SQ/2 SCORPION INK JET PRINTING SYSTEM

Quality, Economical Ink Jet Printing

Squid Ink Lets You Have It Your Way

The SQ/2 Scorpion ink jet printing system offers the durability, versatility and productivity that you have come to rely on from Squid Ink. SQ/2 Scorpion offers more options for making your mark: water-based systems for printing on porous surfaces like corrugated cases, or solvent-based systems for printing on non-porous products like plastics, metals or more. No matter what product you need to print, SQ/2 Scorpion has the functionality to get the job done right.

True Versatility For Your Needs

SQ/2 Scorpion users have the option of choosing from several printhead configurations. Five different print sizes are available: 3/8″, 1/2″, 3/4″, 1″ or 1-3/4″ character height. All printheads are capable of printing at 100% or 70% character height, offering 12 print sizes ranging from 1/4″ to 1-3/4″ in height. The 1″ and 1-3/4″ (1600 Series) printheads even offer split-line capability and the option of printing full-size characters or half-size characters with the same printhead. *That's three different character sizes from one printhead.* Whether you need separate printheads to print messages on two sides of a box, or a single printhead to print split-line small characters on one side of a box, the SQ/2 Scorpion provides a solution. Best of all, each printhead is field-installable for future upgrade to meet your application's changing requirements.

More Brain. More Brawn.

The SQ/2 Scorpion is upgraded with software features that ink jet users need most: increased memory locations for up to 128 messages, the ability to automatically print a manufacturing date and an expiration date, as well as a shift organizer to automatically separate and code different work shifts within your packaging operation. The SQ/2 Scorpion also comes standard with a shaft encoder input for packagers using a variable speed conveyer. On the hardware side, the SQ/2 Scorpion features a built-in central air gauge to view regulated air pressure within the system and fine-tune your print quality.

User-Friendly System

The SQ/2 Scorpion is designed to work as an integral part of your day-to-day packaging operation. SQ/2 Scorpion's state of the art input device provides quick and easy message programming and retrieval for the 128 message locations of 128 characters each. Resident software in the input device walks the user through a series of prompts to program and save each message for printing on-demand. If necessary, the input device can be removed to prevent programming errors on the plant floor. The system also can be programmed and maintained with a PC through a standard RS-232 port. SQ/2 Scorpion's easy-to-use design and user-friendly software makes everyone involved a smooth operator.

Innovative Technology, Proven Reliability

SQ/2 Scorpion utilizes Squid Ink's patented micro-channeling technology, eliminating the need for a costly array of fluid valves. Squid Ink's proven plunger technology distributes ink through a series of channels, keeping production and maintenance costs to a minimum, especially when compared to the costly valve technology common in most ink jet printers today.

Less Maintenance = Less Downtime

The SQ/2 Scorpion is engineered inside and out for industrial-strength operation. Heavy-duty gauge, coated steel cabinetry ensures continuous operation in rugged, real world environments. In fact, the Series 1600 printheads, encased in sturdy, stainless steel framework, are completely sealed and resistant to dust and water. If the printer does fail, however, a fix can be completed in less than five minutes. Quick and easy-to-install replacement printheads, circuit boards and air pump modules minimize downtime and eliminate costly service calls. Best of all, the water-based SQ/2 Scorpion utilizes Squid Ink's patented SQ-60™ no-clog ink, allowing users to leave the ink in their printheads for an extended period of time without flushing or cleaning, making it the most cost-effective, low maintenance ink jet printing system in it's class.

GO WITH THE FLOW.

SQUID INK ®
MANUFACTURING

SQ/2 SCORPION INK JET PRINTING SYSTEM

SQ/2 Scorpion Printing System Components
- Controller cabinet and ink delivery system
- One or two printhead(s) and printhead mounting bracket(s)
- Printhead data cable(s) and ink line(s)
- Photocell product sensor and photocell mounting bracket
- Industrial-strength handheld input device

The SQ/2 Scorpion utilizes water-based or solvent-based inks for printing on a wide range of porous and non-porous surfaces.

Run one or two SQ/2 printheads for versatile single line printing.

Or run one Series 1600 printhead for full character size and split-line capability.

Squid Ink's patented SQ-60™ no-clog ink allows users to leave ink in their printhead without having to flush their system.

SQ/2 Scorpion Printing System Specifications

Printer Type - Large character ink jet printing system

Printhead Options - Users have the option to use up to: two SQ/2 printheads, or one 1600 Series printhead

Character Heights
SQ/2 Series Printheads (7-channel dot matrix characters)
- .75″ (1.9cm) in 7 x 5 matrix; .5″ (1.3cm) in 5 x 5 matrix, or
- .5″ (1.3cm) in 7 x 5 matrix; .375″ (1.0cm) in 5 x 5 matrix, or
- .375″ (1.0cm) in 7 x 5 matrix; .25″ (.6cm) in 5 x 5 matrix

1600 Series Printheads (16-channel dot matrix characters)
- 1.75″ (4.5cm) in 16 x 10 matrix, with split-line capability
  to print two lines of the following size characters: .75″ (1.9cm)
  at 7 x 5 matrix; .5″ (1.3cm) in 5 x 5 matrix, or
- 1.0″ (2.5cm) in 16 x 10 matrix, with split-line capability
  to print two lines of the following size characters: .375″ (1.0cm)
  at 7 x 5 matrix; .25″ (.6cm) in 5 x 5 matrix

Character Set - 61 character ASCII set

Print Speed - Up to 200 feet/minute (61m/minute) line speed

Message Length
128 character length per message; 128 memory locations

Communication
RS-232C, 9600 baud, 8 data bits, 1 start, 1 stop, Asynch

Software Features
Counter, lot counter, 24-hour clock, 8 or 12 hour programmable shift code, Julian date, 3-letter month name, 3-letter weekday name, expiration date, expiration month, expiration day, expiration year, expiration Julian date

Operating Features
Dot size, print delay, character width, photocell on/off/repeat, invert print, reverse print, purge routine

Shaft Encoder Output
Resident software allows communication with shaft encoder for use with variable speed conveyors

Component Modularity
Eliminates the need for costly service calls and minimizes downtime; printheads and components can be replaced in less than 5 minutes

Controller Dimensions
12″ (31cm) H x 12″ (31cm) W x 5.25″ (13cm) D

Controller Weight
10.5 lbs. (4.8kg)

Printhead Dimensions
SQ/2 Series Printheads: 3″ (7.6cm) H x 1.6″ (4.1cm) W x 7″ (17.8cm) L
1600 Series Printheads: 2.5″ (6.4cm) H x 1.5″ (3.8cm) W x 7″ (17.8cm) L
Dimensions are for the printhead only – an additional 3″ (7.6cm) is needed for the ink line and printhead cabling which extends from the back of the printhead

Product Sensor
Diffuse beam photocell (24v) or hardware sinking signal

Communication Interface
Two RS-232 ports for connection to input device, host PC, and PLC for input from scale, scanner or external alarm

Air Pump
Internal air pump module provides necessary air pressure; external air not recommended

Electrical Requirements - 90-120 VAC, 50/60Hz, 4.0 amp

Cabinet Construction - Industrial gauge coated steel

Operating Environment
Water-Based Ink: 32°F (0°C) to 120°F (50°C)
Solvent-Based Ink: 0°F (-18°C) to 120°F (50°C)

Substrate Capabilities - Porous or Non-Porous surfaces

Ink Capabilities
Porous: Squid Ink SQ-60™ no-clog ink
Non-Porous: Several Squid Ink solvent based fluids to meet your application needs for adhesion and dry time

Ink Volume
.5 gallon (1.9 liters) bottle standard; available upgrade (water-base ink only) to 5.0 gallon (18.9 liters) pail

SQ/2 Scorpion Optional Accessories

Spare Parts Kit - Includes spare printhead, card cage and PC board pack, air pump module, data cable and master cap

Starter Kit - Includes ink, cleaner for flushing the system, spray bottle for cleaner, hand cleaner and wipes for the printhead

5-Gallon Pail Upgrade - Upgrades ink supply to 5.0 gallons (water-base ink only)

PC Software - Communications software for PC integration

Shaft Encoder - Allows for operation with variable speed conveyors

Rollaway Stand - Provides mount for the SQ/2 Scorpion controller, designed with caster wheels for transportation within plant

Installation and Training - On-site installation and training available

Marking the future of on-demand printing®

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