iColor® 1-Step Hard Surface Transfer Media Instructions
Part # ICHHARD

iColor® 1-Step Hard Surface Transfer Media is an easy to use, all-in-one paper for use with hard surfaces. Print and press onto ceramic, glass, wood, metal, acrylics and more, thanks to the adjustable white overprint layer when printing from the iColor TransferRIP software. **iColor® 1-Step Hard Surface Transfer Media** does not require coated substrates like sublimation does. Press onto virtually anything, even dark substrates! The result is a vivid, long lasting image.

Please follow the steps below for best results. Each substrate will have a slightly different technique. Refer to the applicable section as it pertains to your project.

1. Place transfer sheet into the multipurpose tray of the **iColor®** printer, coated unmarked side up.

2. In the **iColor® TransferRIP Software,** select the white toner profile and set your system to 'B' configuration. Be sure to select the page size of 'Letter' before importing your image. A white spot coverage (white overprint) of 400% with a 2 device pixel underfilling is suggested for best results.

3. Paper type should be 'Labels 2' and set the paper source to the 'Multi-purpose Tray'. 'Use screening from Printer', select the 'Force Manual Tray' check box and remember to set the job to mirror print, ensuring your graphics look correct when applied. For images with heavier toner coverage, it may be necessary to select 'Ultra Heavy' as the paper type. Remember to set the job to mirror print to ensure it looks correct when transferred to the front of the substrate. For clear acrylics, you can also transfer to the back of the substrate - Do not mirror print and use a white underprint.

4. Print the image.

5. Set the temperature of the heat press to 300°F / 150°C

6. Place a piece of kraft paper the lower plate. Align the substrate to the printed image and lay flat on the press, with the Hard Surface Paper on top. Tape the Hard Surface Paper to the lower kraft paper for additional stability. Cover with a silicone pad (.5mm - 1mm is suggested for best results).

7. Press at 300°F / 150°C with medium high pressure. The duration of the press depends on the substrate used. Refer to the matrix below for specific press times and peeling method.

8. For hot peels, peel immediately after opening the press. For warm peels, do not wait longer than 30 seconds, otherwise the paper will begin to lift prematurely. Do not peel too early either, otherwise the polymer from the paper may not lift away.

Surface	Time	Temp	Press Pressure	Peeling	Notes
Acrylic	60 Sec	300°F / 150°C	8 (Medium – High)	Warm	Place heavy object on top while on the press for 20 seconds to prevent warping if necessary. Remove, then peel.
Aluminum	120 Sec	300°F / 150°C	8 (Medium – High)	Warm	---
Glass	180 Sec	300°F / 150°C	8 (Medium – High)	Cold	After removing from press, wait 2 mins, then place substrate in cold water for 2 mins before peeling. Use care when putting in water – glass could shatter if too hot. Bake in convection oven at 360°F / 182°C for 20 mins. Handwash only.
Ceramic (mugs and tile)	180 Sec	300°F / 150°C	8 (Medium – High)	Cold	Wait 2 mins, then place substrate in cold water for 2 mins before peeling. Bake in convection oven at 360°F / 182°C for 20 mins. Handwash only.
Metal & Steel	180 Sec	300°F / 150°C	8 (Medium – High)	Cold	Place substrate in cold water for 1 – 2 mins before peeling
Wood	60 Sec	300°F / 150°C	8 (Medium – High)	Hot	Make sure paper is larger than substrate for a more uniform application. Immediately pull once press is opened.

If you make a mistake or are not happy with the finished result, use acetone to remove the transfer (before fixing in an oven). Not suggested for plastics or other materials that can be damaged.

TIPS

There are many variables that could produce different results. Specific steps may need to be altered based on:

• **Type and brand of Heat Press**: The temperature and duration varies slightly based on the heat press being used. All instructions are based on using a Hotronix Fusion press. Clam shell and swing away presses may also yield different results.

• **Type of substrate:** Some substrates may require more or less press time, depending on the material and the image being pressed.

• **Type of image**: Photos or full-color graphics may require a longer press time than vector images or text.

• **Toner Coverage**: Halftones in image may cause undesired results. Toner coverage should not be less than 50% otherwise there will be issues with transferring.

Halftones can be corrected by printing a white overprint or underprint using the **iColor® TransferRIP Software** to apply a white layer in one pass. This will help with toner coverage and proper adherence to the substrate.

The use of a silicon pad is necessary when using the Hard Surface Paper. All instructions are based on a .5mm pad. Thicker pads (greater than 1mm) will require longer press times and higher temperatures. In these cases, the use of a thermometer can help to establish the best settings.

Use of kraft paper below and above your project is highly recommended. Only use kraft paper made for heat press applications! The use of butcher paper or other kinds not specifically designed for heat transfer applications can cause the image to stick to the paper.

If you are using tape to secure your image to the substrate, make sure the tape is not covering any part of the transfer, as that will lead to inconsistent results.

For wood applications, the polymer from the Hard Surface Paper is left on, so be sure to use a size that is larger than your substrate to avoid differences in the sheen.

Metals applications are the most difficult to master because of the varying types coatings. The key is to pull before the polymer sets; too early and polymer stays in place…too late and it's difficult to remove.
If a particular instruction is not working for you, try varying pressure, press time, higher or lower temp, longer or shorter dwell time.

To see video instructions for iColor® Hard Surface Paper, visit www.icolorprint.com/video

March 2017 Revision - A newer version of this manual may be available at www.icolorprint.com/support