

Chenille embroidery machine

TCMX series

www.tajima.com



Multi-head Automatic Embroidery Machine

Chenille embroidery machine

TCMX series

The TCMX Series, the result of the know-how and technology, proven by brilliant achievements though many years



TCMX Mixed-Type Series

A Mixed type series to increase production efficiency and open the way to versatile embroidery expressions!
Chenille embroidery and standard embroidery have been brought together in one embroidery machine.
A chenille embroidery head is coupled with a standard embroidery head in a pair (available up to 15 pairs).



TCMX 600 Series

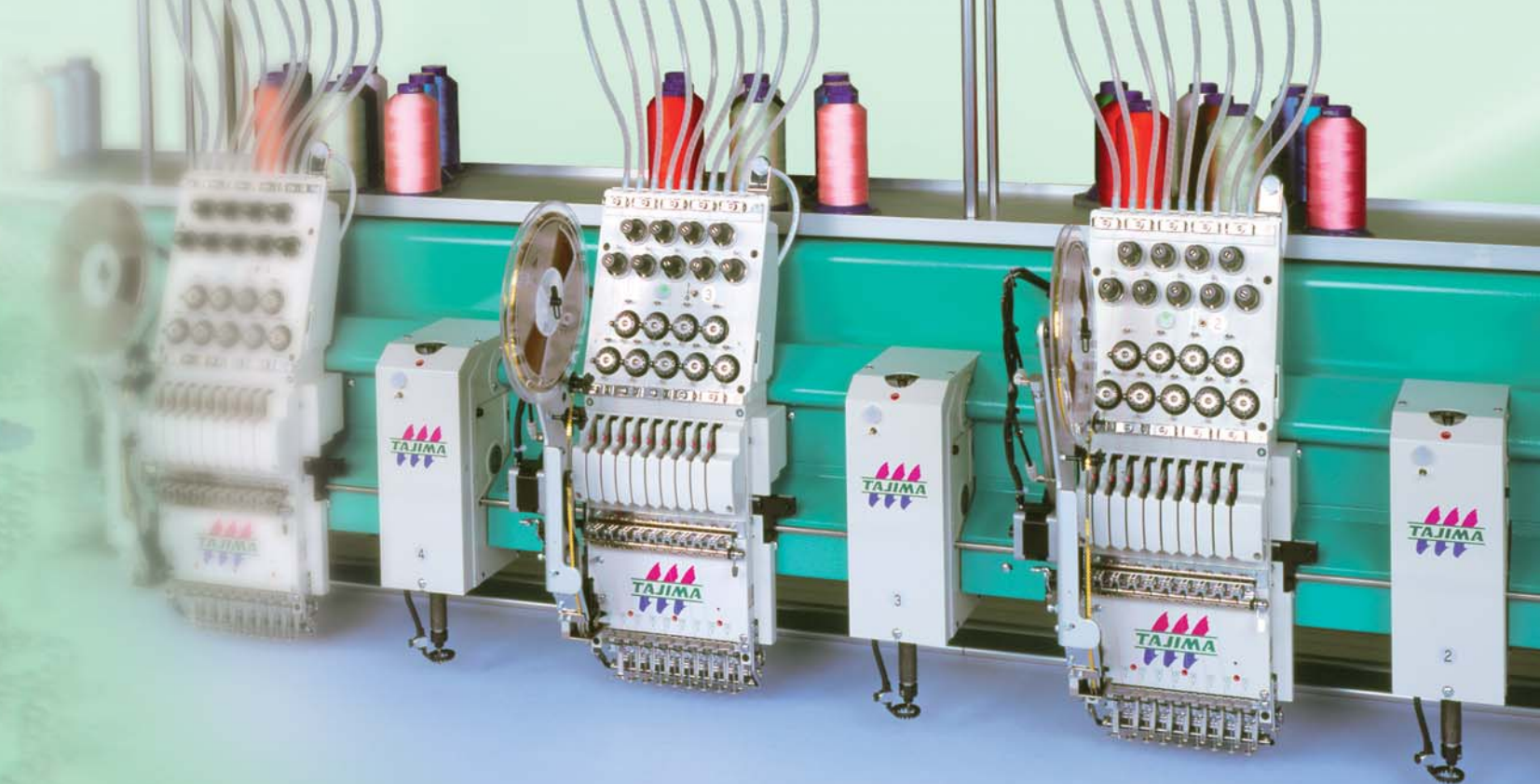
Multi-head embroidery machines, specialized for chenille embroidery, in the pursuit of high speed, quietness and productivity. Stable stitching is available at the industry's fastest speed of 750rpm in lineup up to 23 heads!

TCMX - 601

Single-head model, using the same technologies as the multi-head models.
Space-saving and best suited for small lot production!



Integration of Tajima's know-how and the most advanced technologies creates higher value added products.



1 Function Head Chenille embroidery

High-speed operation at 750 rpm has been brought to reality.

High-speed operation at 750 rpm (in comparison with our previous specification of 600 rpm) has drastically increased productivity.

Automatic change of 6 colors enables versatile multicolor arrangement.

A setting on the operation panel allows the operator to select desired colors.

Automatic stitch exchange

Loop stitches and chain stitches can be automatically switched by a setting on the operation panel.

Automatic needle height adjusting mechanism

Needle height is adjustable in 10 steps according to the loop height or chain size.

Automatic lift-up mechanism

The Needle, Nipple and Presser foot are automatically lifted up for easier frame exchange operation.

Tie-off function to prevent the thread from fraying

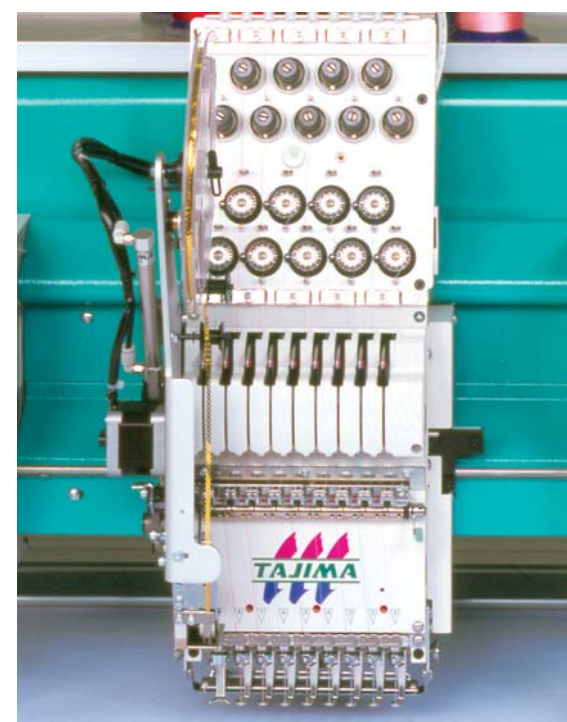
Chain stitches are automatically inserted for some stitches after completion of loop stitches for prevention of thread fraying that causes production error.



Loop stitches



Chain stitches



Chain stitches and standard stitch embroidery (with sequins)

2 Function Head Standard embroidery head

Thread breakage detector to prevent production error

A sensor monitors thread movement at all times. If the upper or under thread is broken, this system detects it in an instant and stops stitching to prevent embroidery production from continuing with broken thread. The sensitivity of the sensor is adjustable on the operation panel, depending on the embroidery conditions.



Middle thread guide with thread take-up spring, keeping the balance of upper and under threads

The thread take-up spring picks up excess thread and stabilizes the balance of upper and lower threads at high speed operation, improving thread tension. Thread breakage has been reduced by 30 - 50% (compared with our previous specification) due to extra fine satin stitches (2mm or less), needle tip or thread untwisting etc.



A ball screw drive system has been adopted to reduce the time for color change operation

A ball screw drive system, widely used for precision positioning control of industrial machinery, has been introduced to the color change drive system. The time required for color change from the first to the ninth needles has been reduced from about 3 to 1.1 seconds, drastically improving productivity of multicolor embroidery.

Spiral tube

Spiral tubes between the upper thread course stand and the individual tension base protect upper threads against environmental wind, generated by air conditions etc. which causes thread to be entangled with each other.



Take-up lever guard <PAT>

Uniquely developed covers are mounted onto take-up levers to prevent threads from getting entangled during high-speed operation and to improve safety in working environments.



3 Function Operation panel Operation panel

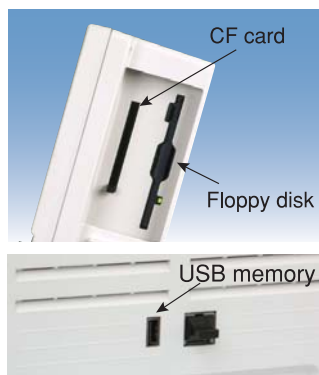
User-friendly operation panel in pursuit of operational convenience

An easy-to view 6.5 inch color LCD operation panel and special use keys are designed in a compact interface to enable operation by instinct. The job currently being embroidered on the machine is displayed on the screen in real time <PAT>.



Selectable data input/output

Design data input or output is available, using CF (CompactFlash) card, USB memory, as well as a floppy disk.



Sleep mode function to save energy

The energy saving function of a personal computer has been introduced to the operation panel. Holding down a single button sets the machine in the standby status and pressing it once more cancels this function. Unnecessary power consumption can be kept down without turning off the main power.



"Condition memory" function, supported by Tajima binary format

Design start position and stitching conditions, registered by an embroidery machine, can be output to USB memory or other media together with the design data. They can be easily recalled and reusable for reproduction. Tajima binary data format (TBF) is supported to create more complicated designs.

LAN support for networking

A LAN port is prepared for easier access to networking function.

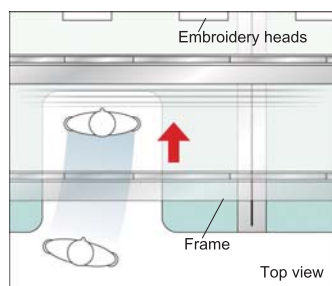


Coiling stitch, chain stitch and standard stitch embroidery

4 Function Switch

Table offset switch <PAT.P>

This special switch is mounted under the table of a jumbo embroidery machine to retract the frame temporarily to any position out of the way for jobs such as threading.



Option

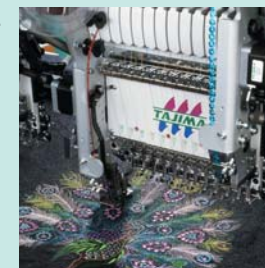
Coiling/Taping device (MT-1)



This device enables both coiling embroidery and taping embroidery. Coiling embroidery finishes core and coiling threads with a soft touch and allows you various coiling variations. (The winding ratio of coiling thread for the core thread is adjustable in 4 steps.) Furthermore, combination with loop and/or chain stitches expands the potentials of you embroidery designs.

High-speed sequin device <PAT>

Various kinds of sequin spangles of 3-9mm dia. on a belt can be stitched at max. speed of 1,000 rpm. Also available are the options of the W-reel to mount 2 sequin tape reels of the same diameter at the same time and the attachment to mount a 200m winding reel (225mm dia.).



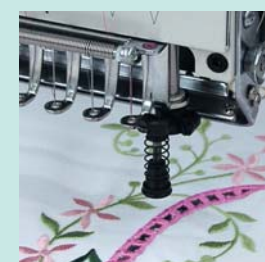
High-speed cording device (KB-2M)

Various kinds of cording materials can be stitched at high speeds. Exchange of the attachment enables looping embroidery. Simple adjustment of the height varies stitch volume and expands the range of embroidery expressions.



Boring device

A special knife bores fabric and the device overlacks the hole. Hole size is adjustable as needed and the shape can be created in the course of design data making.



Cording Device (K-2)

The cording device, exclusively used for chenille embroidery.



Jog remote-controller <PAT>

The jog remote-controller has consolidated the function of frame travel operations.

It is independent of the operation panel and allows to move the frame while the operator is close to the needles.



Specifications

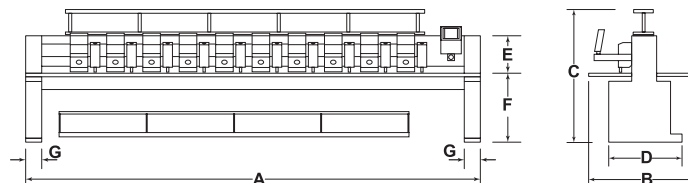
Mixed Type Series

TCMX Mixed type Series

Model	Paired	Chenille heads	Standard heads	Head interval	Number of Needles (Chenille/Standard)	Embroidery space (D x W)mm	A	B	C	D	E	F	G
TCMX-60910	10	10	10	570	6 / 9	680×570	7745	1830	1630	1300	430	833	200
TCMX-60912	12	12	12	480	6 / 9	680×480	7725	1830	1630	1300	430	833	200
TCMX-60915	15	15	15	480	6 / 9	680×480	9165	1830	1630	1300	430	833	200

Example of a model code

TCMX- $\frac{6}{a} \frac{09}{b} \frac{15}{c} \frac{15}{d}$ a=model name, b=Number of needles (Chenille heads)
c=Number of needles (Standard heads), d=Paired heads



Factory options	Standard head	Jumbo rotary hook, High-speed sequin device, Position marker
	Chenille head	Coiling/Taping device(MT-1), Cording device (K-2), Taping device(KT-1)
Option		Jog remote-controller
	Standard head	High-speed cording device(KB-2M), Boring device, Emb Lamé attachment
Stitch length		Ternary: 0.1~12.1mm, Binary: 0.1~12.7mm
Revolution	Standard heads	Chenille heads
	Standard embroidery	Chenille embroidery
	Max.1,000rpm	Max.750rpm
Motor		AC Servo motor x1, Pulse Motor x2
Power supply		3-phase 200-240V50/60Hz, 350V,380V,400V,415V,440V 50/60Hz is also available with an optional transformer.
Power consumption		1.6kw

* Ternary: Tajima code (DST), Binary: Tajima binary format (TBF), Barudan, ZSK

* Consultation for orders of special embroidery like embroider space, number of heads, number of needles is also available.

* Effective embroidery space and running speed may vary depending on machine models, type of product to be embroidered and/or applicable conditions.

* We reserve the right to change the specification for improvements without previous notice.

* No design nor registered trademark of the products contained in this catalog may be used without the prior permission.

600 Series

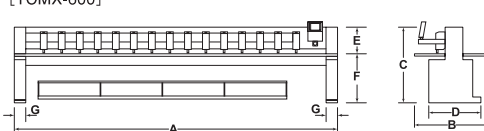
TCMX-600 Series

Model	Heads	Head interval	Needles	Embroidery space (D×W) mm	A	B	C	D	E	F	G
TCMX-601	1		6	460×550	1380	1185	1175	720	255	920	
TCMX-612	12	480	6	680×480	7065	1830	1263	1300	430	833	200
TCMX-615	15	500	6	680×500	8805	1830	1263	1300	430	833	200
TCMX-620	20	400	6	680×400	9205	1830	1263	1300	430	833	200

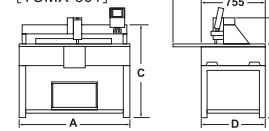
Example of a model code

TCMX- $\frac{6}{a} \frac{20}{b} \frac{20}{c}$ a=model name, b=number of needles, c=number of heads

[TCMX-600]



[TCMX-601]



Factory options	Coiling/Taping device(MT-1, except for TCMX-601), Cording device (K-2), Taping device(KT-1)	
Option	Jog remote-controller	
Stitch length	Ternary: 0.1～12.1mm, Binary: 0.1～12.7mm	
Revolution	Chenille embroidery	Coiling embroidery(1/1)
	Max.750rpm(Max.800rpm for TCMX-601)	Max.500rpm
Motor	AC Servo motor x1, Pulse Motor x2	
Power supply	Single-phase: 100-120V, 200-240V 50Hz/60Hz (only for TCMX-601) 3-phase 200-240V 50/60Hz, 350V,380V,400V,415V,440V 50/60Hz is also available with an optional transformer.	
Power consumption	1.7kw (140w for TCMX-601)	

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