Installation Manual

TCUF TCUFINT





Version 1.0

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Safety instructions



Installation environment

Environment

Condition

Installation Area Ambient Temperature Humidity

Surrounding Area

Indoors 10 - 40 degrees C 95 % RH or less and free of condensation Install in an area free from:

- oil mist and dust
- metal shavings, oil, water or other foreign materials
- radioactive materials
- combustible materials
- harmful gases and liquids
- excessive vibration
- chlorides
- direct sunlight
- Open flames

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Dimensions TCUF

Below are the dimensions of the controller. All measurements are in mm.





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Dimensions TCUFINT

Below are the dimensions of the controller. All measurements are in mm.



Unpack the equipment

If you have ordered a TCUF or a TCUFINT, you will one of the following:

TCUF controller unit.
TCUFINT controller unit.

If you also ordered head(s), you will receive the following parts.



The following parts are optional

Terminal

Hand Carl - unity -	Print selector
	Bridge for Hp-printheads w/2 slides
	Sensor mount for bridge
	Encoder mount for bridge and encoder bracket
	Encoder
	Encoder wheel
	Photo Sensor, fibre optic and transmitter
	Sensor mount for base
Hite	Ink Cartridge
San Jsk. 3 CompactFlash/	Memory card

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Connect the Controller

TCUF



- 1. Connect the controller to mains power.
- 2. Insert memory card.
- 3. Connect print heads to HEAD1 and/or HEAD2.
- 4. Connect start sensor to I/O

Optional equipment

- 5. Connect the encoder to encoder.
- 6. Connect external devices for remote communication to COM 1.
- 7. Connect print selector box to COM2.

TCUFINT



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Mechanical Setup





Install controller near conveyor

The controller must be installed at close proximity to the conveyor where it will be used. The controller and the stall must be connected with a cable no longer than 5 m.

Place Head on conveyor

Install the head on the conveyor so that the "sole" is as close to your media(box/paper) as possible. A distance of no more than 1mm is recommended. 0,5 mm is optimal. It is recommended to respect the following:

The nozzles must be 90 degrees exactly in relation to the print direction. If the angle is not exactly 90 degrees, you will get slanted print and overlap 2, 3 or 4 pen heads.
The head must be absolutely norallel to the media.

The head must be absolutely parallel to the media.

Setup sensor

Install the start sensor so it senses only the product start. You should have some distance from the sensor to the head, more distance if you run faster.

Onnect encoder

The encoder is optional, but strongly recommended for accurate printing.

There are 2 types of encoder:

a. Encoder with hollow shaft.

Position the wheel so it is completely parallel with the conveyor.

Make sure the wheel is perfectly round.

The standard is an encoder with 5000 PPR (Pulse per round) and a wheel circumference of 200mm.

b. Encoder with shaft.

Encoder directly connected to the shaft of the conveyor. The conveyors from HSA Systems have shaft encoders installed.

Test your hardware

TCUF

Turn on the unit. Hold a piece of paper under the print head. Press the purge button. If each pen leaves an ink mark on your paper, the head is properly installed.

Activate the start sensor. If the



TCUFINT

Turn on the unit. Hold a piece of paper under the print head. Press the tool button, select purge and press enter. If each pen leaves an ink mark on your paper, the head is properly installed.



Next, select "St" and activate the start sensor. If "+" changes to "-" the sensor is properly installed. Activate the encoder. If "/" changes to "\" the sensor is properly installed



Support

For product support, please contact HSA SYSTEMS Customer Service department

HSA SYSTEMS CUSTOMER SERVICE DEPARTMENT

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