# Screen

PlateRite 4000

Introduction

Screen's PlateRite 4000 B2-size **thermal platesetter** brings the functionality of Screen's acclaimed 8-page PlateRite 8000 to the task of producing **thermal plates for 4-page presses.** Thermal plates have attracted attention because they produce crisp dots, support long run-lengths, and can be handled in daylight.

The PlateRite 4000's high-speed drum rotation of **up to 1,000 rpm,** combined with the 32-channel laser diode exposure head, result in productivity of up to **16 plates per hour.** A wide range of plates can be exposed for plates are reliably secured to the drum with Screen's own high-precision clamping system. The automatic drum balancing mechanism enables the PlateRite 4000 to expose plates of various sizes, all at maximum speed.

Information on plate sizes and types can be programmed in, and recalled later from memory. By an operator's selecting the desired plate from a menu, drum balance and other settings are automatically adjusted to fit the selected plate. In addition, punch settings can be saved together with plate information, so that appropriate punch configuration is also selected automatically at set-up time. The basic configuration is semi-automatic, but an optional single-cassette auto-loader and a processor bridge are soon to be released, and a multi-cassette auto-loader is under development.

Features

Auto-balance to support different plate sizes
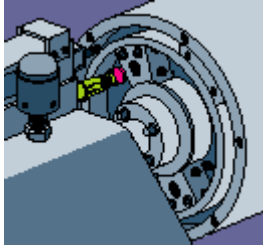
The PlateRite 4000 is designed to fit smoothly into your workflow. Auto-balance enables recording of different sized plates with no manual adjustment. All you do is input or select the type of plate you want to use and the PlateRite 4000 automatically makes the necessary adjustments to create perfect drum balance for each plate size you use. It can handle a wide variety of plate sizes, from 18.4" x 15.5" (467mm x 394mm) to 12.8" x 19.4" (324mm x 492mm), to 32.7" x 25.4" (830mm x 645mm), thus making it easy to tailor plate output to the job at hand.

Automatic loading and unloading options

The PlateRite 4000 can be configured for fully automatic, continuous operation with the optional SA-L 4000 single auto-loader and AT-T 4000 processor bridge. Plates can also be loaded manually. One cassette can hold up to **100 plates.** The single auto-loader can be upgraded to an MA-L 4000 (under development at the time of this writing) multi-cassette auto-loader, which can hold up to three plate cassettes. Screen's automatic plate loaders feature an **interleaf removal system.** The system automatically routes paper to the disposal box, and plates to the platesetter. Since plates are vacuum-gripped from the back for transport, there is no risk of scratching.
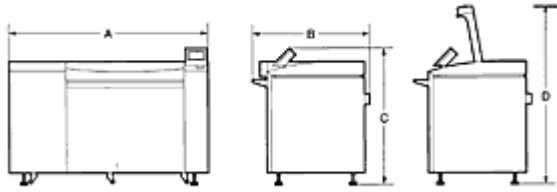
Automatic internal punch

The PlateRite 4000 can even **punch your plates** for you just before imaging, with your choice of optional internal punch block systems that provide exceptional repeatability. You can mount six punch blocks and select punches based on plate size and press type. A variety of suitable punches are available. The PlateRite 4000 can change between two punch configurations automatically as required by the automatic media settings.

Digital workflow

Dainippon Screen offers all the other components you need to move to a **fully digital workflow,** such as copydot scanning, digital halftone color proofing, imposition proofing, color management, automatic trapping and imposition, and **RIP'ing.** The use of CIP3 PPF files is another powerful CTP option, and Screen has been a leading member of the international CIP3 consortium since its inception. Using PPF (print production format) files, ink-duct keys can be pre-set based on plate image data, which shortens press set-up time and eliminates plate scanning. Several companies are already achieving excellent results with Screen's **CIP3 support.**

Specifications

Dimensions				
	A	B	C	D
mm	1,750	1,030	1,178	1,550
in.	68.9	40.6	46.4	61.0

Model name	PT-R 4000
Recording system	External drum
Laser	32 channel infrared LD, 1W per channel
Plate sizes	Maximum: 830 x 645 mm (32.7" x 25.4") Minimum: 467 x 394 mm (18.4" x 15.5") Or: 324 x 492 mm (12.8" x 19.4")
Exposure size	Maximum: 830 x 615 mm (32.7" x 24.2") (With front and rear margins of 15 mm each.)
Media	Thermal (830 nm infrared-sensitive) plates
Media thickness	0.15 - 0.3 mm
Resolution	1,200/2,000/2,400/4,000 dpi
Repeatability	± 5 micrometers (± 0.2 mil.)*
Imaging time	3.5 minutes for a 830 x 645 mm plate at 2,400 dpi**
Interface	Fast PIF
Plate transport	Semi-automatic (standard) Fully-automatic (optional)
Punch (optional)	DS, Heidelberg, Protocol, Komori, and others
Dimensions W x D x H	Main unit: 1,750 mm x 1,030 mm x 1,178 mm (68.9" x 40.6" x 46.4") Blower unit: 429 mm x 600 mm x 361 mm (16.9" x 23.6" x 14.2")
Weight	600 kg (1,320 lbs.)
Environment	Recommended: 21-25* C (70-77* F) Operating range: 18-25* C (64-77* F) 40-70% non-condensing humidity
Power	Single phase 200 ,, 230V± 10% 3kW 15A
Standard accessories	Blower unit
Options	Single cassette auto-loader SA-L 4000 (soon to be released) Processor bridge AT-T 4000 (soon to be released) Multi-cassette auto-loader MA-L 4000 (under development)