

# QSS-2701

## DIGITAL LAB SYSTEM



**NORITSU**

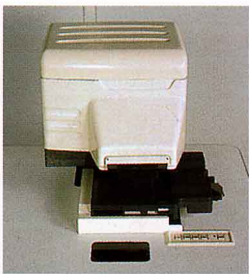


# INTRODUCING THE QSS-2701

THE NEW STANDARD IN DIGITAL PHOTO PROCESSING

**SIMPLICITY FROM SCANNING TO PROCESSING GIVES YOU THE FREEDOM TO GENERATE PRINTS FROM MULTIPLE IMAGE SOURCES.**

*The 2701 integrates a high speed scanner, 17" color monitor, and state-of-the-art keyboard into a digital workstation that's so easy to use even operators with minimal training can input and manipulate images from virtually any image source, including digital cameras, floppy disks, zip disks, M.O. disks, and CDs.*



## SCANNER

The high speed, precision scanner reads and automatically corrects images from most popular film types. A full range of negative

masks and attachments are available for the most popular film sizes, including 135, IX240, and 120 (optional).



## 17" COLOR MONITOR

Scanned images are displayed in either 4, 6, 28, or 40 frame modes on the 17" monitor. And as the images appear on the

monitor, a range of graphic icons with simple point-and-click commands are displayed to simplify operations and reduce operator errors.



## KEYBOARD

The QSS-2701's specialized keyboard allows operators with limited computer experience to quickly input data, such as print sizes and

multiple prints. The keyboard can also be used to add messages to photos. An ergonomic design minimizes operator fatigue.

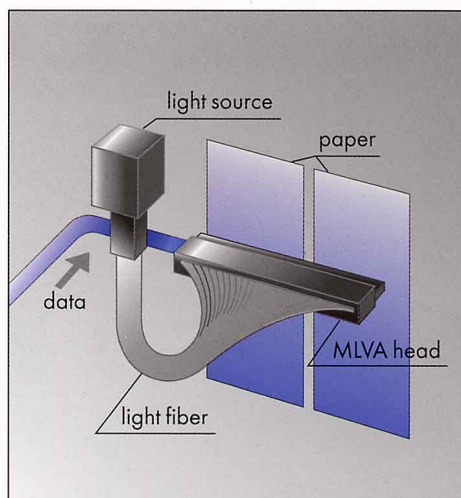
*The QSS-2701 combines a high performance minilab and advanced digital workstation into a versatile and easy-to-use system that generates high quality prints on silver halide paper from virtually any image source.*

## PERFORMANCE

Engineered for high performance, the QSS-2701 on fully automatic printing produces up to 1,250 5" x 3.5" prints per hour and prints intermixed 135 full/panoramic and IX240 classic/high definition/panoramic film in a single pass. The 2701 also lets you provide a full range of additional photo services, such as enlargements up to 12" x 18", print-to-print reproduction, and specialty prints ranging from greeting cards to photo business cards to index prints.

## QUALITY

At the heart of the 2701 is a new print engine, called the Micro Light Valve Array (MLVA). MLVA is a highly efficient and cost effective technology that lets you create 400 dpi resolution digital prints on silver halide paper, saving time and



*The Micro Light Valve Array print engine—developed by Noritsu—advances digital printing to a new level by providing 400 dpi resolution on silver halide paper.*

material costs. Designed for rugged reliability, the MLVA features mechanisms that ensure consistently vivid reproductions over its lifecycle and maintenance costs that are a fraction of traditional digital printing systems.

## EFFICIENCY

To maximize productivity, the MLVA accommodates two-lane processing. This allows paper emerging from the magazine to be separated into two processing lanes, effectively doubling the production rate. Two-lane processing, combined with the system's dual paper magazines, make the 2701 an ideal solution for high volume operations. To further improve system economy, the 2701 employs a roller transport and auto loading system that significantly reduces paper loss during printing.



### IMAGE SOURCES

### INPUT/ IMAGE PROCESSING

### PRINTER

### DIGITAL PRINTS



135 Negative Film



135 Positive Film



120 Negative Film



120 Positive Film



IX240 Film



Prints

### QSS-2701 DIGITAL LAB



### NORITSU EZ MALL DIGITAL PHOTO PROCESSING SOFTWARE ALREADY INSTALLED

To maximize QSS-2701's digital processing performance, based on the latest in digital D&P tools, a specialized digital photo processing software has been originally developed and pre-installed. Combined with a collection of design templates, a wide variety of digital print services can be offered.



Floppy

Zip, MO, etc.

CD

Digital Camera



Personal Computer



Server

Digital image data is transferred from the customer's home computer to the photo shop via the internet. In the future, ordering of digital prints will be possible from home.

### DIGITAL PHOTO PROCESSING AND PRINTING

Digital printing direct from multiple image sources. Print sizes from 3.5" x 3.5" to 12" x 18".



### ENLARGEMENTS

Make prints up to 12" x 18".



### BLACK AND WHITE OR SEPIA PRINTS

Crossing new boundaries in photo retouching, a new print service allows photos to be printed in black and white or sepia.

### IMAGE WRITING

Digital image data obtained from scanning negative and positive film can be recorded onto various digital sources such as floppy disks, zip disks, etc.



### INDEX PRINTS

Filing and storage is made easy with photos and digital images available at a glance.



### PRINT TO PRINT

Even without a negative, copies of photos can be printed directly onto silver halide paper.



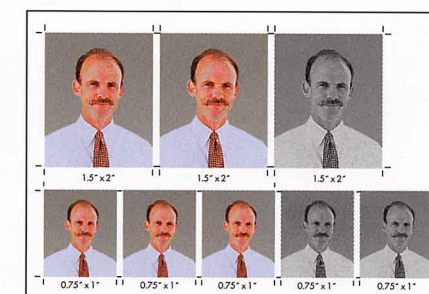
### GREETING CARDS

With the pre-installed design templates, any digital photo can easily be transformed into a digital greeting card, Christmas card, etc.



### PHOTO BUSINESS CARDS

Design individual business cards complete with photos.



### ID PHOTOS

Different sizes of the same ID photo can be printed on one sheet, from a negative, print or image data from a digital camera.

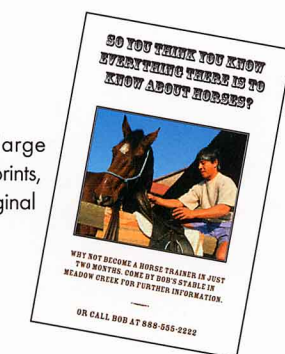


### CALENDAR PRINTS

Easily create calendar prints by combining the pre-installed design templates with your favorite photos.

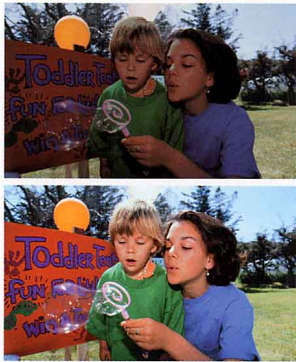
### DIGITAL LETTER PRINTING

Print sizes up to 12" x 18". With large dynamic print sizes and smaller POP prints, print services can include creating original eye catching posters, etc.





## CORRECTION OF BACKLIT SCENES



*When the background of a scene is too bright, the required density is applied to both the front and background subjects, similar to dodging.*

## CORRECTION OF FLASH PHOTOGRAPHY



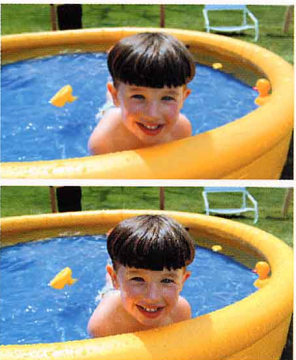
*For flash photography where the front subject is often over illuminated and the background is too dark, the gradation of the entire photo is corrected.*

## CORRECTION OF UNDEREXPOSED AND OVEREXPOSED NEGATIVES



*By correcting the density and contrast, even underexposed and overexposed negatives will come out clear and vivid.*

## SHARPNESS CORRECTION

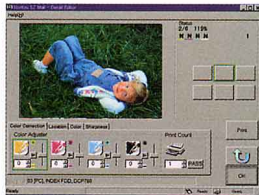


*For images with a dull appearance, sharpness enhancement makes them sharper and clearer.*

# SMOOTH, EFFICIENT, AND RELIABLE OPERATION

## COST EFFECTIVE SILVER HALIDE PAPER

The ability to output 400 dpi digital prints on silver halide paper significantly reduces operating cost and speeds production by eliminating the expense and difficulties associated with specialized paper.



## EASY TO USE GRAPHIC ICONS

Automatically corrected images appear on the 17" monitor as positive image in either 4, 6, 28, or 40 modes. A range of graphic icons, with simple point-and-click commands, are displayed to simplify manipulation operations and reduce the risk of operator error.

## DIGITAL CROPPING

Any portion of an image displayed on the monitor can be cropped without special masks.

## HIGH PERFORMANCE DUAL PAPER MAGAZINES

Dual paper magazines allow for the loading of different paper widths and surfaces, letting you efficiently make different sized prints without the hassle of switching magazines.

## VIRTUALLY NO PAPER LOSS

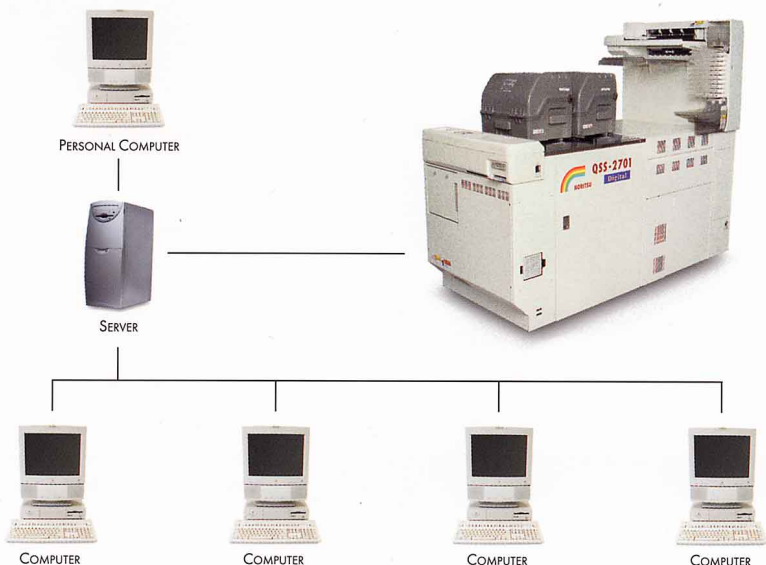
To further improve system economy, the 2701 employs a roller transport and auto loading system that virtually eliminates paper loss during printing.

## NORITSU RELIABILITY

Like all Noritsu machines, the 2701 is built to provide years of efficient and reliable service. And, as the originators of on-site photo processing, we are able to furnish the strongest technical support and service in the industry.

## QSS-2701 | DIGITAL NETWORK SYSTEM

*A server-based network is being developed to allow for maximum utilization of the 2701's capabilities. The network will allow multiple operators to digitally manipulate separate images from different workstations and send them to a centralized minilab for processing.*



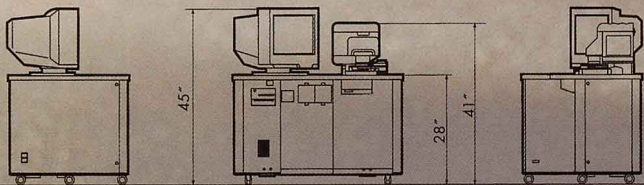
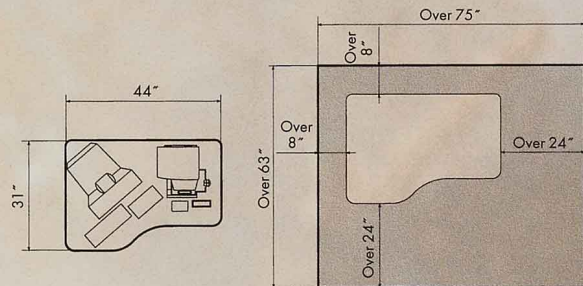


# QSS-2701

## Digital

### FILM SCANNER SPECIFICATIONS

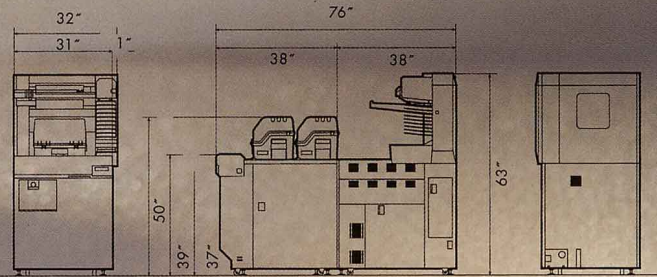
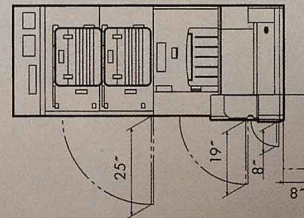
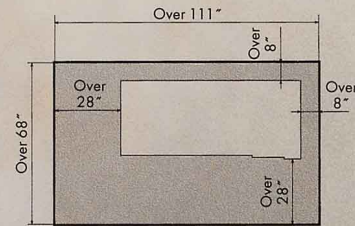
<b>LIGHT SOURCE:</b>	HALOGEN LAMP
<b>COLOR CORRECTION RANGE:</b>	-15 TO +15
<b>DENSITY CORRECTION RANGE:</b>	-15 TO +15
<b>COMPATIBLE FILM:</b>	110, 135, IX240, 120 ; FILM TYPE—NEGATIVE AND POSITIVE
<b>WORK STATION:</b>	SPECIALIZED KEYBOARD ; COMPUTER KEYBOARD AND PC MOUSE
<b>DISPLAY MONITOR:</b>	17 INCH COLOR DISPLAY MONITOR. FINAL PRINT CONDITION DISPLAYED ON MONITOR AS A POSITIVE IMAGE (UP TO 40 FRAMES CAN BE DISPLAYED). DIGITAL MESSAGES DISPLAY OPERATING GUIDE, DATA AND ERRORS.
<b>SPEED:</b>	1080 FRAMES/HOUR AT MAXIMUM RESOLUTION 1900 FRAMES/HOUR AT D&P RESOLUTION
<b>MAXIMUM RESOLUTION:</b>	2000 x 3000 PIXELS
<b>ALIGNMENT:</b>	DIGITAL CENTERING ALIGNMENT OF CCD TO FILM GATE
<b>ILLUMINATION:</b>	SOLID STATE LED LIGHT SOURCE PROVIDES STABLE ILLUMINATION OVER THE PRODUCT LIFE. THE SPECTRAL DISTRIBUTION IS OPTIMIZED FOR COLOR NEGATIVE AND COLOR REVERSAL FILMS
<b>SENSOR:</b>	3072 x 2048 ELEMENT MONOCHROME LOW NOISE FULL FRAME CCD
<b>SCANNING:</b>	DMIN COMPENSATING SPECTRALLY STABLE ILLUMINATION AND LOW NOISE CCD ALLOW FOR UNDEREXPOSED AND OVEREXPOSED NEGATIVES TO BE SCANNED AT HIGH SPEEDS
<b>IMAGING OPTICS:</b>	THREE SEPARATE COLOR EXPOSURES EVENLY ILLUMINATE THE FILM
<b>DIGITIZATION:</b>	THE VIDEO SIGNAL IS CONDITIONED BY A DARK LEVEL TRACKER AND DIGITIZED TO 12 BITS
<b>IMAGE PROCESSING:</b>	THE 12 / BIT COLOR / PIXEL IMAGE UNDERGOES HIGH SPEED IMAGE PROCESSING USING PROPRIETARY COMPENSATION ALGORITHMS TO PRODUCE VIVID IMAGE FILES WHICH CAN BE ARCHIVED, PRINTED OR SHARED WITH NETWORKED DEVICES



**FILM SCANNER**

### FULLY DIGITAL PRINTER-PROCESSOR SPECIFICATIONS

<b>EXPOSURE ENGINE:</b>	12" WIDE LINE TYPE MLVA PRINTER HEAD
<b>PRINT RESOLUTION:</b>	400DPI
<b>LIGHT SOURCE:</b>	HALOGEN LAMP(400W + AUTOMATIC DICHROIC FILTER UNIT)
<b>PRINT SIZES:</b>	3" TO 12" ; 12" (MAXIMUM PAPER WIDTH)
<b>PAPER SUPPLY:</b>	DUAL PAPER MAGAZINES ; MAXIMUM DIAMETER OF PAPER ROLL: 9"
<b>PAPER LENGTH:</b>	590 FT. MAXIMUM PAPER LENGTH
<b>WORKSTATION:</b>	44" (L) x 31" (W) x 45" (H)
<b>DIGITAL PRINTER PROCESSOR:</b>	76" (L) x 32" (W) x 63" (H)
<b>POWER REQUIREMENTS:</b>	AC 220V, 1Ø2W, 60Hz
<b>ESTIMATED PROCESSING CAPACITY:</b>	FULLY AUTOMATIC PRINTING
	5" x 3.5" 1,250 PRINTS/HR
	3.5" x 5" 1,000 PRINTS/HR
	6" x 4" 1,200 PRINTS/HR
	4" x 6" 860 PRINTS/HR



**FULLY DIGITAL PRINTER-PROCESSOR**

UNIT: IN. / Modifications can result in changes to specifications, design and size.

Specifications subject to change without notice.  
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