QSS-3101-1 *Digital*
QSS-3102 *Digital*

High Performance | High Quality | Easy Operation | Networking Ability

ADVANCED PHOTO SYSTEM™

Digital

FOR THE NEXT STAGE

NORITSU

QSS-3101-1/3102Digital delivers high precision prints at high speeds. This high performance lab system offers a diverse range of photo services.

FOR THE NEXT STAGE

Combining the latest in digital technology with the technology of Silver Halide photography, the QSS-3101-1/3102 Digital is setting the standard for tomorrow. Providing high quality images on Silver Halide paper, QSS-3101-1/3102 Digital offers a new freedom to photography, with prints possible from multiple image sources. Leaping into the next generation, a lab system supporting a wide range of digital print services has appeared on the stage of the photographic world.

High Performance

High speed processing of approx. 2,369 [QSS-3101-1] / 2,580 [QSS-3102] prints (127×89mm) per hour

While not possible when using an optical system, with the QSS-3101-1 / 3102Digital's advanced potential, the paper emerging from the paper magazine is able to be separated into two lanes for processing. Besides having a high processing capacity, the QSS-3101-1/3102Digital also boasts a maximum print size of 12×18 inches.

High Quality

Superior correction functions and high 300dpi resolution on Silver Halide paper

Equipped with a print engine employing laser technology, high image quality of 300dpi is possible on standard economical Silver Halide paper. Moreover, high quality paper are able to be output using highly developed correction functions which allow the engraving of rich image data onto Silver Halide prints.

Easy Operation

Fully digital processing from scanning to printing

The high speed scanner, workstation, and high specification digital printer provide digital processing of image data from a wide range of sources. Easy to operate. Various digital manipulation of prints is possible.

Networking Ability

The implementation of a network enables efficient digital printing

A network system is available so that you can utilize the full potential of this digital printer!

Expand your business opportunities with new digital image output services

INPUT>

135 negative and positive film	Digital Camera media
120 negative and positive film	FD
135 B&W negative film	MO
IX240 negative and positive film	CD-R/RW
	Zip etc.

QSS-3101-1 / 3102 Digital

OUTPUT>

Silver Halide Prints (Max. print size: 12×18 inches)

Media Writing	Business Cards
Package Prints	Index Prints
Greeting Cards	ID Photos
Calendar Prints	Frame Prints
Album Prints	etc.

High Performance

With a superior work flow provided by fully digital operations, and system components that employ state-of-the-art technology, the QSS-3101-1 / 3102Digital is a highly productive minilab.

High resolution laser print engine

Revolutionary laser technology is employed in the exposure system, enabling high quality prints of 300dpi to be output onto both conventional photo paper and digital paper.

High capacity

From scanning to printing, all operations are fully digital. The utilization of a high-speed scanner, laser print engine, and numerous speed-enhancing features enable the QSS-3101-1 / 3102Digital to produce up to approx. 2,369 [3101-1] / 2,580 [3102] prints per hour (127×89mm).

Large format prints

A maximum print size of 12×18 inches.
The print trays can be installed in the front of the machine or in the back, and they can hold prints up to 10 (w) ×8 inches. [QSS-3102 only. 50 prints / tray.]

High Resolution
300dpi **High Capacity**
2369 [3101-1]
2580 [3102] prints / hr
Max. Print Size
12×18 inches
(305×457mm)

High Quality

High precision correction functions provide a dramatic increase in print quality.

DIGITAL ICE™ (option)
automatically corrects dust and scratches on film

DIGITAL ICE™ technology is applied to autmatically discover unwanted dust, fingerprints, and scratches on film and correct them. This amounts to a huge reduction in makeover work, and also proves to be a very beneficial feature for positives and enlargements.

※The photo below was created specifically to explain the DIGITAL ICE™ function.

digital ICE technology

DIGITAL ICE™ is a trademark of Kodak.

· There are some instances when DIGITAL ICE™ cannot make a satisfactory correction, if the extent of the dust or scratches is too great.
· It cannot correct Black and White film.
· When scanning Kodachrome film, the use of DIGITAL ICE™ is not recommended as it may not be sufficiently effective, especially when correcting areas that are dark or have dense colors. There are also some cases where the quality of the scanned images may even deteriorate.

Digital correction

※All of the photos below were created specifically to explain the correction functions.
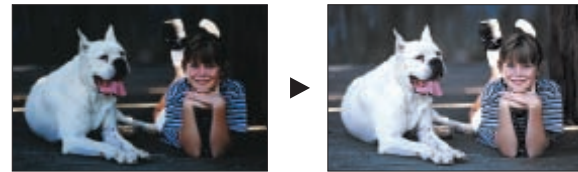
Correction of Backlit Scenes
When the background of a scene is too bright, the required density will be applied to both the front and background subjects, similar to dodging.

Correction of Flash Photography
For flash photography where the front subject is often over illuminated and the background is too dark, the gradation of the entire photo will be corrected.

Correction of Underexposed and Overexposed Negatives
By correcting density and contrast, even underexposed and overexposed negatives will come out clear and vivid.
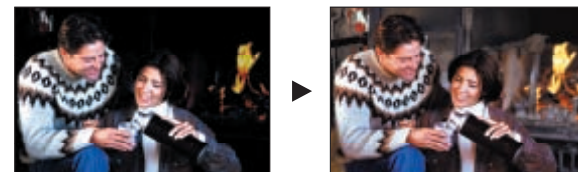
Sharpness Enhancement
Provides added sharpness or softness depending on user preference.

Red Eye Correction (option)
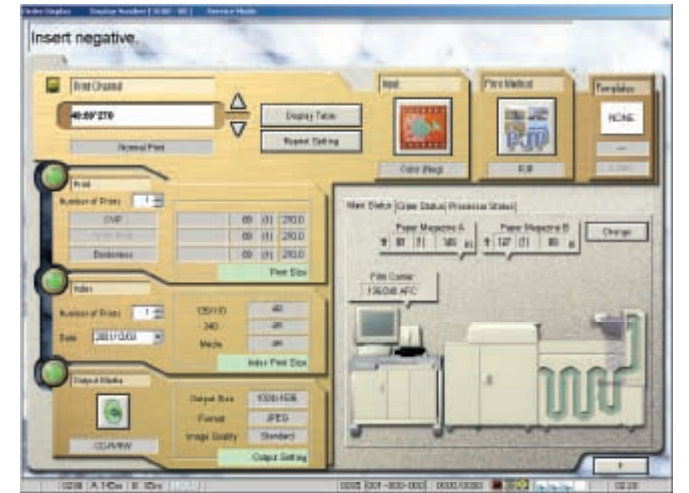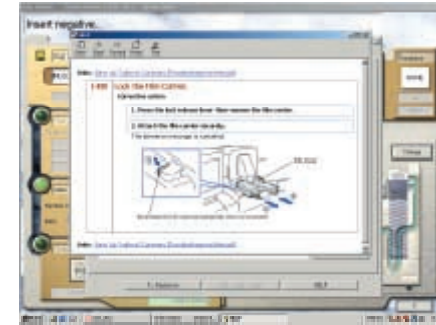Corrects the "red-eye" look that often occurs when taking pictures with a flash.

Easy Operation

Despite the fact that modern technology is utilized, the QSS-3101-1 / 3102Digital is amazingly easy to operate.

Simple user interface

The QSS-3101-1 / 3102Digital comes with a user interface that is easier to use than ever before. Icons resembling the actual input / output media are displayed on the screen. You can also check the progress of your orders simply by glancing at the main menu.
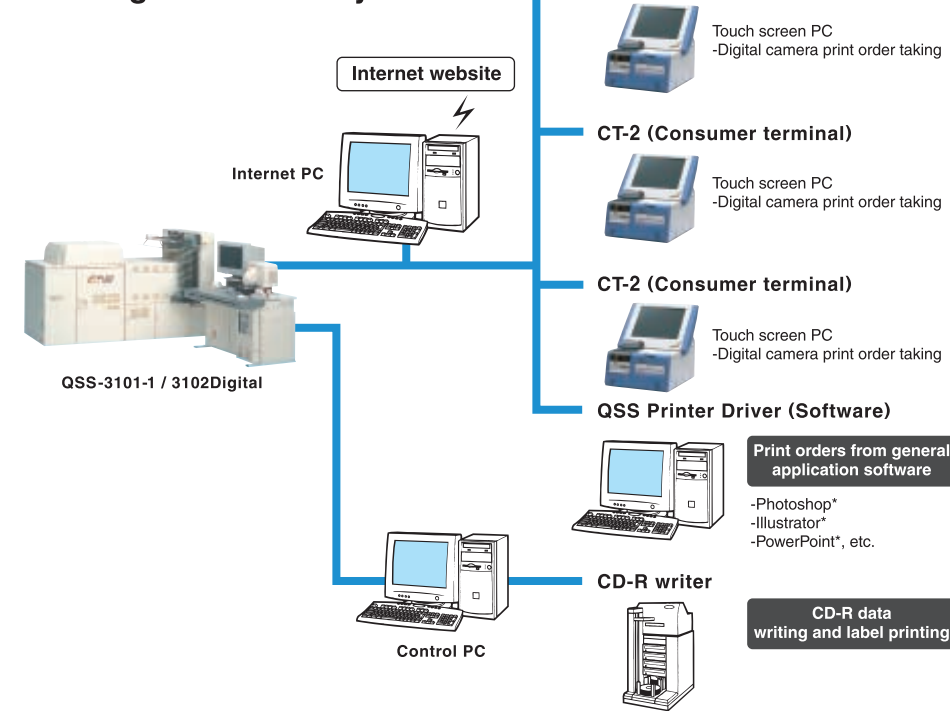
Built-in manual

An electronic operator's manual is built into the system computer. Whenever an error occurs, a "Help" button is displayed along with the error message. If the "Help" button is pressed, easy-to-understand instructions about how to deal with that specific error are displayed instantaneously. This will save the operator time and hassle because it will eliminate the necessity to pull out the paper manual and leaf through it to find solutions to specific problems.

Networking Ability

The implementation of a network enables you to see an increase in print orders and achieve a higher rate of efficiency within the shop.

Take the efficiency of the QSS-3101-1 / 3102Digital to a higher level with QSS Digital Network

QSS Digital Network System

Internet website

Internet PC

QSS-3101-1 / 3102Digital

CT-2 (Consumer terminal)
Touch screen PC
-Digital camera print order taking

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QSS Printer Driver (Software)
Print orders from general application software
-Photoshop*
-Illustrator*
-PowerPoint*, etc.

CD-R writer
CD-R data writing and label printing

Control PC

*Photoshop and Illustrator are trademarks of Adobe Systems Incorporated
*PowerPoint is a Trademark of Microsoft Corporation.

CT-2

This is a "Consumer Terminal", a computer terminal with a touch screen placed in the store to take orders for prints from digital media. With CT-2, the consumers use the touch screen to directly place orders for such things as making prints from digital media and writing to media. Since the consumers input the media and order data themselves, the operator workload is reduced and potential trouble with handling consumers' media can be avoided.

QSS Printer Driver (Software)

The QSS Printer Driver further increases the ability of this network system by enabling you to fulfill orders for prints from files created in Photoshop, PowerPoint, or other application software.

CD-R writer (Rimage)

With the combination of a QSS-3101-1 / 3102Digital and a CD-R writer, film images can be digitized and written to a CD-R.
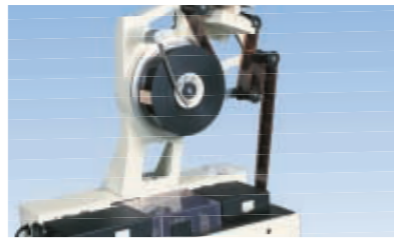A big advantage to this CD-R writer is that you can perform CD-R writing during the D&P process, with minimal effect on the D&P processing capacity. You can also print the thumbnail images on the face of the CD-R, providing an index that can be viewed simply by glancing at the CD.

User-friendly options
that support a fully digital minilab system

Increasing work efficiency with automatic long roll film processing

Long Roll Feeder (option)

One roll of film holds up to 100 orders of 24 exposure film, and up to 70 orders of 36 exposure film. The operator simply inserts the leader, and scanning and printing are carried out automatically.

Automatic film insertion decreasing the workload of the operator

Neg. & Positive Film Sleever (option)

Add this sleever for fully automatic operation from scanning to inserting the negatives and positives into sleeves. Attaches to the QSS-3101-1/3102. The film does not need to be notched.

Increasing the efficiency of scanning strip film

Film Set Feeder (option)

While one strip of film is being scanned, the next strip is pre-set for scanning.

Automatically sets the next IX240 cartridge for processing.

IX240 Auto Supplier (option)

Enables continuous processing of IX240 film in batches of 5 or 10 rolls.

Automatically sends film (negative and positive) to the scanner

135/240 AFC (option)

Changing between 135 and IX240 is taken care of by simply moving a lever. This saves time and trouble, as the operator does not have to change film masks whenever the need to process a different kind of film arises.

Compatible with an array of digital media

A variety of media drives

DVD, CD-R/W, MO, CompactFlash, and more. QSS-3101-1/3102Digital comes with digital media drives that are able to take in digital image data from various input sources.
*Standard: FD drive, CD-ROM drive

Template Creation Software

Card/Calendar Creation Software (option)

This optional software, which comes complete with pre-made templates, is used to create the kinds of prints described below.

Frame prints 10 varieties

Add life to your photos by inserting a single image into an attractive frame.

Available print sizes

89×127mm
89×152mm
89×254mm
102×152mm
203×254mm
203×305mm

Greeting cards 21 varieties

Combine a single image with a template to create a card for a special occasion.

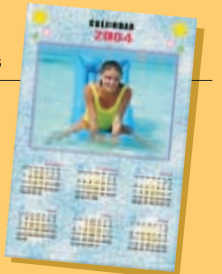**Available print sizes**

89×178mm
102×216mm

Calendars 6 varieties

Make a unique calendar by inserting a single image into a calendar template.

Available print sizes

102×152mm
203×254mm
203×305mm

Business cards 5 varieties

Make professional-looking business cards by combining your photo image with a template.

Available print sizes of individual cards
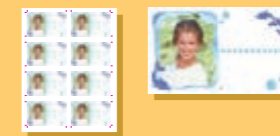
51×89mm
55×91mm

Multiple cards are printed on one sheet of photo paper.The number of cards printed on one sheet varies with the print size.

Card prints 5 varieties

On one sheet of photo paper, print multiple copies of cards made from a template with one or more images inserted into it.

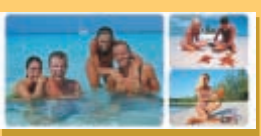**Available print sizes of individual cards**

55×91mm

Multiple cards are printed on one sheet of photo paper.The number of cards printed on one sheet varies with the print size.

Package Template prints 9 varieties

Print different sizes of the same or different images onto one sheet of photo paper.

Available print sizes

89×203mm
102×127mm
127×178mm
152×203mm
203×254mm
254×305mm

Multi-Frame Print Creation Software (option)

This optional software, which comes complete with pre-made templates, is used to create the kinds of prints described below.

Album prints 8 varieties

Combine multiple images with one template, creating a photo album effect.

Available print sizes

127×178mm
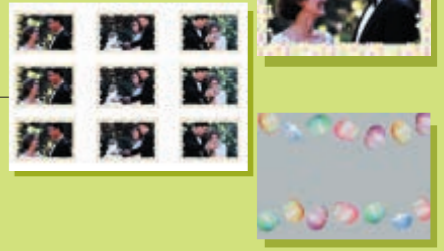152×203mm
203×254mm
210×305mm

Multi-Frame prints 5 varieties

Combine multiple images with a template and print multiple copies of it on one sheet of photo paper.

Available print sizes
multiple copies are placed within the following print sizes

89×127mm
102×152mm

Package prints 5 varieties

Print different sizes of the same image onto one sheet of photo paper.

Available print sizes

89×127mm
102×152mm
127×178mm
165×216mm
203×305mm
254×381mm
305×457mm

Contact print style photos

Digitally composed prints that are made to resemble contact prints.

ID photos

Multiple ID photos are printed on one sheet of photo paper.

The number of ID photos printed on one sheet varies with the print size.

Film scanner (SI-2600)

Light source of scanner… Halogen Lamp
Film size..................... 110, 135F, 135P, 135H, 135HD,
IX240 (C,H,P), 120 (6X4.5, 6X6, 6X7, 6X8, 6X9)
Film types.................... Color negative and positive (including mounted),
B&W negative, Sepia negative
Film carrier (option)......... 135 / 240 AFC-II : Compatible with both 135 and IX240 film.
Lane changes performed manually.
120 AFC-II : Film carrier for 120 film.
Minimum film length : 1 frame.
110 AFC-II : Film carrier for 110 film.
Compatible with negatives only.
135/240 MMC-II : Carrier for mounted 135 and IX240 film.
135/240 AMC-II : Carrier for mounted 135 and IX240 film.
MFC : Attachments for each film size are set in the MFC to enable multiple film support.
Compatible input media…Standard : Floppy disk, CD-ROM, CD-R/RW
Optional : MO, ZIP, DVD-RAM (only 3101-1), DVD-R (only 3101-1), DVD-ROM (only 3101-1), PC Card, CompactFlash, SmartMedia, Memory Stick, Memory Stick PRO (Using PC Card adapter), SD Card, MMC Card, Microdrive, xD-Picture card (Adapter required), Prints (from Flatbed scanner)
Compatible output media… Standard : Floppy disk
Optional : CD-R/RW, MO, ZIP, DVD-RAM (only 3101-1), PC Card, CompactFlash, SmartMedia, Memory Stick, Memory Stick PRO (Using PC Card adapter), SD Card, MMC Card, Microdrive, xD-Picture card (Adapter required)
Display monitor............ 17 inch color display monitor
Dimensions.................. See "External view" below
Weight........................ Approx. 187.7±3kg

Laser printer-processor (LP-2600, PP-1223 / 1230)

Exposure system............Laser scanning exposure by paper movement
Laser Class : Class1 (EN60825-1)
Print resolution............300dpi
Exposure speed............89mm / sec.
Print sizes....................Paper width : 82.5, 89, 102, 114, 117, 120, 127,130, 152, 165, 178, 203, 210, 216, 240, 254, 279, 305 (mm)
Paper advance length : 82.5 to 457mm
Exposure conditions......Control with the built-in colorimeter
Transport System.........Roller transport
Processing speed.........2322mm/min [3101-1], 3024mm/min [3102]
Paper supply...............Dual magazine system
Paper specifications......Maximum diameter of paper roll : 250mm
Watert refilling...............Automatic water refilling
Automatic cleaning.........Automatic cleaning of turn racks
Order classification.........Can choose either 17 or 14 orders [3101-1], 14 orders [3102]
Dimensions..................See "External view" below
Weight........................[3101-1] Approx.864.7kg (including weight of solution (176kg))
[3102] Approx.1106.7kg (including weight of solution (257kg))

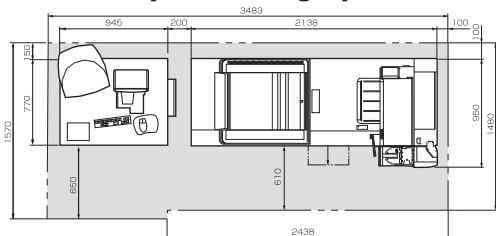### Estimated processing capacity (PJP mode)

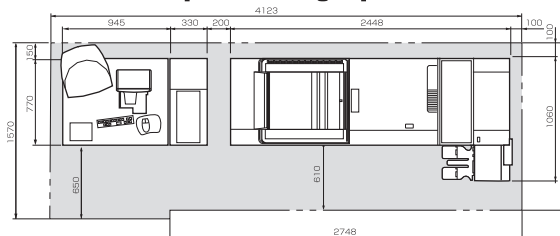|	Print size Width x Paper advance length	Processing capacity (prints/hr)	
		QSS-3101-1Digital	QSS-3102Digital
135 negative film (24 exp.)	127×89mm 152×102mm 203×254mm 305×457mm	Approx. 2,369 Approx. 2,125 Approx. 488 Approx. 228	Approx. 2,580 Approx. 2,330 Approx. 530 Approx. 250
IX240 negative film (25 exp.)	89 paper width (C,H,P intermixed)	Approx. 1,457	Approx. 1,600
Digital Camera (2.5million pixels)	89×127mm	Approx. 1,361※1 (PPI mode)	Approx. 1,500※2 (PPI mode)

Calculated according to our criteria. The actual capacity you achieve may be different.
※1 Using 5 Slot Card Reader. No digital camera correction.PC memory:512MB. QSS computer.PC-NRT-5.
※2 Using 5 slot Card Reader. Digital camera correction. PC memory:1.5GB. QSS computer:PC-NRT-RD4.
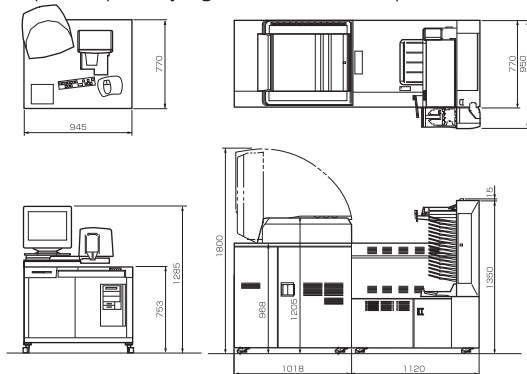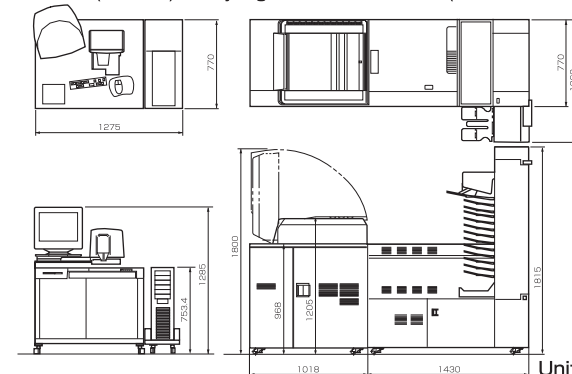
External view

[QSS-3101-1Digital]

[QSS-3102Digital]

Film Scanner (SI-2600)   Fully Digital Printer-Processor (LP-2600/PP-1223)

Film Scanner (SI-2600)   Fully Digital Printer-Processor (LP-2600/PP-1230)

Unit:mm

NORITSU UK LTD.

The specifications, information, and the appearance of the machine in this brochure are subject to change without notice.

Our products have been manufactured under an ISO 9002-certified quality assurance system.

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