

# QSS-2711 DLS

## DIGITAL LAB SYSTEM



**NORITSU**

# INTRODUCING THE QSS-2711 DLS

DIGITAL IMAGING SOFTWARE FROM KODAK. DIGITAL PRINT PROCESSING FROM NORITSU.

## PLUG AND PLAY

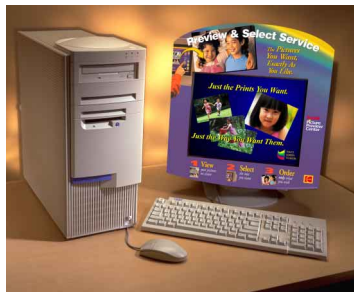
WITH THE LATEST INNOVATIONS FROM KODAK

A small platform and modular design make the Noritsu QSS-2711 Digital Lab System (DLS) a perfect platform from which to expand your business. By integrating products and services like the KODAK Picture Maker, KODAK Picture Preview Center, or KODAK PhotoNet™ Online, you'll generate more business from new and current customers, and help to increase your reprint and enlargement business. And, you will achieve significant product differentiation.



**KODAK Picture Maker**—creates photo-quality prints and enlargements from prints in minutes without a negative.

Works With



**KODAK Picture Preview Center**—lets customers preview their pictures on screen, so they can create an order with exactly the prints that they want.

Works With

**Kodak PhotoNet**  
online



**KODAK PhotoNet™ Online**—lets you upload your customer's roll to a password protected website for consumer sharing, storage or re-order.

Kodak DLS software sets the standard for digital imaging solutions by providing new ways to enhance, output, distribute, display, store, and access photographic images—no matter how the pictures were captured. Now it's easier than ever to give your customers exactly what they want. From print order quantities to sizing to image composition and enhancement, your customers will have a second chance to enjoy their once in a lifetime memories.

## PERFORMANCE

At the heart of the QSS-2711 DLS is a high resolution, high speed 16 base (2K x 3K) film scanner that uses proprietary Kodak scanning technology to read and automatically correct images from most popular film types. Scanned images are displayed on the system's Image Processing Workstation where advanced software capabilities allow for a wide range of image improvements, such as tone-scale correction for enhanced detail in shadows and highlights, improved sharpness, correction for prints up to three stops underexposed, red-eye

removal, and corrections for severe high contrast and backlighting conditions.

## FLEXIBILITY

The easy-to-use Noritsu DLS can input and manipulate images from virtually any source, including digital cameras, floppy disks, Zip™ disks, M.O. disks, and CDs. And it is designed to meet the changing needs of retail photofinishing. The system's open, modular design allows you to add future input and output technologies and peripherals. Simply start with the services and capabilities that best meet your

current needs and add software or peripherals as your digital imaging business grows.

## EFFICIENCY

Designed for maximum efficiency, the DLS permits concurrent workflow to increase the throughput of routine D&P orders, as well as digital output. And user-friendly operation allows operators with minimal training to effectively run the system, resulting in fewer makeovers and improved workflow management.

### IMAGE SOURCES

### INPUT/ IMAGE PROCESSING

### PRINTER

### DIGITAL PRINTS



135 Negative Film



135 Positive Film



120 Negative Film



135 Mounted Positive Film



120 Positive Film



IX240 Film



Prints

### QSS-2711 DLS



### KODAK DLS SOFTWARE

The capabilities of KODAK DLS Software maximizes the QSS-2711's digital processing performance by allowing for a wide range of image improvements, such as tone-scale correction for enhanced detail in shadows and highlights, improved sharpness, correction for prints up to three stops underexposed, red-eye removal, and corrections for severe high contrast and backlighting conditions.

### QSS-2711 DLS WORKFLOW DIFFERENCE

Kodak's *scan once* philosophy permits a dealer to produce a variety of outputs either digital or multi-size printing without re-scanning the film. This feature in combination with Kodak's DLS Store-It System allows a dealer to capture more downstream business even without the negatives in hand.

Kodak's *job management* system allows photo imaging labs to easily prioritize their workstream to meet demanding deadlines while simultaneously permitting uninterrupted workflow for their operation. High priority jobs are serviced over next day jobs easily and conveniently. This also provides the ability to handle complex orders, those requiring printing, resizing, or digital output without stopping or significantly impacting your primary D&P printing.



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

### KODAK DLS Store-It System

The optional Kodak DLS Store-It System lets you retain the scans of your D&P orders for several weeks in high resolution format to help spark incremental sales.



Digital Still Camera Cards



Personal Computer

### 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, sepia, or high color.

### IMAGE WRITING

Digital image data obtained from scanning negative and positive film can be recorded onto various digital sources such as Kodak Picture CD, Kodak PhotoNet uploads, and generic CD-Rs.



### 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.



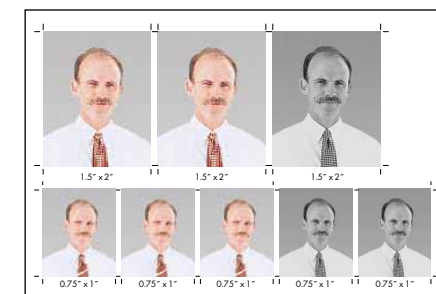
### GREETING CARDS

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. (optional)



### ID PHOTOS

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



### CALENDAR PRINTS

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



### NOTE-ABLE PRINTS

A pre-dated white strip at the bottom of the print where consumers can write notes and important information.



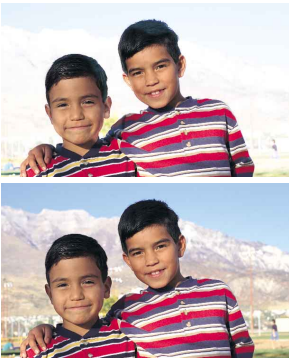
### FRIENDSHIP PRINTS

A full size (3R or 4R) print to keep and two wallet-size prints to share — all on a single sheet.

### PERSONALIZED PROMOTION PRINTS

An exciting promotional advance that shows customers how great their pictures can look in new formats.

**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.*

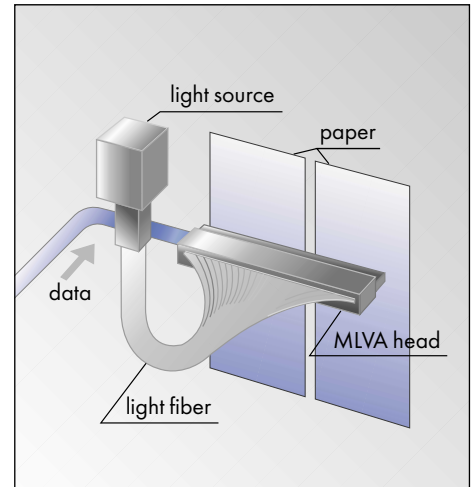
**SHARPNESS ENHANCEMENT**



*Provides added sharpness or softness depending on user preference.*

**THE HIGH PERFORMANCE QSS-2711DLS MINILAB GENERATES VIVID PRINTS ON SILVER HALIDE PAPER:**

- New Micro Light Valve Array (MLVA) print engine creates 400 dpi resolution digital prints on standard silver halide paper, which saves time and money by eliminating the expense and difficulties associated with specialized paper.
- Automatic printing of up to 1,250 5" x 3.5" prints per hour.
- Intermixed 135 full/panoramic and IX240 classic/high definition/panoramic film printed in a single pass.
- Additional photo services include enlargements to 12" x 18", and specialty prints like greeting cards, note-able and friendship prints, and index prints.
- MLVA accommodates two-lane processing for maximum productivity.
- Dual paper magazines permit the loading of different paper widths and surfaces to improve efficiency.
- Roller transport and auto loading system virtually eliminates paper loss during printing.

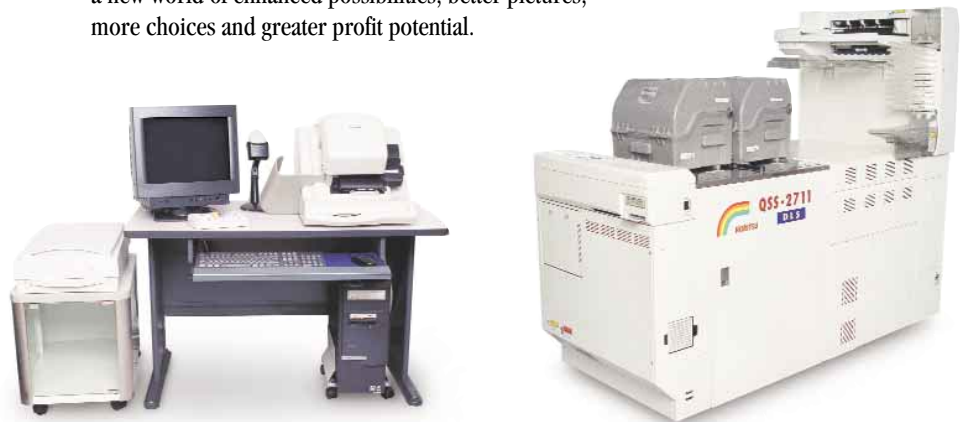


*The Micro Light Valve Array print engine—developed by Noritsu—advances digital printing to a new level by providing 400 dpi resolution on silver halide paper.*

**AFTER SALES MARKETING SUPPORT**

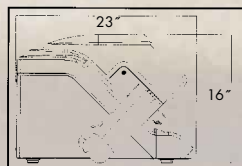
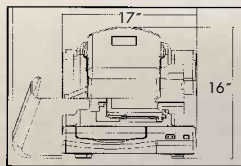
By purchasing the Noritsu QSS-2711 DLS, not only do you get reliability and productivity, but you get superior support with a wide variety of Kodak in-store marketing support materials and dynamic merchandising aides that quickly and effectively communicate the features, benefits and unique advantages of the output products generated by the QSS-2711 DLS.

The Noritsu QSS-2711 combined with Kodak DLS software opens up a new world of enhanced possibilities, better pictures, more choices and greater profit potential.



## WORKSTATION SPECIFICATIONS

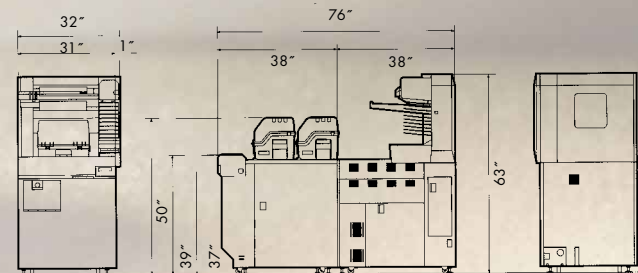
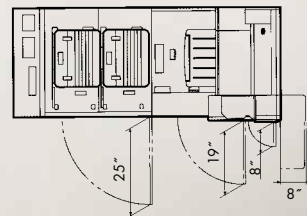
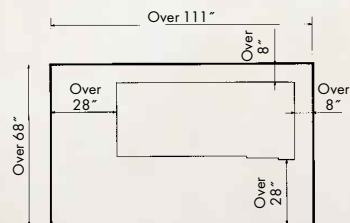
SCANNER:	DAYLIGHT, TABLE-TOP FILM SCANNER
IMAGE PROCESSOR:	FLOOR-MOUNTED TOWER CASE WORKSTATION WITH 17" MONITOR, STANDARD 104 KEYBOARD, 27 KEY CUSTOM KEYBOARD, AND BARCODE DETECTOR
SCAN FILM FORMATS SUPPORTED:	135 COLOR NEGATIVE FILM, IX240 COLOR NEGATIVE FILM, 135 REVERSAL FILM (MANUAL GATE) (120/220, 110, B&W FILM FUTURE AVAILABILITY)
SCAN RESOLUTION:	2,048 x 3,072 PIXEL CGD, 3 COLOR SEQUENTIAL
CAPACITY:	1,080 IMAGES/HOUR AT 2,000 x 3,000 PIXELS; (16 BASE) 1,900 IMAGES/HOUR AT 1,000 x 1,500 PIXELS; (4 BASE)
NETWORK CONNECTION:	10/100 MBit LAN ETHERNET CONNECTION TO POWER STATION AND PICTURE MAKER; WAN CONNECTION FOR PHOTO.NET AND REMOTE SERVICE SUPPORT
SCAN LENS:	37.8 MM 6 ELEMENT, F ∞/4.9 FOR NEGATIVES; AND F ∞/6.6 FOR CHROMES
SCAN LIGHT SOURCE:	LED ILLUMINATION
IMAGE PROCESSING:	AUTOMATIC OR PRE-JUDGE OPERATION; BOTH OPERATIONS INCLUDE AUTOMATIC GAMMA ADJUSTMENTS TO SCENES WITH MORE THAN ONE STOP UNDEREXPOSURE RE-MAPPING OF TONE SCALE FOR MAXIMUM VISIBILITY OF DYNAMIC RANGE, SINGLE CHANNEL SCENE BALANCE CORRECTION (INCLUDING ADVANCED PHOTO SYSTEM PQI)
CUSTOMIZABLE:	SUPPORTS GLOBAL LAB PREFERENCE FOR COLOR, DENSITY, AND TONE SCALE, AND SUPPORTS PER FILM TYPE PREFERENCE SETTINGS
IMAGE EDITING:	COLOR AND DENSITY, ZOOM AND CROP, ENLARGEMENTS UP TO 50X, RED-EYE REMOVAL, DEFECT REMOVAL, ORIENTATION, FLASH AND BACKLIT CORRECTION
IMAGE FORMATTING:	INDEX PRINTS (CUSTOMIZABLE TEMPLATES AVAILABLE), FRIENDSHIP PRINTS, NOTE-ABLE PRINTS; PACKAGE PRINTS
OPERATING SYSTEM:	WINDOWS NT 4.0 SOFTWARE
INTERFACE:	1.44 MB FLOPPY, CD-ROM DRIVE, ETHERNET LAN
ARCHIVE:	(OPTIONAL) ULTRA-SCSI BASED ARCHIVE CAN STORE UP TO APPROX. 1,000 ORDERS. (24 EXP. @ 2,000 x 3,000 PIXELS)
USER INTERFACE:	CUSTOM KEYBOARD TO OPTIMIZE BASIC OPERATION, INCLUDES QWERTY KEYBOARD AND NUMERIC KEYPAD; 3 BUTTON MOUSE, BARCODE READER
DISPLAY:	17" ADJUSTABLE, 24-BIT COLOR MONITOR (1,280 x 1,024 PIXELS, FULL COLOR)
FILM CARRIER:	AUTOMATIC CARRIERS FOR 135 AND APS NEGATIVES, MANUAL GATE FOR MOUNTED SLIDES AND 135 ONE—OR TWO—FRAMESTRIPS
POWER REQUIREMENTS:	100-120V
DIMENSIONS:	SCANNER: 23" (L) x 23" (W) x 16" (H)
IMAGE PROCESSOR CPU:	21" (L) x 15" (W) x 23" (H)
MONITOR:	19" (L) x 18" (W) x 18" (H)
STORE-IT SYSTEM:	21" (L) x 15" (W) x 23" (H)
WEIGHT:	APPROX. 88.2 LBS.
SCANNER WEIGHT:	37 LBS.
SCANNER POWER:	35 WATTS
INSTALLATION SPACE:	7.32 FT <sup>2</sup>



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

## FULLY DIGITAL PRINTER-PROCESSOR SPECIFICATIONS

EXPOSURE ENGINE:	12" WIDE LINE TYPE MLVA PRINTER HEAD
PRINT RESOLUTION:	400DPI
LIGHT SOURCE:	HALOGEN LAMP (400W + AUTOMATIC DICHOIC FILTER UNIT)
PRINT SIZES:	3" TO 12" ; 12" (MAXIMUM PAPER WIDTH)
PAPER SUPPLY:	DUAL PAPER MAGAZINES ; MAXIMUM DIAMETER OF PAPER ROLL: 9"
PAPER LENGTH:	590 FT. MAXIMUM PAPER LENGTH
POWER REQUIREMENTS:	AC 220V, 102W, 60HZ
DIGITAL PRINTER PROCESSOR:	76" (L) x 32" (W) x 63" (H)
ESTIMATED PROCESSING CAPACITY:	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



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