

One Way Vision ICC Profiles

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Using the correct ICC profile for your print job is very important. Many if not most film and printing issues, such as banding, can be traced back to an incorrect profile.

A profile is a file that contains information your printer machine needs to ensure colours are printed correctly and consistently every time. A profile file contains specific information for a make and model of printer, make and version of RIP software, type and brand of ink, and film. That is because all these things may affect the printed colour. As you can imagine, the white points between films can vary. The CMYK inks can vary, such as one brand may have their magenta ink at a slightly different level of pigmentation than another manufacturer. Droplet size and distance between droplets can vary the perceived look of a colour. Therefore, if an artwork file has a colour with CMYK values of 0/100/100/50 (maroon), without a profile, guarantee this colour will print differently on every machine, film, ink etc. Profiles help to make sure the colour looks the same irrespective of printer, film, ink, RIP etc.

There are also many other variables that affect colour. Such as heat and speed. A RIP will typically store the colour profile and printer/RIP settings into a file, which is also commonly referred to by signwriters as a profile.

IMPORTANT: Performing a test prior to actual production can minimise costly errors and help to ensure the success of your project. Refer to the **Warranty Statement and Warranty Procedure Fact Sheets**.

Whilst it is very important to use the right profile when printing onto films, it is not feasible to provide a profile for every film. This is because there are too many permutations, making it not economically viable to create a profile for every permutation. Assuming there are 20 wide format digital printer manufacturers, each with 20 past and present printer models, 12 RIP software programs, each with 6 past and present versions, 30 brands of ink each with 5 ink types, the number of possible profiles is in the order of 4,320,000. Therefore, CFOWV does not create profiles.

Profile Recommendations

1. Please visit <http://www.clearfocus.com/support/printer-profiles/> in the first instance. There may be a profile that meets your criteria. Try using a profile that closely meets your criteria, such as same printer but different model. There is also other helpful information for profiling.
2. Visit your printer manufacturer's web site and search for profiles for perforated films or at least a profile for a generic vinyl.
3. Visit your ink manufacturer's web site and search for profiles for perforated films or at least a profile for a generic vinyl.
4. Visit your RIP software developer's web site and search for profiles for perforated films or at least a profile for a generic vinyl.
5. Should there be no profile matching your criteria, then you have no other option but to create your own. This will be a trial and error process and therefore may take up to day. Consider the operating environment for the printer and films as well. They should be in a temperature and humidity controlled room together. If not, you may need to create a profile for each season of the year, as ambient temperature and humidity can affect the performance of One Way Vision films through a printer.

Please follow the instructions for your RIP software to create an ICC profile. More than likely, from within your RIP software, start with a calendered vinyl profile you know that works well in your printer. Otherwise start with a generic calendered vinyl profile. Copy it and rename it to a relevant name. Adjust various settings one at a time, such as pre/print/post heat, head speed, feed/scan offsets, feed speed/distance, uni/bi-direction, resolution, number of passes, head height, dry time, vacuum power, overprints, dot type, dot size, halftone method, interpolation method, ink limits, density, calibration curves, and various cut settings if relevant.

Print a test pattern after each setting change, such as a Pantone colour chart. Colour match against a Pantone colour book and save the settings that match the closest to the colours you find acceptable. ***The desired output for your custom media profile is not High Speed nor High Quality, a balance between the two.***

Reported Roland Eco/Solvent RIP Settings

Others in the signage industry have reported the following settings has worked for them:

Copy the standard “Roland's Generic Vinyl B” that comes with VersaWorks, and modify the settings to:

Printer profile: DefaultCMYKPrinter.icc

Profile template: Roland's Generic Vinyl B

Passes: 16

Dot Type: 4, Dot Pattern: Stochastic, Dot Size: SML

Separation: V2 control

Single colour limits: C - 85%, M - 90%, Y - 82%, K - 85%, Total ink limit: 200%

Print Quality (Standard): 720x720 dpi CMYK (v) and w-pass

Half tone: Dither

Interpolation: Bi-Cubic

Direction: Bi-direction

Head speed: 720

Feed speed: 7

Overprint: 1

Feed calibration: 0%

Vacuum Power: Strong

Dry Time: 5 minutes

Head height: Normal

Print heater: 35-40 degrees

Dryer: 45 degrees

Cut passes: 1

Speed: 5

Pressure: 150

Offset: 0.25

Colour Management Pre-set: MAX Impact

Reported Settings for 2015 and newer HP Latex models

Such as the HP Latex 360

Others in the signage industry have reported the following settings has worked for them:

Copy the standard “HP Perforated SAV” that comes with the HP Latex printer, and modify the settings to:

10-pass

120% ink

105 degrees

Straightness Optimisation: 0

Latex Optimiser: 12

Vacuum: 45

Advance Factor 0

Inter-pass delay: 0

Airflow Pressure: 175

Input tension: 15

Reported Settings for older HP Latex early models

Such as the HP Latex L26500

Others in the signage industry have reported the following settings has worked for them:

Copy the standard “HP Perforated SAV” that comes with the HP Latex printer, and modify the settings to:

12-pass, bi-direction, 2bpp, 40 speed, 600dpi

Media: Mesh

105 °C curing temperature, 46 °C drying temperature

Heat Airflow: 30%

Input tension: 15

Vacuum: 30

Advance Factor 0

All Offsets 0

Generic profile

16 passes

55 degrees drying temp

100 degrees curing temp

vacuum 30

Everything else leave as default.

[Reported Mimaki UV-Cure RIP Settings \(UCJV300\)](#)

Others in the signage industry have reported the following settings has worked for them:

RIP: Rasterlink

Input profile: RGB ticked / sRGB, CMYK ticked / WideMimakiCMYK

Inkset: LUS170

Media: Generic PVC

Resolution: 600x600

Passes: 8 for CMYK colour set up, 16 for CMYKLcLmW colour set up

Print direction: Bi-Direction

Fast Print: Ticked

Dot Size: Select profile setting

[Reported Mimaki Solvent-UV \(SUV\) RIP Settings \(JV400-160\)](#)

Others in the signage industry have reported the following settings has worked for them:

RIP: Rasterlink

Input profile: RGB ticked / sRGB, CMYK ticked / WideMimakiCMYK

Inkset: SUV100

Media: Gloss PVC, GPVC-Dv3.1

Resolution: 1200x900

Passes: 6

Print direction: Bi-Direction

Fast Print: Ticked

Dot Size: Select profile setting