



# B790 PRO

## Next level of sewing, quilting and embroidery.

Designed to bring you more features that enhance the joy of creating. This is the new BERNINA 790 PRO.

Enriched with exciting new sewing, quilting and embroidery features and the next generation stitch**precision**<sup>2</sup> Technology, the B 790 PRO is even more precise and lets you control every stitch to achieve perfect results every time.

Innovations like the BERNINA Pinpoint Laser, 4-Point Placement and WiFi Connectivity bring you the joy of precision and control!

### NEW BERNINA STITCHPRECISION<sup>2</sup>

The B 790 PRO features the next generation BERNINA stitch**precision<sup>2</sup>** Technology that makes your sewing, quilting and embroidery experience quieter, more precise, and joyful. Swiss innovations allow for superior stitch quality and up to 33% higher SDT embroidery speed.

#### NEW BERNINA PINPOINT LASER

Enjoy pinpoint precision by seeing exactly where the needle will enter the fabric in every needle position. The BERNINA Pinpoint Laser marks your start and travel points as you sew and embroider.

### NEW AUTOMATIC NEEDLE THREADER

The Automatic Needle Threader helps you get started with a different thread. Conveniently and quickly, every single time.

### STITCH DESIGNER

Create your own stitches by drawing your ideas right on the touch screen. With a touch, the B 790 PRO transforms your design into a stitch pattern or alters existing stitches as you wish. Save your very own stitch creations to expand your stitch library.

### **TIPS AND TRICKS**

The Sewing and Embroidery Consultants, built-in Tutorials and On-screen Help offer support and answers to your questions whenever you need them.



**BERNINA Dual Feed** 





**Slide speed control** Sewing and embroidery speeds up to 1,000 stitches per minute Includes Stitch Designer and BERNINA Stitch Regulator **Color 7-inch display** with easy navigation and modern touch screen technology 1 1 i 10 A -PRC 1 -0 8 . + 1 . 1 stichprecision\* 00 F BERNINA × U BERNINA A full 13-inch (330mm) extended freearm including 10 inches (254mm) of space to the right of the needle 6. **30 bright LED lights** 13] 14] 12 15] 17] 18] 19 20 21 22 28 5 1 6 7 1 8 9 9 10 11 12 8 6] 71 cm 1| 2| 3| 4| Inches 1 5 BERNINA Free Hand System (FHS) **NEW: Automatic Needle Threader** 

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**NEW: BERNINA Pinpoint Laser** 

### Beautiful embroidery. Made easy, fast and precise.

The BERNINA 790 PRO sewing and embroidery model features unique innovations to make embroidering easier than ever. Simply switch to embroidery mode directly via the touch screen to easily position, mirror, rotate, combine and resize motifs. Place your design on the fabric exactly where you want with 2-Point Placement or the new 4-Point Placement in combination with the BERNINA Pinpoint Laser.

Design editing offers a wealth of additional options, allowing you to create curved lettering effects, alter stitch density, and combine decorative stitches with embroidery designs or create beautiful, endless embroidery designs. Complex combinations can even be resequenced according to color, and alternative color options can be applied before stitching out.

The finished design can be saved directly on the machine or on a USB stick. What's more, additional designs can be imported to the machine via a USB stick, or new with the B 790 PRO, wirelessly from the optional BERNINA Embroidery Software 9.

The high-end embroidery module L with BERNINA Smart Drive Technology (SDT) comes standard with the B 790 PRO. It elevates your embroidery experience with enhanced stitch quality, smoother and quieter movement and higher embroidery speed.



The B 790 PRO includes the BERNINA embroidery module L with SDT and extra-large embroidery area (400 mm × 210mm, 15.7" × 8.3") 1





# Next generation embroidery and quilting with the B 790 PRO.

### **NEW 4-POINT PLACEMENT WITH MORPHING**

Creating has never been easier! With the new 4-Point Placement the positioning of your embroidery or quilting design is extremely easy and precise. This new function allows you to place your designs to precisely suit your project. Simply define four points on the fabric in the hoop and the design is placed proportionally or can be morphed to fit the created boundary.

### NEW WIFI CONNECTIVITY AND BERNINA STITCHOUT APP

WiFi allows you to transfer embroidery designs from your BERNINA Embroidery Software 9 (optional) directly to your B 790 PRO, or the other way around. And thanks to the new BERNINA Stitchout App, the embroidery process can be monitored on your smartphone. The B 790 PRO connects with the app allowing you to monitor the status of your embroidery stitchout from any room in your house. The app notifies you when the machine needs your direct attention, like thread color change, thread breakage or when the design is finished.

### **NEW CUSTOMIZABLE QUILT DESIGNS**

Quilt like a PRO. The new Customizable Quilt Designs (.bqm) bring the functionality of professional longarm quilting to your embroidery machine. Unlimited scaling possibilities, the ability to modify the stitches per inch (SPI) and enhanced quilt securing functions enable you to achieve perfect computerized quilting on your embroidery machine.

### NEW ALIGNMENT OF LETTERING AND DESIGNS

Easily align and distribute embroidery designs horizontally and vertically. Use Multi-line Lettering and Text Alignment to personalize your text placement.

### **NEW SHAPE DESIGNER**

Multiply designs with one click and arrange them in a desired formation. Whether in a circle, square or heart, new and unique designs emerge.

### **COLOR WHEEL**

Change designs easily and coordinate to your favorite color scheme before you start embroidering.

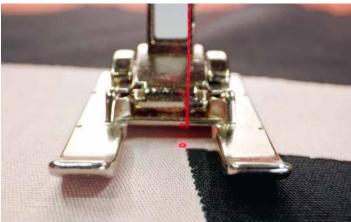




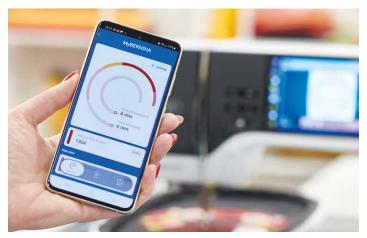
NEW BERNINA stitchprecision<sup>2</sup>



NEW Automatic Needle Threader



NEW BERNINA Pinpoint Laser



NEW WiFi and BERNINA Stitchout App



NEW 4-Point Placement with Morphing

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NEW Align and Distribute Designs



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NEW Multi-line Lettering and Align



### 7 things you will love about the BERNINA 790 PRO

### TOTAL STITCH CONTROL

The BERNINA 790 PRO provides an exclusive level of stitch control. Whether you are altering stitch length, stitch width or needle position, the machine will remember the details for you. Your personal settings can be saved and retrieved.

### BERNINA STITCH REGULATOR (BSR)

The BERNINA 790 PRO is equipped with the BSR function. The BSR foot assists you with free-motion sewing and quilting with a straight or zigzag stitch, ensuring stitches of the exact same length even at variable sewing speeds. Beginners quickly gain confidence with the BSR, while experienced quilters acquire additional self-assurance. The BSR foot comes in the standard accessories package of the B 790 PRO. The B 790 PRO also offers three modes just for quilters and the KickStart function for comfortable quilting. The BSR 3 mode allows you to set your stitch length to 2 or 4 stitches per inch for easy quilt basting. The KickStart function enables quilting in a continuous sewing mode without having to keep constant pressure on the foot control.



### **BERNINA DUAL FEED**

The innovative BERNINA Dual Feed tames hard-to-manage fabrics providing superb fabric feed and optimum visibility while sewing. Easy to engage when needed, the BERNINA Dual Feed tucks completely out of the way when it's not required.

### 4 SEW WITH EVEN GREATER EASE

The B 790 PRO accomplishes many tasks all by itsef. The presser foot lowers automatically at the beginning of a seam. Needle threading is simple and fast with the Automatic Needle Threader. The thread is cut automatically when you reach the end of a seam, or when you wish to change colors while embroidering. Moreover, a practical extension table, which yet again significantly increases your work area, is included in the standard package.

### BERNINA ADAPTIVE THREAD TENSION

The BERNINA Adaptive Thread Tension, a BERNINA innovation, provides ideal thread tension while sewing to achieve perfect stitch quality on both sides of the fabric. Once the tension is set according to the thread and fabric used, BERNINA Adaptive Thread Tension will constantly check the thread tension, adjusting it automatically when needed. The result is the finest stitching without pressing a button.

### **S** EXTENDED FREEARM

The BERNINA 790 PRO includes a meticulously engineered extended freearm with 10 inches (254 mm) of space to the right of the needle, providing you with ample space for big, beautiful sewing and embroidery projects. With its 9 mm stitch width, the B 790 PRO is ideally suited for decorative stitching.

### JUMBO BOBBIN

The front loading, easy access Jumbo Bobbin holds up to 70% more thread than standard bobbins, allowing you to sew and embroider longer without interruption.



### More great features for embroidery and sewing

### **DESIGN EDITING**



Endless Embroidery Easily repeat and align embroidery designs to make continuous borders. Designs can be fine-tuned to the spacing desired and verified with stitched placement arrows.



**Group & Ungroup** Combine designs into a Group to edit at once. Ungroup to edit designs individually.



**Rearrange** Change the stitchout sequence of design layers. Use Rearrange in combination with Group and Ungroup for further editing possibilities.



**Color Wheel** 

Change the hue and saturation of a design on screen, translate the visual colors to thread colors and convert your colors to alternate thread libraries.

### **DESIGN PLACEMENT**



**4-Point Placement: Fit** Simply define four points on the fabric in the hoop and the design will be placed centered in created boundary.



**4-Point Placement: Morph** Morph designs to fit in irregular shapes with or without margin spacing. The design is adjusted to fit the new shape. Perfect for quilt blocks that are not so perfect.



2-Point Placement: Points on grid

Imperfect hooping – perfect results! Define two points on the grid and the design is resized and rotated to fit the new alignment.



2-Point Placement: Any points on design

Place designs using any two stitch points in the design as placement reference. The original size of designs can be kept or resized to fit the new placement.

#### **DESIGN CREATION**



Shape Designer

Arrange designs including imported stitches into formations such as rectangles, circles, hearts, stars, arches and more.



Stitch Designer

Create your own stitches and continuous line quilting designs by drawing your ideas right on the touch screen. Once the stitch or design is created, sew it or open it in embroidery and stitch.

### **DESIGNS & ALPHABETS**



Built-in stitches and sewing alphabets

Enjoy hundreds of sewing stitches and alphabets. Easily embroider individual sewing stitches, buttonholes or a row of stitches.



### Built-in embroidery designs and alphabets

A wide variety of embroidery designs including in-the-hoop projects and special technique designs. The B 790 PRO also offers BQM Quilting Designs.

GENERAL INFORMATION	B 790 PRO	B 770 QE PLUS	B 735	B 700
Space to the Right of the Needle	10" (254 mm)	10" (254 mm)	10" (254 mm)	10" (254 mm)
Workspace Height	5" (127 mm)	5" (127 mm)	5" (127 mm)	5" (127 mm)
Centrally Located Color Touch Screen	7" (177.8 mm)	7" (177.8 mm)	7" (177.8 mm)	7" (177.8 mm)
Multi-function Knobs	√	✓	✓	✓
LED Sewing Lights	30	30	30	30
NEW: Automatic Needle Threader	✓	-	-	-
Semi-automatic Needle Threader	-	✓	✓	✓
NEW: BERNINA Pinpoint Laser	√	-	-	-
NEW: WiFi	✓	-	-	-
NEW: stitchprecision <sup>2</sup> Technology	√	-	-	-
Total Stitch Control	✓	$\checkmark$	$\checkmark$	-
BERNINA Adaptive Thread Tension	✓	$\checkmark$	$\checkmark$	$\checkmark$
BERNINA Dual Feed	✓	$\checkmark$	-	-
Hook System	BERNINA	BERNINA	BERNINA	BERNINA
Jumbo Bobbin with 70 % more Capacity	✓	$\checkmark$	$\checkmark$	$\checkmark$
Bobbin winding while sewing/embroidering	✓	$\checkmark$	$\checkmark$	$\checkmark$
Powerful DC Motor	√	✓	$\checkmark$	$\checkmark$
BERNINA Free Hand System (FHS)	✓	$\checkmark$	$\checkmark$	$\checkmark$
Programmable BERNINA Foot Control	√	✓	-	-
Thread-up Command	✓	$\checkmark$	$\checkmark$	$\checkmark$
Automatic Presser Foot Lifter	✓	$\checkmark$	$\checkmark$	$\checkmark$
Automatic Thread Cutter	✓	$\checkmark$	$\checkmark$	$\checkmark$
Manual Thread Cutters	3	3	3	3
Adjustable Presser Foot Pressure	√	✓	$\checkmark$	-
Lower Thread Sensor	✓	$\checkmark$	$\checkmark$	$\checkmark$
Upper Thread Sensor	✓	✓	✓	✓
Tutorial	✓	$\checkmark$	$\checkmark$	$\checkmark$
On-screen Help	✓	$\checkmark$	$\checkmark$	$\checkmark$
Eco Mode	✓	✓	✓	$\checkmark$

SEWING AND QUILTING	B 790 PRO	B 770 QE PLUS	B 735	B 700
Maximum Sewing Speed (stitches per minute)	1,000 spm	1,000 spm	1,000 spm	-
Maximum Stitch Width	9 mm	9 mm	5,5 mm	-
Maximum Stitch Length	6 mm	6 mm	6 mm	-
Adjustable Needle Positions	11	11	11	-
Presser Foot Selection	√	✓	√	✓
Security Function for Needle and Stitch Plate	√	✓	√	~
Sideways Motion	√	-	-	-
Connecting stitches	√	-	-	-
Tapering	√	-	-	-
Automatic Buttonhole / Length Measuring System	√	✓	✓	-
Manual multi-step buttonhole	√	✓	√	-
Button sew-on program	√	√	√	-
Personal Memory	√	√	√	-
Temporary Altered Stitch Memory	√	✓	✓	-
History Function (most recently used stitch patterns)	√	✓	$\checkmark$	-
Stitch Designer	√	-	-	-
Creative Consultant Sewing	√	✓	$\checkmark$	-
Pattern Repeat	1-99 (NEW)	1-99	1-99	-
Pattern Begin	✓ ×	√	√	-
Pattern End	✓	√	✓	-
Mirror-image function	√	✓	$\checkmark$	-
Elongation	√	✓	1	-
Basting Stitch	Stitch #21	Stitch #21	Stitch #30 (manually)	-
Long Stitch	√	V	-	-
Triple Stitch	✓ (NEW)	✓ ✓	✓	-
Backstepping	√ (NETV)	√	✓	-
Programmable Securing Function	· · · · · · · · · · · · · · · · · · ·	· · ·	· ·	_
3SR enabled	√	√	√	_
3SR 3 Mode	✓ (NEW)	· ·	_	
KickStart Function	✓ (NEW)	· · ·		
Start/Stop Button (stitching without foot control)	✓ (NEVV)	· · ·	✓	✓
Freearm Sewing	· · · · · · · · · · · · · · · · · · ·	· · ·	· · ·	
Monograms (with sideways motion only)	· · · · · · · · · · · · · · · · · · ·			
Total Number of Sewing Stitch Patterns (incl. alphabets)	2,040	1.809	1.255	
Alphabets	9	9	6	
Monograms	1	-	-	
Decorative Stitches	700	500	350	
Button Sew-On Program	1	1	1	-
Buttonholes/Eyelets	16/2	16/2	13/2	
Practical Stitches	38	38	32	
Sideways-Motion Stitches	139			
Quilting Stitches	70	- 74	- 29	
Tapering/Skyline Stitch Patterns	28/30	/4	29	
iapening/oxymile official ratients	20/30	-	-	-

EMBROIDERY	B 790 PRO	B 770 QE PLUS	B 735	B 700
Maximum Embroidery Speed (stitches per minute)	1,000 spm	1,000 spm	1,000 spm	1,000 spm
Embroidery Area	15,7 x 8,3" (400 x 210 mm)	15,7 x 8,3"	15,7 x 8,3" (400 x 210 mm)	15,7 x 8,3"
Freearm Embroidery	(100 x 210 mm)	(100 x 210 mm) ✓	(100 x 210 mm)	(100 x 210 mm) ✓
Built-in Embroidery Designs	500	275	250	320
Embroidery Alphabets	25	8	6	18
NEW: Customizable Quilt Designs (.bgm files)	76	-	-	-
On-screen Editing of Designs: position, mirror, rotate, scale, combine	/0	-	-	-
Change Design Size Proportionally/Non-Proportionally	✓ ✓	✓ ✓	✓ ✓	✓ ✓
NEW: Align/Distribute embroidery designs	✓ ✓	-	-	-
NEW: Multi-line Lettering and Align	✓ ✓	-	-	-
Endless Embroidery	✓ ✓	-	-	-
NEW: Shape Designer	✓ ✓	-	-	-
Color Wheel	✓ ✓	-	-	-
	✓ ✓			
NEW: QWERTY Keyboard	✓ ✓	-	-	-
WordArt				
Drag and Drop	✓	✓	✓	✓
Absolute Check Design Positioning	✓ ✓	~	~	~
NEW: 4-Point Placement with Morphing		-	-	-
2-Point Placement	✓	✓	✓	✓
Lock scaling	✓	✓	<ul> <li>✓</li> </ul>	-
Check Design Size	✓	✓	✓	✓
Group/Ungroup	✓	✓	✓	✓
Rearrange designs	√	~	~	~
Undo/Redo	√	-	-	✓
Adjust Stitch Density	√	√	✓	✓
Change Stitch Type	✓	✓	✓	✓
Basting	√	✓	✓	✓
Color Resequence	√	√	✓	$\checkmark$
Stitch Design as Single/Multi-Color	√	√	✓	$\checkmark$
Personal Memory for Saving Embroidery Designs	√	√	✓	✓
Programmable Jump Stitch Cutting	√	√	✓	√
Smart Secure	√	√	✓	✓
Invisible Secure	√	√	✓	✓
Thread Away Mode	√	✓	$\checkmark$	$\checkmark$
Creative Consultant Embroidery	$\checkmark$	-	$\checkmark$	$\checkmark$
Embroider Sewing Stitches	$\checkmark$	-	-	-
Multi-format Reading (EXP, DST, PEC, JEF, PCS, SEW, XXX)	$\checkmark$	$\checkmark$	$\checkmark$	$\checkmark$
NEW: BQM Format Reading	$\checkmark$	-	-	-
NEW: Adjust Stitches Per Inch (BQM)	✓	-	-	-
NEW: Direct Design transfer to/from BERNINA Embroidery Software 9 via WiFi	$\checkmark$	-	-	-
Automatic Hoop Recognition	$\checkmark$	✓	$\checkmark$	$\checkmark$
View Stitch-out Time, Thread Colors, Size, Stitches	√	√	$\checkmark$	✓
NEW: BERNINA Stitchout App compatible	✓	-	-	-
Stitch Sequence Control	√	✓	~	✓
Position Recall	√	$\checkmark$	$\checkmark$	$\checkmark$
Jumbo Hoop Compatibility	√	$\checkmark$	$\checkmark$	$\checkmark$
Maxi Hoop Compatibility	√	$\checkmark$	$\checkmark$	$\checkmark$
Mega Hoop Compatibility	√	√	✓	✓
Midi Hoop Compatibility	√	√	<ul> <li>✓</li> </ul>	√
Small Clamp Embroidery Hoop Compatibility	√	√	~	✓
Medium Clamp Embroidery Hoop Compatibility	√	~	~	✓
Large Freearm Embroidery Hoop Compatibility	√	√	~	✓
STANDARD ACCESSORIES	B 700 PRO		R 735	B 700

STANDARD ACCESSORIES	B 790 PRO	B 770 QE PLUS	B 735	B 700
BERNINA Precision Presser Feet included	11	7	5	1
Reverse Pattern Foot #1/1C	✓	√	$\checkmark$	-
Dual Feed Reverse Pattern Foot #1D	✓	✓	-	-
Overlock Foot #2A	✓	-	-	-
Buttonhole Foot with Slide #3A	✓	√	$\checkmark$	-
Zipper Foot #4/4D	✓	$\checkmark$	$\checkmark$	-
Blindstitch Foot #5	✓	-	-	-
Jeans Foot #8/8D	✓	-	$\checkmark$	-
Open Embroidery Foot #20/20C	✓	√	$\checkmark$	-
Embroidery Foot #26/26L	✓	-	-	✓
BERNINA Stitch Regulator (BSR) #42	✓	√	-	-
Sideways Motion Foot #40C	✓	-	-	-
Patchwork Foot #97D	-	$\checkmark$	-	-
Slide-on Table	✓	√	$\checkmark$	-
Knee lever/Free Hand System (FHS)	✓	✓	$\checkmark$	-
Embroidery Module L with Smart Drive Technology (SDT)	✓	optional	optional	✓
Standard Embroidery Hoops included	3	-	-	3
Embroidery Hoop Large Oval with template (255 × 145 mm, 10.0" × 5.7")	✓	-	-	√
Embroidery Hoop Medium Oval with template (130 × 100 mm, 5.1" × 3.9")	✓	-	-	✓
Embroidery Hoop Small Oval with template (72 × 50 mm, 2.8" × 2")	✓	-	-	$\checkmark$
Dust Cover	✓	✓	✓	✓
Accessory Box	✓	√	$\checkmark$	√





bernina.com/B790PRO		

We reserve the right to makes changes to machine features, equipment and design. Additional information available at your local BERNINA store.

BERNINA recommends threads from

