

CHAPTER 7

SENDING CUT-ONLY JOBS

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Your SignLab package includes an *Installation Manual* that describes the various methods of sending jobs to cutters and printers. In this chapter, we will discuss the **Cut | Plot** command, which is used to cut on vinyl with any line art shapes and text created or imported into SignLab.

For jobs that involve printing upon vinyl and then cutting the vinyl, it is assumed and recommended that the **File | Print and Cut** command be used for both the printing and cutting.



Configuring the Cutter

Under the **Cut** menu, choose **Plotting Defaults** to configure the cutter for using the **Cut | Plot** command.

Important Plot dialog configuration settings:

1. Choose **Cut | Plotting Defaults** to open the **Plot** dialog
2. On the **Plot** dialog, choose the **Tool** that will be used for plotting or cutting. For some cutters, the Tool setting refers to the set of machine conditions that are being used, in which case the Operator's Manual should be consulted for that cutter.
3. To open the **Tool Options** dialog, click the **Move Control** button on the Plot dialog. The cutter's Operation Manual should be consulted for more information about these settings.

Important Plotter Setup dialog configuration settings:

1. To open the **Plotter Setup** dialog, click the **Setup** button on the **Plot** dialog
2. On the **Plotter** tab, verify that the **Machine Limits** are correct
3. On the **Port** tab, choose the method that will be used for sending cut data to the cutter

- ☐ **Direct to port** – This will send the cut data to a cutter that is attached to this workstation
- ☐ **Use Plot Spooler** – This option is a legacy feature of SignLab. For seasoned users of SignLab, this option is still available, but new users are encouraged to use the **Cut Manager** option.
- ☐ **Use Cut Manager** – This will send the cut data via the queue (i.e. a “cut-only” version of the Print and Cut Manager). The queue name will be available from the drop-list.

If the Cut Manager has been set up on a remote (network) workstation, then you will need to browse to the workstation and select the “Cut Manager” directory.

Locating a remote Cut Manager:

1. Click the “**New Remote Print and Cut Manager**” button to open a browse window
2. Browse to the workstation that has been installed with the Cut Manager
3. Select either the “Cut Manager” or “PCut Manager” directory (depends on your SignLab package).
4. Click **OK**, and the queue name should now be in the drop-list



Previewing the Cut Job

When the **Cut | Plot** command is used, SignLab will preview the design in **Cut Preview** mode. All line art shapes will be considered to be valid cutting shapes.

In **Cut Preview** mode, the cutter and tool will be displayed at the far-left of the SmartBar.

At the far-right of the **Cut Toolbox**, click the **Cut** button to send the job. The cut data will be sent according to the method that was chosen on the **Plotter Setup** dialog:

- ☐ **Direct to port** – The cut data should now be received by the cutter.
- ☐ **Use Plot Spooler** – As previously mentioned, this option is a legacy feature of SignLab.
- ☐ **Use Cut Manager** – The queue (i.e. the Cut Manager) will now launch, and the cut job will be in the **Active List**. Before continuing, confirm that your cutter is ready to receive data. Then from the **Active List**, right-click the cut job and choose **Cut** from the context menu.

The Cut Manager

In practice, the term “queue” is used interchangeably with that of “Cut Manager.” For any workstation that has been installed with the Cut Manager, that workstation can also be referred to as a “queue.”



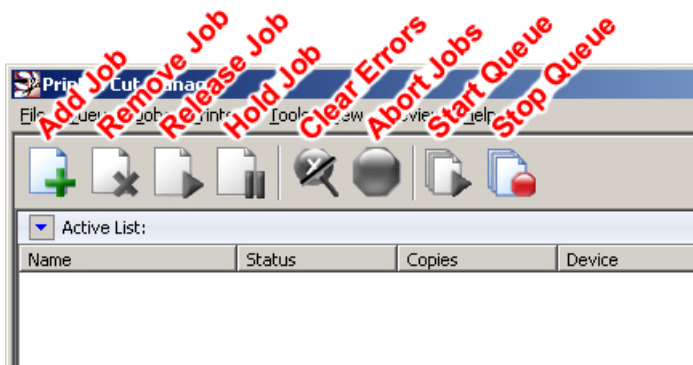
For print and cut versions of SignLab, the queue can also refer to the “Print and Cut Manager.” However, the Print and Cut Manager is merely a queue that is also able to handle print jobs.

When cutting jobs to the queue, the queue will automatically open. Alternatively, the queue may be opened by choosing **Launch Cut Manager** from the **File** menu, or by choosing **Cut Manager** from the Windows **Start** menu.

The queue window provides real-time control over cut jobs as they are sent from SignLab to one-or-more cutters. The queue can collect similar cut jobs until there are a sufficient number to proceed with cutting the series like a batch job.

In the queue toolbar are the **Start Queue** and **Stop Queue** buttons. If the **Start Queue** button is clicked, then cut jobs will begin according to the **Scheduling** settings. If the **Stop Queue** button is clicked, then all cut jobs will be placed on hold. In the latter case, right-click the cut job and choose **Cut** from the context menu.






From the **Queue** menu, choose **Setup** to review the queue properties.



Queue Settings:

- **Queue Name** – If you have two-or-more queues on a network, then it is helpful to distinguish each queue with a meaningful name. Otherwise, all queues will have the default “My Queue” designation.
- **Hot Folder** – The queue will monitor this directory. Any cut files placed in this directory will be added to the Active List as new jobs.
- **Scheduling** – Job Scheduling is used to automatically place cut jobs on hold, such that the jobs are not processed until you can verify that the cutter is ready.

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- **Archiving** – After a cut job has been completed, archiving will store the job files for reuse.

Registration Marks

Registration marks are used for alignment when loading printed media into a cutter. To determine the correct style and usage of registration marks, consult the cutter's Operator Manual. Once the correct style of registration marks is known, they can be included when printing the media.

When loading printed media into the cutter, some cutter models have a sensor that can recognize the registration marks and align the job automatically. For cutters that do not include a sensor, the operator will be prompted to manually align the cutter tool with each registration mark.

The method that you use for creating registration marks in SignLab will depend upon your particular workflow.



Registration marks for “Cut | Plot” jobs:

1. From the **Shape Tools** flyout, the **Registration Mark** tool is used to manually place registration marks about the artwork.
2. From the **Shape Tools** flyout, the **Multi-Registration Mark** tool is used to manually offset registration marks about the artwork.
3. From the **Cut Preview** mode, the **Cut Toolbox** has a **Registration Mark** button. Right-click the **Registration Mark** button to choose the position, size, and offset of the registration marks. Left-click the **Registration Mark** button to place the specific type of registration marks.

Plotter Jog

Plotter jog is the ability to position the cutter head by using the **Jog** dialog controls in SignLab. This feature is typically used to reduce wasted material by cutting new shapes within unused sections of media.

In order to perform plotter jog:

1. The cutter must be connected to the computer via an RS-232 cable (i.e. a serial cable)
2. From the **Cut** menu, choose **Plotting Defaults**
3. In the **Plot** dialog, enable the **Jog** option
4. Registration marks must be included as part of the job
5. From the **Cut** menu, choose **Plot** to preview the job
6. In the **Cut Toolbox**, click the **Cut** button
7. The **Jog** dialog will open, and the cutter head can be positioned for each registration mark

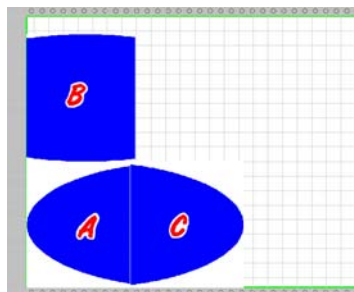


Tile Settings



If the limits of either the cutter or media are exceeded, then the job must be divided into tiles. Each tile may then be output as a separate job. Depending on the dimensions of the loaded media, the tiles may also be “stacked” in order to conserve material.

When creating a design, the dimensions of the loaded media should be considered, and one should be mindful of the maximum physical limits of the cutter. For example, consider a roll of tractor-fed media. Not only is the width of the media a constraint, but the teeth of the tractor-feed also restricts the width. As a general rule, consult the Operator’s Manual to confirm the physical limits of the cutter.



By stacking the tiles, wasted material may be reduced.

Creating tiles in Cut Preview mode

1. From the **Cut** menu, choose **Plot**
2. Click **Tile** in the **Cut Toolbox**
3. Drag tiling lines to form tiles
4. To select only some of the tiles for cutting, click the tiles that should be cut. An 'X' indicates that the tile will be cut.
5. Click **Apply** to return to the preview
6. Drag the tiles to reposition them upon the material

Filter By Color

The **Filter By Color** option is used to send only one color layer as output to the cutter. This feature is typically used when cutting shapes from different colors of vinyl. If thick line styles are in the design, then the line colors will also be filtered.

In **Cut Preview** mode, the **Filter By Color** button is on the **Cut Toolbox**. Click the **Filter By Color** button and choose the color layer that will be filtered.

When filtering colors, registration marks are used to maintain alignment between each layer of vinyl. To allow registration marks to be cut with all layers, leave the **Filter Registration Marks** option checked.

Cut Tool Usage

Under the **Cut** menu, selecting the **Cut Tool Usage** item will open the **Tool Tracking** dialog.

Cut Tool Usage is an estimation tool that collects statistical information about the performance of the tools being used in cutting or plotting. A variety of data is gathered about each tool, such as the overall distance traveled, the number of jobs completed, and the date of the last tool change. Using this data, comparisons between successive tools may be used to make an informed decision about when tools are likely to decline significantly in performance. Tools may then be replaced in advance of this decline, thereby preventing materials from being wasted by an old tool.



Estimate Time for Current Job

When using this option, be prepared to record the approximate time that is needed to complete the next cutting job. After the job is completed, you will be asked to enter the time that was expended in completing the job.

Note: From the **Help** menu, the **TimeSign** feature can be used to record the expended time.

Once the expended time has been set, use **Cut | Show Traveled Distance** to estimate how much

time will be required to cut other jobs. By using this estimate, you can better manage your own time, since you will be able to work on other tasks and return when the current job is complete.

Weed and Power Weed

After cutting a vinyl shape, the shape must be peeled away from its backing. However, problems may occur when the shape doesn't pull away easily from the surrounding vinyl, in which case stretching of the vinyl may occur. To avoid stretched vinyl, a weed border may be created, which is essentially an extra rectangular cut around the shape. Once cutting is done, the rectangular cut may be peeled away first, followed by the inner shape.

Alternative methods of creating weed lines

- From the **Shape Tools** flyout, choose **Weed Border**
- From the **Shape Tools** flyout, choose **Power Weed**
- In **Cut Preview** mode, left-click the **Weed** button to create a weed border (Right-click will set the weed offset).