

AccuRIP™

www.softwareforscreenprinters.com

Manual

This Manual is for both Purchasers of AccuRIP (Desktop and Wide Format versions) as well as AccuRIP Trial Users!

Now with a **Set-Up Wizard**
for first-time AccuRIP Installers!

We made the industries easiest and fastest set-up even simpler with the Set-Up Wizard.

Apple and Windows Ready:

- Apple OSX Tiger and Leopard
- Windows XP and Vista (32 • 64)

Created by Screen Printers for Screen Printers

Welcome to AccuRIP. Whether coming from another RIP or using a RIP for the first time, you will appreciate the ease of use and quality you get from AccuRIP.

We know you're frustrated with other RIP solutions that require too much attention and fail to deliver the results in a timely manner. Switch to AccuRIP today! **AccuRIP is simple to install and configure and even easier to use.**

For over 25 years Freehand Graphics has been screen printing, color separating, software developing and educating screen printers. When our users asked us to put our experience into a screen print specific RIP we took on the challenge and AccuRIP is the result. Built as a "core" system driver once installed AccuRIP is a PRINTER choice listed in the Print Window of all of your applications. AccuRIP is not like other RIP programs. It was designed and programmed to handle one specific and important task and to do it extremely well. Have a question or need some help - support is ALWAYS FREE!

SUPPORTED DEVICES:

AccuRIP

Desktop Version - Epson Models:

- 1280 PLUS: OYO EcoPro
- 1400
- 1520
- 1800
- 1900
- 2200
- 2400
- 3000
- 3800
- 4000
- 4800
- 4880

AccuRIP EX

Wide Format Version - Epson Models:

This version works for both desktop (see list at left) and wide format devices:

- 7000
- 7600
- 7800
- 7880
- 9600
- 9800
- 9880
- 10600
- 11880

AccuRIP is a "core system" service which means it is ready when you are. Just select PRINT! No need to launch the program - it is available as a driver in ALL of your applications.

AccuRIP is the most important pre-press tool you'll ever forget about!



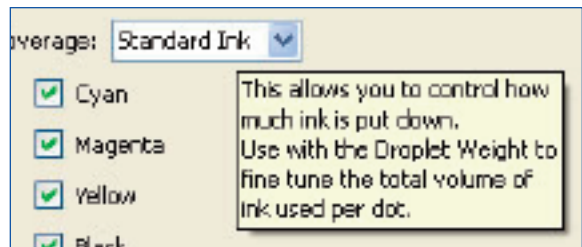
AccuRIP works in the background ready to deliver films made with your shop's parameters. Just Hit PRINT and AccuRIP is called into action. It's so easy - you just might forget about the technology behind your films!

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Advisory Pop-Up Windows!

AccuRIP set-up is even easier with pop-up windows in the software.



An easy to understand explanation of a feature is at hand as you perform the set-up of AccuRIP. Simply move your mouse over a selection.

This manual offers concise and easy to follow instructions.

Direct your support questions to:

techsupport@accurip.net 9 am EST - 5 pm PST Monday - Friday
 - or call **631-744-4330** 9 am EST - 6 PM EST Monday - Friday

FREE Trial Information

NO WATERMARK on your films! Go to press while you test AccuRIP!

Freehand Graphics wants you to be as confident with your purchase of AccuRIP as you have been with all other Freehand Graphics software. That's why AccuRIP has a 14-day, fully-functional trial. Begin making money with AccuRIP from day one of your trial!

STEP 1

Download the AccuRIP Trial available at www.softwareforscreenprinters.com

STEP 2

Run the installer for AccuRIP, submit your registration information and receive back an unlocking code via e-mail to begin working. This manual explains the simple set-up process (see page 5).

IMPORTANT Note: You will receive 2 e-mails, the first is a \$0 shopping cart receipt -disregard it. The second e-mail includes the required "UNLOCK" code. COPY and PASTE this code into the "unlock code" field on your screen.

Because we know you'll love it... PURCHASE OPTIONS

There are several easy options for purchasing AccuRIP Software at any time during your trial period or after the trial has expired.

Option 1 (Valued Resellers):

We encourage you to contact the Valued Reseller that introduced you to AccuRIP. Your Reseller will be happy to handle your purchase for you.

Option 2 (Freehand Graphics):

- From within AccuRIP go to the "Purchase Menu" and purchase securely through E-Sellerate. You will be instantly and automatically activated!
- Purchase online <http://www.softwareforscreenprinters.com/store/index.php>
- Contact Freehand Graphics at 631-744-4330 / 9 am to 6 pm EST / Mon - Fri / USA and a sales professional will handle your order.

www.softwareforscreenprinters.com

techsupport@accurip.net

Step 1: Installation with Set-Up Wizard

Run the Installer. The AccuRIP Set-Up Wizard will appear (see picture below).

First Time Users will enjoy AccuRIP's Set-Up Wizard designed to make the already simple, one-time set-up process even easier and faster!

The Wizard will..

- walk you through the setup and connection of AccuRIP.
- locate Locally connected as well as TCP (Ethernet printers).
- build drivers and print a test page.

Once completed all the user needs to do is start using AccuRIP by simply selecting the "AccuRIP to Epson" print driver (built for your Epson model) from your favorite applications print window.

Fine tune your results using the easy setup feature within AccuRIP (File Menu>Setup).



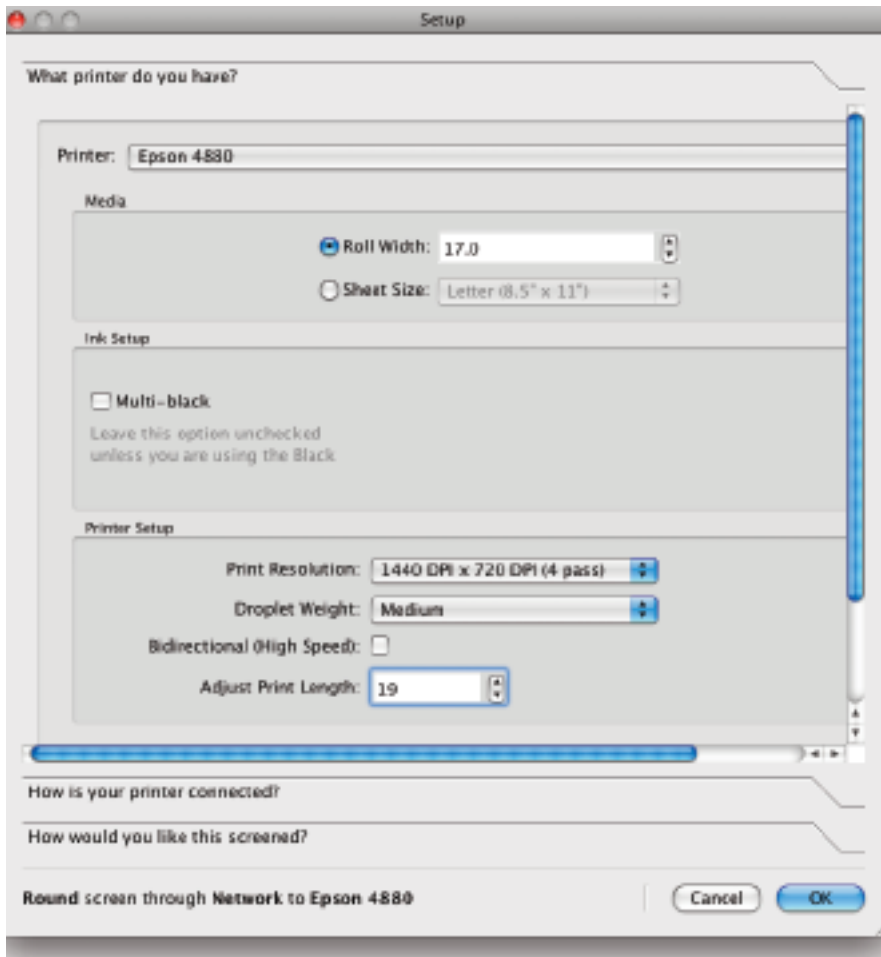
Step 2: After the Wizard



The Set-Up Wizard completed the connection process and a TEST PAGE was made. Review your TEST PAGE (film output). You can easily fine tune the results by choosing "Set-Up" from within AccuRIP. For example, you can adjust the ink droplet weight to lighten or darken your results or adjust the resolution for the best results.

The Set-Up Menu is located: File Menu>Setup.

AccuRIP offers a simple 3 tab set-up with just a few questions. The 3 Tabs are shown and described on the following pages.



Tab 1 What printer do you have?

(a) PRINTER

Locate then select your printer model from the convenient pop-down list of AccuRIP supported printers.

(b) MEDIA

Select Roll or Sheet Size and set the proper size. AccuRIP automatically sets the page size based on your document size in the application you are working in. Even though AccuRIP has this auto feature it is important to set the proper media size so you can take advantage of AccuRIP's N-UP feature (ganging up/nesting). N-UP printing is discussed further in the Special Features section of this manual Page 13 PLUS a PDF is available which can be located in your Applications/Program Files Folder/Main Application Folder in the AccuRIP folder.

Mac Hard Drive>Main Application Folder>AccuRIP>App Notes

Windows: C:/Program Files>Fawkes Engineering>AccuRIP

(c) INK SET-UP

Unchecked (by default) - AccuRIP will draw ink from the Photo Black Ink Cartridge.

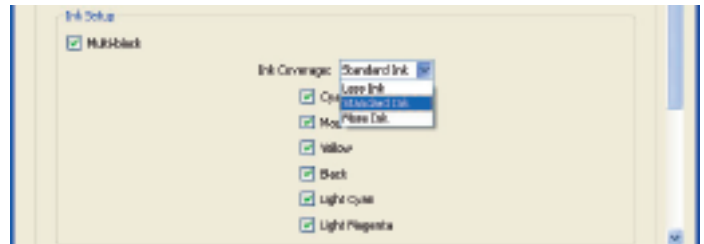
Checked - is for users of the All Black Ink Cartridge-based bulk system (aka. Black Max, Jet Black).

AccuRIP reads the cartridge chips and instructs the inkjet to print (spray ink) from ALL of the ink cartridges

which now have our formulated black dye. When using the All Black option make sure all cartridges are selected otherwise their will be an uneven draining of cartridges. Leaving cartridges unused (idle) may result in clogged inkjet heads and uneven draining - two of the main reasons All Black was developed in the first place!

Turning ON Multi-black displays all the ink cartridges in your printer and sets coverage to “standard ink”.

All Black Ink is an exclusive feature of AccuRIP and a high-production benefit designed to keep your device working as it was intended - with all cartridges in use regularly. For supported devices and info please visit www.allblackbulkink.com



PLUS: Users of other ink systems such as bottled bulk inks as well as odd cartridge configurations can use this feature to control which ink cartridges are used during printing (i.e. R1800 printers using the matte black cartridge for inks such as Fast Ink).

(c) PRINTER SETUP

- PRINT RESOLUTION

Choose Print Resolution from the pop-down menu. This feature controls the print resolution of your printer. Higher resolutions sometimes result in darker and more detailed prints but will result in slower printing time. Always try to get the best results you can using 720 x 720 or 1440 x 720 before raising the resolution. Note: Some printer models MUST print at 2880 x 1440 (R1800 and R1900) and this is directly related to inks. For your purposes dye will perform better than pigment (UltraChrome K3).

- DROPLET WEIGHT

Next select droplet weight (light, medium or heavy). The default is set to **medium** which is a good starting point to determine what your needs are based on your brand of film. Droplet weight controls the flow of ink from the print head and has the greatest effect on a films darkness. Depending on your ink and film combination you may have to increase or decrease this setting. For very thick films that require a lot of ink may need to use the heavy setting.

- BIDIRECTIONAL (High Speed Printing)

Bidirectional allows the inkjet head to spray ink in both directions (passes) and subsequently speeds file output. By default an inkjet printer only sprays ink when the head is moving right to left. As long as the film is not moving when the head is traveling left to right it is completely possible to spray ink accurately on the return pass. This feature cuts print time in HALF!

Bidirectional works best with new printers and the ability of an inkjet to manage bidirectional diminishes over time due to normal wear of the printer. If your printer starts to stage (move) film prematurely you may

experience blurred printing. If this happens simply turn off the bidirectional feature and have your printer serviced. Default setting is off.

- Adjust Print Length

This new feature allows users of large format style printers (Epson 4000 and higher) to precisely control the length of prints over a long distance. The width of prints are unaffected. The registration from film to film is exact but over a long length films can universally be short by 1/64th of an inch (0.0396875cm) which doesn't matter to most screen printers because each film registers. This has nothing to do with your RIP software it has everything to do with the thickness of your film and your ink rollers. AccuRIP has addressed this need for precision industries (see below).

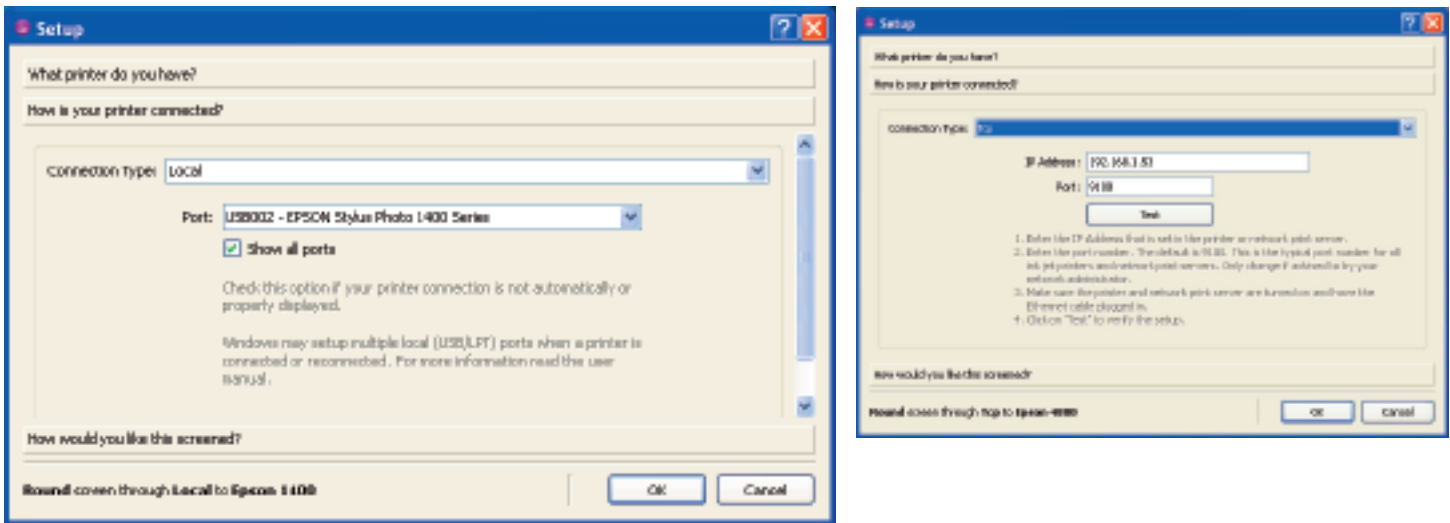
So why has AccuRIP addressed this?

Most screen printers don't have the need for exact dimensions, but (for example) those that need to match films to "die cut" templates or have other specific dimension needs desire this control that AccuRIP can deliver.

How do I use it?

1. Located in the AccuRIP program folder is a pdf file called "Adjust Print Test.pdf".
2. "Drag and Drop" this pdf file into the Queue window of AccuRIP and it will print. The test print requires 17"(43.18cm) of film. Measure the result.
3. Open the SETUP feature in AccuRIP and locate at the bottom of the first tab (What printer do you have?) the "Adjust Print Length" feature.
4. Positive numbers increase length while negative numbers decrease length.
5. Starting with number 19 reprint the test page until you have the desired result. Changes in increments of 10 make visual movements.

*It's advised to check your settings each time you change film rolls or brands as variations during manufacturing may effect your printers film feeding rate.



Tab 2: Windows AccuRIP Setup (Local Connections) (left). Windows AccuRIP Setup (Network Connections) (right).

- convenient tab system
- easy to understand headings
- POP-UP Advisory Windows

Tab 2 How is your printer connected?

Connection Type: Select either Local or TCP (Network) (example: Epson 1400, 1800 and 1900 select Local).

Local is for locally connected printers such as USB, LPT1 or Firewire. TCP (Ethernet) connected printers.

Note: Firewire is only supported on Windows computers.

Local connections: Windows computers will automatically pick up any printer connected via USB, LPT1 (Parallel) or Firewire. If you do not see a proper connection click “show all ports” (Windows only) and locate the proper printing port for your computer.

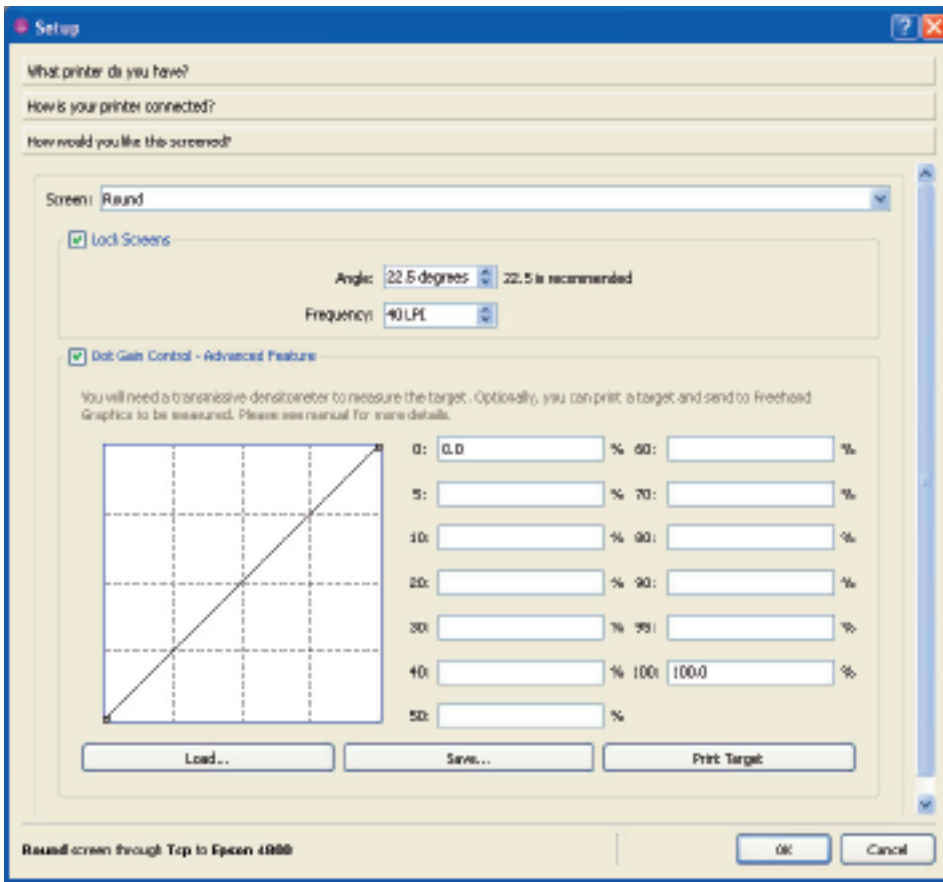
Network connections: (TCP/Ethernet) a “dummy” address of 127.0.0.1 will appear in the address field. Do not attempt to connect using this false “dummy” address.

Address: Enter a proper IP Address for your printer or network print server. If you don't know what it is contact your network administrator for help, access the network setup from the front control panel of your Epson printer or use the “EpsonNet Config” software utility that can be downloaded from the Epson web site.

Port: 9100 is the default port for inkjet printers*.

Test: Click this button to test that you have a good (passed) connection to your printer.

*EcoPro printers using the internal Ethernet card that has been converted from AT (Apple Talk) to Ethernet use Port 35. Don't know how to do this? Contact technical support: techsupport@accurip.net



Tab 3 of the AccuRIP Set-UP shown at left (Windows users).

Tab 3 How would you like this screened?

Screen: There are many shapes to choose from when making a halftone screen. The default for AccuRIP is ROUND. There is also DIAMOND, LINE, and ELLIPSE. Choose the shape you desire. Round and Ellipse are the most commonly used shapes but ALL will work well.

Lock Screens: This simple feature is your greatest asset. Not only does it prevent user error when printing films by universally overriding the setting in your various graphics applications to ensure proper film output, it also eliminates the need to address those settings in the graphics applications every time you need to print your file or separations – saving you a tremendous amount of effort and time.

When you select your angle in AccuRIP (i.e. 22.5 degrees) your halftones will all be printed at the same chosen angle - proven to be the cleanest printing method hands down. Lock screens assures that AccuRIP controls the info provided to the printer and not your application(s). See page 12 for additional information on the power and benefits of single angle printing (Flemenco).

Angle: This sets the angle for the spot on your halftone screen. The default is 22.5 degrees and also known to be the best screen angle for screen making as it has a very low moiré rating when exposed to mesh screen properly stretched at a 90 degree angle and looks best when viewed after printing. There are

a few other angles that work well such as 61 degrees.

Frequency: Set your line screen value here. The default is 45 lpi which is a comfortable line screen for most textile screen printers. Set this number to your desired line screen. In order to choose a proper mesh count for a line screen you can quadruple the lpi to establish the minimum mesh count to successfully capture this line screen. Going a little bit higher is good too. Example, 45 line screen time 4 equals 180. Therefore you should use a 196 mesh or higher – 230 is recommended.

Dot Gain Control: This advanced feature is to be used by those with a Transmissive Densitometer that require exact control over dot size as it relates to dot gain.

For printers needing to control dot gain created by their printing press AccuRIP offers the Advanced Dot Gain control feature. Made as easy as possible simply click the "Print Target" button. Be sure to print on the film you use to make screens. Read the film or a print of the test film and apply those numbers to the proper fields to adjust the RIP for the inkjet printer.

You can also Save and Load the calibrations as needed.

Advanced information: Please know that calibrations to film adjust the inkjet printer and not the printing press. For the most accurate calibrations it makes sense to calibrate the printing press so printing the Test Print on press and measuring that result tells you how much dot gain is created by the "printing press" allowing you to make the most accurate adjustments. Harder to do since there are changing variable on all presses. Most people just calibrate the inkjet printer and do their best on press to control inks and pressure.

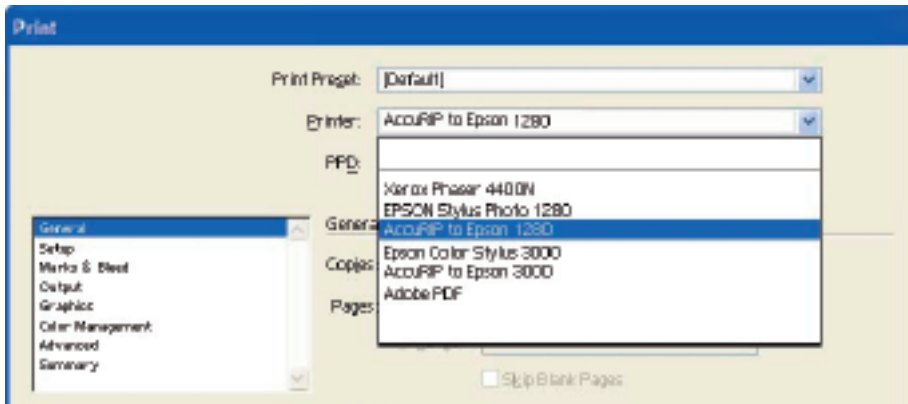
Single Angle Printing (Flemenco Printing): is historically the best method for printing halftones. Discovered in the late 1800s and patented by the Italian newspaper Flemenco users moved away from single-angle printing ONLY because of registration problems of the cmyk printing presses during that time period. Today the offset presses and screen print presses are far superior and have highly accurate registration processes. Screen printers will find a remarkable improvement in their halftone printing by moving to single-angle printing (you're welcome!)

Not convinced? During discussions many will say "it can't be done" and when asked why they simply have no good answer other than someone they think was knowledgeable told them that. Ask to see their prints and find out just how hard they had to work at them. The conversation always turns to the "secret angles" they have discovered and usually its that they simply line up the black and yellow screen which improves clarity and reduces dot gain. I always say "great idea" but why stop there? You have improved your print by only 50%. If you can line up two out of four colors and the world did not stop spinning then why can't you line up all four? Usually followed by silence and a lot of brow ruffling. Now it sinks in and they smile.

AccuRIP On Call

AccuRIP is a “Core Service” which means it is always on call, ready and waiting. Think of it as “sleeping until ready”. Once you complete your set-up you do not need to open/launch AccuRIP to take advantage of its service whenever you wish to print.

Simply choose the AccuRIP Driver that will be available in all Print Menus. Go ahead and print as usual.

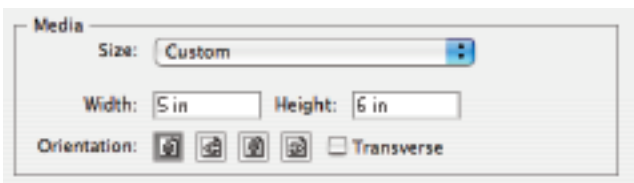


Note: AccuRIP adds its driver to your list and does not remove or modify drivers as other RIP solutions can. It is friendly with your present setup.

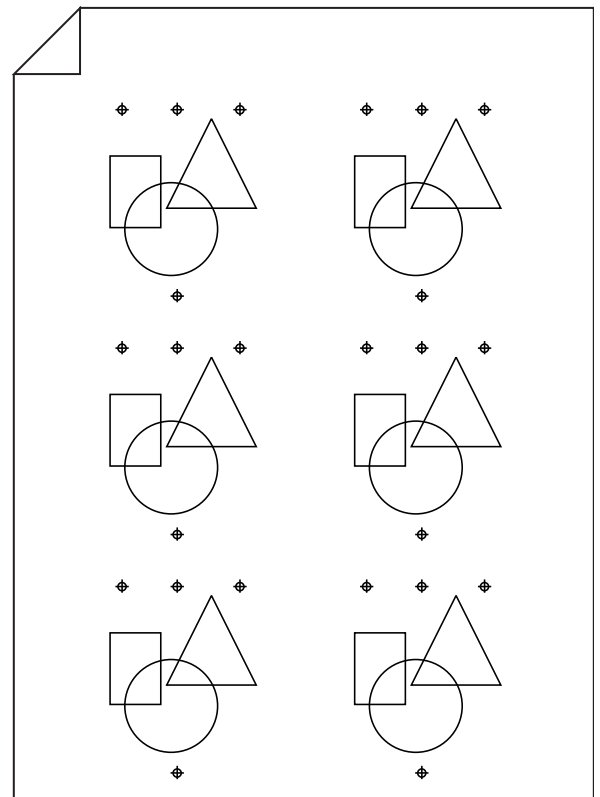
N-UP Printing

N-UP Printing (Auto Nesting) is a great feature usually reserved for larger format inkjets, but AccuRIP brings this valuable ability to users of smaller format inkjet devices too.

Simply stated, N-UP Printing dramatically reduces usage of consumables by automatically “ganging up/nesting” smaller images so they make the most of your film size. A small image will NOT sit alone in the center of your large, costly film. With N-UP Printing separation channels will share space on your film. This feature not only saves you in consumables but it saves output time.



Screen Shot of the Adobe Illustrator Print Window



N-UP Printing

HOW TO:

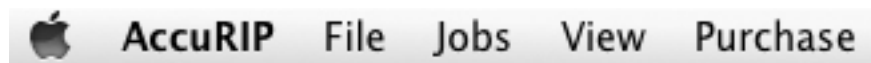
N-UP Printing is an “automatic” feature activated when the page size (media size) of your graphic in any application is smaller than half the size of film selected in AccuRIP. To make the most of this feature simply make your page size (media size) large enough to accommodate your image, registration marks and plate labeling. When AccuRIP sees that your page size is half the size of your film size it will automatically fit and organize as many images on a single film as possible. AccuRIP applies division mathematics. For more information specific to your graphics program refer to the supplied PDF documents in the AccuRIP program folder.

Mac Hard Drive>Main Application Folder>AccuRIP>App Notes

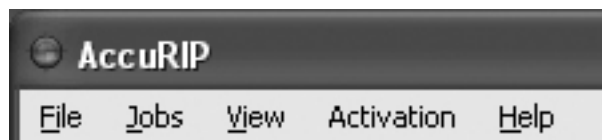
Windows: C:/Program Files>Fawkes Engineering>AccuRIP

AccuRIP Menus Explained

The AccuRIP Menus are easy to navigate and for the most part the user will not need to use the features in the Menu.



Macintosh Menu Bar (shown in trial mode).
“Purchase” changes to “Activation”



Windows Menu Bar (shown in purchased mode). Trial users would see “Purchase” rather than “Activation”.

About Menu (Mac)

Mac users only can access the “About” feature (under the AccuRIP Menu) to check their version and build number. Handy for tech support and knowing when to update your software. Windows users can find the same information under the “Help” Menu.

Hide AccuRIP (Mac)

Hides the AccuRIP window.

Quit AccuRIP (Mac)

Quits AccuRIP the application only. AccuRIP is always available as a ready to select driver in all of your

applications. Quitting AccuRIP does not affect your ability to use AccuRIP anytime. Not needed to launch AccuRIP to use AccuRIP is a great benefit of the program.

Under the **File Menu** you will find:

Test Print • Setup • Quit (Quit is available here for the Windows version only)

Test Print

As part of the AccuRIP setup we recommend you do a Test Print to verify that your selected settings are producing the results on film that you desire. Test Print will deliver a single piece of film with copy and graphics created specifically for your testing of AccuRIP and not one of your personal files.

Setup

Brings up the 3 Tab Setup Windows that we have discussed in length earlier in the manual. You can revisit the Setup any time you wish to change your AccuRIP settings such as when you switch to a different support inkjet model or to change your shops desired lpi (line screen).

Quite AccuRIP (Windows)

Quits AccuRIP the application only. AccuRIP is always available as a ready to select driver in all of your applications. Quitting AccuRIP does not affect your ability to use AccuRIP anytime. Not needed to launch AccuRIP to use AccuRIP is a great benefit of the program.

Under the **Jobs Menu** you will find:

Refresh Job List • Pause Job Processing • Resume Job Processing • Cancel Job • Delete Job • Cancel All Jobs

These are your controls for job queue or you can use the friendly icons in the Main AccuRIP Window! Roll your mouse over the icons for a pop up description.

Trash Can/Recycle Can:

Deletes selected files from the Job Queue.

Green Square:

STOPS your job from printing.

The Jobs Menu also includes the option to Cancel All Jobs.

Double Green Bars:

PAUSES the printing.

Green Arrow (triangle):

RESUMES printing. If the RIP is Paused you will see this displayed in the lower left corner of the AccuRIP window. It will say "RipCore Paused". Click the "Resume" (Green Arrow) icon to turn printing back ON. The display should say "RipCore Ready".

***AccuRIP can go into the “Paused” Mode any time a file is not fully printed. Causes can be from the printer not being turned on to a broken Network connection to the printer.**

Under the **View Menu** you will find:
Job History • Job Details • Tool Bar

Here is where you can control what Menus you see in the AccuRIP Window. All Menus are “tear away” so you can configure your on screen appearance to suit your needs. Job History and Details provides basic job information about the files sent and processed with AccuRIP. Tool Bar can be viewed or hidden by checking or unchecking it under the View Menu.

WINDOWS USERS:

Under the **View Menu** you will also find:
Help • About

Help Menu (WINDOWS USERS ONLY):

Windows users will have access to a Help Menu.

About (WINDOWS USERS ONLY):

In this location Windows users can access the “About” window to check their version and build number. Handy for tech support and knowing when to update your software to the latest build of their purchased version.

Note: About for Mac users is located under the AccuRIP Window.

Under the **Purchase Menu** you will find:
Buy Online • Enter Serial Number

This Menu is ONLY displayed in the trial versions. Once the software is purchased the Menu changes to ACTIVATION.

Purchase Menu:

You can Purchase AccuRIP directly online. This provides for instant unlocking (just a few minutes). Your purchases are “secured” through E-Sellerate.

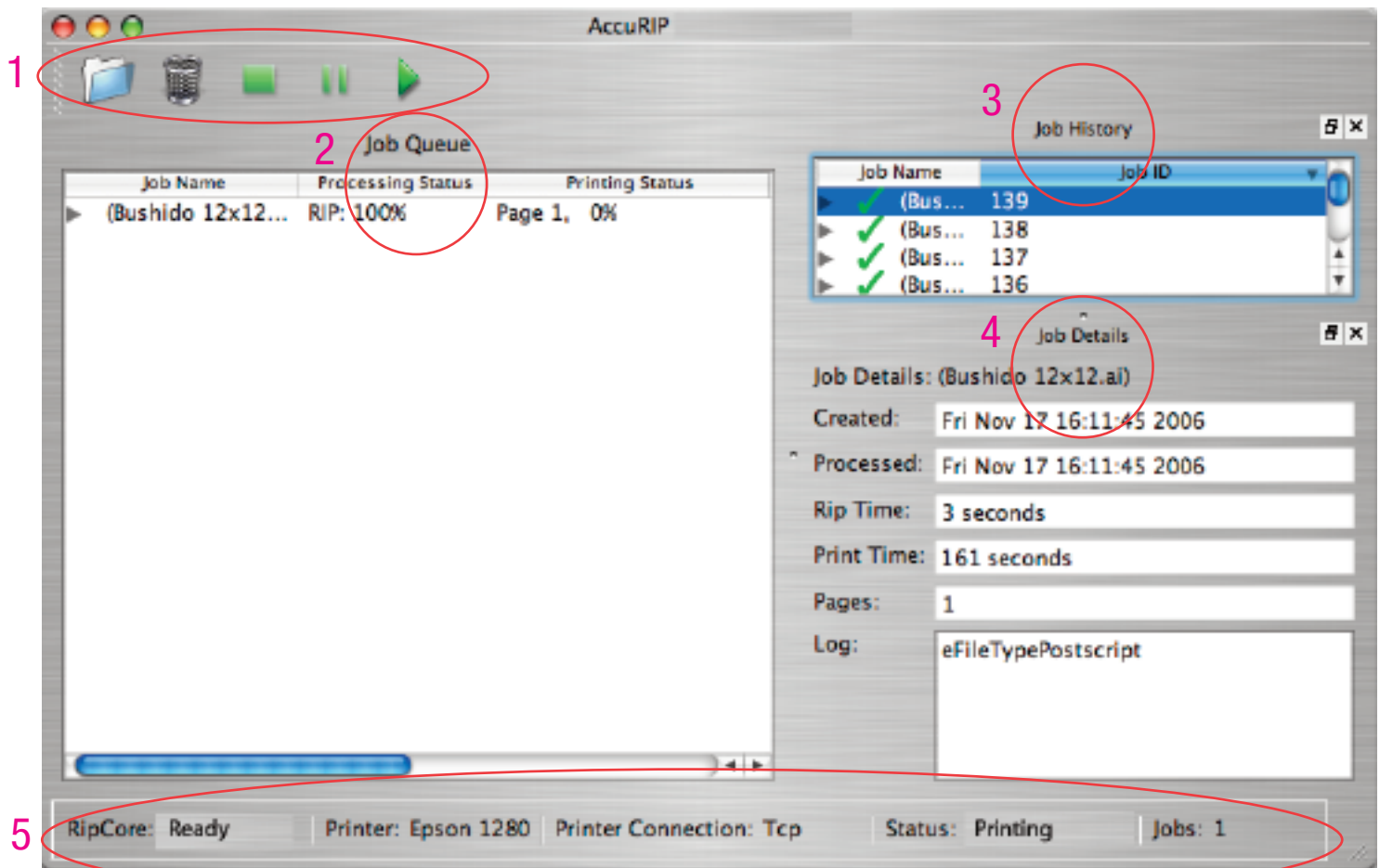
Activation Menu:

Visible in versions that have had a serial number entered.

Transfer Activation: (requires Internet connection) If you need to "move" AccuRIP to another computer you must first "de-activate" the serial number before re-installing. It is advised to wait 20 minutes after de-activation before re-installing. This gives our security servers time to communicate and reopen access to your serial number.

Don't "remove or delete" the software from the original computer AccuRIP was installed. Removing or deleting is not the same as de-activating. You **MUST** "de-activate" before moving and re-installing.

AccuRIP is a "single install" license that allows you to "share" the driver with your entire network not "install" and activate it on multiple computers. * Too many failed attempts at multiple installations will result in a security lock out and the need for you to contact tech support at techsupport@accurip.net.



The Job Queue, Job History and Job Details window are displayed together or may be torn apart to float on their own.

1. Job Control Tools:

Located at the top of the Job Queue window (may also be repositioned to the left side of the window by dragging and drop. Use the Open file, Trash, Stop, Pause and Play icons to control jobs selected in the Job Queue.

2. Job Queue:

Displays the present file printing and all the separations related to that file as well as all jobs waiting to be printed.

3. Job History:

Click on any job previously printed to display Job Details. Mac and PC users can right click to reprocess jobs. Jobs with green check marks indicate the job has fully processed - printed. Jobs with an "X" failed to process and may need investigation or possible reprinting from the application.

4. Job Details:

Provides general information about the job (i.e. file name, Rip Time, etc.)

5. Status and Data Bar:

Located at the bottom of the Job Queue window, it displays all critical data about AccuRIP and its network.

Moving Windows:

The Job Queue, Job History and Job Details windows may be pulled apart (tear away / float). Click on the window name and drag, then release the mouse over the desktop. To resize the window, click and drag the lower right corner of the window.

To return the window to the Main Job Queue window click once on the Window Return icon located at the upper right corner of the window or click and drag the window name, releasing the mouse over the Job Queue window.

Close the window by clicking on the “X” located at the upper right corner of the window.

Open a closed window by going to the “View Menu” and selecting the window.

Have a PDF, Postscript file or EPS file and don't have an application for these files?

Simply drag and drop the file into the Job Queue.

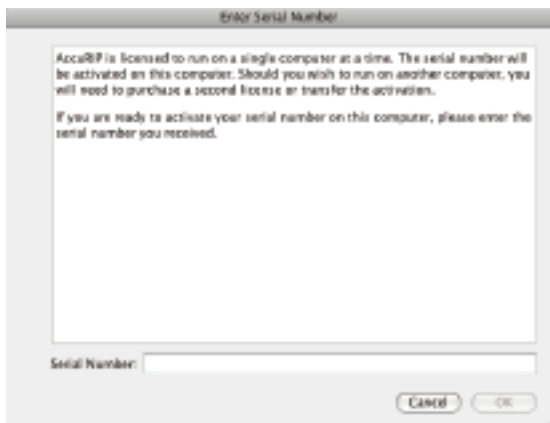
Quick reference for the AccuRIP setup and operation.

- My unlock code is not unlocking the trial. I am receiving an error.

- Trial users: The unlock code will arrive in the *2nd e-mail received* after registering online. Be sure that you don't attempt to use the serial number received in the 1st email which is your \$0 receipt.

- My serial code is not unlocking the trial into a full purchased version. I am receiving an error.

- Purchasers: Make sure that you copy or paste the ENTIRE purchase code including the ACCU... into the Enter Serial Number field (see below).



If you type it in be sure that it is in ALL CAPS and you include the dashes - NO SPACES.

Unlock errors are:

- user typing errors
- copy and paste errors (used just part of the code)
- users attempt to use a code that has already been activated on another computer.

Setting up Parallel to Ethernet Connections

Older Epson models (1280 and 1520) that support parallel connections can quickly and easily be converted to Ethernet and shared across a network at high speed. All that is needed is an inexpensive parallel to Ethernet Print Server available at computer stores and online.

Example - search www.CompUSA.com

EcoPro Users Only: Contact Freehand Graphics to quickly learn how to convert the internal card from AppleTalk (AT) to TCP (Ethernet) at NO COST.

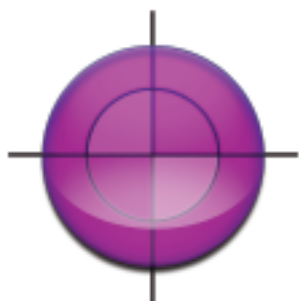
Thank you for reading the manual and using AccuRIP Software. We appreciate your business.

Contact Information

Freehand Graphics, Inc.
31 Ridgefield Drive
Shoreham, NY 11786 USA

631-744-4330 PH
631-209-0265 FX

techsupport@accurip.net
sales@spotprocess.com
support@spotprocess.com
www.softwareforscreenprinters.com



AccuRIP™

www.softwareforscreenprinters.com