

# INDUSTRIAL SEWING MACHINES PLK-J (General Catalog)

*Next-generation Sewing* 



# Everything to improve usability

Stable and neat stitches

Beautiful design stitching

## Automotive

From quality control to quality assurance





Beautiful corner stitches

Neat stitches from the beginning

Consistent stitching

## Bags & Shoes



Strong yet attractive

## Safety Belt

Strong penetrating force pierces even stiff fabrics

# Improve finished stitches!

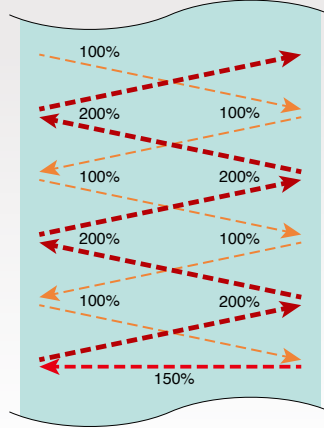
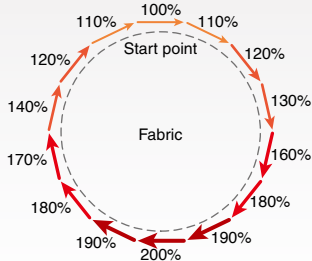
## Optimizes thread tightness in all stitching directions

## Digital tension

beautiful stitching finish



### Tension when stitching curved lines



- Digital tension function  
The sewing machine selects the optimum tension according to the stitching pattern. They reduce variation in tightness according to the stitching direction and improve quality. **This function is ideal for difficult circle stitching and stitching in the hitch direction.**
- Digital reproduction of the aesthetic sense of skilled workers  
The basic adjustments are the same as conventional machine, so there is no need to learn new operation methods. Conventional knob settings may be kept as they are, while stitching using the digital function.
- When sewing safety belts, the fabric becomes harder as the stitching progresses. By gradually increasing the tension, stable stitches can be realized with each stitch.

## Realizes stable thread interlocking from the first stitch

## Prevention of skipped stitches at startup (e-stitch)

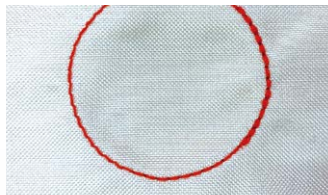
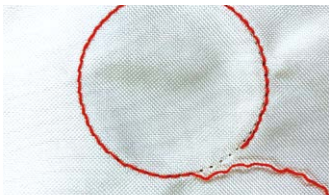
beautiful stitching finish



Stitches not interlocked



Stitches interlocked

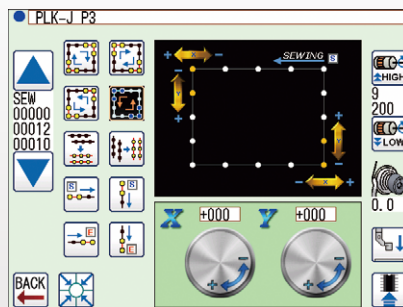
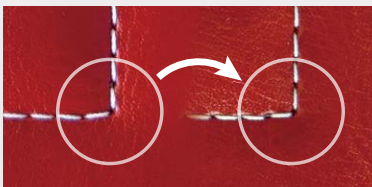


- Stitches are smoothly interlocked from the start of stitching. "Stitch interlock faults" are resolved by minimizing the flapping of fabric at the start of stitching. **"Stitch entanglement," which occurs on the back of the fabric at the start of stitching, is minimized.**
- Inevitable stay stitching can be minimized. Stay stitches can be minimized by using the presser foot to firmly press down on thin fabrics that are difficult to interlock. **This function is useful for stitching on materials that are difficult to stay stitch, while maintaining stitching quality. Enhance decorative stitching with a beautiful finish that does not require stay stitches.**

## Ensures neat corners by anyone

## Stitch compensation (FF-stitch)

beautiful stitching finish



- Shorten the adjustment time for stitching corners, start of stitching and end of stitching. Times can be finely adjusted easily in the operation panel, so anyone can perform intuitive adjustments. **The settings can be easily and finely adjusted according to the corners and number of stitches for each sewing product. The needle drop position (back or forth) can be easily adjusted.**
- Even if a problem occurs at the corner during high-speed stitching, it can be easily adjusted. **Productivity is improved as there is no need to drop the speed to create a neat corner.**

\* Supported by PLK-J2516-YU/J2516R-YU only

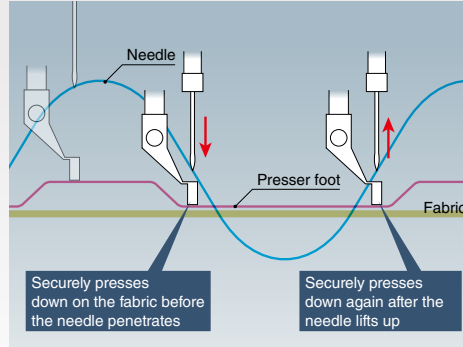
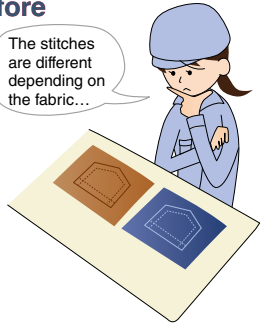
## Realizes beautiful stitches using diverse adjustment functions

## Independent presser foot

beautiful stitching finish

### Before

The stitches are different depending on the fabric...



- A presser foot optimally presses down on all fabrics, from thin to thick. The presser foot, which directly affects the stitching state, allows free motion, so beautiful and stable stitches can be achieved. Stitching tension can be smoothly adjusted in the operational panel.
- The fabric pressing time and timing can be adjusted digitally. The fabric is pressed at an optimum timing and reduces the flapping. This contributes to stable needle location and reduced stitch skipping.

## Supports larger stitching areas

## Extra-thick stitching of larger areas

beautiful stitching finish

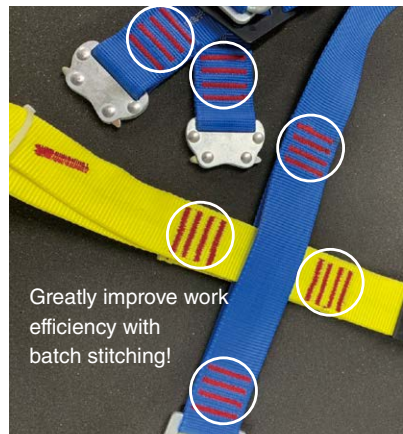
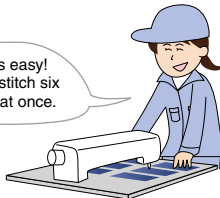
### Before

It's a pain to change the settings for each part.



### After

This is easy! I can stitch six parts at once.



- With an increased stitching area, you can perform multiple steps for full harnesses and lashing belts in one stitching session. Speed is been increased by 1.5-times compared to conventional extra-thick stitching. The increased stitching area and increased speed will greatly shorten cycle times.

\* Supported by PLK-J4040RH/J10050RH only

## Automatically adjusts presser foot height

## Featuring an MT tracer

beautiful stitching finish

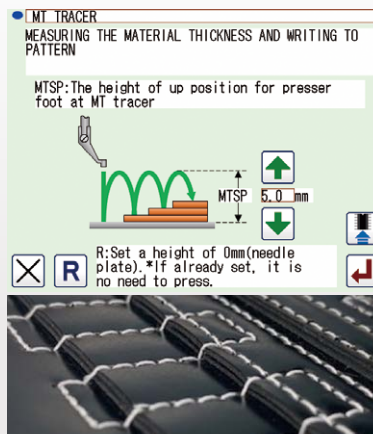
### Before

Fabric thickness adjustments are complicated...



### After

Automatic thickness measurements make work easier!



- The presser foot adjusts its height after automatically measuring the overall fabric thickness along the stitching pattern. Although it was necessary in the past for workers to manually adjust the presser foot height of each location where fabric thickness changes occurred, use of this function enables the time and effort necessary for such process to be drastically reduced.

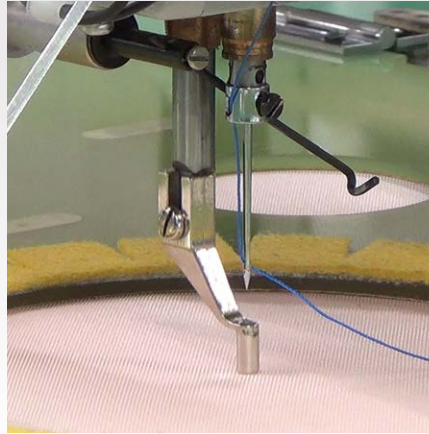
- This function is useful for sewing materials with numerous locations of varying thickness.

\* This function does not guarantee that the optimal presser foot height for the fabric being sewn will be achieved. After measurements are performed, fine adjustments may be necessary in some cases.



# Helps to discover defective items!

## Automatically discovers setting errors



## Thickness detection

Helps to discover defective items!

- The sewing machine checks the thickness of the fabric and detects setting errors before beginning sewing. The presser foot moves along the stitching pattern and confirms the thickness, so valuable fabric is not wasted.
- Even materials 0.01mm thin can be detected. The sewing machine double-checks all conventional settings that are made manually.

## Detects stitching errors\*

## Comes standard with thread break detection and skip stitch detection

Helps to discover defective items!



### Stitch error detection

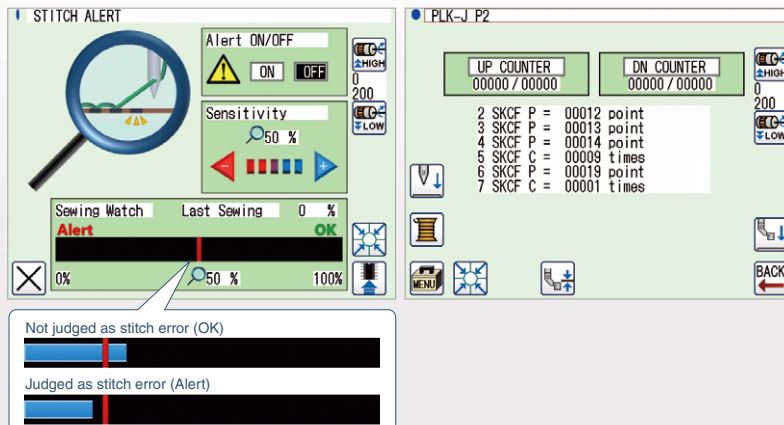
In addition to visual detection by the operator, stitch errors (skipped stitches, thread breaks) are detected by the machine to help discover defective items.

The machine can also detect at which stitch the error occurred. This information can be used to analyze the sections of fabric or pattern where stitch skipping tends to occur.

- \* Supported by PLK-J2516-YU/J2516R-YU with options
- \* Excludes PLK-J4040RH/J10050RH

## Stitch alerts

Helps to discover defective items!



- Stitch errors are discovered beforehand. The stitch errors (skipped stitches, thread breaks) that occur during stitching are detected by sensing the tension applied on the hook. This function stops the sewing machine so rejects can be found at an early stage.

- \* Supported by PLK-J4040RH/J10050RH only
- \* This function does not warranty all abnormal stitch detections. Depending on the sewing conditions, there may be undetected or false detection.

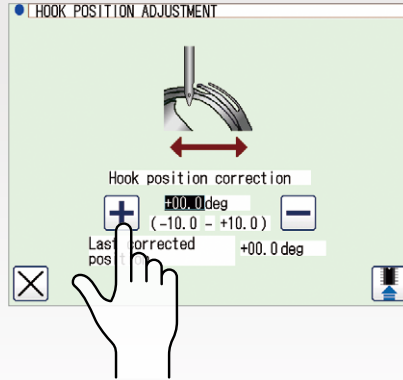
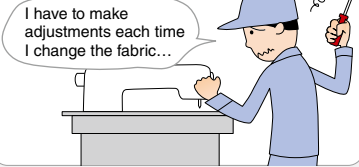
# Simplify maintenance!

## Enables digital adjustment

## Digital adjustment of hook, presser foot, and thread trimmer (up/down separate drive)



### Before



- Shorter adjustment time. Operation panel settings greatly reduce the “time spent on making fine adjustments with a tool!”
  - The machine adjustment section is quantified to simplify adjustments. The quantified settings make it possible to reproduce machine adjustment sections that were previously not possible.
  - The finely honed sense of skilled workers can be digitally reproduced as necessary. Sections that required the finely honed sense of a skilled worker can now be adjusted simply by setting values in the operation panel.
- \* With the PLK-J2516-YU/J2516R-YU, only the presser foot can be digitally adjusted.



### Open/close window for bobbin exchange

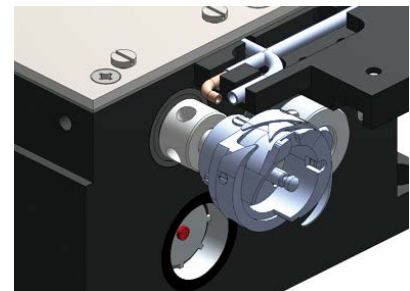
Unlike conventional large models which required the operator to get under the sliding plate to replace the bobbin, the J Series models all have an open/close window on the sliding plate so that the bobbin can be easily exchanged. This greatly reduces the operator's work.

\* Excludes PLK-J2516-YU/J2516R-YU



### Glass epoxy sliding plate

The glass epoxy sliding plate is not contaminated as easily as the conventional stainless steel plate, and helps to prevent rust.

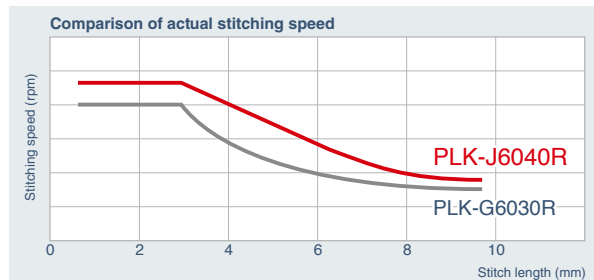


### Spray-type digital oiling

This function reduces the fatigue for adjusting oiling amount.

## Ensures quality and energy savings

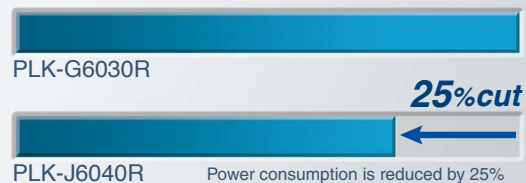
### Faster and more attractive



Stitching speed is maximized under various conditions even when the fabric thickness changes. It is increased by up to 30% compared to the stitching speed of conventional sewing machines.

### Outstanding energy-saving effect

<Both increased productivity and energy savings are realized>



Power consumption is reduced by 25% compared to the conventional model even with the faster speed and larger stitching area.

\* Enforce with conditions designated by Mitsubishi Electric

The new arm bed structure and new XY feed control realize low vibration and low sound, and thereby realize energy savings. Power consumption is greatly reduced compared to the conventional machine even with the faster stitching speed and larger stitching area.

# Traceability model which supports quality

## PLK-3020R-SE The take-up lever is independently driven which is an industry first! \*as of July 2021

In addition to acquiring sewing information, pressure on take-up lever and changes of material thickness during sewing operation can be collected and accumulated. This machine come standard with traceability functions. With the help of independently driven take-up lever, we will offer better sewing quality compared to our previous models (PLK-G series).

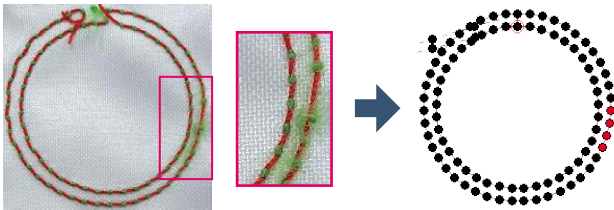


### Traceability

#### Monitoring the pressure on take-up lever during the sewing operation

By detecting the pressure on take-up lever during the operation, every stitching condition can be monitored. It will help discover defective items such as skip stitches and fiber stitches.

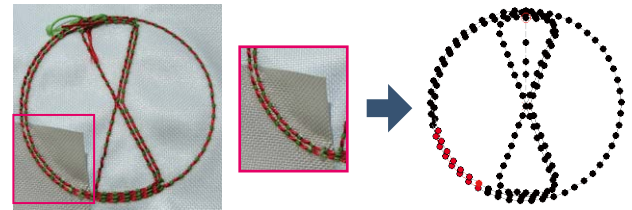
(Example) When fiber stitches occurred



#### Monitoring the changes of material thickness during the sewing operation

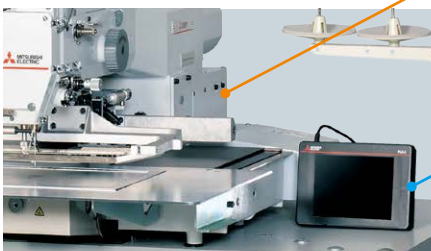
In addition to detecting material placement mistake, the machine can monitor the changes of material thickness during operation. When the changes occur, it helps discover additional or misplaced fabric.

(Example) When fabric was folded by mistake

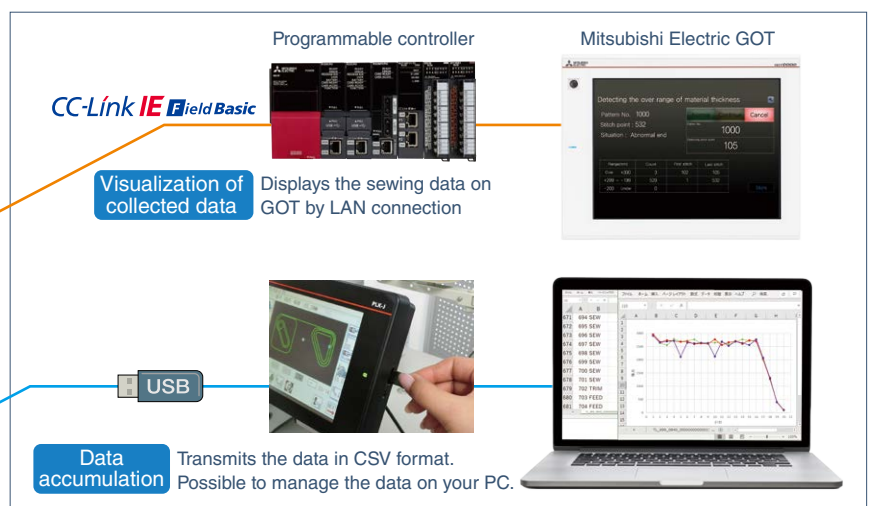


#### Save the sewing results

The data of take-up lever pressure and materials thickness can be accumulated into the sewing machine. It allows to utilize the data for quality control as well as for reliable data source to your clients. It is compatible with Mitsubishi Electric FA products which makes it possible to display data in a real time.



Data can be collected through USB or CC-Link





# assurance



## Improvement of sewing quality

### Reduces skip stitches at start of sewing

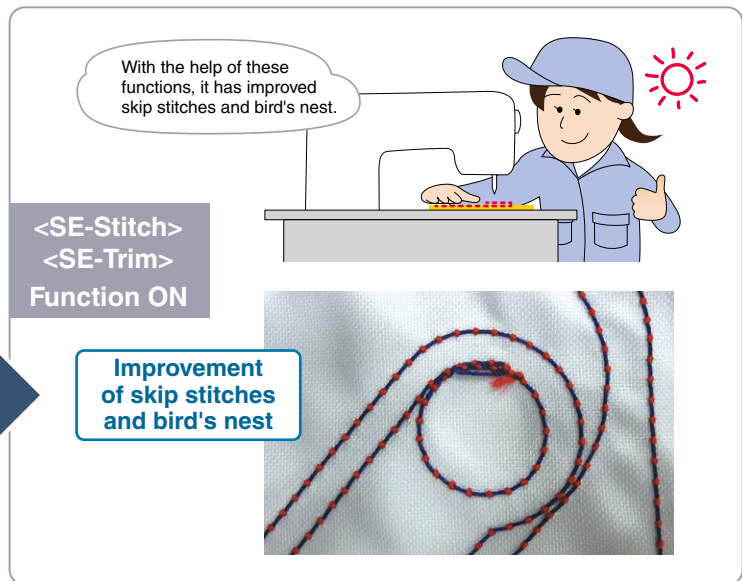
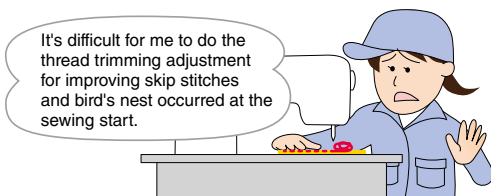
#### <SE-Stitch>

Even the remaining thread is short, it reduces skip stitches which may occur at the start of sewing cycle.

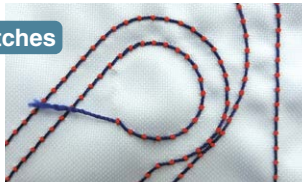
### Improves appearance (bird's nest) at start of sewing

#### <SE-Trim>

The remaining thread tail when trimming is adjustable to a certain length. It greatly reduces the case of bird's nest by adjusting the amount of thread tail on the back of the fabric.



Skip stitches



Bird's nest



<SE-Stitch>  
<SE-Trim>  
Function ON

Improvement  
of skip stitches  
and bird's nest



Product information  
is available on video.



# Software that enhances J Series usability

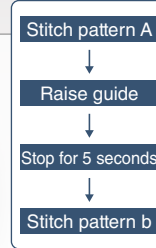
## PTN-JX

Creation and correction of stitching patterns

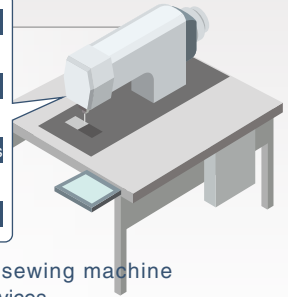
Allows stitching patterns to be created on a personal computer screen.

## PLKJ-STEP

Creation and editing of simple sequences



Programs the sewing machine and external devices.



## PLKJ-SET

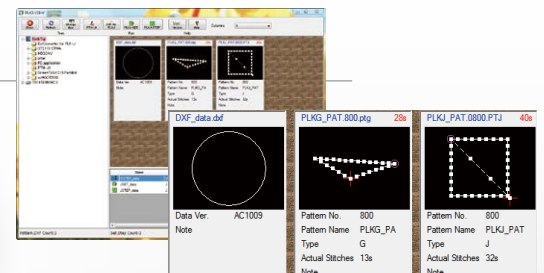
Editing of settings



Settings made in the sewing machine's operation panel can be easily edited from a personal computer.

## PLKJ-VIEW

Data management



Displays sewing machine data as a tree or thumbnail for easy management.

## DXF Converter

Conversion and editing of CAD data

Allows easy correction of stitching patterns.

Paid version PTN-JX



Free version



Free versions can be downloaded from the following URL.  
[http://www.mtco-web.co.jp/english/sewing\\_machine/download/software.html](http://www.mtco-web.co.jp/english/sewing_machine/download/software.html)

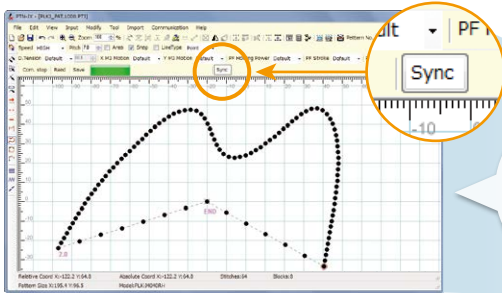
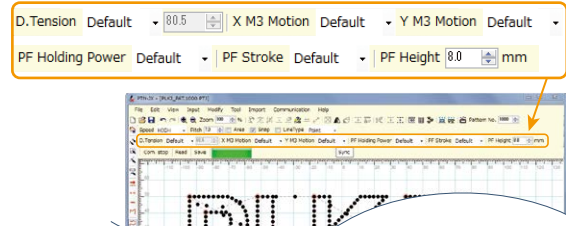
**PTN-JX**

## Create and edit stitching patterns on a personal computer screen

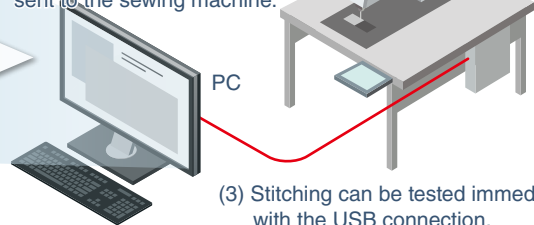
**Paid version**

### → Test the stitching immediately

- Control stitching quality.  
The feed motion, presser foot motion, and digital tension can be set in the stitching data.
- Data can be read, edited, and written to a Mitsubishi electronic sewing machine. (Supported models: PLK-J, G, E, B Series)
- Synchronization mode

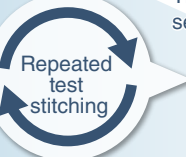


(2) Click the Synchronize button.  
The corrected data will be sent to the sewing machine.



(1) Correct on the personal computer's large screen.

(3) Stitching can be tested immediately with the USB connection.

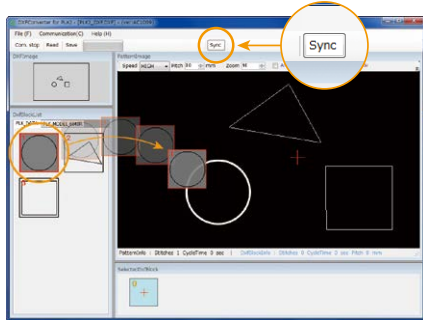


**DXF Converter**

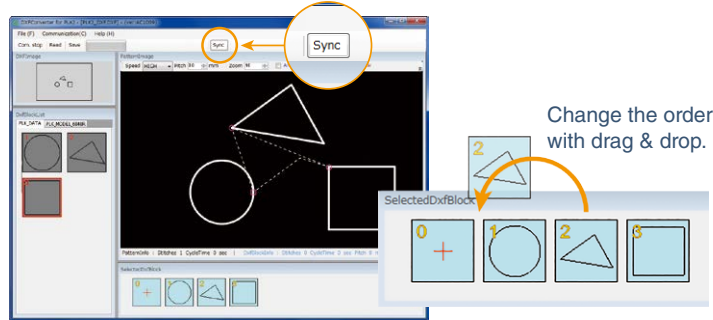
## Convert CAD data into stitching data

**Paid version**

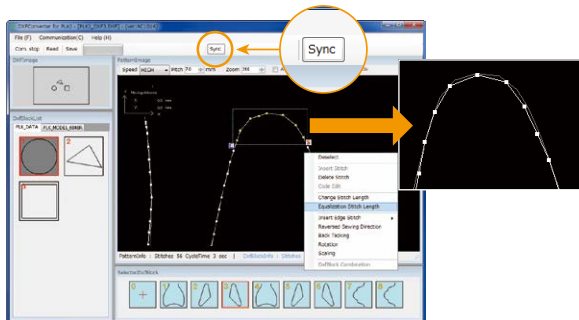
### → Make quick corrections with intuitive operations



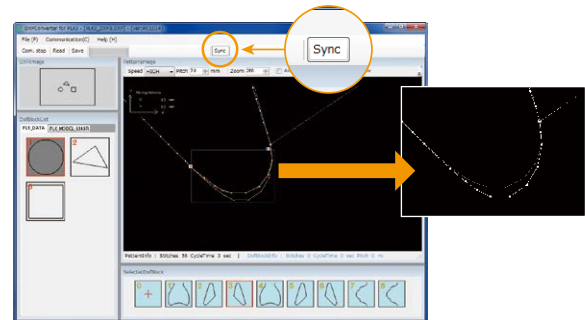
Drag & drop the stitching pattern from the block list.



Easily change the stitching order in parts (block) units.




Select part of the stitching pattern to make the stitch length uniform.




Easily change the stitching pattern size.




# Responding to various stitching scenes with the best specifications

**PLK-J2516-YU** 

**PLK-J2516R-YU** 



**PLK-J4040/6040** 

**PLK-J4040R/6040R** 

**PLK-J4040R3/6040R3** 



**Sewing area**  
300 x 200mm: PLK-J2516-YU/2516R-YU

Item	Model	PLK-J2516-YU	PLK-J2516R-YU
Stitching style		Single-needle lockstitch	
Hook		Double-size shuttle hook	Double-size rotary hook
Needle		DPx17 #18	
Max. speed <sup>(Note 1)</sup>		Intermittent feed: 2,300rpm Continuous feed: 2,300rpm	
Feeding system		Intermittent or continuous (switchover method)	
Stitch length		0.1 to 20.0mm (min. resolution 0.1mm)	
Max. stitches		20,000 stitches/pattern	
Max. patterns <sup>(Note 2)</sup>		9,000	
Memory medium		USB flash memory	
Upper shaft motor		Mitsubishi Electric 750W direct servo motor	
Lower shaft motor		-	
Work holder		Air cylinder drive	
Presser foot drive		Direct drive by stepping motor	
Presser foot lift stroke		18.0mm (max. 22.0mm) variable in 0.1mm step	18.0mm (max. 24.0mm) variable in 0.1mm step
Presser foot stroke <sup>(Note 5)</sup>		Digital adjustment stroke: 0.0 to 10.0mm	
Upper thread tensioner		Manual/digital switchover method	
		Input data save function provided	
		Stitching direction-compatible automatic adjustment function provided	
Oil lubrication		Inside of sewing machine head only Spray type: Adjustable spray time method	
Operation panel		6.5-inch color LCD touch panel with USB port	
External device		Terminal I/O 16-point input, 16-point output	
Interface		Ethernet <sup>(Note 3)</sup> (CC-Link IE Field Basic compatible), USB communication	
Barcode reader		USB barcode reader (HID) supported	
Thread break detection, skipped stitch detection <sup>(Note 4)</sup>		Option available (MP-J25-AD)	
Stitch alert <sup>(Note 4)</sup>		-	
Programmable controller		Dual original step sequence function	
Outline dimensions		1,200 x 1,144 x 1,230 mm (WxDxH)	
Mass		187kg	
Power supply		200 to 240V single-phase/three-phase	

**Sewing area**  
400 x 400mm: PLK-J4040/4040R/4040R3  
600 x 400mm: PLK-J6040/6040R/6040R3

Item	Model	PLK-J4040/ PLK-J6040	PLK-J4040R/ PLK-J6040R	PLK-J4040R3/ PLK-J6040R3
Stitching style		Single-needle lockstitch		
Hook		Double-size shuttle hook	Double-size rotary hook	Triple-size rotary hook
Needle		DPx17 #18		
Max. speed <sup>(Note 1)</sup>		Intermittent feed: 2,000rpm Continuous feed: 2,000rpm	Intermittent feed: 2,300rpm Continuous feed: 2,500rpm	
Feeding system		Intermittent or continuous (switchover method)		
Stitch length		0.1 to 20.0mm (min. resolution 0.1mm)		
Max. stitches		20,000 stitches/pattern		
Max. patterns <sup>(Note 2)</sup>		9,000		
Memory medium		USB flash memory		
Upper shaft motor		Mitsubishi Electric 750W direct servo motor		
Lower shaft motor		Mitsubishi Electric 400W direct servo motor		
Work holder		Chucking system		
Presser foot drive		Direct drive by stepping motor		
Presser foot lift stroke		18.0mm (max. 24.0mm) variable in 0.1mm step		
Presser foot stroke <sup>(Note 5)</sup>		Digital adjustment stroke: 0.0 to 10.0mm		
Upper thread tensioner		Manual/digital switchover method		
		Input data save function provided		
		Stitching direction-compatible automatic adjustment function provided		
Oil lubrication		Spray method: Spray time adjustment		
Operation panel		6.5-inch color LCD touch panel with USB port		
External device		Terminal I/O 16-point input, 16-point output		
Interface		Ethernet <sup>(Note 3)</sup> (CC-Link IE Field Basic compatible), USB communication		
Barcode reader		USB barcode reader (HID) supported		
Thread break detection, skipped stitch detection <sup>(Note 4)</sup>		Standard equipment		
Stitch alert <sup>(Note 4)</sup>		-		
Programmable controller		Dual original step sequence function		
Outline dimensions		1,350 x 1,570 x 1,205 mm (WxDxH)		
Mass		440kg		
Power supply		200 to 240V single-phase/three-phase		

Note 1: Sewing speed may be limited by the type of sewing material, presser weight, stitch length, etc.

Note 2: Max. patterns may be limited depending on the number of stitches per pattern in the memory.

Note 3: Ethernet is a trademark of Fuji Xerox Co., Ltd.

Note 4: Detection of all stitch errors is not guaranteed. Always complete adjustments according to the stitching conditions before use.

Note 5: Standard value is 8.0 mm.

**PLK-J10050** 

**PLK-J10050R** 

**PLK-J10050R3** 



**PLK-J12060** 

**PLK-J12060R** 

**PLK-J12060R3** 




**Sewing area**  
**1,000 x 500mm: PLK-J10050/10050R/10050R3**

Item	Model	PLK-J10050	PLK-J10050R	PLK-J10050R3
Stitching style		Single-needle lockstitch		
Hook		Double-size shuttle hook	Double-size rotary hook	Triple-size rotary hook
Needle		DPx17 #21		
Max. speed <sup>(Note 1)</sup>		Intermittent feed: 2,000rpm Continuous feed: 2,000rpm	Intermittent feed: 2,500rpm Continuous feed: 2,500rpm	
Feeding system		Intermittent or continuous (switchover method)		
Stitch length		0.1 to 20.0mm (min. resolution 0.1mm)		
Max. stitches		20,000 stitches/pattern		
Max. patterns <sup>(Note 2)</sup>		9,000		
Memory medium		USB flash memory		
Upper shaft motor		Mitsubishi Electric 750W direct servo motor		
Lower shaft motor		Mitsubishi Electric 400W direct servo motor		
Work holder		Chucking system		
Presser foot drive		Direct drive by stepping motor		
Presser foot lift stroke		18.0mm (max. 24.0mm) variable in 0.1mm step		
Presser foot stroke <sup>(Note 5)</sup>		Digital adjustment stroke: 0.0 to 10.0mm		
Upper thread tensioner		Manual/digital switchover method		
		Input data save function provided		
		Stitching direction-compatible automatic adjustment function provided		
Oil lubrication		Spray method: Spray time adjustment		
Operation panel		6.5-inch color LCD touch panel with USB port		
External device		Terminal I/O 16-point input, 16-point output		
Interface		Ethernet <sup>(Note 3)</sup> (CC-Link IE Field Basic compatible), USB communication		
Barcode reader		USB barcode reader (HID) supported		
Thread break detection, skipped stitch detection <sup>(Note 4)</sup>		Standard equipment		
Stitch alert <sup>(Note 4)</sup>		-		
Programmable controller		Dual original step sequence function		
Outline dimensions		2,122 x 1,941 x 1,205 mm (WxDxH)		
Mass		620kg		
Power supply		200 to 240V single-phase/three-phase		

**Sewing area**  
**1,200 x 600mm: PLK-J12060/12060R/12060R3**

Item	Model	PLK-J12060	PLK-J12060R	PLK-J12060R3
Stitching style		Single-needle lockstitch		
Hook		Double-size shuttle hook	Double-size rotary hook	Triple-size rotary hook
Needle		DPx17 #21		
Max. speed <sup>(Note 1)</sup>		Intermittent feed: 2,000rpm Continuous feed: 2,000rpm	Intermittent feed: 2,300rpm Continuous feed: 2,300rpm	
Feeding system		Intermittent or continuous (switchover method)		
Stitch length		0.1 to 20.0mm (min. resolution 0.1mm)		
Max. stitches		20,000 stitches/pattern		
Max. patterns <sup>(Note 2)</sup>		9,000		
Memory medium		USB flash memory		
Upper shaft motor		Mitsubishi Electric 750W direct servo motor		
Lower shaft motor		Mitsubishi Electric 400W direct servo motor		
Work holder		Chucking system		
Presser foot drive		Direct drive by stepping motor		
Presser foot lift stroke		18.0mm (max. 24.0mm) variable in 0.1mm step		
Presser foot stroke <sup>(Note 5)</sup>		Digital adjustment stroke: 0.0 to 10.0mm		
Upper thread tensioner		Manual/digital switchover method		
		Input data save function provided		
		Stitching direction-compatible automatic adjustment function provided		
Oil lubrication		Spray method: Spray time adjustment		
Operation panel		6.5-inch color LCD touch panel with USB port		
External device		Terminal I/O 16-point input, 16-point output		
Interface		Ethernet <sup>(Note 3)</sup> (CC-Link IE Field Basic compatible), USB communication		
Barcode reader		USB barcode reader (HID) supported		
Thread break detection, skipped stitch detection <sup>(Note 4)</sup>		Standard equipment		
Stitch alert <sup>(Note 4)</sup>		-		
Programmable controller		Dual original step sequence function		
Outline dimensions		2,522 x 2,112 x 1,205 mm (WxDxH)		
Mass		650kg		
Power supply		200 to 240V single-phase/three-phase		

**PLK-J4040RH** 



**PLK-J10050RH** 



**Sewing area**  
**400 x 400mm: PLK-J4040RH**

Item	Model	PLK-J4040RH
Stitching style		Single-needle lockstitch
Hook		6-fold rotary hook
Needle		DDx1 #26
Max. speed <sup>(Note 1)</sup>		Intermittent feed 1,000rpm Continuous feed 1,000rpm
Feeding system		Intermittent or continuous (switchover method)
Stitch length		0.1 to 20.0mm (min. resolution 0.1mm)
Max. stitches		20,000 stitches/pattern
Max. patterns <sup>(Note 2)</sup>		9,000
Memory medium		USB flash memory
Upper shaft motor		Mitsubishi Electric 750W direct servo motor
Lower shaft motor		Mitsubishi Electric 400W direct servo motor
Work holder		Chucking system
Presser foot drive		Direct drive by stepping motor
Presser foot lift stroke		15.0mm (max. 30.0mm) variable in 0.1mm step
Presser foot stroke		Digital adjustment stroke: max. 10mm
Upper thread tensioner		Manual/digital switchover method
		Input data save function provided
		Stitching direction-compatible automatic adjustment function provided
Oil lubrication		Spray method: Spray time adjustment
Operation panel		6.5-inch color LCD touch panel with USB port
External device		Terminal I/O 16-point input, 16-point output
Interface		Ethernet <sup>(Note 3)</sup> (CC-Link IE Field Basic compatible), USB communication
Barcode reader		USB barcode reader (HID) supported
Thread break detection, skipped stitch detection <sup>(Note 4)</sup>		-
	Stitch alert <sup>(Note 4)</sup>	Standard equipment
Programmable controller		Dual original step sequence function
Outline dimensions		1,350 x 1,570 x 1,250 mm (WxDxH)
Mass		460kg
Power supply		200 to 240V single-phase/three-phase

**Sewing area**  
**1,000 x 500mm: PLK-J10050RH**

Item	Model	PLK-J10050RH
Stitching style		Single-needle lockstitch
Hook		6-fold rotary hook
Needle		DDx1 #26
Max. speed <sup>(Note 1)</sup>		Intermittent feed 1,000rpm Continuous feed 1,000rpm
Feeding system		Intermittent or continuous (switchover method)
Stitch length		0.1 to 20.0mm (min. resolution 0.1mm)
Max. stitches		20,000 stitches/pattern
Max. patterns <sup>(Note 2)</sup>		9,000
Memory medium		USB flash memory
Upper shaft motor		Mitsubishi Electric 750W direct servo motor
Lower shaft motor		Mitsubishi Electric 400W direct servo motor
Work holder		Chucking system
Presser foot drive		Direct drive by stepping motor
Presser foot lift stroke		15.0mm (max. 30.0mm) variable in 0.1mm step
Presser foot stroke		Digital adjustment stroke: max. 10mm
Upper thread tensioner		Manual/digital switchover method
		Input data save function provided
		Stitching direction-compatible automatic adjustment function provided
Oil lubrication		Spray method: Spray time adjustment
Operation panel		6.5-inch color LCD touch panel with USB port
External device		Terminal I/O 16-point input, 16-point output
Interface		Ethernet <sup>(Note 3)</sup> (CC-Link IE Field Basic compatible), USB communication
Barcode reader		USB barcode reader (HID) supported
Thread break detection, skipped stitch detection <sup>(Note 4)</sup>		-
	Stitch alert <sup>(Note 4)</sup>	Standard equipment
Programmable controller		Dual original step sequence function
Outline dimensions		2,122 x 1,941 x 1,250 mm (WxDxH)
Mass		640kg
Power supply		200 to 240V single-phase/three-phase

Note 1: Sewing speed may be limited by the type of sewing material, presser weight, stitch length, etc.

Note 2: Max. patterns may be limited depending on the number of stitches per pattern in the memory.

Note 3: Ethernet is a trademark of Fuji Xerox Co., Ltd.

Note 4: Detection of all stitch errors is not guaranteed. Always complete adjustments according to the stitching conditions before use.



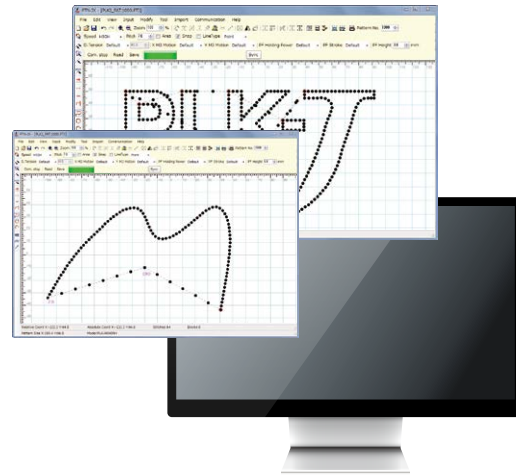
**PLK-J 3020R-SE**   Traceability model



**Sewing area**  
**300 x 200mm: PLK-J3020R-SE**

Item	Model	PLK-J3020R-SE
Stitching style		Single-needle lockstitch
Hook		Double-size rotary hook
Needle		DPx 17 #18
Max. speed <sup>(Note 1)</sup>		Intermittent feed 2,300rpm Continuous feed 2,300rpm
Feeding system		Intermittent or continuous (switchover method)
Stitch length		0.1 to 20.0mm (min. resolution 0.1mm)
Max. stitches		20,000 stitches/pattern
Max. patterns <sup>(Note 2)</sup>		9,000
Memory medium		USB flash memory
Type of motor (Main)		Mitsubishi Electric 750W direct servo motor
Type of motor (Sub)		Mitsubishi Electric 400W direct servo motor (For the thread take up lever direct drive)
Work holder		Air cylinder drive
Presser foot drive		Direct drive by stepping motor
Presser foot lift stroke		18.0mm (max. 24.0mm) variable in 0.1mm step
Presser foot stroke		Digital adjustment stroke: 0.0 to 10.0mm
Upper thread tensioner		Manual/digital switchover method
		Input data save function provided
		Stitching direction-compatible automatic adjustment function provided
Oil lubrication		Inside of sewing machine head only Spray type: Adjustable spray time method
Operation panel		6.5-inch color LCD touch panel with USB port
External device		Terminal I/O 16-point input, 16-point output
Interface <sup>(Note 3)</sup>		Ethernet (CC-Link IE Field Basic compatible), USB communication
Barcode reader		USB barcode reader (HID) supported
Thread break detection, skipped stitch detection <sup>(Note 4)</sup>		Option available (MP-J25-AD)
Stitch alert <sup>(Note 4)</sup>		-
Programmable controller		Dual original step sequence function
Outline dimensions		1,200 x 1,144 x 1,320 mm (WxDxH)
Mass		190kg
Power supply		200 to 240V single-phase/three-phase

**PTN-JX**



Item	Model	PTN-JX
Recommended operation environment		
CPU		1.5GHz or higher 32bit (x86) or 64bit (x64) processor
OS		Windows®8/8.1 (32bit/64bit)/Windows®10 (32bit/64bit)
RAM		32bit: 1GB or more, 64bit: 2GB or more
HDD		Windows®8/8.1, Windows®10 : 32bit (16GB or more open space), Windows®8/8.1, Windows®10 : 64bit (20GB or more open space)
Monitor resolution		Capable of displaying 1024x768 or higher
Monitor color setting		Full color (32bit) or higher
Peripheral devices		CD-ROM drive (used for installation), USB memory (medium for electronic sewing machine and pattern data), USB port x 2 (for USB memory or USB communication, for protection key), RS-232C port (when exchanging stitching data between PTN-GX and sewing machine)

\*1. The CPU, memory, and hard disk specifications may vary depending on the amount of data being processed.

\*2. A relatively high PC performance is required for the best use.

Windows is a trademark or registered trademark of Microsoft Corporation in the United States and other countries.

Main specifications	
Protector type	USB
Input type	Linear, arc, circle, curve, polygonal line, point, multiple/offset, zigzag, tacking (same input functions as Mitsubishi Electric's PLK-J Series electronic sewing machines)
Modification type	Delete, insert, change, move, convert, code (in addition to Mitsubishi Electric's PLK-J Series electronic sewing machine modification function, data can be deleted, inserted and moved in block units)
Display scale	20 to 5000%
Grid line pitch	0.1 to 100mm, or hidden
Input method	Personal computer mouse, coordinate value input (absolute coordinate, relative coordinate)
Supported data types	Data compatible with Mitsubishi Electric's PLK electronic sewing machines (J, G data)*1 DXF data*2 (R12, R13, R14), embroidery data (only specified versions are supported)

\*1. G data is read only.

\*2. Some restrictions apply to the data conversion function. Please refer to the instruction manual before use.



### **Safety Precaution**

To ensure safe and proper use of the products in this document, please make sure to read the relevant instruction manuals and technical notes before use.

Note: Be sure to confirm the details of the warranty when making a purchase.

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