

# LU-2828V-7 Semi-dry Direct-drive, 1-needle, Unison-feed, Lockstitch Sewing System with automatic thread trimmer (Vertical-axis 2.7 fold-capacity hook / Shorter - thread remaining type)

# **Commitment to sewing Next-generation sewing system**



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 $\ast$  Specifications and appearance are subject to change without prior notice for improvement. \* Read the instruction manual before putting the machine into service to ensure safety.
\* This catalogue prints with environment-friendly soyink on recycle paper.





JUKI ECO PRODUCTS



LU-2828V-7

# Management of sewing performance and sewing machine with JUKI's next-generation sewing system.

Machine is mounted with inbuilt NFC (Near Field Communication) and communication devices capable of a 2-way data transmission.



# Various digitalized functions

Management of sewing performance and sewing machine by the utilization of IoT (Internet of Things)

### Management, browsing and editing of data can be carried out on the application software

Data on sewing machine adjustments made according to the product to be sewn can be transferred to a commercially-available Android tablet in contactless mode. This enables quick check for uniform settings as well as confirmation of conditions of sewing machines in a sewing line, thereby facilitating setup changes. The operation panel is also provided as standard with a USB port. Data management and software update can be carried out with ease using a USB thumb drive.

Data items of sewing can be numerically managed to ensure "stab le quality" and reduction in time required for setup changes. Quantified sewing data can be externally taken from the sewing machine using anAndroid tablet or USB thumb drive.

\*Android OS Version 6.0 is recommended to use JUKI Smart APP. (Operation is confirmed with respect to Versions 5.0 and later.) Contact JUKI distributor in your area for how to use the application software.

The sewing machine can be paired with equipment which supports NFC (Near Field Communication only by holding the equipment over the sewing machine

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New

### Adjustment of sewing condition is displayed on one screen

Sewing conditions can be set easy since sewing conditions such as thread tension, stitch length, presser foot pressure, alternate vertical movement amount, etc. are displayed on one screen.

## Adoption of the needle-thread active tension

### Needle tension is digitally controlled

Needle thread tension which matches sewing conditions given can be set on the operation panel and stored in memory. The needle thread tension adjustment needs experience. However, for this sewing machine, thread tension data stored in memory is reproducible, thereby reducing the setup time when the product to be sewn is changed.

Example : Needle-thread active tension demonstrates its effectiveness in the topstitching process.

## Active presser foot pressure mechanism

#### The presser foot pressure is digitally controlled

Digital control system controls the presser foot pressure. Under the automatic mode, the multi-layered section detection function detects changes in material thickness to increase/decrease the presser foot pressure accordingly. Under the manual mode, the presser foot pressure control function is assigned to the hand switch to enable operation with the hand switch.

# Shorter - thread remaining type

The shorter-thread remaining type LU-2828V-7 is a high-performance sewing machine. It leaves a shorter thread on the material at the beginning of sewing by means of the needle thread clamp device, as well as at the end of sewing by means of the thread trimmer which is provided with a shorter-thread remaining function. This means that manual thread nipping both at the beginning and at the end of sewing is no longer required, thereby helping reduce operator fatigue. Thanks to the adoption of a 2.7-fold hook, the frequency of bobbin thread changing is reduced and workability is improved.

#### Beautiful finished seams

#### Needle thread clamping device

This device pulls the needle thread into the wrong side of the material at the beginning of sewing, thereby ensuring more beautifully-finished seams.



#### The shorter-thread trimming mechanism (needle thread roll-in and shorter-thread remaining type)

The thread trimming mechanism has been completely renewed. The industry's shortest remaining thread length achieved by trimming the thread close to the fixed knife at the last stitch (condensed stitch).

(The length of remaining needle thread is 5mm)

# **Energy-saving effect**

Automatic OFF function of the operation-panel backlight

The operation-panel light can be turned OFF after a lapse of the preset time.

#### Sleep mode (Automatic power-OFF function)

If no operation is carried out for a predetermined period of time, the power supplies to the motor, etc. can be automatically turned OFF.

\*These options can be set up on the operation pane









### Multi-functional 6-string switch

#### Sewing conditions can be changed to the best-suited ones only with the one-touch changeover switch.

The sewing data (stitch length, needle thread tension, amount of alternate vertical movement, presser foot pressure and sewing speed) can be changed easily with the one-touch changeover switch to obtain the ones that have been elaborated according to sewing conditions. The sewing data (stitch length, needle thread tension, amount of alternate vertical movement, presser foot pressure and sewing speed) can be changed easily with the one-touch changeover switch to obtain the ones that have been elaborated according to sewing conditions. Four different one-touch functions can be assigned to six-gang hand switches (1) to (6), touch-back switch and jog dial, at the maximum. (\*For the initial settings, the one-touch functions are assigned to 6-gang switches 1 to 3.)

#### Improvement of operability by means of the jog dial

The operator is able to turn the main shaft (for moving the needle bar up and down) only with the jog dial without stretching his/her arm to the handwheel.

When the jog dial is pushed, it can be used as 1/2 needle-stitch correction switch (one touch function).



1) to 3: One-touch changeover function (4): Automatic reverse feed stitching changeover switch 5: Needle-entry alignment switch 6: Thread clamp switch



### Best-suited stitches are produced at multi-layered parts of material.

#### Multi-layered part detection function

Multi-layered parts of material which occur in the case two or more plies of material are sewn or different kinds of material are sewn can be detected by the multi-layered part detection function to change over the stitch length, thread tension, presser foot presser and amount of alternate vertical movement to those that have been predetermined for sewing those parts of material.

#### Setting of thresholds for the multi-layered part detection

Under the teaching mode for the multi-layered part changeover ON sensor value, the material thickness at the normal part and that at the multi-layered part of material can be measured with ease. The automatically-measured thresholds can be set as those for the multi-layered part detection.

### Other continuous sewing conditions

For settings corresponding to continuous sewing conditions (polygonal shape stitching function), more beautifully finished seams are produced by using various functions (custom-pitch setting function, reverse-feed stitching function).

#### Example) Sewing conditions in the case of using the polygonal-shape stitching function

In the case of sewing materials 1 and 2 that differ in thickness to the base material (material thickness), the sewing conditions can be easily changed over to the best-suited ones on a step-by-step basis.

(The number of stitches, one-touch changeover and multi-layered part detection are used as the step-by-step changeover triggers.)



#### Standard equipment

#### LED Light

The LED light can adjust the light intensity to 5 levels, and Off setting is also possible.

The operator can set the brightness which is easy to work, improving work efficiency.

### Bobbin thread spool device

Bobbin thread spool device is no neccessity of rolling thread manually.

#### Maintenance work carried out safely (Standby switch)

When the standby switch is pressed, the sewing machine does not start unexpectedly even if the pedal is depressed. When the standby switch is pressed, operations through the operation panel, and with the machine 6-string switch and jog dial are also disabled, thereby allowing sewing-machine maintenance work such as threading, needle replacement, gauge replacement to be carried out safely.

(In this case, the pulley can be turned by hand.)

#### High-torgue direct-drive motor is installed

The direct-drive motor system has been adopted by all of the sewing system with a thread trimmer. As a result, the sewing machine starts up swiftly and promises increased stop accuracy, thereby demonstrating improved responsiveness.











In stundby mode



LU-2828V-7 is an eco-friendly product which complies with JUKI ECO PRODUCTS standards for protecting the environment.

• The sewing machine complies with the "Juki Group Green Procurement Guidelines" on the use of hazardous substances,

\*The RoHS Directive is an EU Directive limiting the use of 6 hazardous substances (lead, hexavalent chromium, mercury, cadmium, PBB and PBDE) in electrical and electronic equipment. The Juki Green Procurement Guideline is the voluntarily established criteria to eliminate not only the aforementioned six substances, but also other ones which also adversely affect the envirc

#### **Cover Sensor Unit**

The cover sensor unit detecting (1,2) and (3) (shown below) are closed tightly during sewing, thereby preventing the sewing machine from starting up unexpectedly. ((1,2) and (3) can be used discretely.)



① Eye guard with an open/close sensor



The eye guard prevents a broken needle from flying off. If the eye guard is open, the sewing machine cannot be started. As a result, the sewing machine will not start up unexpectedly even if the operator forgets to turn the power off. 2 Bed slide with an open/close sensor



The sewing machine will not start if the throat plate is open. This prevents the material from being caught in the hook during sewing. ③ Handwheel cover with an open/close sensor



In a situation where the power is on, the handwheel cover with the open/close sensor prevents the sewing machine from starting suddenly. In addition, the cover prevents thread and material from being caught in the handwheel during sewing.

#### **Skip Stitch Detector**

Stitch skipping is detected during sewing. This helps lighten the operator's inspection work load and also prevents defective products from being shipped. In the case where a skipped stitch is detected, the buzzer sounds up and the sewing machine stops. With this function, the operator is allowed to concentrate on sewing work without worryring about skipped stitching.

#### **Bobbin Thread Remaining Detector**

The buzzer sounds up when the amount of thread remaining on the bobbin reaches a predetermined length. It is also possible to stop the sewing machine at this point. With this function, the operator is allowed to concentrate on sewing work without caring about the amount of thread remaining on the bobbin. remaining on the bobbin reaches a predetermined length. It is also possible to stop the sewing machine at this point. With this function, the operator is allowed to concentrate on allowed to concentrate on sewing work without caring about the amount of thread remaining on the bobbin.

#### **SPECIFICATIONS**

Model name	LU-2828V-7
Туре	1-needle, Unison-feed, Lockstitch Sewing System (Shorter - thread remaining type)
Max. sewing speed	3,500sti/min
Max. stitch length	9.0mm
Presser foot	20mm
Alternating vertical movement(DL)	1~9.0mm
Needle thread tension	0~200
Presser foot pressure	0~200
Hook	Vertical axis 2.7 fold-capacity hook
Needle	134×35 Nm140 (#22), Nm125~180 (#20~#24)
Thread	60/3 ~ 20/3 (#30~#5)
Machine head weight	66Kg

\* "sti/min" stands for "Stitches per Minute."

#### WHEN YOU PLACE ORDERS

#### Machine head



Control box

SC952A		
Power supply	Code	
Single-phase 100~120V	S	
3-phase 200~240V	D	
Single-phase 200~240V (for general export)	к	
Single-phase 200~240V (for ce)	N	
Single-phase 200~240V (for china)	U	