

**The Evolution II** is a high resolution, large character ink jet printer that delivers bold, highly legible and fully formed characters at production line speeds of up to 200 feet per minute with a print resolution of 300 DPI.



**Hewlett Packard** Inkjet technology coupled with an efficient, affordable, maintenance free design makes this compact system very competitive with contact coders.

**This system comes equipped** with Arial font style in four character heights, 1/2", 7/32", 1/8" & 3/32", a hand held controller with tactile keypad for message entry, print head module with ink cartridge and breakaway mounting bracketry.

This unit can print a one line message in 1/2" characters, two lines in 7/32", three lines in 1/8" and four lines in 3/32" characters. Each font size will yield 48 characters per line.

**The hand held controller** is capable of controlling up to 32 individual printhead modules.

**Selecting the character heights** is accomplished through the font key on the hand held controller. Unlike the Evolution I, the Evolution II controller has a blue back lighted LCD graphics display with the capability of variable input for barcode usage. This controller allows you to select a barcode format from a menu, type in the specific barcode parameters, insert time, date and sequential numbering if needed and print.



**Other features include** all of the capabilities provided in the four software packages available for the Evolution I, Message Storage: Up to 100 messages in controller, Programmable line speed, Programmable print direction, Inter-character spacing, Inverted printing, Auto message repeat, Password protection, Variable time formats, Variable date formats, Sequential numbering, Shift coding, Date offset & Product counter. **Plus**, Eight Barcode Symbolologies: 1 2 of 5, Code 39, UPC-A, UPC-E, 128 B, 128 C, EAN 8 and EAN 13. Multiple language prompts: English and Spanish.

**The print head** is an integral part of the ink cartridges, when you replace the ink cartridge you are also replacing the print head. No maintenance down time or costly field service to keep your system running like new.



**Power Required:** 110-240 VAC, & 50-60 Hz 0.5A

**Environmental Specifications:** 50F - 104F (10C - 40 Up to 80% RH non-condensing.

**Physical Dimensions:** Controller: 4.125" W x 8.750" L x 1.500" D.  
Print Head Module: 1.750" W x 4.500" L x 3.00" T.

**The Print Head Module**, houses the ink cartridge and is designed with a dovetail slot on one side and a dovetail slide on the other so you can easily slide multiple print head modules together. Built into the print head module is a product sensor to detect the presence of a carton or product.

**Each Print Head Module has a discreet address so you can identify them for message entry.**



**The Mounting Bracket** will hold up to 4 separate print head modules at once; a small RS 485 data cable is used to connect each module together which allows the hand held controller to network all of the print heads. The controller has the capability of controlling up to 32 individual print head modules. A longer cable is used to connect the modules to the printers on the next production line in the manufacturing area.



**Note:** If your application requires you to have more or less space between lines of text, graphics or barcodes you can stagger up to four print heads on the line to achieve this.

**Breakaway Mounting Bracketry** was designed to protect the print head from harm should a carton moving down a conveyor or case taper come through skewed or off center. The adjusting rod holding the print head will turn away or "breakaway" from the line moving the print head out of harms way as soon as the carton comes in contact with it. Once the misaligned carton passes, a detent in the assembly allows you to pivot the rod back into position without any further adjustment.



Authorized **EVOLUTION** Distributor

**Universal Stenciling & Marking Systems, Inc.**

P.O. Box 871 - St. Petersburg, FL 33731 - U.S.A.

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**The 4500 porous ink cartridges** are genuine Hewlett Packard cartridges but the ink was specially formulated exclusively for the Evolution systems. The print head driver design uses a smaller droplet of ink to achieve the same dark black print at 300 DPI resolution as a standard HP ink cartridge would at 600 DPI. The reservoir in the ink cartridge holds 42 cc's of ink.

**The 4700 black non-porous ink cartridge** is a genuine Hewlett Packard cartridge also with specially formulated non-porous ink exclusively for the Evolution systems. The dry time for the non-porous ink cartridge on most surfaces is 2 seconds. Adhesion of the ink is very good on a wide variety of non-porous surfaces: HDPE, PE, coated chipboards, packaging films, frosted glass, metal cans, hard plastic, mylar & stainless steel as long as there is no oil present. To preserve the life of the ink, place the ink cartridge in the cartridge clip provided when the system is not running. For the best performance, a maximum print distance of 1/8" is recommended. The reservoir in the ink cartridge holds 42 cc's of ink.



**Approximate Yield per Cartridge:**

- 1/2" high fonts - yield - 450,000 characters
- 7/32" high fonts - yield - 2.1 million characters.
- 1/8" high fonts - yield - 5.6 million characters
- 3/32" high fonts - yield - 8.6 million characters.

**4500 porous ink colors:** Black, Dark Blue, Cyan, Green, Red, Yellow and UV Readable ink.

**Important Note:** The 4700 Ink requires different energy settings than the 4500 inks in order to fire the ink. These changes are made using the hand held controller. Please follow the instructions provided with every 4700 ink cartridge.



**Approximate Yield per Cartridge:**

- 1/8" high fonts - yield - 3.75 million characters
- 4700 non-porous ink color:** Black

**4500 POROUS SERIES PRINT SAMPLES**

**4 LINES OF 3/32" PRINTED ON AN EGG CARTON**



**2 LINES OF 1/2" PRINTED ON CARDBOARD BOX**



**2 LINES OF 7/32" & 1 LINE OF 1/2" PRINTED ON TREATED WOOD**



**4700 NON-POROUS SERIES PRINT SAMPLES**

**PRINT ON PLASTIC BOTTLE**



**PRINT ON ALUMINUM BAR**



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**Logo & Barcode Download Packages**

The **Logo Download Software Package** gives the user the ability to download a BMP file directly to the print head module from the Data Flash Card. A bitmap file is simply an image file containing anything from multiple lines of text, company logos, intricate graphics or barcodes. Logos can be created by the user in any graphics program that is capable of producing a 2-bit black and white image in Bitmap (BMP) format. A standard feature on the Evolution I and Evolution II printers is the ability to print up to three images in either the one line mode or the two line mode. Bitmap files can also be custom ordered and supplied on a Data Flash Card ready to be downloaded into the print head module.

**Example of single line, logos and text image:**



**Example of dual line symbols and text:**



**Example of single line, barcode image:**



**Data Flash Card**

The Software packages are supplied on a Data Flash Card and can be easily installed in the field. Simply insert the Flash Card into the slot on top of the print head module and follow the instructions on the box, it's that easy. Each Flash Card is intended to be used in only one print head module so if the same software package is required in more than one print head, you must purchase a separate package for each head required for your application.



**DATA FLASH CARD PACKAGE**

The **EVOLUTION Ink Jet Printers** can be easily customized to fit each individual users requirements. Font styles, character heights (different than the standard sizes), and logos can be supplied and easily added with optional data flash cards.

**EVOLUTION-Net Software**

The Evolution-Net software is a PC resident package that gives the user complete control of all the Evolution printers within the manufacturing area. Create messages, monitor printers and more all from a central location. Due to the varying lengths, all interconnect cables are optional. Please ask your distributor for complete details.

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