Right arrow key.

Media Positioning, continued

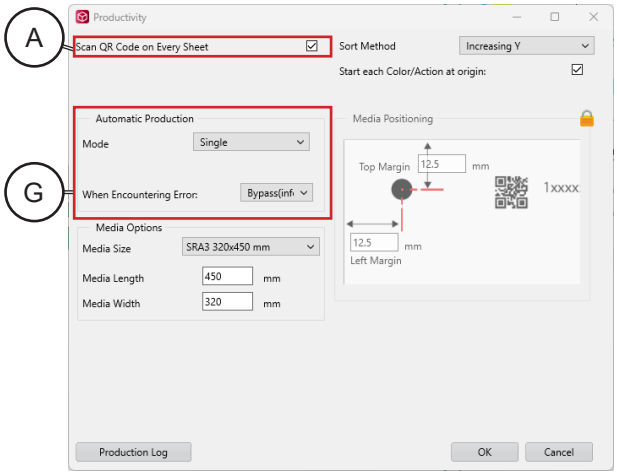


3. Use Up/Down arrow keys to move the tool carriage to the position on your media where you wish to start cutting.
4. Now select “Manual” under media positioning and send your cut file for cutting.

If “Scan Targets” is set to Yes within the Settings options. “Manual” positioning option will be greyed out.

Automatic Production

The Automatic Production [G] section in the Productivity dialogue box enables you to change between production modes.



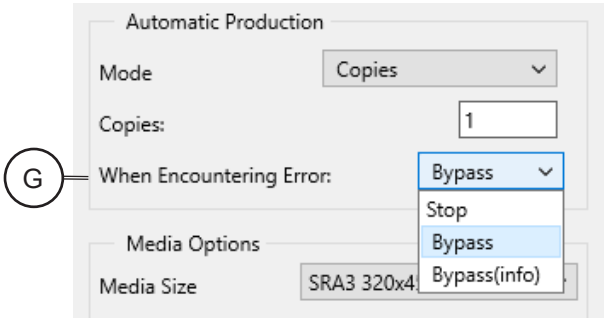
In productivity mode, you can choose between two settings:

Copies Mode

Allows to select how many copies of the sheets need to be cut.

Single Mode

The cutter will load a single sheet of media and cut the media accordingly. (Will hide the Copies entry area.)



Error handling

Another important item to consider is what should happen if an error is encountered. This can be a that the target was not read, an error reading a QR code, or a blank sheet mixed in with your cut jobs.

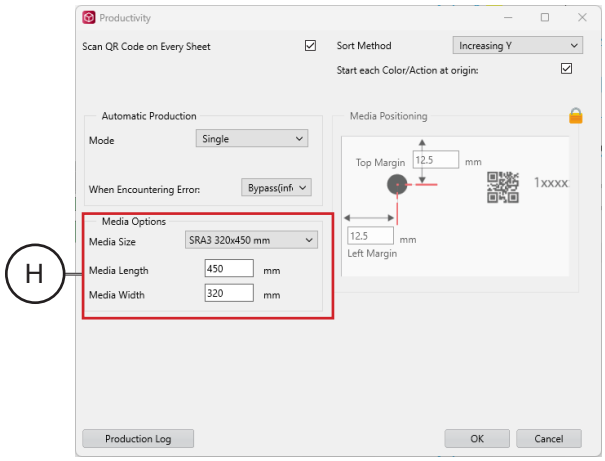
The error handling is set within the option ‘When encountering an Error’ [G]. The recommended action is to Bypass the error. When this is set and after an error is encountered, there is a short pause then the sheet will be ejected and the production process will continue.

The alternative option is to Stop which will halt production and leave the sheet in the cutter. You will need to remove the sheet and then start production again after resolving the error. For the most efficient and easiest production, use a combination of the options in the Production dialogue box. i.e.:

- Enable the ‘Scan QR code on every sheet’ [A];
- Set Productivity mode to Copies;
- Set ‘When Encountering an Error’ to Bypass [G].

This will cut the number of jobs you require without requiring user intervention or stopping and will reject/bypass any failed sheets.

Media Options



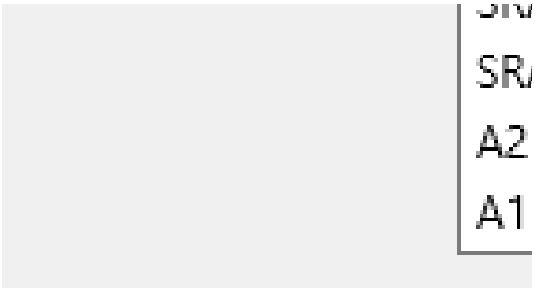
The Auto-Sheet feeder, uses self centering media guides, this means the edge of the media will be located in different positions depending on the media size you have loaded.

Therefore, Media options [H] is one of the most important areas to set within the Productivity settings screen.

Cut-True Pro uses the media size set here to correctly calculate the position for the Vision3 sensor to scan for the registration PageMARK (and QR code - if applicable).

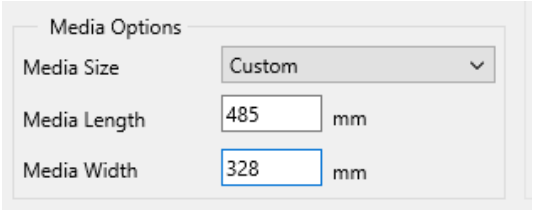
NOTE: As different media sizes will result in the edge of the media being in a different (and therefore your registration PageMARK) location, it is very important to ensure you set the Media Options correctly to match the media size loaded in the Auto-Sheet Feeder.

Media Size



The most popular media sizes are listed under the Media Size drop down menu.

Typically, you only need to select your media size here. Selecting a media size within this menu, will automatically populate the Length and Width fields for your media.

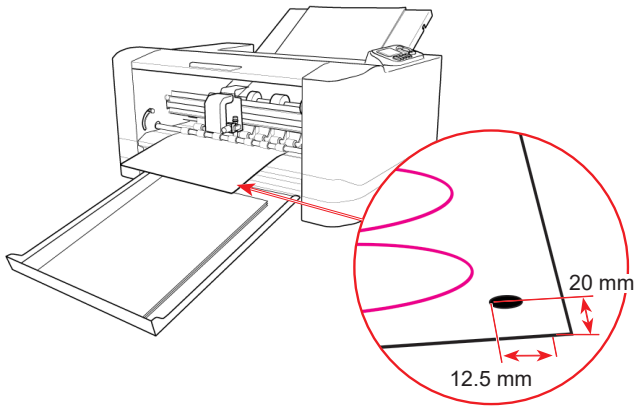


However, your media size is not listed in the Media Size list scroll to the base of the list and select ‘Custom’. Now enter :

Media Length (the distance from the front of the media to the position of the backstop in the media feeder)

Media Width (the left to right distance across the mouth of the cutter).

Position of PageMarks on Media



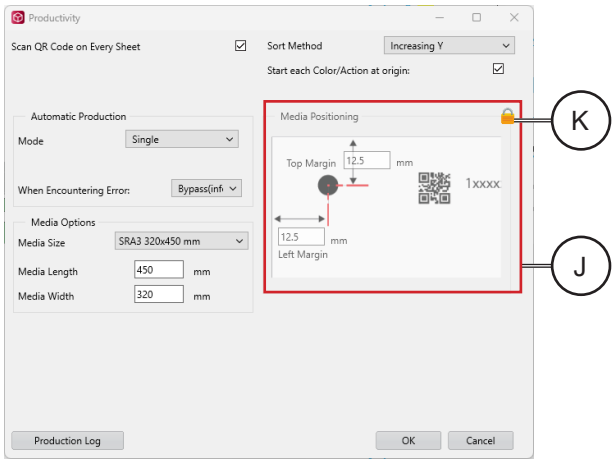
PageMARKs are applied during the design stage, in your Graphics Application.

It is important that you followed the recommendation to set Cut-True Pro to place PageMARKs relative to the Page Size (See section “Registration Pagemarks”) which keeps PageMARK positioning consistent across all of your designs. It is also recommend you use the same margins, to avoid having to frequently change settings.

The 1st PageMARK, is located on the lead edge of sheet at the offset/margin you specified when applying the PageMARKs (See section “Registration Pagemarks” and “Automatically Adding Registration PageMARKs”)

Media Positioning

The Media Positioning [J] control sets location that the DDC20 should move to, when scanning for the 1st PageMARK. The Top Margin and the Left Margin settings should reflect the margins set under the Cut-True Pro PageMark Preferences in your Graphics Application.

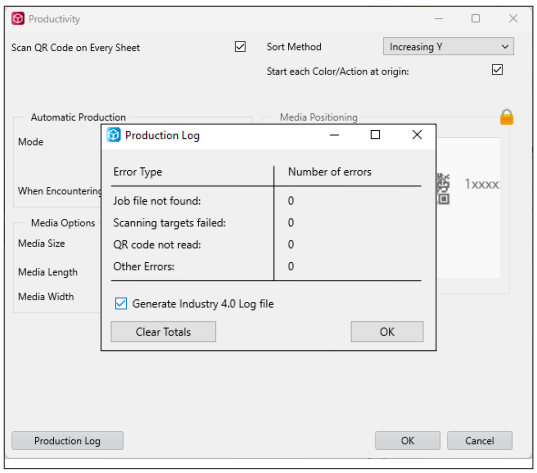


Once set, it should not need to be changed again (assuming you do not frequently change the PageMARK margins).

To prevent accidental changes, the control is locked by default. If you need to adjust the values (normally only first time to match your design positions), click the Padlock [K] to edit the values.

Production Log

The DDC20 has two different log's that provide feedback on your cutting.



To view the basic log, click the [Production Log] button at the bottom left of the Production screen.

Here you will be able to view a summary of any errors during cutting. i.e. Jobs not found, QR codes not read and Target Scanning errors.

The summary totals can be cleared, by clicking the [Clear Totals] button.

A more advanced log can be generated by enabling the Generate Industry 4.0 Log file check box.

The Industry 4.0 log is an external log.file (Tab delimited) that is generated as each job is output, including identification of the Job ID, the time released, the status of the job, number of colors within the job, along with the color used, tool applied and length cut for the specified tool (example shown)

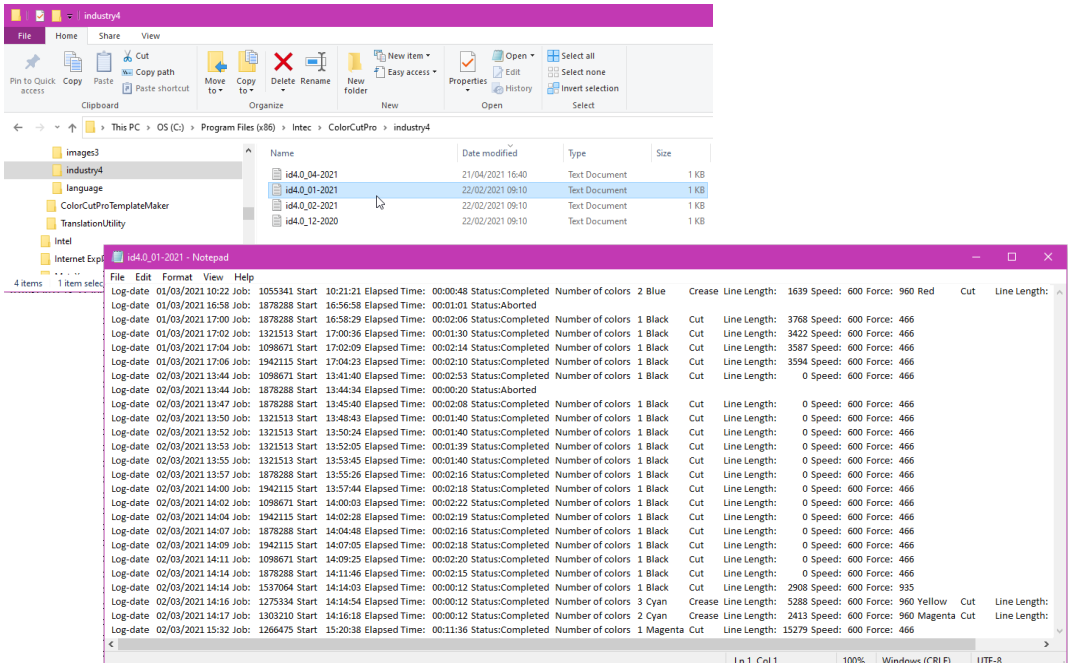
Continued on next page...

Production Log, continued

The Industry 4.0 Log may be required by EPOS systems and certain JDF systems. To find the location of the output data file, for your EPOS, JDF system (or third party application) navigate to:

C:\Program Files (x86)\Formax Group\Cut-TruePro\industry4

The file path may alter.



Page Intentionally Blank

Graphics File Design - Creating Your Artwork

The Cut-True Pro Plug-in works directly from Adobe Illustrator or CorelDRAW. It requires the lines for cutting and perforating to be organised on a single layer. Therefore when designing with graphics you should organize the graphic design in different layers:

- One or more layers for the main graphics (the printed artwork).
- One layer for the contour (the lines to be cut).
- PageMARKs, the marks that are used for Page Registration are automatically placed for you on a different (3rd) layer.

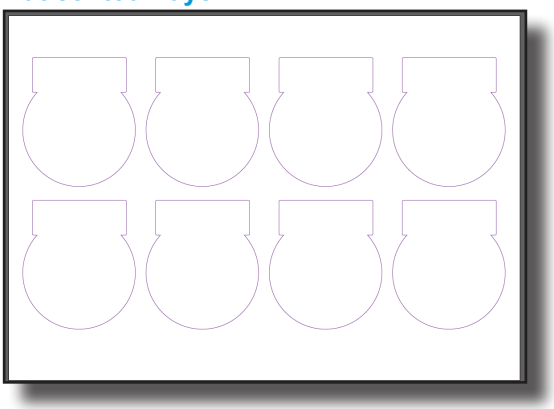
Graphics/Artwork layer



When printing you don't want to print the cutting lines or folding lines on your artwork. Equally, when sending cutting lines to the cutter, you don't want to confuse the cutter with lines that may be in your printed design. The layers feature enables you turn layers on or off as required. But in both cases, you need to have the registration marks available.

NOTE: The most common mistake people make is to print all the layers including the contour layer (the cut lines) that make the prints unusable in most cases.

Cut contour layer



Similar commands are available in Adobe Illustrator and CorelDRAW to enable and disable the layers.

In the pictures shown on this page there is an external frame to indicate the border of the sheet making it easier for you to see the page.

NOTE: This is for illustration purposes only.

Automatic Cut-True Pro Marks Layer



When opening some PDF format files directly in Adobe Illustrator or CorelDRAW, very often you may also find an external frame on the graphics. You will need to delete the external frame if it exists for the file to operate correctly with the Cut-True Pro software.

Layers

Layers for Printing

In this example, the main graphics layer is visible and active. The Cut-True auto-generated 3rd layer with Alignment PageMARKs is also visible. (Detailed later). The cut contour layer is disabled.



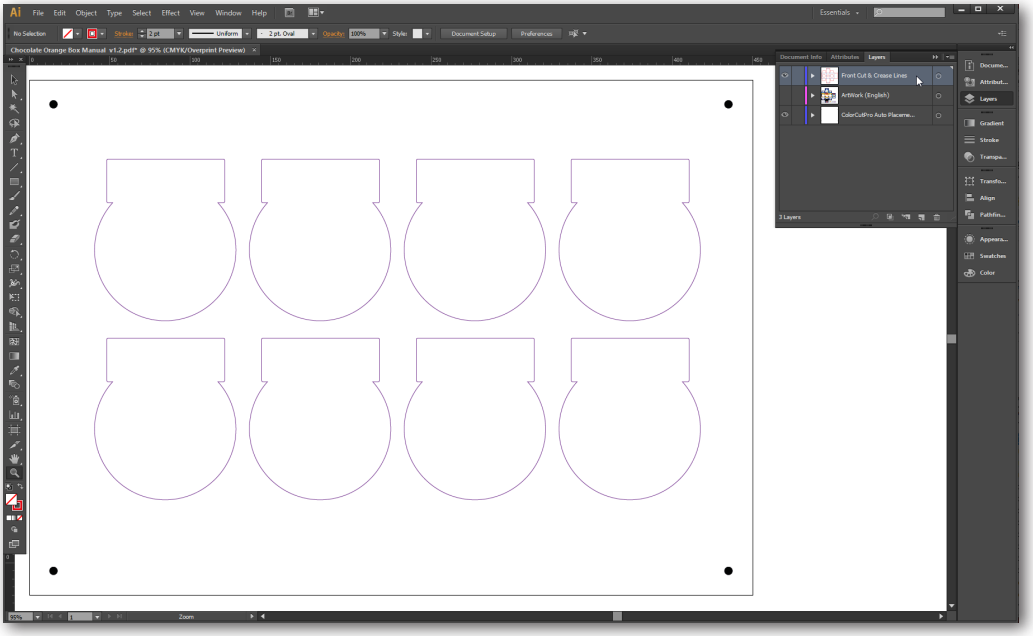
Drawing is ready for printing.

Layers for cutting

In this example, the main graphics layer is disabled. The Cut-True auto-generated 3rd layer with Alignment PageMARKs is still visible. (Detailed later).

The cut contour layer is active. This drawing is ready for cutting.

If you used guidelines then it is not necessary to hide or remove them before saving.



Drawing Cut or Perforated Lines

The Cut-True DDC20 has A Blade Tool, which can be used to: Contour-Cut shapes, Score lines, Perforate lines.

When creating projects you may wish to perform 2 or more actions with cutter. For example cutting different lines at different speeds.

The easiest way to do this in artwork is to use a different coloured line in your design. Cut-True Pro can recognise up to 8 pre-defined colored lines (detailed below) making it easier for you to design and assign actions for each line.

If you created a job with 4 colored lines (For example; RED, YELLOW, GREEN) in the Cut-True software you could set the actions as follows :

RED to Cut using 100 mm/s

YELLOW to Cut using 200 mm/s

GREEN to Cut using 300 mm/s

NOTE: The actions you select a Line Color to perform can be reassigned at any time, and the order in which they are performed can be adjusted easily. (See following pages).

Line Colors recognised by Cut-True Pro

Cut-True Pro uses 8 standard colors, which when used on the cutting layer are recognised by Cut-True Pro. Even if your cut lines are not drawn in these specific colors, the Cut-True Pro software will intelligently Color match up to 256 variations of these each of these colors and assign your colored line to the closest match with one of the below colors.

Cut-True Pro will recognise the named colors in either RGB or CMYK.

If you have designed your cut lines using a Pantone or other color spaces you must use the Illustrator or CorelDRAW color commands to convert to (or remap) the color to one of the above RGB or CMYK line colors.

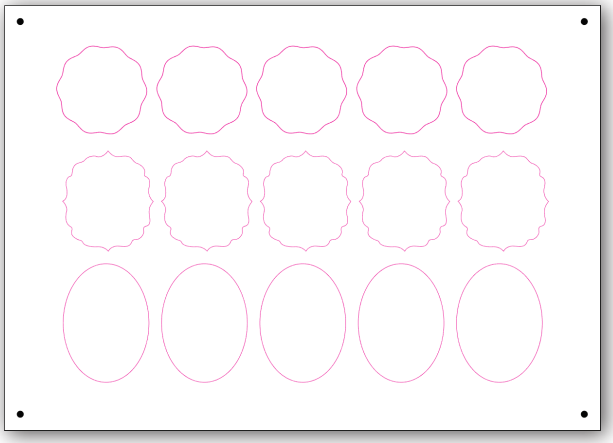
	Black	Red	Green	Yellow
RGB No:	(0,0,0)	(255,0,0)	(0,255,0)	(255,255,0)
CMYK No:	[75,68,67,90]	[2,98,95,0]	[76,0,100,0]	[4,2,98,0]

	Blue	Magenta	Cyan	Violet
RGB No:	(0,0,255)	(255,0,255)	(0,255,255)	(115,0,204)
CMYK No:	[91,80,1,0]	[0,100,0,0]	[100,0,0,0]	[70,87,0,0]

Registration Pagemarks

Before you design your page you need to consider that for accurate cutting each job requires 4 Registration PageMARKs. The PageMARKs are automatically placed on your artwork by Cut-True Pro's Add Pagemarks option. They are placed on all 4 corners of a rectangle that is typically surrounding the cut lines.

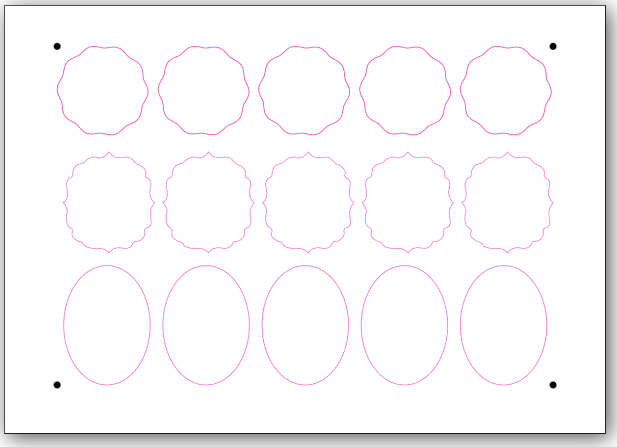
The PageMARKs can be placed at a fixed position on the Page, or anywhere on the page as long as it surrounds your design. Either example below can be used.



PageMARK's based on **PageSize.**

Fixed position of targets (PageMARKs) near page edges to maximise cutting area.

(Recommended for easier sheet replacement)



PageMARK's based on **Design size**.

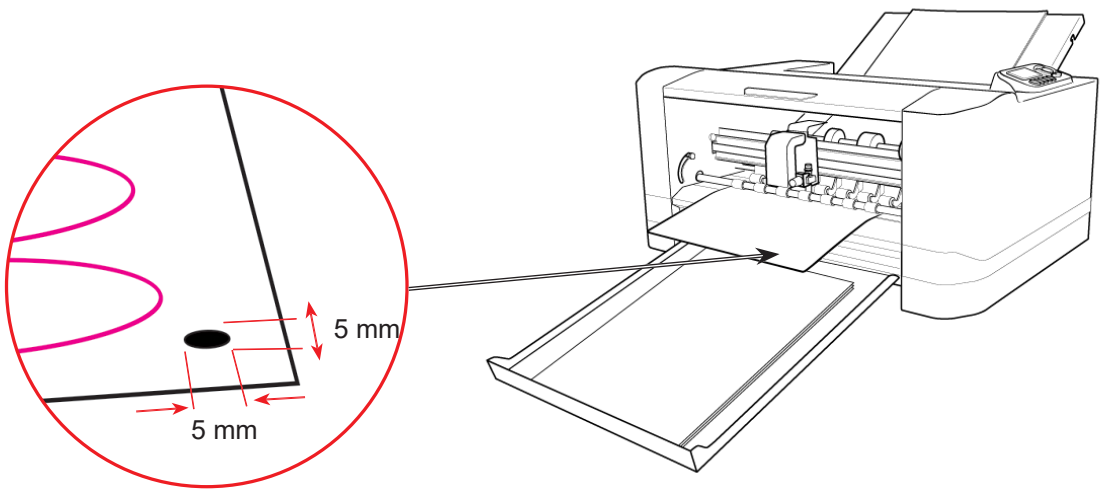
Marks around artwork.

(Alternative to PageSize)

The first Registration PageMARK provides the origin of the job and is positioned at the bottom left edge of the sheet. The second which provides scale (Y) and skew parameters is positioned top left in the drawing shown. The third mark provides skew and rotation information and is positioned at the top right in the drawing shown and the final fourth mark provides scale (X), skew and error checking is bottom right.

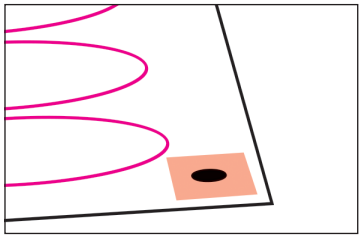
Each Registration PageMARK is a 5 mm x 5 mm circle and 100% K black with no outline.

Although you can manually draw the Registration PageMARKs on to your design, PageMARKs do not need to be manually drawn on; Cut-True Pro simplifies this, and will automatically add them for you.



Positioning of Registration PageMARKs

To maximise your cutting area you may choose to place the cut marks close to the edge of your media. Be aware that there is a 8 mm scanning zone around the cut mark, (shown in red) so care should be taken not to place artwork too near the mark as this may be read by the sensor and cause an error or reduce the accuracy of PageMARK scanning.



The Vision Sensor needs 8 mm around the mark to read correctly

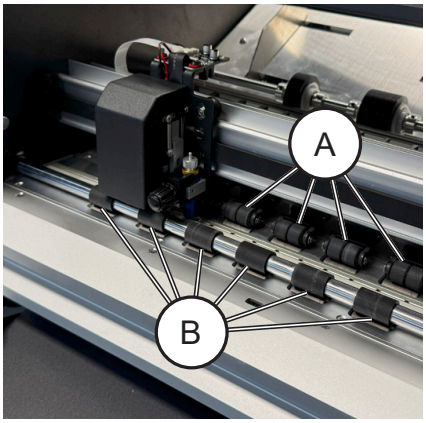
In addition, be aware that digital printers may have a non-printable margin around the edge of the sheet. So take care to observe your printer's non-printable margin when printing near the edges of a page so as not to 'clip' the PageMARK.

Technically the absolute minimum margin (due to the scanning window) is 8 mm from the page edge or 8 mm to artwork elements. However for best practise, it is recommended to place the marks with a 10 mm margin to the leading page edge and to either side. (For the rear of the page please see the considerations below).

NOTE: The Cut-True Plug-in that applies PageMARKs automatically includes a preferences option that enables you to define the margin you wish to use. The value you enter here in this option/setting, is the distance to the centre of the PageMARK. The PageMARK is a 5 mm diameter circle, so you should set a 12.5 mm margin in PageMARKs preferences to achieve the recommended margin from the edge of your media to the edge of the PageMARK).

Considerations for rear PageMARK placement

The DDC20 does not hold the sheet static while cutting, instead it uses an X-axis cutting system, (this is commonly the type of cutting system most vinyl cutters use), meaning it moves the sheet along the X-axis during cutting. Typically in this type of cutter, the main feed rollers grip the sheet during cutting. However, the cutting head cannot cut the sheet under the grip rollers therefore for under normal circumstances it is not possible to cut the last 30 mm of a sheet.



To enable you to cut the entire sheet and minimise label sheet waste the DDC20 is fitted with a unique Dual Grip roller system.

The Dual Grip roller system, incorporates a second set of rollers known as Secondary grip rollers, which holds the media further up the sheet enabling you to cut the last 30 mm.

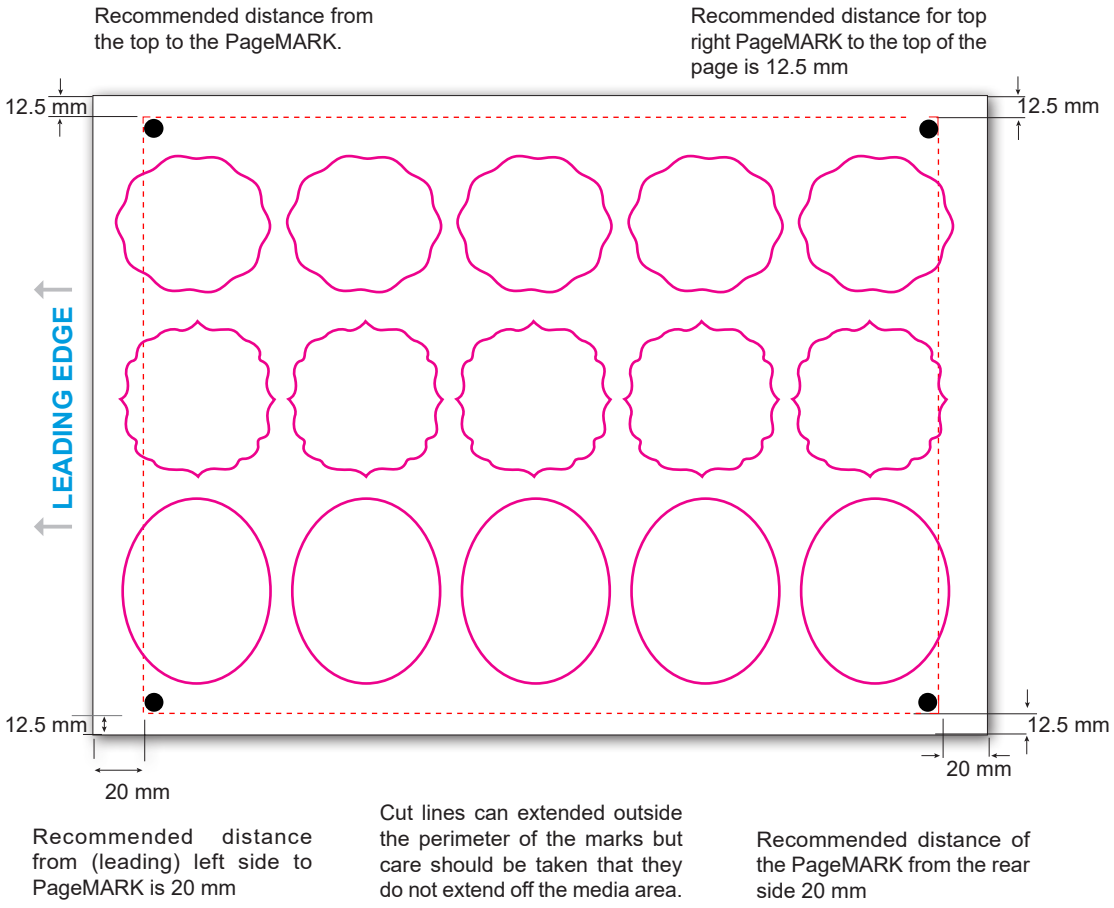
Dual Grip Roller configuration: Main Grip Rollers [A] and Secondary Grip Rollers [B].

NOTE: Please be aware, when the media is held only by the 'Slave' grip rollers during the registration process or in the cutting process, the accuracy may be fractionally reduced.

Configuring PageMARKs for maximum cut accuracy

For designs or elements requiring the highest cut accuracy, it is recommended that the all PageMARKs are placed in a position that enables the main grip roller to retain grip of the sheet during the registration process. If the design includes PageMARKs placed close to the trailing edge of the sheet then only the Secondary grip rollers will hold the sheet when it is advanced to scan the trailing edge PageMARKS. This may affect the overall registration of the sheet and all cut lines on the sheet.

Therefore, the recommended margins for the highest cut accuracy are shown below.



As previously mentioned, using the above mark distance, will ensure the media is held within the main grip rollers while all marks are scanned and adjustments for registration scale and skew are calculated. The sheet can then be cut from the lead edge, delivering the highest degree of accuracy for all elements within the main cutting area. However, it is also possible to cut outside the cut mark perimeter. Therefore, while the rear PageMARKS are set at 20 mm from the rear edge of the sheet, you can design and cut elements up to 12.5 mm from the rear of the sheet using the dual grip roller system.

NOTE: Any element in the last 20 mm of the cutter area will have fractionally reduced cut accuracy due to only the slave roller retaining the sheet during cutting. In most cases this reduction in accuracy will not be noticeable.

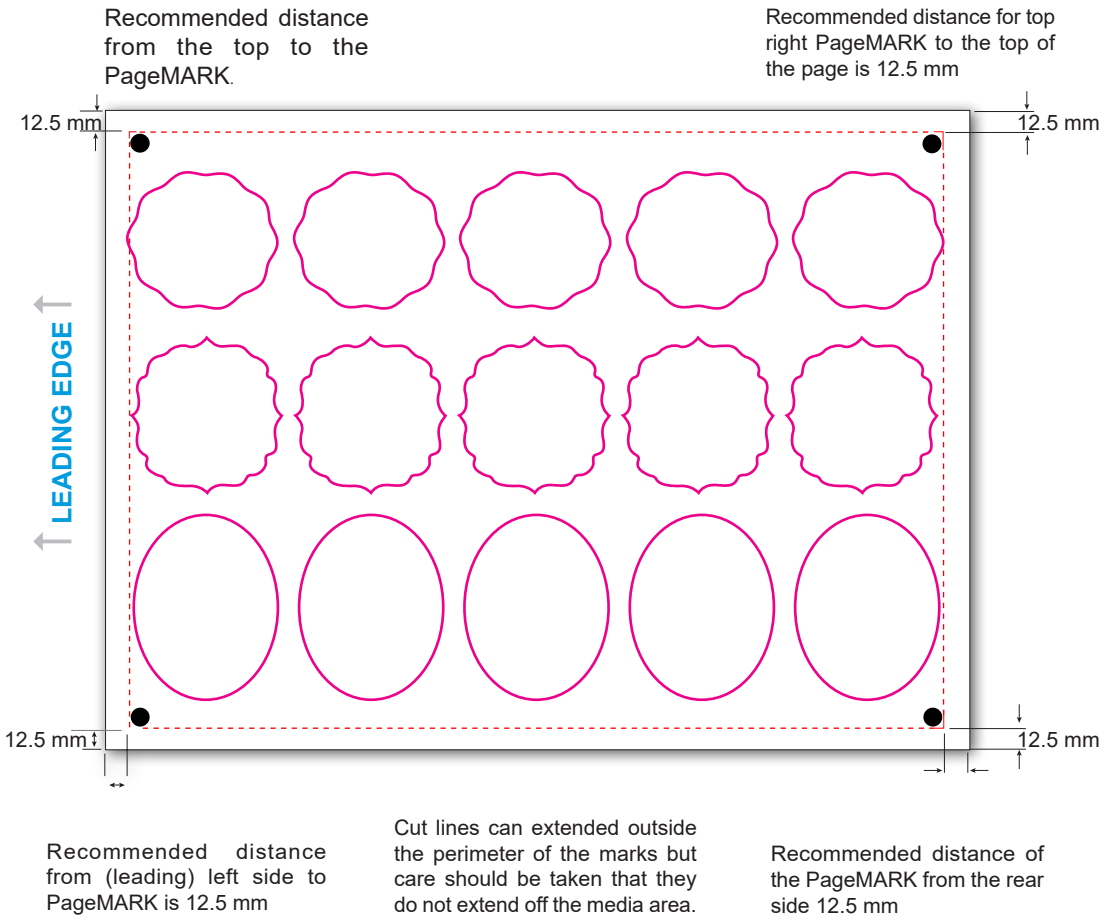
Configuring PageMARKs for maximum efficiency

Maximising the space on the page is important for many users and here the Dual Grip roller system provides users with the ability to achieve a full page and enable cutting right up to the edge of the media.

You can cut beyond the PageMARK position, so it is possible to right to the edge of the sheet but in most cases you will need some media/matrix left on the label sheet to make removing he waste matrix on your labels easier. Also, cutting off of the sheet is not recommended as the blade, may snag the side of the sheet as it turn to come back onto the sheet area.

Typically we recommend you observe the 12.5 mm margin on all sides, this will eliminate the risk your cut lines will exceed the media size and allow enough waste material on the sides of your media to ensure the waste matrix can easily be removed.

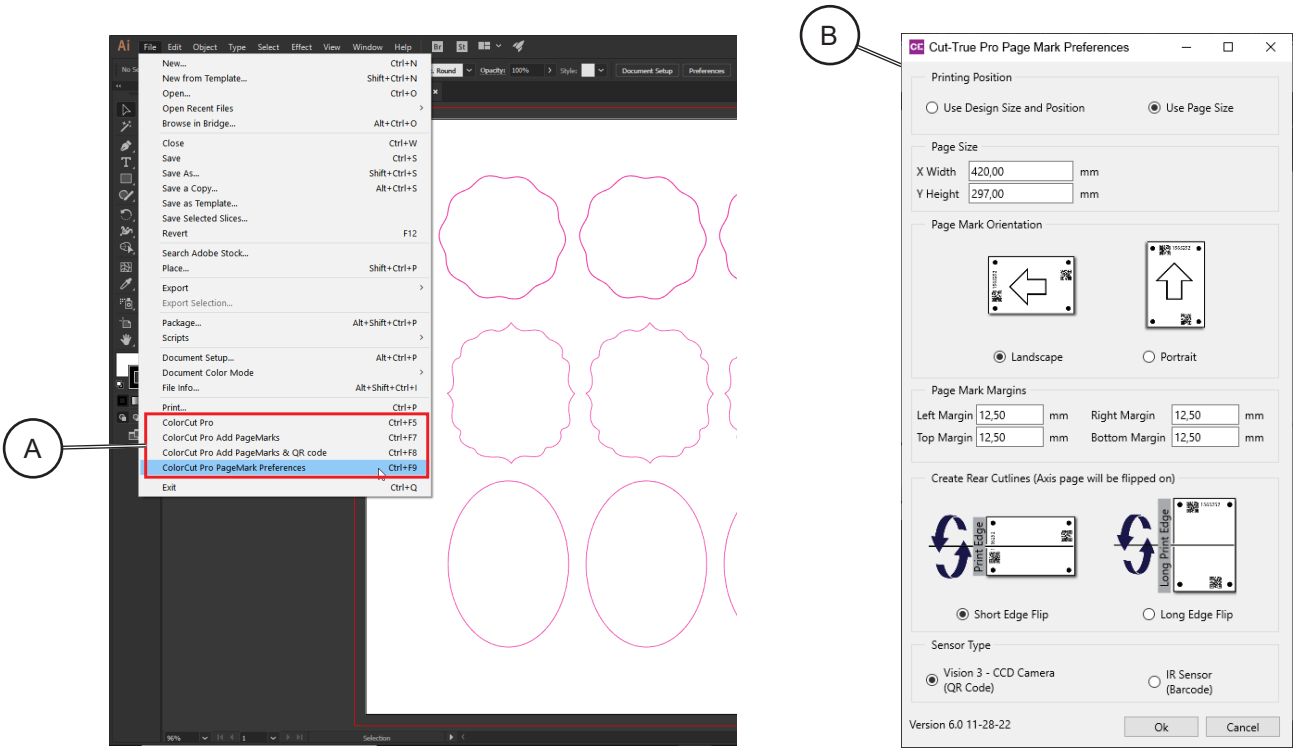
The recommended margins for the maximum efficiency of the media usage are shown below.



NOTE: When feeding the sheet during the registration process or cutting the sheet. Please be aware that any time the sheet is held only by the ‘Slave’ grip rollers the accuracy may be fractionally reduced, if maximum accuracy is required please see previous section.

Automatically Adding Registration PageMARKs

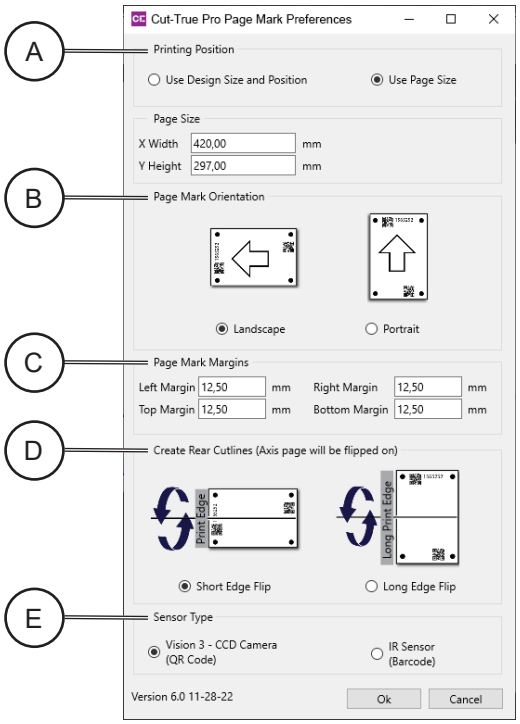
You do not need to manually draw your PageMARKs on to your designs. Cut-True Pro will automatically add the marks for you. After installing Cut-True Pro and launching Illustrator (or CorelDRAW), you will find a new set of options [A] under the Print command in the File drop-down menu.



1. Launch Illustrator (or CorelDRAW). In the File drop-down menu under the Print command click the [Cut-True Pro PageMARK preferences].
   (You only need to do this on initial use.) Therefore, the recommended margins for the highest cut accuracy are shown in picture.
2. The Cut-True Pro PageMARKs Preference dialogue box [B] will appear. You can use this control to set where the cutting registration marks (PageMARKs) will appear on the sheet.
3. Choose Printing Position of page marks.
4. Define the margins based on chosen print position:
   - Distance from the page edge to the centre of the PageMARK for Page Size position
   - Distance from the design edge to the centre of the PageMARK for Design Size position

NOTE: With the DDC20 series of auto-feed sheet cutters, it is recommended that you place the PageMARKs based on “Use Page Size” (as opposed to based on “Use Design size and Position”). We also recommend you keep the Mark position margins consistent across your jobs. This is because your DDC20 will load the sheet and move a pre-set distance in from the edge of your sheet to scan the PageMARK. If your PageMARK position changes on subsequent sheets you will need to adjust the location setting in your software before starting each cut job to enable your sheet’s marks to be located. Therefore placing marks based on Design size is not recommended when using the auto-feeder.

Configuring Automatic PageMARKs



1. In Cut-True Pro PageMARK preferences window under Printing Position section [A] select 'Use Page Size'.

NOTE: Page size is updated from your Artboard size in Illustrator, so you do not need to adjust the page size setting here it will automatically adjust when the PageMARKs are added.

2. Locate the Page Mark Orientation section [B] and select the orientation for your design.
3. Ensure the PageMARKs are orientated so the 1st mark and the QR Code are placed on the lead edge of your media when placed on the table.
4. Cut-True Pro scans identifies the origin mark and then moves the appropriate distance (based on your design) to locate the second/next mark (across the lead/feed edge of the media). When designing jobs on to be cut on the DDC20 using SRA3 media, ensure the 1st mark is placed on the lead edge used in the auto-feeder (This will be Narrow edge of the media). So it is important you add your marks using the correct orientation.

Failure to choose the correct orientation can mean your cutter will try to scan a mark that is located at a different position and fail (i.e. a distance equivalent to the length of your sheet rather than the width).

NOTE: The terms Landscape or Portrait in the Cut-True Pro PageMarks preferences, relate to the positioning of the marks on the sheet based on the thumbnail shown (i.e. Landscape places them on the left of the design and so if your design is already Landscape then choosing landscape in the Cut-True Pro preferences will effectively rotate the mark position and add your marks to the left edge as you design on screen. Thus, Cut-True Pro will add marks 1 & 2 (& QR code if appropriate) on the left edge - this is now the lead edge when placed into the Auto-sheet feeder which will be correct for DDC20 users. Note however applying the marks using the Portrait option - will add PageMARKs to the top of the sheet (the wide edge) this will not be correct as it is not possible to place the wide edge of the sheet as the leading edge in the auto sheet feeder.

With the DDC20, if your design is Portrait, then choose to add the PageMARKs in a Portrait Orientation. (Adding marks 1 & 2 (and QR code if appropriate) to the top edge - Please consider the orientation you need the marks to ensure the PageMARKs are added to the lead edge of your sheet when it is placed in the Auto-Sheet feeder.

5. Locate the Page Mark Margins section [C] and enter the margin you would like.

It is also important to note that the measurements are to the centre of the 5 x 5 mm Circle registration PageMARK. When adding PageMARKS, consider therefore to use a 12.5 mm margin for the left Margin & Right Margins (Portrait) and 20 mm - 22 mm margin to the Lead edge (top) and tail edge (bottom) boundaries to give recommended margin to the page edge.

6. Select the Short Edge Flip or Long Edge Flip [D] to produce cut lines on the back side of your page. This option is very useful when printing designs that necessitate precise and accurate trimming, such as those printed on both sides. By selecting this option, you may verify that printed pages are accurately aligned and cut to their exact final size.
7. Sensor Type [E] - The DDC20 uses an advanced Vision 3 CCD camera sensor which reads round registration marks and will recognise QR codes. However the Cut-True Pro application supports a number of different cutters, some with standard IR sensors that use traditional square marks and barcodes. Therefore to ensure that Cut-True Pro adds Round marks, please ensure that the 'Sensor Type' is set to "Vision3 CCD Camera (QR Code)" in this dialogue box.

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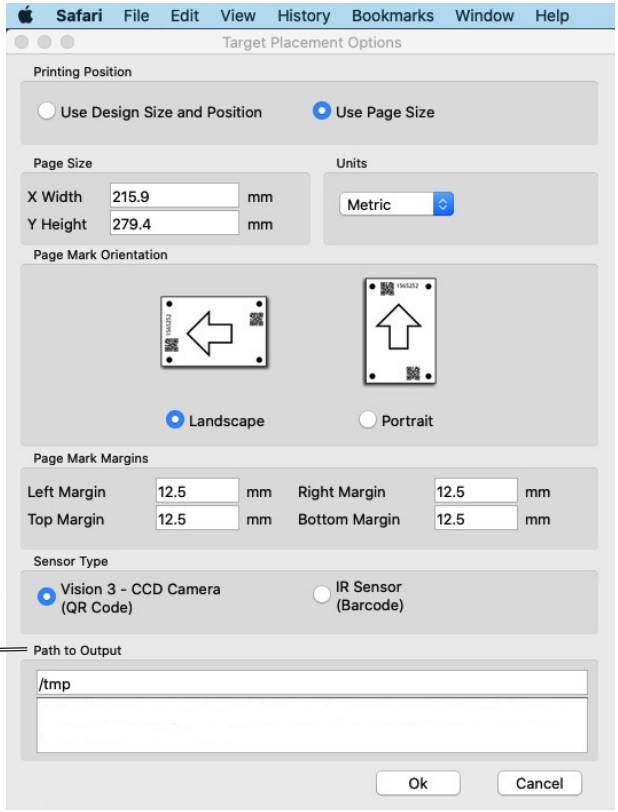
Additional Configuration for Mac users



Adding PageMARKs is exactly the same for Mac users, however Mac users will typically use Cut-True Pro's Job Library feature to assign a job number (and QR code where applicable) to their jobs - enabling them to be cut efficiently in a production environment.

Mac users wishing to use the Job Library and QR code feature must ensure that they configure the connection to the Job Library correctly, otherwise Job Numbers and QR codes can not be generated and added to jobs.

You will need to configure the PC which is hosting Cut-True Pro and connected to the cutter, to broadcast/share the Cut-True Pro Job Library folder.

There is a video guide on the website to guide you through this process, under support, in the How to section; https://intecprinters.com/how-to-video-support/

Once you have enabled the PC to share the Job Library folder (Cut-True Pro Data), then you will need to mount this share on your Mac, and enter the path to it in the Path to Output section [F] in the Cut-True Pro Add PageMARKs preference screen.

To confirm the path to be entered, please follow the video guide highlighted above or read the section 'Mac users - Connecting to the Cut-True Pro Job Library' in the separate 'Setup & Installation guide'.

Using 'Cut-True Pro Add PageMARKs'

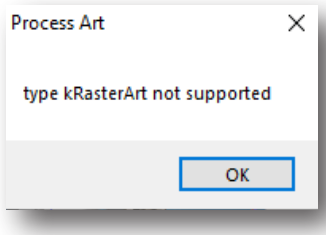
It is important to note, that when you activate the 'Add PageMARKs' feature from the [File] menu, the Cut-True Pro software will examine the currently selected 'Layer' in your graphics application and isolate all vector lines and curves on the page.

You may see an Error Message if there are artwork elements or images on the layer selected when you launch Cut-True Pro. You can avoid this by drawing the cutting profile and the artwork graphic on separate layers.

In this example the graphic layer is active; this drawing is ready for printing.



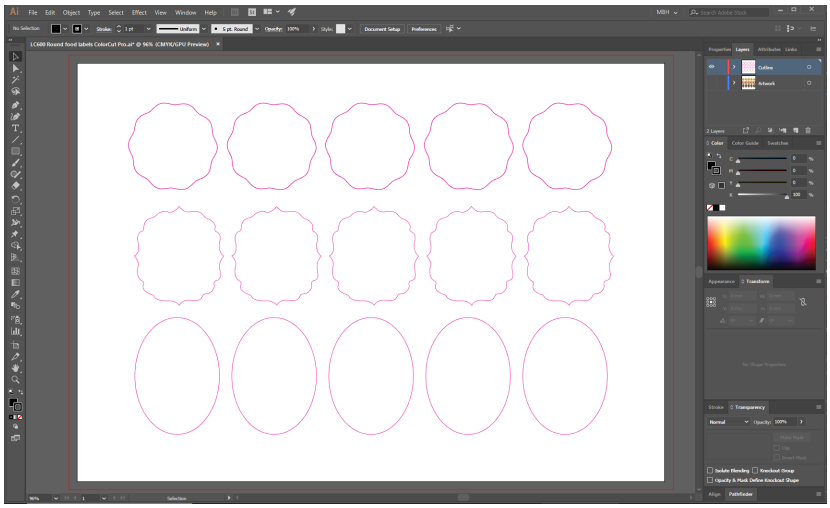
Warning:
Launching Cut-True Pro Add PageMARKs with the artwork layer selected will generate an error:



kRasterArt not supported Cut-True Pro does not know how to interpret the Graphics as cutting lines.

Selecting the Layer to Add PageMARKs

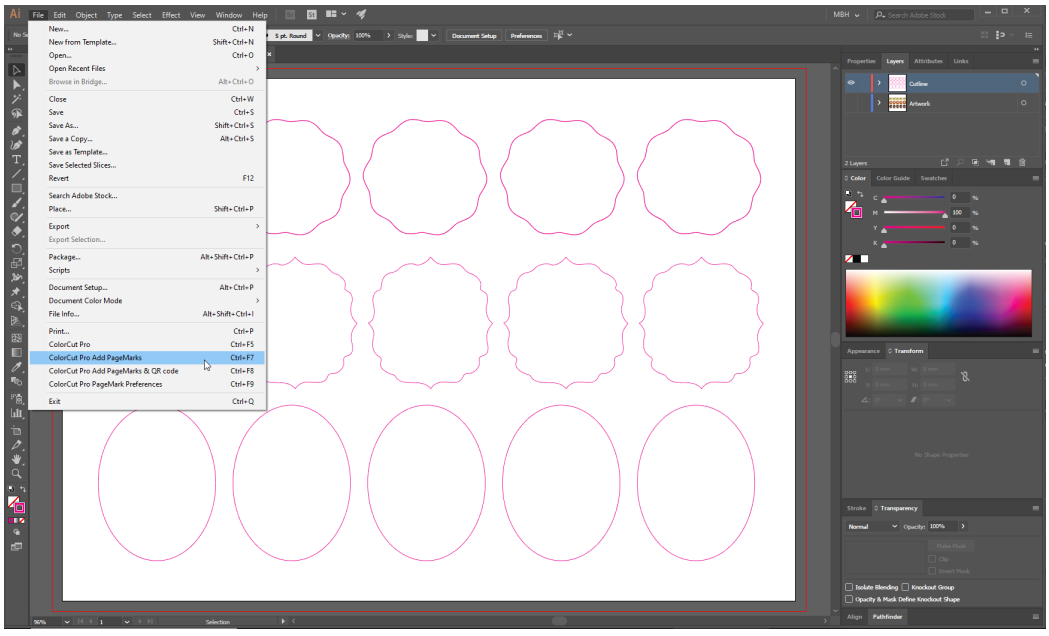
Ensure only the vector lines you wish to cut and send to your Cut-True are on the layer selected before adding the PageMARKs using ‘Cut-True Pro Add PageMarks’. (You do not need to delete your artwork. It simply must be on a separate layer). In the example below the Cutline is selected (The artwork layer is not selected) and the layer is ready for you to ‘Add PageMARKs’.



NOTE: The Artwork layer is hidden in this example, however you do not need to hide the artwork layer.

The only requirement is that you must select the vector/cut line layer and there should be no artwork/ printed elements on the layer you wish to cut or ‘AddPageMARKs’ to.

Automatically Adding PageMARKs



From the File menu in Illustrator or CorelDRAW, select the menu item ‘Cut-True Pro Add PageMARKs’.

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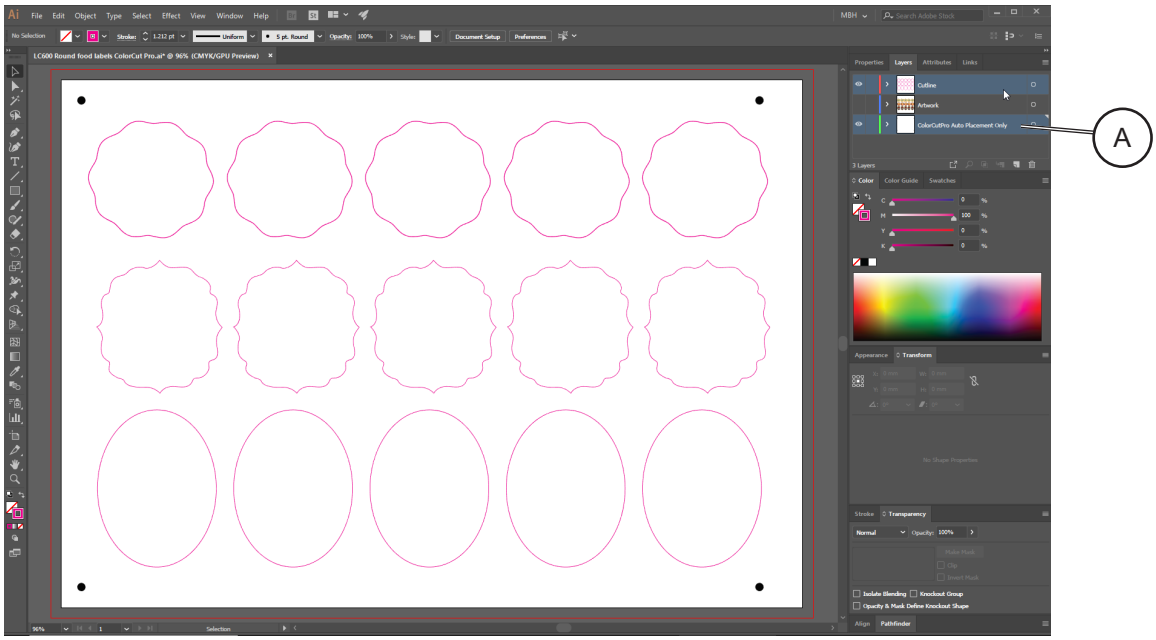
Automatically Adding PageMARKs, continued



From the File drop-down menu in Illustrator or CorelDRAW, select the menu item ‘Cut-True Pro Add PageMARKs’.

PageMARKs will be automatically added to your job and you will see a New Layer Cut-TruePro Auto Placement Only [A] added in your Layers palette.

When printing your artwork you will want to hide the cut lines as you do not want these to print. Generating the PageMARKs on a separate layer means that you don’t hide your PageMARKs when hiding your cut lines and enables you to leave the PageMARKs layer visible alongside your artwork layer (while still enabling you to hide your cut lines).



In example above the file is prepared for Printing (or saving as a PDF for digital printing systems). The cut line layer is hidden and not visible however the New Layer which includes the alignment PageMARKs (‘Cut-TruePro Auto Placement Only’) is visible alongside the layer including your artwork, enabling your job to print with your artwork and the PageMARKs visible on your document.

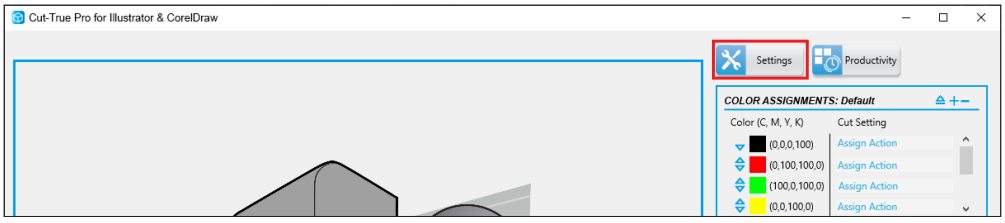
Cutting without using PageMarks

It is recommended that normally you use PageMARKs, Cut-True Pro will scan the PageMarks on your sheet to calculate where your sheet is (the origin) and compensate for any positional errors, scale or skew therefore accurately aligning your cut with a print or position on the sheet. However, in some cases, e.g.:

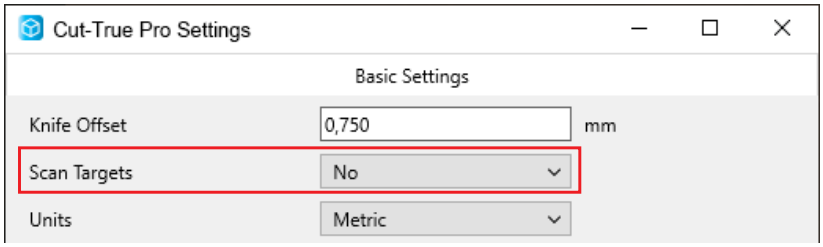
- On a sheet that is unprinted/blank, such as a clear sheet of Polyester to be used as a face shield. You only need to cut a visor shape and have no print, and no PageMARKs on the sheet.
- On clear material for Mobile phone screen covers. Again, no PageMARKs and the sheet is blank, you are not aligning to an element.
- Blank red card at Valentines day, to cut multiple red heart shapes. The hearts will be blank and not aligned to the sheet.
- A difficult media which has been foiled and the PageMARKs can not be read using the normal process (This may have print to align to, but the accuracy of alignment has a high degree of tolerance).

Cutting without PageMARKs is simple and often quicker as the process of scanning the PageMARKs is skipped, however the downside of skipping the registration PageMARKs is that there is no process to register the position of the sheet accurately and no ability to adapt your cutting lines for printing scale, skew or rotation errors.

Disabling Scan Targets



1. To cut sheets without PageMARKS, open the [Settings] window.



2. Set the Scan Targets option from to [NO]. This setting applies to all sheets until the setting is changed back to [YES]. Click [OK] to save the settings and close the window.

The cutting accuracy in respect to where the origin of your cut starts on the sheet or in respect to alignment of the cut to printed elements varies according to the media size you set, the feed and feed advance and left offset values (under the [Productivity] button) and the first cutting element on your design.

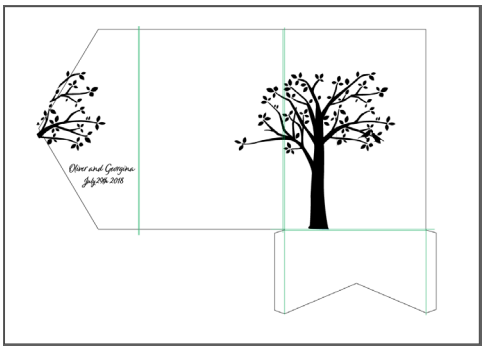
NOTE: Setting “Scan Targets“ to [NO] also disables scanning of QR codes, so if you have a stack of sheets in the Auto Sheet Feeder, some without PageMARKs and some with. It will no longer detect any PageMARKs.

Design requirements when cutting without PageMARKs

Cut-True Pro does not use your document page size, normally cutting starts relative to the first PageMARK. Therefore if you disable 'scan targets', cutting will start at the furthest left and upper point of the perimeter around your elements for cutting. It is therefore recommended you consider this in the design.

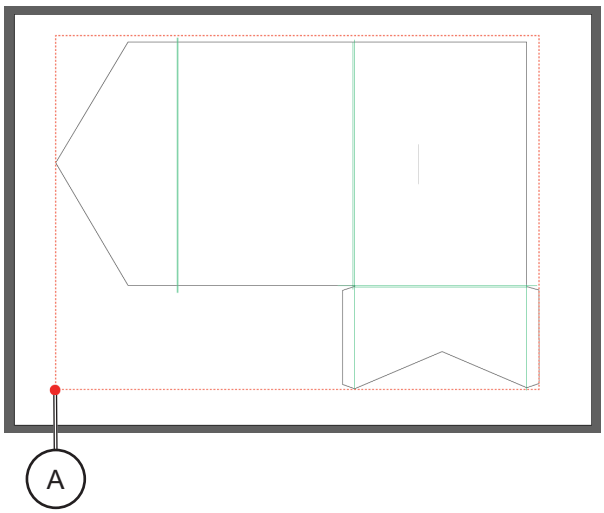


Desired result

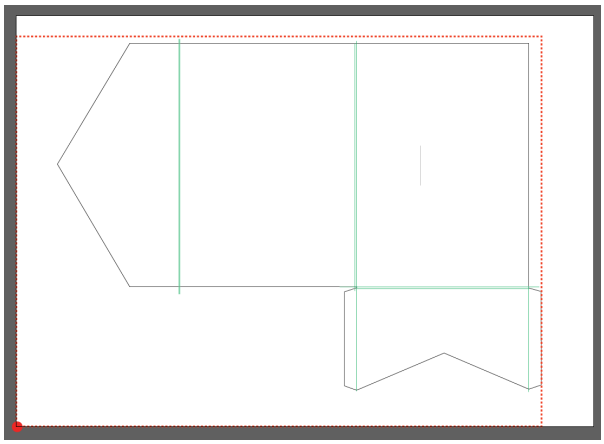


Artwork (before modification)

In given example, the used media was foiled, in addition the surface of the media contained glitter, which rendered the foiled PageMARK's unreadable. As the artwork is such that a small degree of movement would not be noticeable, this job was cut with Scan Targets disabled.



The frame on the artwork design represents the media size the job was printed on. However, Cut-True Pro files only contain the cut line and position data relative to each element (the elements inside the red dotted line), not your design in relation to the media size. Therefore to cut accurately we would need to manually adjust the start/origin point [A] of the cutting to the position.



As Cut-True Pro, works from the First element on your page it is much easier and simpler to set Cut-True Pro to use the leading corner of the sheet as the origin. This can be easily achieved by adding a small dot or 0.1 mm circle on the corner of your Page.

The perimeter of your cut lines/elements now relate to the corner of your media. If the Productivity settings for feed advance and left margin offset are correct then this will now cut relatively accurately.

Use a different color for this dot, then you can set a specific action for this color to lightly tap the creasing tool there before cutting the rest of your design as desired.

How To Cut Files Using Cut-True Pro

There are two different ways to Launch Cut-True Pro Production Studio.

Cut-True Pro - Production Studio is the full version of Cut-True Pro, and is used to cut your files. It can be used in two different ways, you can select the most suitable method for your working environment.

1. Cut-True Pro (Direct Plug-in) is launched Directly from your graphics application. Launching Cut-True Pro, directly from your Graphics application will transfer the currently open design file (specifically the currently selected layer) directly to Cut-True Pro for cutting. This enables you to cut the file you are working on (or open a previously saved file). This way of working is ideal for testing a design or where the cutting will be handled by the same person that makes the artwork.

NOTE: When working in Cut-True Pro (Direct) mode, as Cut-True Pro is launched directly from the graphic application it requires either Adobe Illustrator or Corel Draw installed on the computer that will do the cutting. In addition the operator will need to locate the file to cut and to be able to use the graphics application in order to launch Cut-True Pro. For this reason we typically recommend using the stand-alone mode of Cut-True Pro - Production Studio, also known as Cut-True Pro Job Server mode.

2. Cut-True Pro (Job Server Mode) does not need a graphics application installed on the computer. It also does not require you to locate the original graphics file. In addition the simplified interface is designed to be used by any operator (typically a Print Finisher with no specific computer or Graphic Applications skills) by providing a [Start/Scan QR Code] button to start operation.

When using Cut-True Pro in Job server mode your files must already have been created and had PageMARKS and a Job Number/QR Code added during the design stage. When the ‘Add Job Number & QR Code’ feature is carried out by the designer, the cutting lines are saved automatically for all users in the Job library folder.

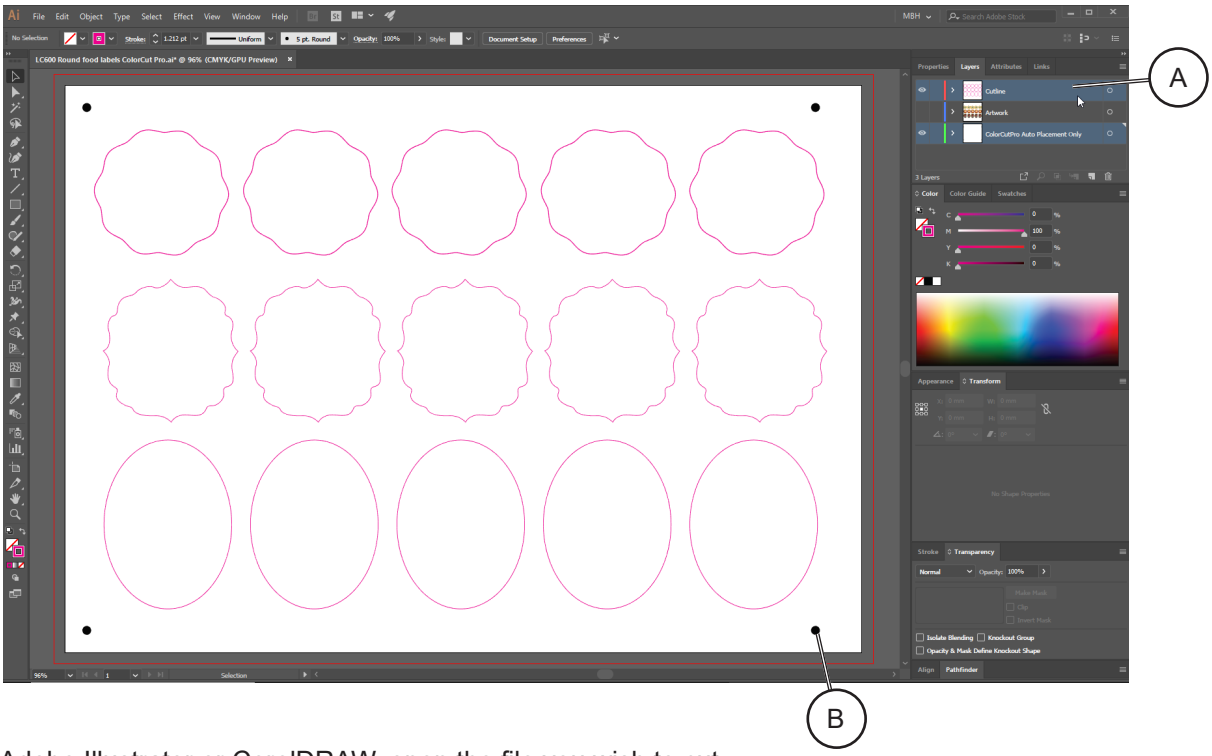
When using Cut-True Pro - Production Studio (Job Server Mode), Cut-True Pro is launched on its own (stand alone) on your computer from the Windows Start Menu. The appropriate cutting file is retrieved by the operator entering the job number or can be retrieved automatically as the DDC20 scans the QR Code.

Using Cut-True Pro - Production Studio in (Job Server) mode streamlines the cutting process and retrieves cut files for you making cutting much easier. It is the recommended way of working for busy designers so they can find the files quickly and especially in companies where the cutter operator is a different person to the graphic designer, or where a different computer will be used for the cutting such as in MAC environments.

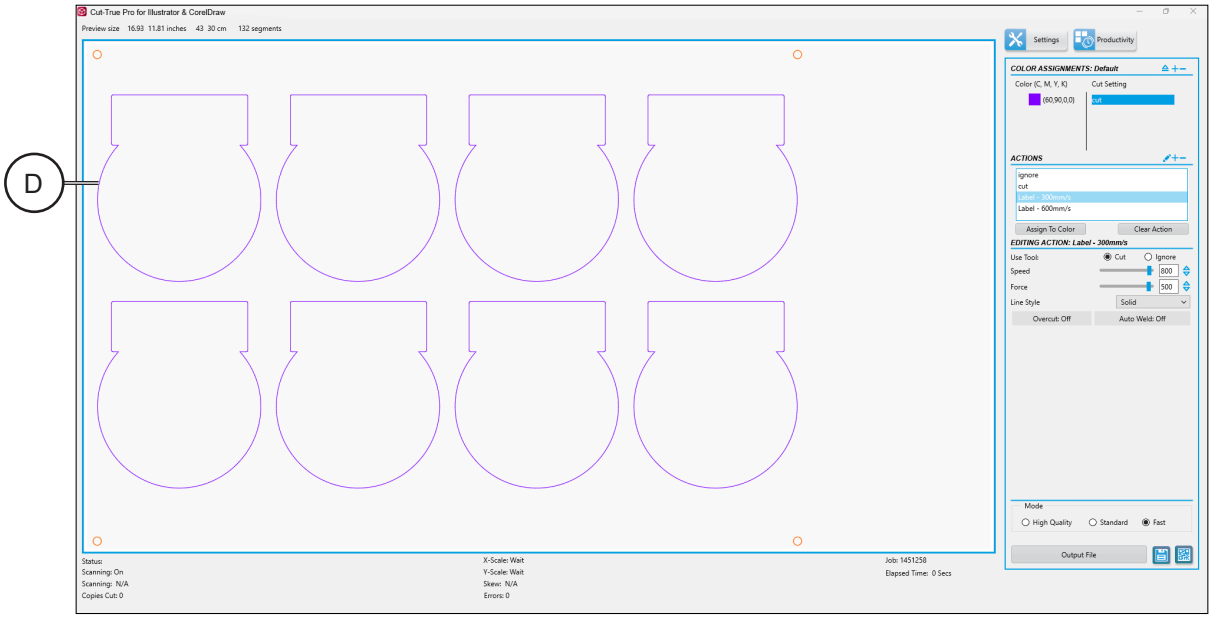
NOTE: When working in Cut-True Pro - Production Studio (Job Server) mode, as Cut-True Pro will retrieve the cutting files from the job library for you, it is important that your files were created with a Job Number and QR Code using the ‘Cut-True Pro ‘Add PageMARKS and QR Code’ feature in the design process from your Graphics Application.

The following section of this manual details how to launch Cut-True Pro - Production Studio to cut your files using either method.

Cutting Jobs Directly from Graphics Application (Direct Mode)



1. In Adobe Illustrator or CorelDRAW, open the file you wish to cut.
2. Ensure you have selected the layer with the Cutting lines [A] you wish to cut.
3. Ensure you have already added PageMARKs [B] using the Cut-True Pro add PageMARKs feature.
4. With the Layer which you wish to cut selected, choose the [File] Menu in Illustrator or CorelDRAW.
5. Now select ‘Cut-True Pro’ from just under the Print command in the File menu.



6. The Cut-True Pro will launch, and Cut lines will appear in the preview window [D].

Please review the section in this manual for Cut-True Pro main interface functions to understand how to create and save Material/Actions, and how to assign Line Colors to the material/actions.

Retrieving Jobs from the Job Library (Job Server Mode)

Retrieving Jobs from the Job Library

Job Server mode enables you to open files previously saved during the design process, to the Cut-True Pro Job Library. This can streamline your production and make your design process easier.

Creating Cut Job files using Job Numbers means you can assign a Cut Job number to a specific customer or assign a specific 'Design Template'/ Style to a Cut Job number.

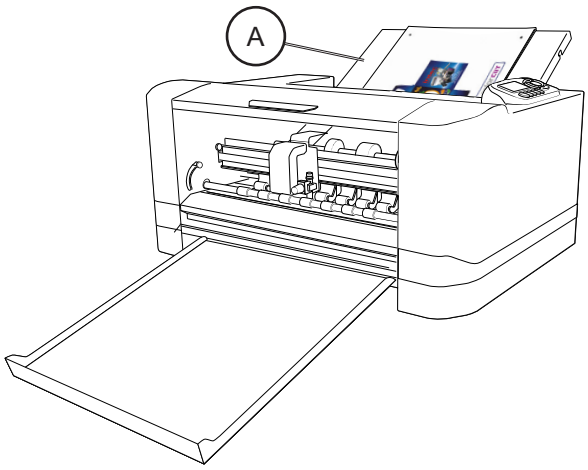
Your Cut files are saved to the Job Library when you generate the Job number & QR code for the cut line. The Job Library can be accessed at any time without Illustrator or CorelDRAW on the PC hosting the Job Library. To launch Cut-True Pro - Production Studio (Job Server Mode), simply launch the Cut-True Pro software from the Start menu (or desktop shortcut if you created one) on your computer.

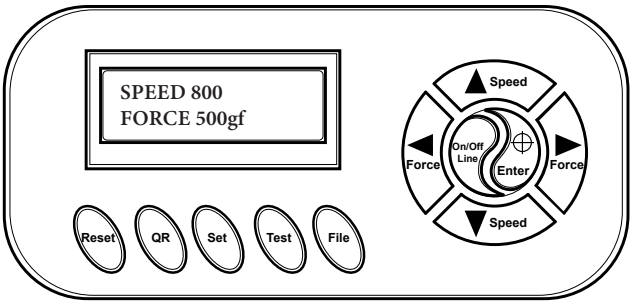
There are two ways to retrieve Jobs from the Job Library.

1. To 'Scan QR Code'
2. To manually enter the Job Number.

Retrieving Jobs with QR codes printed on them

1. Place your sheet into the media tray [A]. Adjust the self centring side guides to the edges of the media. Ensure they are not too tight against the side media.





2. On the DDC20 control panel check that the LCD panel shows cutter is ON-LINE. The LCD display should show the set speed and force of the Tool.
3. If the DDC20 is not 'ON-LINE', press the [On/Off Line] button to place the cutter On-Line and to display the main as shown.

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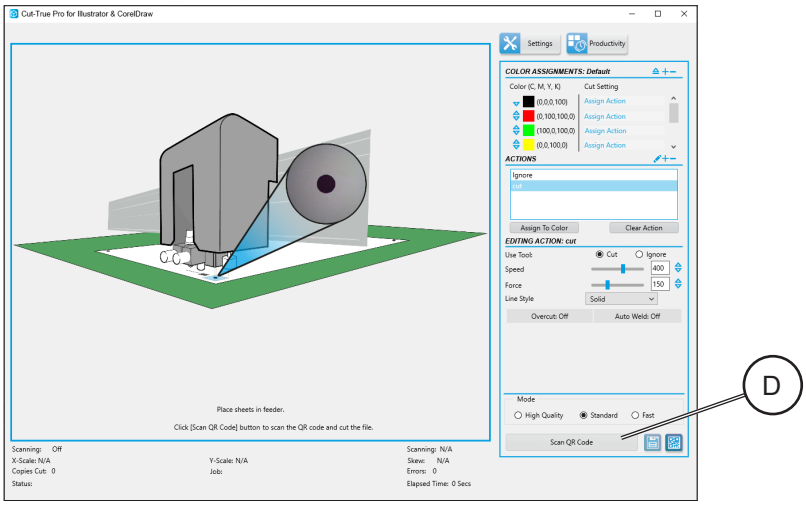

4. Using Cut-True Pro, Click on the [Scan QR Code] button [D] on the main application to load the media from the Auto Sheet Feeder and to scan the QR Code.

Jobs are saved to the Job Library during the design process. Each job is stored with the designated Job Number. The QR code carries the Job number and retrieves the Job cut file for you.

As soon as the QR code is recognised, a preview of the job to cut will appear in the Job Preview Window.

Enter a Job number to retrieve the Cut Job file directly

In addition to scanning a QR code to retrieve a cut file, from the Job Library you can also manually enter the job number to load the cut file. There are several reasons why it is useful to enter the Job number directly rather than scanning the QR code:

Manually entering the Job Number can enable you to pre-load line color assignments

This is useful if the job was made by someone else or uses different color settings. By loading the job manually, you can make sure the correct actions are used for each line. This helps avoid mistakes during cutting.

Manually entering the Job Number can enable Jobs without QR codes to be retrieved without the original graphics file

Adding your jobs to the Cut-True Pro Job Library is helpful because it lets you open the job later or allows someone else to cut it without needing the original file or design software. Normally, you add a job to the library by choosing “Add PageMARKS and QR Code” in your design software. This creates a QR code on the artwork so the cutter can find the job automatically. However, sometimes the QR code may get in the way—for example, if there’s a full background color or if the designer wants to use the full sheet for cutting. In this case, the designer can still add the job to the library using “Add PageMARKS and QR Code,” but then delete the QR code from the design after the job number has been assigned. Later, you can load the job by simply typing the job number (usually printed at the top of the sheet) into Cut-True Pro.

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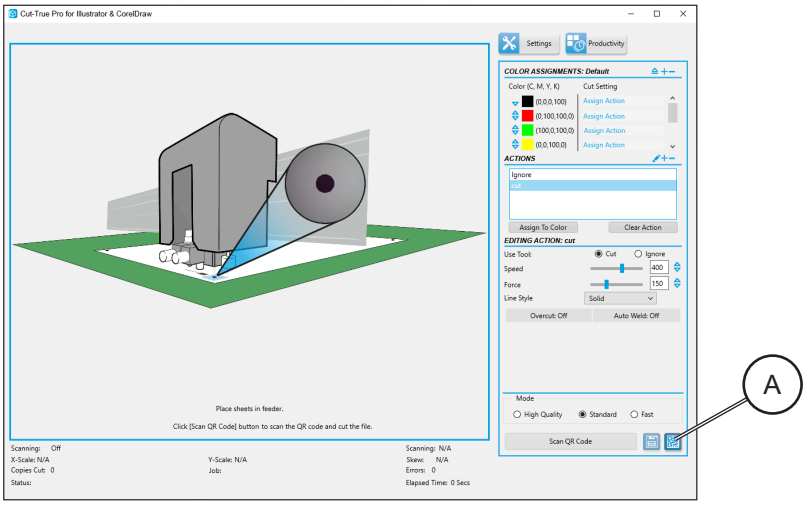
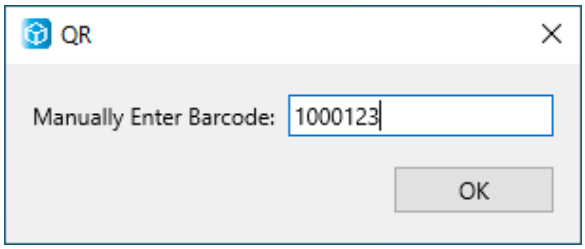
Enter a Job number to retrieve the Cut Job file directly, cont.

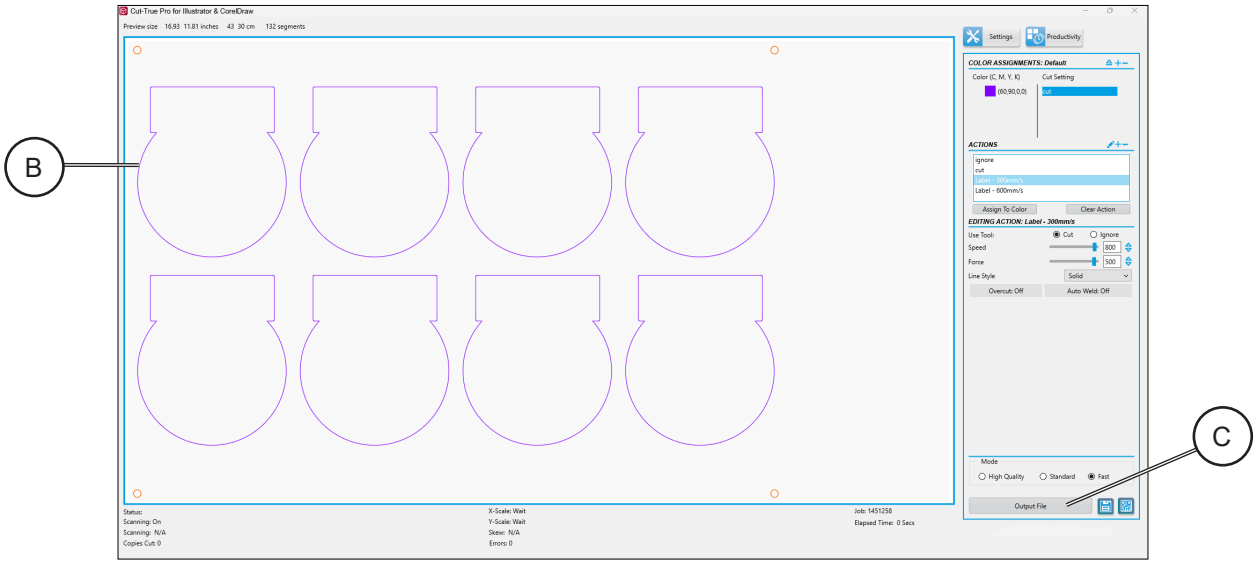
To load a Job file from the Job Library using the Job Number:



1. Click on the QR Code Icon [A].



2. This will display a dialogue box asking you to enter the Job Number manually. Enter the Job Number (found at the end of the printed sheet) and click the [OK] button to accept.



Your Cut Job File will be loaded directly into the Job Preview window [B].

You will notice the [Scan QR Code] button has now changed to [Start] [C].

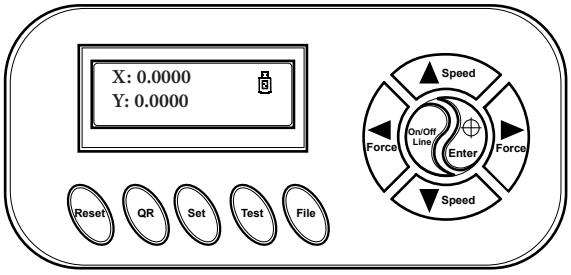
3. Assign actions to each Color.
4. Set the number of copies you want to cut after assigning actions to colors and making any other necessary changes, and then click the [Start] button.

Page Intentionally Blank

Settings & Options

This section contains previously outlined Cut-True Pro settings that may be changed directly via the cutter's control panel. If you wish to utilize the cutter in standalone mode by importing files through USB, you won't need to make modifications in the Cut-True Pro and may instead do it directly through the cutter's control panel.

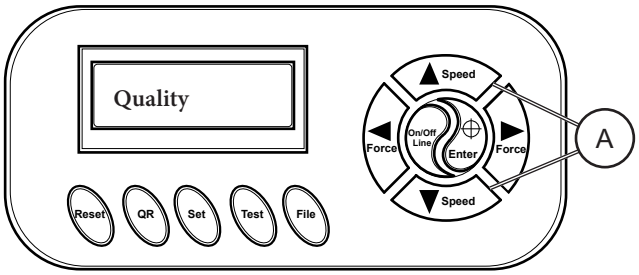
The Settings and Options screen



Press the [On/Off Line] button to activate Offline mode if it is not already active. To access the Settings and Options menu, press [SET]. Navigate through the menu by pressing [Set] to go backwards or [TEST] to go forwards.

After changing setting in the sub screen, press the [SET] button to save your changes and return to the main screen.

Quality Mode



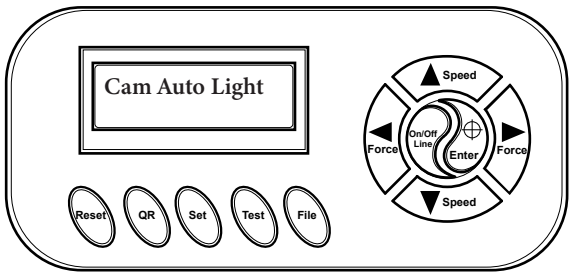
There are three cutting modes are available for selection, each of which enables a modification in cutting speed by adjusting the mode of the cutter. Navigate through the modes using Up/Down arrow buttons [A].

When handling cutting and creasing tasks of relatively straightforward complexity, it is advisable to employ the Speed Quality mode.

For projects involving thicker media or intricate designs with finer details, such as demanding perforations, the HD Quality mode is recommended due to performance and precision.

For tasks that don't specifically necessitate the use of either the Speed or Precise modes, opting for the Balance mode is recommended for achieving consistent and balanced results.

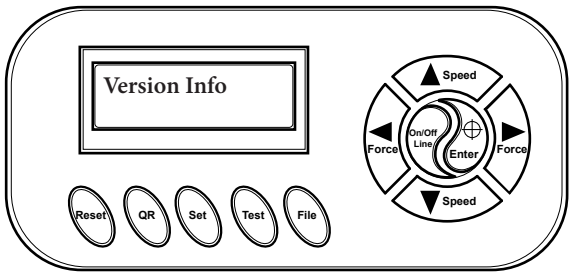
Camera Auto Light



Enable or disable the Camera Auto Light on the Tool Carriage using the Up/Down arrows.

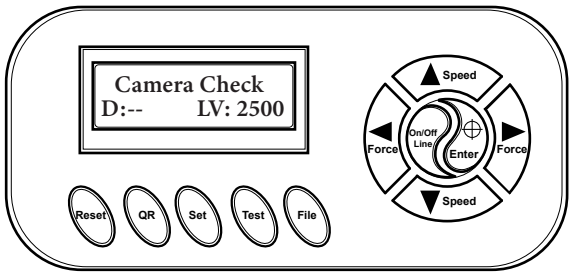
If automatic settings are enabled, the LED light on the carriage adjusts automatically. If camera fails to read the marks it will make up to 5 attempts to read and adjust the light settings.

System and Hardware Information



The system submenu provides detailed information about the system's firmware version, camera version, machine ID, hardware version and ID and machine model to help identify the configuration and specifications of the device. Use the Up/Down buttons to navigate through the submenu options.

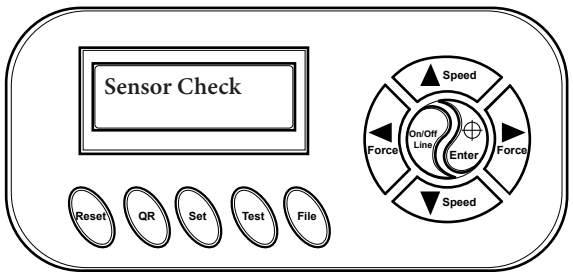
Camera Check



Camera Check tells the difference in position between the actual Blade on the cutter and the Vision sensor that reads the PageMARK positions.

1. Navigate to Camera check and press Enter
2. Put pen tool in the blade holder and a blank sheet in the feeder
3. Press File Button on Keypad
4. The DDC20 feeds the sheet and draws a circle. The camera will then read the circle and updates Tool Offset X and Y on the DDC20.

Sensor Check

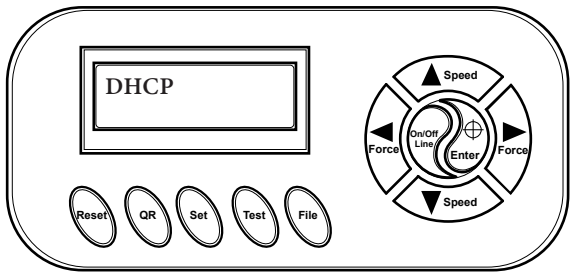


The sensor check screen allows to inspect the operating status of a given sensor.

Sensor readings:

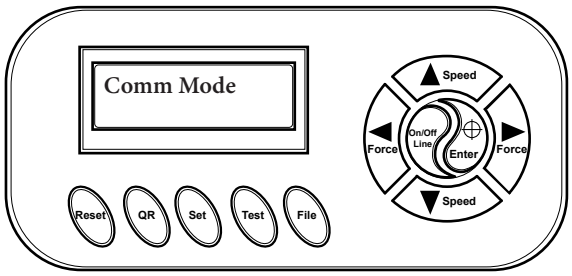
- S1On = Sensor at exit is clear
- S2On = Sensor at in drive rollers is clear
- S3On = Sensor in Media feed tray is clear
- S1Off = Sensor at exit is covered
- S2Off = Sensor at in drive rollers is covered
- S3Off = Sensor in Media feed tray is covered

Dynamic Host Configuration Protocol



Choose to enable or disable DHCP, which automatically assigns an IP address and other necessary settings.

Communication Mode

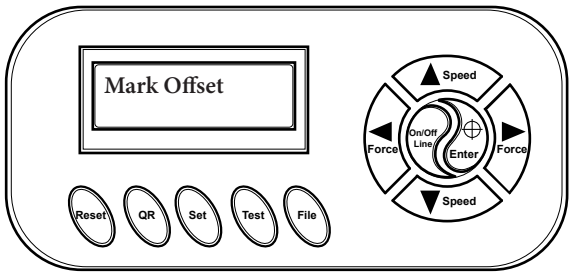


Choose between a USB linker or a network connection to connect the cutter.

USB Linker = USB cable

Network = Ethernet cable communicate via IP address

Mark Offset

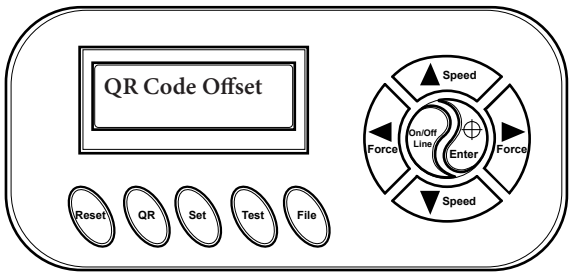


The default setting for mark offset is ‘Disabled’.

To manually adjust PageMark distance from the margins use the arrow to edit X and Y values. To confirm your changes press enter.

Mark offset can be used if your print that is not in the correct place.

QR Code Offset Y

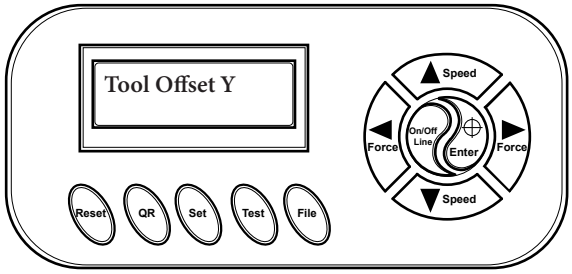


The QR code default placement value should be 20 mm. This is where the Cut-True Pro plugin will automatically add the QR code.

To adjust the QR code position, use the up and down arrow buttons, then press Enter to confirm the placement.

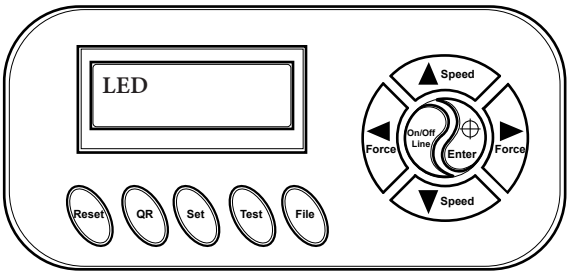
QR code offset can be used to create extra space for the design or compensate if your print is not aligned correctly.

Tool Offset

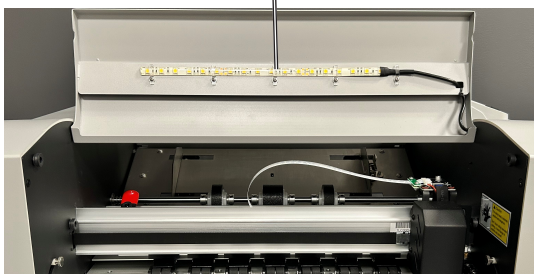


Adjust the offset between the blade and the sensor along the X and Y axes by editing the values.

LED



LED strip



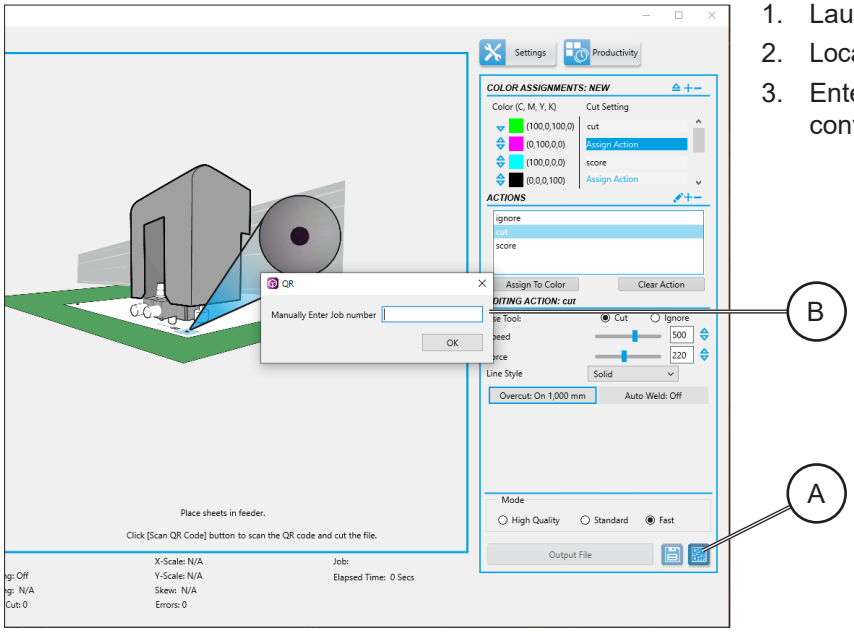
Enable or disable the LED light located under the front cover of DDC20.

Hold Mode

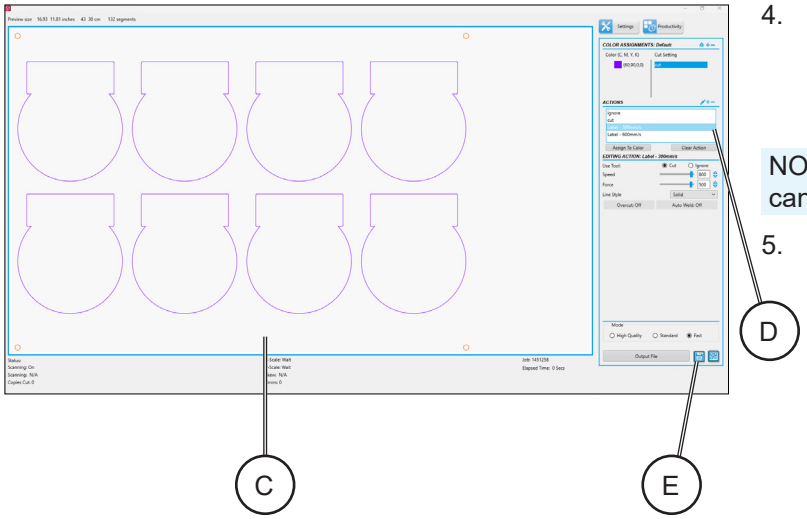
The Hold mode offers the capability to operate the machine directly using files stored on a USB drive or within the machine itself. This means that for repetitive high-volume production tasks, there is no necessity to maintain a connection to a computer or server station. Users can effortlessly engage this mode, select their desired file, input the desired quantity, and initiate the operation with a simple click, streamlining the workflow.

Note that the Cutter has limited storage capacity so it is recommended to keep job files stored in the USB.

How to create cut files (.cch files for hold mode)



1. Launch Color Cut Pro.
2. Locate the QR code icon [A] and click on it.
3. Enter the QR code of the design [B] to be converted to a .cch file and press [OK].



4. The design will appear in the Preview section [C]. Actions can be assigned, and speed and force settings for each action can be input [D].

NOTE: Once the .cch file is created, settings cannot be changed.

5. When satisfied with the settings, click the Save icon [E].

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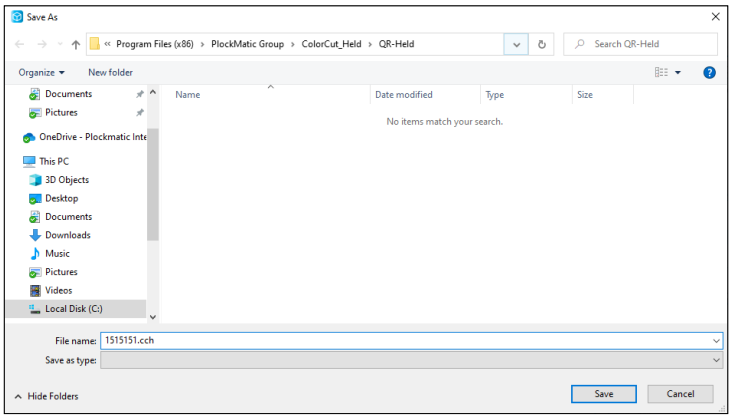
How to create cut files (.cch files for held mode), continued

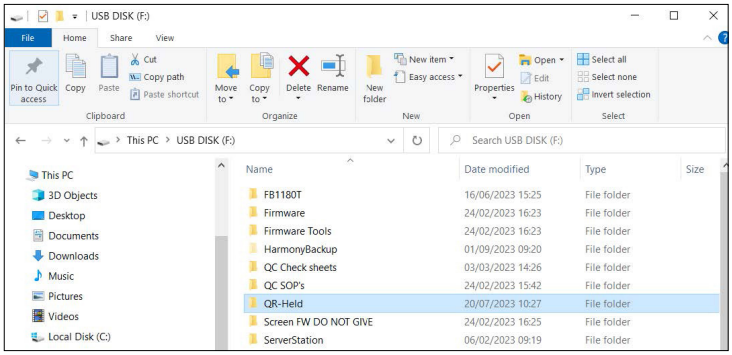


6. The default save location is: C:\Program Files (x86)\Formax Group\ Cut-True_Held\QR-Held

   .

   Click [Save] to create the .cch file for Hold Mode on the cutter.

7. To run the .cch file to the cutter, there are two options:
   - a. Share the Cut-True_Held folder over the network.
   - b. Plug a USB stick into the cutter, then click on the Folder Icon and the USB Icon.



8. If using a USB stick, ensure the .cch file is in a root folder named ‘QR-Held’ for the cutter to find.

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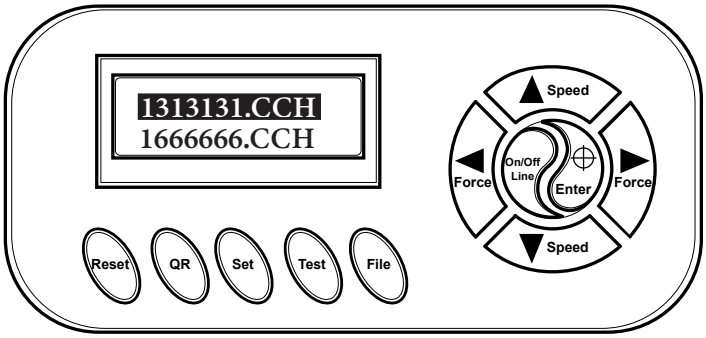
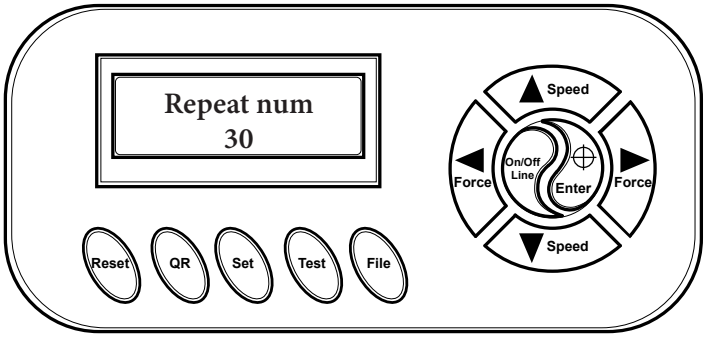
How to run job with USB stick



1. Insert the USB stick into USB port on the rear side of the machine.
2. Press File.
   The cutter will display the available cch. files on the USB. Locate and press Enter to select the file you want to cut.



3. Specify the number of copies to run with up/down arrow buttons and press [Enter] to start cutting.

4

Recommendations

Do’s and Don’ts

- Always follow all warnings marked on, or supplied with, the equipment.
- Always exercise care in moving or relocating the equipment.

Caution:
Unplug the power cord from the wall outlet and machine before you move or relocate the equipment.

- Do not remove the covers or guards that are fastened with screws.
- Do not override or bypass electrical or mechanical interlock devices.
- Do not operate the equipment if you notice unusual noises or odours. Disconnect the power cord from the power source and call your authorized technician to correct the problem.

Warning:
This is a Class A product. In a domestic environment this product may cause radio interference in which case the user may be required to take adequate measures.

NOTE: The domestic environment is an environment where the use of broadcast radio and television receivers may be expected within a distance of 10 m of the apparatus concerned.

- Do not switch off the power while the machine is running. Make sure the machine cycle has ended.
- Do not open covers while the machine is running.
- Do not move machine while the machine is running.
- Do not make arbitrary changes to the machine.
- Do not sit or step on the stacker tray. Stacker will break or machine will tilt over. The maximums load for the stacker tray is 15 kg.

Where to Place Your Machine

Machine Environment

- Always locate the equipment on a solid support surface with adequate strength for the weight of the machine
- Always keep magnets and all devices with strong magnetic fields away from the machine

If the place of installation is air-conditioned or heated, do not place the machine where it will be:

- Subjected to sudden temperature changes
- Directly exposed to cool air from an air-conditioner
- Directly exposed to heat from a heater

Power Connection

- **Always** connect the equipment to a properly grounded power source. If in doubt, have the power source checked by a qualified electrician.

Warning:
Improper grounding of the equipment can result in electrical shock

- **Never** connect the machine to a power source that lacks a ground connection terminal. A missing ground will cause damage to electronics and cause machine malfunctions.

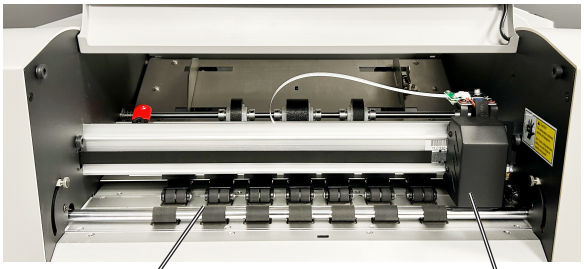
Maintaining Your Machine

Never attempt any maintenance function that is not specifically described in this documentation.

Cutting strip

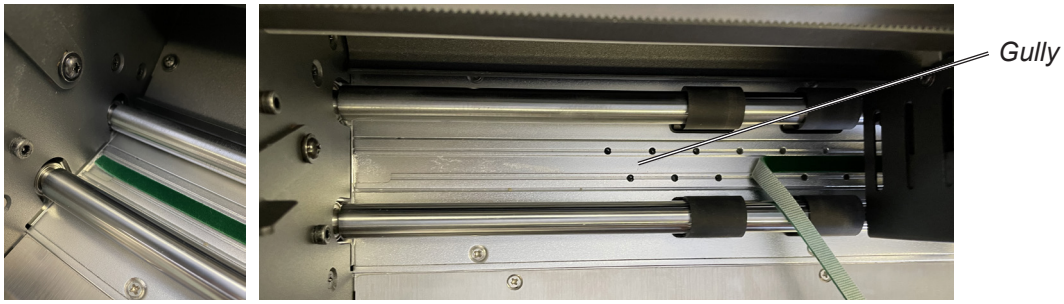
The cutting strip should be checked for signs of wear daily, if the strip is damaged and worn it should be replaced.

The longevity of the cutting strip's effectiveness depends by the material being cut and the operator's skills in adjusting the blade depth. It is recommended to replace the cutting strip on a monthly basis on average.



Cutting strip *Tools carriage*

1. Turn off the machine and disconnect the power cord.
2. Open the top cover and manually move the Tools carriage if it is in front of the cutting strip's edge.

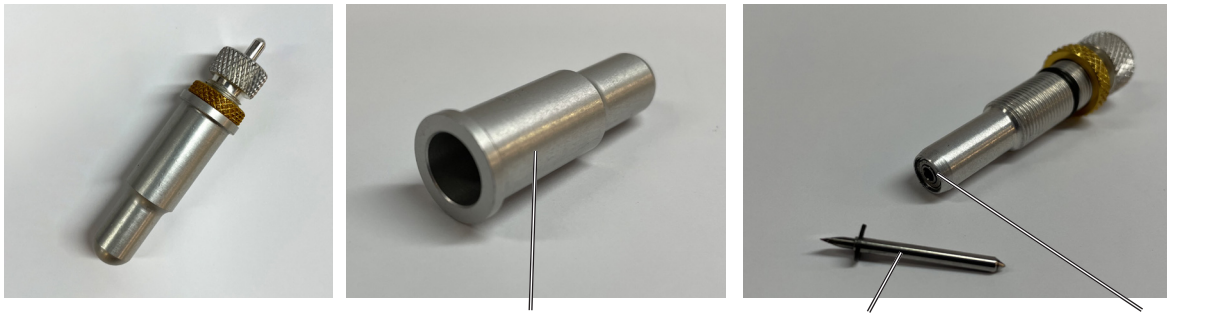


Gully

3. Peel off the cutting strip from one corner, dispose damaged strip.
4. Clean the gully of the glue residue with label cleaner. The gully must be residue free to ensure a flat surface for the new cutting strip. Leave it dry or dry it with cloth.
5. Stick the new strip down in the gully, cut it to the size.

Cleaning tools

The tools should be checked and cleaned of paper dust weekly to ensure the blade rotates freely in the holder.



Outer cover *Blade with circlip* *Inner blade holder*

1. Unscrew the outer cover, clean it with small brush or compressed air.

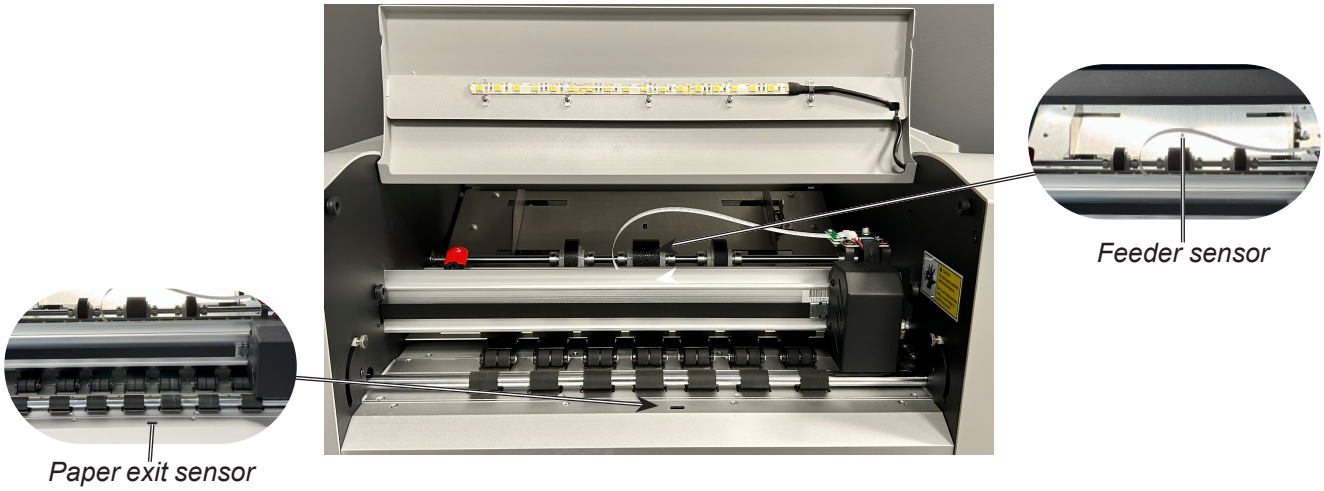
Caution:
Take caution with the blade to avoid cutting your hands!

2. Take the blade out of the holder, clean from paper dust.
3. Lubricate the stud of the blade with bearing grease and put it back in the inner blade holder, screw back the outer cover.

Media optical sensors

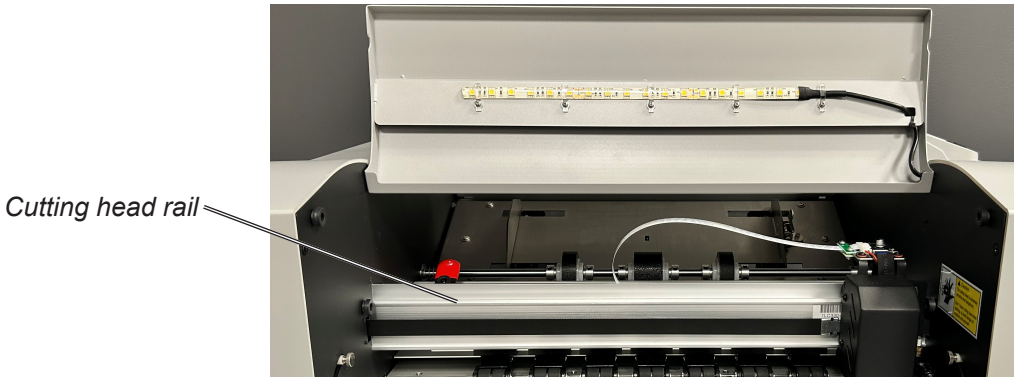
The sensors need to be cleaned every day, more frequent cleaning may be required depending on media type. Using a lint free cloth, compressed air or soft bristled brush clean the sensors. Turn off the machine and disconnect the power cord before performing any procedures.

Caution:
Never use cleaning fluids on sensors!



Cutting head rail

Weekly clean the Cutting head rail with engineer wipe and lightly lubricate top rail with PTFE lubricant spray.



Dual Grip Roller

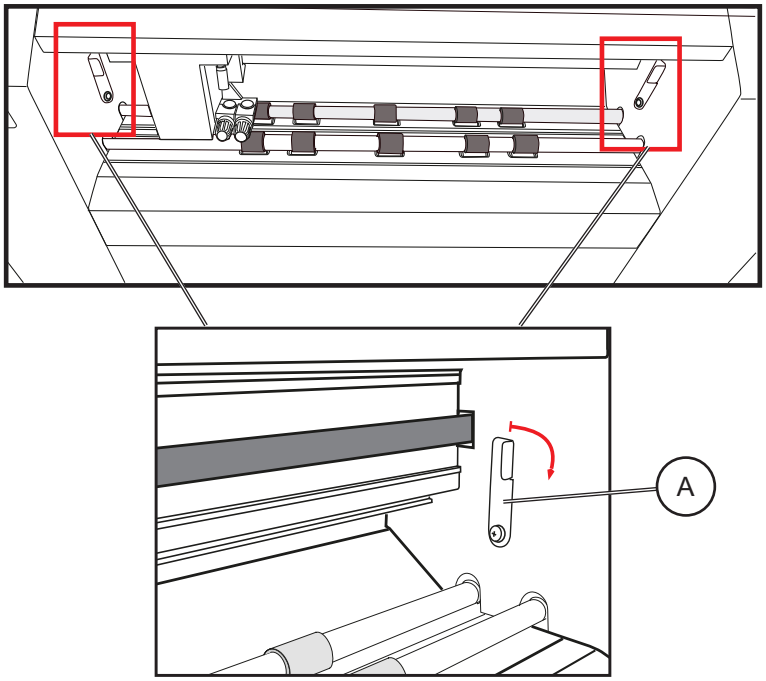
Typically a vinyl cutter grips and feeds the media using a 'Pinch' roller system situated behind the Tool Carriage position. This means the rear of the sheet would not be held by the grip roller during cutting therefore typical cutters can not cut within 30 mm (1" 1/4) of the rear of the sheet. However, to solve this problem the DDC20 is fitted with an advanced Dual Grip roller system to maximise cutting area and to enable the DDC20 to cut closer to the rear and front edge of your media than any other Y-Axis cutter.

The main (Master) grip roller is the Rear Grip roller, (and is the most accurate) grip roller that holds and drives your media backwards and forwards during registration or cutting. The DDC20 is also configured with a supplemental slave grip roller at the front of the cutter (So the media is gripped either side of the cutting head). This Front Roller functions in conjunction with the main roller, and the combination of feed rollers is referred as the Dual Grip Rollers.

NOTE: Please be aware; when the cutter scans the registration marks, the most accurate cut is achieved when the rear grip (Master) rollers grip the sheet during scanning of all 4 marks, as any calculations for all cut lines are done after scanning the marks. Please refer to the DDC20 Cut-True Pro manual for further details, on PageMark placement on your design for the optimum results.

From time to time, it may be necessary to lift, or remove the dual grip rollers to assist in cleaning or removing media from under the rollers when elements have fallen out of your cut sheet due to insufficient TAGs. It is also necessary to remove the Front Grip roller when changing your cutting strip. Therefore please follow the guide below showing how to release pressure on the rollers for simply lifting them to remove debris or removing them completely.

Replace the Dual Grip Rollers



1. The Dual Grip front roller is held in place by the Dual Grip Clamps, these can be lifted using the Dual Grip Levers [A] at either side, on the front of the DDC20.
2. Open the Dual Drip Lever clamps to release the pressure on the Dual Grip Rollers. (Release lever clamps on both sides)

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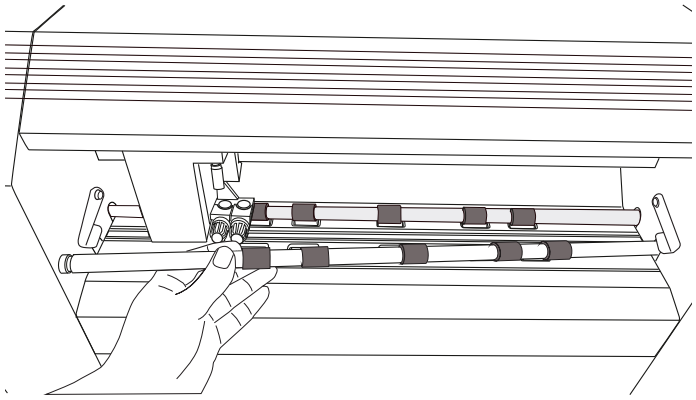
Replace the Dual Grip Rollers, continued



3. With the pressure released from the Dual Grip Levers you can move the Front Grip Roller right (in to the DDC20 chassis) 5 - 10 mm then diagonally move the opposing (left) end of the Grip bar out from the Left side (of the DDC20 chassis) and then diagonally up and out of the cutter.

NOTE: Due to manufacturing differences on some units it may be easiest to move the Grip Roller into the right side of the machine and turn the left end rotating this out first. However on other machines, you may find it easier to move the opposite end (left side) of the roller into the left chassis of the machine and rotate the right side of the roller out.

4. In most cases it is not necessary to remove the Rear Grip roller, but while the pressure is released, it is easy to lift to remove any debris. However, if you need to remove the Rear Grip Roller, please ensure the tools are removed from the tool carriage. The process is the same, move the roller into one side of the chassis and diagonally slightly rotate and move out.

NOTE: You may need to fractionally lift the roller before moving into the chassis as there is a small lip holding the roller that may make it difficult to move far enough into the chassis to enable you to move the roller out.

5. Replacing the Dual Grip Rollers is the opposite procedure, diagonally fit the bar towards the one side and then down into position.

Warning:
You must ensure the Rubber Roller sections on the Grip roller align with the Knurled Metal Grip Rollers in the base of the cutter. The Grip Roller is designed to fit in one orientation only.

6. Close the Dual Grip Lever clamps [A] to secure the Dual Grip Roller.

NOTE: The Dual Grip roller enables you to cut closer to end of the sheet than normally possible, however the accuracy may decrease when sheets have PageMarks or Cutting elements within the last 22 mm of the sheet, when the sheet is held by the secondary grip roller and no longer held by the main drive roller.

To achieve the highest cutting accuracy it is important that the sheet is held at all times by the main grip rollers particularly while scanning the PageMarks. Therefore, always ensure the rear / tailing edge registration PageMARKs are 22 mm from the rear edge of the sheet. This will ensure during the scanning of the pagemarks, the sheet is retained at all times by the main grip rollers. When positioning PageMARKs in the last 22 mm of the sheet there is a risk, the final marks will be read in a less accurate position and as a result scale or skew compensation can be incorrectly applied for the entire sheet. Please see the DDC20 Cut-True Pro manual for tips and details about Graphic File Design and how to get the best results from your DDC20.

DDC20 Best Practices

- Sheets with Curl will cause more frequent misfeeds and lead to greater inaccuracy during cutting. Be sure to use your printers de-curl function if possible.
- Set design rules within your organization to keep consistent smart mark and QR code locations. That will lead to minimal set up changes when cutting on the DDC20.
- Set design rules with regards to what color is used for cut. Generally, red is the most common cut color.

DDC20 Limitations

- GSM lower than specification (140 gsm) may cut sufficiently but it depends more on curl and paper properties. (The paper may bend and the marks will be difficult to read resulting in a less accurate cut.)

Material Limitations

- Magnetic paper cannot be cut on the DDC20 due to the machine's steel construction
- Metallic effect media (paper OR polyester) may be cut, but it depends on the composition

Specifications

Media Handling	
Standard media sizes	13x19, 12x18, 11x17, 8.5x14, 8.5x11
Custom media sizes	Max:13 x 19 in Min: 6 x 7.5 in
Media thickness	0.14 mm (140 micron/140 g/m²) - 0.35 mm (350 micron/350 g/m²)
Auto-sheet capacity	Up to 120 sheet auto-sheet feeder
Max Speed / Max Force	31.5 in/s
Mountable tools	A single tool holder supports; - Blade holder tool for cutting blades at 30°, 45° & 60° - Pen calibration tool for auto-calibration
Software & Connectivity	
Cut-True Pro 5 Plugin - PC	Cut-True Pro 3 plug-in (all features available). Cut-True Pro sends projects designed in Adobe® Illustrator® or CorelDRAW® directly to Cut-True label cutter with no need to convert them to a different format. Requires: PC - Adobe® Illustrator® CS6, CC2014 - CC2025, or CorelDRAW® X8, 2017 - 2025 Graphics Suite
Cut-True Pro 5 Plugin - Mac Client	Cut-True Pro Plugin for Mac enables the Cut-True Pro Job Library Client. Mac users add cut marks to Illustrator files and assign Job numbers and QR codes. The jobs are sent to the remote Cut-True Pro Job Library on a PC for cutting. Requires: Illustrator CC2018- 2025
Cut-True Pro 5 Standalone - PC Only	Cut-True Pro (Job Server) version of Cut-True Pro is PC only and enables jobs created by the Cut-True Pro plug-in (above) to be cut at any time, without requiring Adobe® Illustrator® or CorelDRAW® and without having to re-open the original file
PC minimum specification	Windows® 10/11 Pro 64-bit. 4 GB of RAM (8 GB recommended). Minimum display resolution: 1280 × 960
Connectivity	USB (1 connection to PC is required), Ethernet, Wi-Fi
Registration Control & Job Management	
Registration system	Vision3 - High resolution CCD vision system ARMS 9
Cut position accuracy	+/- 100 micron*
Auto job recognition	Yes: Cut file retrieval, supported through QR code (requires Cut-True Pro)
Mixed job recognition	Yes
Machine specifications	
Ratings	100-240 Vac ±10%
	150W average 4.0A
	50-60 Hz