



## Large format digital inkjet printer dryer

Assembly and Operating Instructions for "Twin Support Stand" Dryer Assemblies Catalog numbers ending with -"DS"

Please review all of these instructions in advance of attempting to assemble, install, or operate the equipment to assure that the proper tool's, materials, and personnel are available for safe and successful usage of the dryer.

The Black Body® Digi-Dri<sup>™</sup> is packaged in 2 cartons so that it meets the shipping requirements of conventional ground and overnight package delivery services. Please make sure all cartons have been received before attempting assembly.

The following **assembly** procedure is recommended for this equipment:

- 1.) Inspect and identify all of the shipped equipment and parts. Immediately report any suspected lost or damaged items.
  - a.) The flat carton includes 2 each "tee"-shaped floor stands that are pre-assembled with casters.
  - b.) The triangular shaped carton includes the heater head (with the 2-heater head attachment tubes and lever clamp handles preinstalled at each end), a heat control, and 2-lever handle bolts.
- 2.) With the face of the heater head laying flat on a protected surface, twist each lever handle counterclockwise to "unlock" the attachment tube bracket inside of the heater head. After determining that the rectangular portion of each heater head attachment are parallel with one another, "snug" them both in the heater head by rotating the lever clamp handles in the back of the heater head clockwise.
- 3.) Loosely thread the 2-lever clamp handles shipped loose in the triangular-shaped tube into the weld nuts located on the side of each rectangular attachment to the support stand.

4.) Lay the 2 "tee"-shaped stands flat on the floor such that when stood up, they are at the approximate distance needed for connecting to each end of the heater head.

NOTE: Assure that the vertical mast of each "tee"-shaped floor stand is adjusted to be perpendicular to the base; and that the thumb wheel bolt on each tilt bracket are snug.

- 5.) Locate the heater head on the floor between the 2 "tee"-shaped stands.
- 6.) <u>Using 2 people (one at each end)</u>, install the heater head onto the 2 "tee"-shaped floor stands by:
  - a.) Have each person hold 1 stand erect with the masts vertical and the bases parallel using 1 hand.
  - b.) Using their other hand, both people should simultaneously lift the heater head and slide it down onto the top of the vertical stand mast.
  - c.) Locate the heater head at the desired height above the floor by sliding it up and down on the vertical mast.
  - d.) Once in place, secure the heater head by tightning the lever clamp handles on the vertical mast.
  - e.) Using the level located on the top of the heater head, adjust the heater by loosening each lever and adjusting the height until the level is centered. Once the level is centered, retighten the clamp handles.
  - f.) Rotate the heater head to the desired position by loosening the 2 clamp handles on the heater head and turning the head. Once the heater head is in the desired position, tighten the 2 clamps hands back down.
- 7.) Slide the heat control down over the top of the upright masts such that it rests upon the heater bracket.
- 8.) If this installation includes a second heater head, repeat steps (b) thru (f).
- 9.) Plug the heater head into the receptacle on the heat control, followed by plugging the heat control into the appropriate power source. Route the heat control power cord through the plastic wire guide on the side of the vertical mast and close the clip.
- 10.) Apply pressure to rotate the rheostat(s) on the heat control(s) from the off position until it clicks. Check that the indicator light

illuminates and the face of the heater begins to heat up by holding your hand about 2" from the heater face.

NOTE: The heating element heats up quickly and should never be touched while the heater is turned on. The heating element may emit a slight odor and smoke on the initial start up. This is normal and will disappear after a few moments.

## The Digi-Dri™ is now ready for normal use and operation.

The following procedures are recommended for normal use and operation of this dryer.

1.) Position heater head(s) at the location(s) where it (they) will dry the printed product.

NOTE: The Digi-Dri<sup>™</sup> utilizes an infrared heating technology, which means that energy waves are emitted perpendicularly from the flat surface of the heater face. Drying of the ink occurs when these waves are absorbed by the ink and substrate material versus circulated warm air. Care needs to be used when determining a heater location to assure that these waves will be absorbed by the ink and substrate to be cured, and not other surfaces that could be affected by being warmed.

The face of the heating element(s) should be parallel to the substrate, approximately 3" to 4" away. The Digi-Dri<sup>™</sup> will work equally well in all orientations (looking down, up, left, right or any other in between). The Digi-Dri<sup>™</sup> can also cure images from the "back" side of the substrate (the opposite side where the ink is deposited).

Supervise that the media will not contact the face of the heater. In addition to potentially smudging and uncured image, sustained contact could cause the media to overheat and be destroyed.

Using the various lever clamps on the heater head and upright mast, manipulate the stand, heater bracket, and heater to achieve an optimal location.

- NOTE: For "High Speed" (2-heater head) Applications, the vertical mast on the "tee" floor stand can be tilted toward the printer (positioning the head closer to the printer) by adjusting the upright in the bracket at the base of the "tee" floor stand.
- 2.) Plug each Digi-Dri<sup>™</sup> heater (heat controller) into an appropriate power source as described in step #9 of the installation instructions.
- 3.) Rotate the rheostat(s) on the heat control(s) counter-clockwise from the "OFF" position until it "clicks-on". Adjust power setting(s) to 70% to begin.

Allow approximately 5 minutes for the Digi-Dri™ to initially "warm-up".

NOTE: The intensity of the heat is controlled by turning the rheostat counter clockwise from the "0" setting.

4.) Observe and test the images as they move across and beyond the heater head. Dependent upon the speed of the printer, type of substrate, room ambient conditions (specifically humidity), and the amount of ink deposited, the rheostat on the control will need to be adjusted.

Although the process is not sensitive, care needs to be taken that the edges of the substrate do not curl as the result of the Digi-Dri<sup>™</sup> curing the image. If this occurs, reduce the amount of energy emitted by adjusting the heat control down.

As images should be dry after they have passed by the Digi-Dri<sup>™</sup>, an optimum setting is simply emitting enough energy as needed to cure the image without adding any additional heat.

NOTE: BBC recommends that a quick reference chart be developed by the user for noting the appropriate settings dependent upon the above noted conditions.

## 5.) <u>Turn off the Digi-Dri™ when not in use. Avoid touching the emitter</u> surface or allowing any materials to come in contact with it.

Please contact the service department at BBC Industries at 800-654-4205 or Service@bbcind.com with any questions regarding these instructions.