

OPERATING INSTRUCTIONS

for the labelcutter and labelfinisher

Secabo LC30

Congratulations on the purchase of your Secabo labelcutter!

Please carefully read the operating manual to easily integrate your unit into your production environment.

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Version 1.0 (01.03.2017)

Safety measures

Please read the information and safety measures carefully prior to initial operation of the unit!

- Do not place any magnetic objects in the vicinity of the cutting head; otherwise uniform contact pressure is not ensured.
- Do not remove the connection cable to the computer while plotting is in progress.
- Relieve the pressure on the pressure rollers when not in use by moving the pressure lever up.
- Do not reach into the unit when it is connected to electricity supply.
- Never open the casing and do not make any modifications to the unit yourself.
- Ensure that neither liquids nor metal objects are put inside the vinyl cutter.
- Ensure that the wall socket used is grounded and protected with a ground fault switch.
- Ensure that the connected voltage (220V) does not deviate by more than ±10%. Otherwise install a voltage stabilizer.
- Pull the power plug if the unit will not be in use for a longer period of time.
- Never reach into the unit in the vicinity of the blade holder during the cutting operation!
- Discontinue any printing jobs in progress before readjusting the blade holder!
- Always ensure that the vinyl cutter is out of reach of children during operation and never leave the unit or individual parts of it switched on without supervision.
- Do not touch the tip of the sliding blade to avoid injury.
- Always place the unit on a stable base to prevent it from falling down.
- Do not operate the unit during thunderstorms; it can be damaged or destroyed by lightning.

Items Included

Before starting work, please check whether the following items are all present:

Article	Quantity	
labelcutter	1	
Power cable	1	
USB connection cable	1	
Blade holder	1	
Pen holder	1	
Drag knife 30°, 45°, 60°	3	
Clamping element	3	
Fence element	3	
Acrylic glass plate	3	
Rubber feet	4	
Certificate of DrawCut license	1	

Machine parts and their function



- a) Winding shaft with clamping elements
- b) USB port
- c) Winding shaft for excess foil
- d) Winding shaft for finished labels
- e) Dancer roller for clamping winding finished excess foil
- f) Strip edge for excess foil
- g) Dancer roller for winding finished labels
- h) Control panel cutting unit
- i) Cutting unit
- j) Dancer roller for winding
- k) Electricity connection and switch

Control panel



Initial operation of machine and software

Caution! Please note that the smooth installation and complete configuration requires DrawCut LabelStudio to be installed first.

Installation DrawCut LabelStudio

Your Secabo LC30 labelcutter is delivered with the cutting software DrawCut LabelStudio. This software must be activated over the Internet. You do not necessarily need Internet access on the computer, on which DrawCut will be installed. The activation can also be performed via another computer.

In order to control your LC30 via your computer, install the software as described in the following:

- Disable the Windows Firewall as well as your anti-virus software for the duration of the installation.
- Download the current version of DrawCut LabelStudio at http://www.draw-cut.com/#downloads and follow the installation wizard.
- Find your DrawCut LabelStudio 26-digit serial number on the printout that was delivered with your Secabo LC30. Enter it when you are prompted to do so.
- Now you can use DrawCut LabelStudio.

Installation of your Secabo LC30 in DrawCut LabelStudio

Please keep in mind that your Secabo LC30 can only be operated under Windows XP, Windows Vista, Windows 7, Windows 8, Windows 8.1 and Windows 10. Operation with an older version of Windows is not possible.

- Connect the Secabo LC30 to your computer via the supplied USB cable.
- Switch on the device.

- Your Secabo LC30 will now be recognized. Windows will search for the appropriate drivers and automatically install them. This can take some time. After that, the device is ready for operation.
- Start DrawCut LabelStudio



 Drawcut LabelStudio immediately recognizes the Secabo LC30, a manual installation is not necessary.

Initial operation of machine

- Unpack the LC30 labelcutter and place it on a stable surface. Avoid lifting the unit by its shafts and axes. Instead, only lift it by its base plate at the bottom.
- Mount the supplied rubber feet by lifting the unit on one side and, one by one, screwing the feet into the holes provided for this purpose from the bottom. The loose nut provided on each foot is used for locking and fixing, once the final position is set.



• Thread the clamping elements for the cardboard tubes onto the three main shafts. Fix these at the same distance from the rear wall - the scaling on the shaft will help you with this!



- Connect the LC30 to a 230 V socket via the supplied power cable.
- Now connect the LC30 to the computer on which you previously installed DrawCut LabelStudio using a USB cable.
- Now switch on the device.

Installing and adjusting the blade

- Take one of the supplied cutting blades and place it in the blade holder in such a way, that the sharp side extends at the front.
- Now set the cutting depth by turning the screw at the upper end of the blade holder.
- Initially, the depth is correctly set if you can carefully move your fingertip across the blade and feel only a light scratching. Since the depth adjustment for the blade depends on the material, it may be necessary to adjust it later.
- Secure the blade setting by tightening the gold lock nut.
- Press the pin on the rear end of the blade holder to remove and replace the blade at any time. Caution risk of injury!

The various material thicknesses require different blade settings or even special blades; it may therefore be necessary to repeat the adjustment described above.

Inserting the blade holder

- First, sufficiently loosen the clamping screw for the blade holder on the cutting head.
- Next, press down the blade holder from above into the hole on the right side until there is contact and pull the lock nut tight. In doing so, please ensure that the blade holder is also secured correctly by means of the fixture provided for this purpose.



- a) Blade holder
- b) Clamp

Calibration of the LC30 via DrawCut LabelStudio

Laser offset calibration

The laser's offset must be calibrated prior to the first use of the Secabo LC30.

• Open the spooler in Drawcut Labelstudio

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V ≡ 0151_63 V ≡ 0150_86 <	Print+Cut	200,0mm × 238,0mm 200,0mm × 89,1mm	05.08.2016 13:53:19 05.08.2016 13:48:27	C:\ProgramData	0		
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• Click on "Auto Calibrate Laser Offset" in the spooler's header

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		Place laser where re	d dot is to begin.
Batch Process	☑ Label Cutter mode	Cut La	abels Close

• {ut1}Now place a white sheet of paper into the LC30, equip the cutter head with the included pen holder and position the origin approximately in the center of the inserted page! Next, confirm the software request by clicking Yes!

♥∷ Auto File Cu	mark Cutting Module V1 utter Jobs Advanced	.16 Help		- 🗆 X
Detect	Barcode	Scan Marks	Cutout Job	Finished
Confirm	Auto Calibrate Laser? Please load a blank she and use the PEN tool. F in the middle of the pa orign (base point). Do you wish to proceed Yes N	et of paper, Postion the pen per and reset the d?	Place laser where rec	d dot is to begin.
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• {ut1}Also confirm the second software request by clicking "Yes". The calibration will automatically start now. This process may take several minutes to complete.

ile Cutter Jobs Advance			(#)
Detect Barcode	Scan Marks	Cutout Job	Finished
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Yes	Calibrate Laser?		
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Batch Process	☑ Label Cutter mode	Cut Lab	els Close

• Upon successfully completing the calibration, the software will return the measured laser offset! Confirm the value by clicking OK! This value will also be stored in the cutter settings!

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vetect Barcode	Scan Marks	Cutout Job	Finished
b Status Cutter Settings			
Cutter Settings			
Use Multiple Tools	Pen mode v		
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Cutting Speed	300 🌲		
Blade Comp.	0,000		
Over Cut	0,00		
Travel Speed (mm/sec)	600		
Laser Offset	/		
X-Offset (left/right)	22,176		•
Y-Offset (down/up)	-5,277		
Automatic Mode		Place laser where red o	lot is to begin

Setting the blade offset

• In the cutter settings, you can set the blade offset and overcut. The value of 0.250 is used as a reference value for the knife offset of original Secabo drag knives.

Ų.	Media Laser Sensitivity (SV)	9	Calibrate Media	
9 23	Laser Y-Offset (Left+,Right-) Laser X-Offset (Back+, Front-)	22,342 1 -5,384 1	Calibrate Offset	
ťt	✓ Blade Compensation (mm) ○ Overcut Contours (mm)	0,250 1 2,00 1	Blade Test	
	Maximum Job separation (mm)	60,00		

• The most important basic settings are now saved and you can begin finishing your print job previously created with Drawcut LabelStudio.

Inserting the foil

 Mount a printed film onto the spigot provided for this purpose and externally fix it using the clamping spigots!



- Also using the clamping spigots, load empty cardboard tubes on the other two shafts. Be sure that all three pairs of clamping sets are tight and that the cardboard tube's width is fitting for the medium.
- Ensure that the three pairs of clamping sets are precisely aligned, so that the media can be fed through the LC30 completely straight.
- Insert the foil in the LC30 according to the following diagram:



• Make sure that the clamping lever of the cutting device is open when the loading the foil, i.e. so that the medium in the cutting head won't be guided.

- Firmly stick the foil medium onto the winding for excess foil in the middle, as well as the carrier medium onto the winding for finished labels in a straight manner.
- After inserting the foil as described above, operate the dancer roller for the winding for finished labels by hand and run 1-2m of material through the LC30 by doing so to allow the medium to straighten itself.
- Make sure that the foil lies in a good place that is as symmetrical to the positions of the rollers in the cutting device (marked by white arches) as possible, and that at least one pressure roller is positioned left and right directly above it.



• Then close the black clamp lever on the cutting head and complete the inserting the foil thereby.



Cutting test



- Execute the cutting test in the "Online Mode" by clicking the "Test" button. The vinyl cutter will cut a triangle with a rectangular border into the inserted foil/vinyl at the currently saved zero point.
- You can check the adjustment of the blade holder as well as the contact pressure with this cutting test. The inserted material should be cut cleanly and straight during the cutting test; the carrier material should not be damaged.
- If the carrier material has been cut, either the contact pressure is set too high or the blade or blade holder are set incorrectly. Change these settings and perform the cutting test again.
- Also readjust if the vinyl was cut imprecisely or to an insufficient depth.

Settings and Operation

Online / offline



After switching on the unit a reset is performed and the unit switches to the online mode. By selecting the "on-/offline" button on the panel, you can switch between online and offline mode. During the cutting operation, the vinyl cutter must generally be in the online mode. To change the configuration settings, the unit must be set offline.

Moving the Cutting Head



In the offline mode, the cutting head can be moved left and right by pressing the "Force" arrow keys, as well as forwards or backwards by pressing the "Speed" arrow keys. The corresponding X and Y coordinates are shown on the display.

Setting the zero point



In order to set the correct starting point for plotting, in offline mode, move the cutter head and foil in such a way, that the laser point is located in the so-called start box in front of the bar code on the inserted medium. Now confirm the zero point by pressing the crosshair, which will cause the device to automatically switch to online mode.

Adjust speed and contact pressure

You can make the following changes in the online mode by pressing the corresponding buttons:

Increase speed	Reduce speed	Increase contact pressure	Reduce contact pressure
Speed	Speed	Force	Force

The cutting speed and contact pressure cannot be changed while a plotting job is in progress.

Other settings



In the online mode, pressing the set button repeatedly will let you page through additional configuration menus.

In the second menu point, one can calibrate the vinyl cutter correctly. Correction may be required here due to wear to the mechanical parts. The X and Y scaling of the data can be changed by changing the XP and YP values. If, for example, an object for which a length of 100 cm was entered on the computer is cut on the vinyl cutter to a length of only 98cm, it is necessary to correct the corresponding scaling value on the plotter. Otherwise, these values should not be changed.

Reset button

The reset button lets you cancel your job at any time. This function can be helpful when, for example, a job was accidentally generated too large.



Creating a print job in DrawCut Label Studio

→refer to Manual Drawcut Label Studio

Starting a cutting job from DrawCut Label Studio

First, insert the already printed medium in the Secabo LC30 as described above.

• Use the laser button inside the LC30's control panel to manually switch on the laser, position it directly on a mark on the wall side of the LC30 and set the source here.



• Open the Spooler in LabelStudio

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Job Type					1		
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• Check the Label Cutter mode option and click Load Job

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etect Barcode		Scan Marks		Cutout Job		Finished
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Laser Offset						r
K-Offset	(left/right)	22,176	÷		•	
Y-Offset	(down/up)	-5,277	-			
		100		Place la	aser where red dot is to b	egin.
Automatic Mode						

• Now simply enter the job ID into the dialog box that opened. One place you can find this is between the crop marks on the printout you created.

Enter the Job ID you wis	h to preview
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120041	
OK	Cancel

• Click on Cut Labels. The cutting process will start automatically!

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Drag knife

Drag knives are sensitive, sharp and dangerous precision tools.

- Keep the blade out of the reach of children!
- To avoid personal injury, caution must be taken in handling the blades.

Handle the drag knives carefully and always store them with the protection cap when not in use. Should the tip of a blade come hit hard materials such as glass or stone, it can cause tiny fractures of the tip of the blade, making the blade unusable.

Please consider the following instructions to prevent unnecessary wear and tear of your drag knives and to achieve a long durability of these products instead.

- In any case, avoid cuts into the carrier material of the foil. The deeper you cut into the used material, the higher will be the wear and tear of the blade.
- Adjust the cutting depth of the blade so that the material is merely cut cleanly. if the blade protrudes any further, it reduces the durability of the blade and good cutting results can no longer be guaranteed.
- For thicker materials, use knives specially suited for it (e.g. flock knife for flock).
- Frayed edges after cutting the foil indicate a blunt drag knife. Replace worn blades immediately!

Technical data

Model	LC30			
Туре	Roll to roll labelcutter with servo motor and automatic multi pass marker detection			
Max. Media width	400mm			
Max. Cutting width	305mm			
Connections	USB			
Display	backlit, graphic LCD screen			
Memory	4MB			
Max. Speed	960mm/s			
Max. Media thickness	1mm			
Contact pressure	50g-750g			
Mechanical Resolution	0,0125mm			
Repetition accuracy	< +/-0.08mm			
Power supply	AC 90V - 240V / 50Hz - 60Hz			
Environment	+5°C - +35°C / 30% - 70% relative humidity			
Weight without packaging	75kg			
Weight with packaging	110kg			
Dimensions (W x H x D)	103cm x 50cm x 67cm			

Statement of conformity

We herewith declare under sole responsibility that the product mentioned under "9. technical data" meets the provisions of the following EC Directives and Harmonized Standards:

EC directives: 2006/95/EC Low Volatge Directive 98/37/EC Directive on machinery (from 2009-12-29: 2006/42/EC)

Standard: EN 60204-1:2006 Technical documents at: Secabo GmbH, Hochstatt 6-8, 85283 Wolnzach, Germany

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