

THE EXPERIENCE OF A LEADING COMPANY

C

0

T he best choice of duplicating machines for any type of keys existing in the world

CAPRI



CM.01

EVO

AVANTCO



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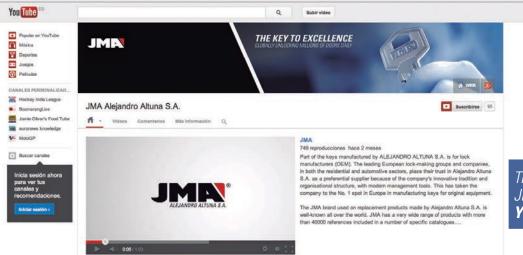






THE KEY TO EXCELLENCE GLOBALLY UNLOCKING MILLIONS OF DOORS DAILY

YOUTUBE CHANNEL JMA ALEJANDRO ALTUNA S.A.



The new JMA ALEJANDRO ALTUNA S.A. **YOUTUBE CHANNEL IS READY!**

JMA VIDEO MACHINES



AVANTCODE Electronic key cutting machine do JMA Asjandro Atura S.A. 650 reproducciones Avantodos is the most advanced JMA electronic machine with the li fast and robust to guarantee optimum quality of cut for key dupicati

TRE-6000 EVO Transponder machina de JAA Abjandro Aitura S A. 3.501 reproductiones The most advarces (respetato factoricogy. "Sones a transponder over another transponder in 85% of the vehicles on the market...



JMA VIENNA Key Blank Machine de JMA Alejandro Altuna S.A. 3.367 re The VIENNA is the new semi-automatio atic key-cutting machine for flat keys for cylinder l

REMOTE CONTROLS de JMA Adjandro Altuna S.A. 456 reproducciones JMA saurches the most innovative technology for copying remote controls for opening of doors on the market. We have developed a new product with a high capacity for copying both fixed codes and evolving codes and for all frequencies used on the different markets. ...

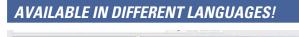


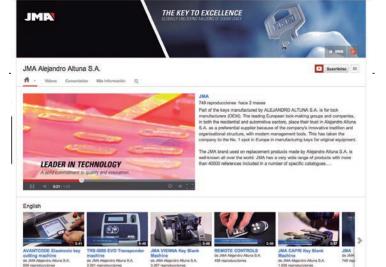
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JING CAPRE Kay Blank Menhain de JINA Alejandro Altuna S. A. 1. 1636 reproducciones CAPRE is the new JINA key cutting machine for security, wave, tubular and special keys, designed for key-cutting professionals.

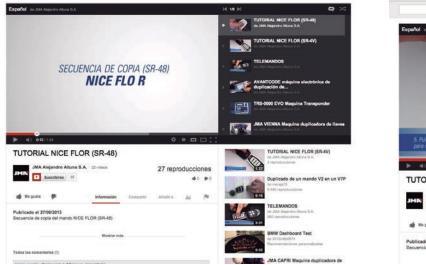


JAA du JMA Asignetic Altune S.A. 749 reproducciones Part of the keys manufactured by ALEJANDRO ALTUNA S.A. is for lock manufacturers (OEM). The leading European lock-making groups and companies, in both the residential and automotive sectors, place their funst in Alejandro Altuna S.A. as a preferential supplier because of the company's innovative L...





VIDEO TUTORIAL





MECHANICAL MACHINES

FOR OPTIMUM RESULTS



FLAT KEYS BIT KEYS SECURITY KEYS

THE KEY TO EXCELLENCE GLOBALLY UNLOCKING MILLIONS OF DOORS DAILY

MECHANICAL MACHINES FOR FLAT KEYS

VIENNA

The VIENNA is the JMA flat key duplicating machine for cylinder locks, vehicle and cruciform keys, designed for key duplicating professionals.

The Vienna has an innovative electronic system for easy adjustment of the machine as well as for those with long experience in duplicating, with a few simple steps for adjustment to guarantee optimal duplication results. The first machine in the world to include a simple electronic adjustment system as a standard (previously it had a point duplicator) and key counter to control the quantity of keys duplicated on the machine. It counts the amount of duplicated keys

in the case of multiple duplications using a partial counter. The strength of its design, the new technologies and last generation materials, make this a long-lasting duplicator that always maintains precision of duplication.

It has a new design with clean lines and ergonomic use.

The diverse safety guards covering all the moving parts of the machine afford safety to the operator during the duplicating process. All the activation and stoppage buttons are easily accessible.

PARTIAL AND TOTAL **KEY COUNTER**



ne mist machine to incorporate a partial and total key counter. You can control the keys cut on the machine during its life. Helps you keep count of the number of keys when making multiple copies. The first machine to incorporate a



Has an electronic regulation system that indicates the exact machine regulation point. The display shows the rotation direction of the ajustment wheel



INNOVATIVE CLAMP TURNING SYSTEM



LED ILLUMINATION innovative illumination using low consumption led to illuminate the cutting area







micrometric depth adjustment and the first on the market to also include micrometric lateral adjustment



BURR REMOVAL BRUSH

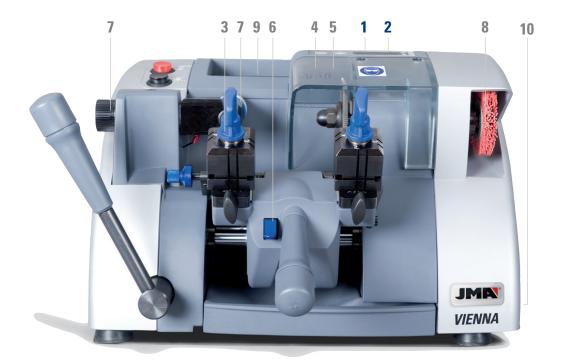


TRAY for accessories, keys, tools, etc... with easy access for the operator.



HANDLES for moving the machine







CODE	MOTOR	
VIENNA(single phase)	220 V. 50 Hz 0.18 Kw. - 1350 rpm 1.7 Amp	
VIENNA 110(optio- nal single phase)	110 V 60 Hz - 0.18 Kw. - 1700 rpm 3.14 Amp	
TECHNICAL FEATURES		
Cutter (High-Speed Steel)	FP24 HSS (Ø80 x 5 x 16)	
Clamps	Steel 4-face jaw M-4L	
	Optional: 4-faces M-SOF (Portugal).	
Width	430 mm	
Height	280 mm	
Depth	420 mm	
Weight	27 kg	

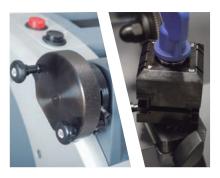


Cutter speed	650 rpm	
Useful run	X axis = 53 mm	
Illumination	LED DIODES	
Transmission	Ribbed belts with self-tensing system	
Displacement	Over self-lubricated bearings	
Brush	Yes	
SAFETY		
Rear start-up button		
Duplicating corrigge upblocking button		

Duplicating carriage unblocking button Automatic limit removal system Large cutter protection Brushing area protection

VERSIONS VIENNA X-CLUSIVE





Inclinable tracer for duplicating BRI-10, BRI-11, and BRI-12 keys

TECHNICAL DATA (special)

Clamp: Steel 4-faces jaw M-V-BD special BRICARD

MECHANICAL MACHINES FOR FLAT KEYS

VIENNA SMART

The VIENNA SMART is the new JMA flat key duplicating machine for cylinder locks, vehicle and cruciform keys, designed for key duplicating professionals. Combining simplicity and versatility in the duplication of flat keys for cylinder locks and for vehicles, cruciform keys (cross-shaped) and special keys, thanks to its 4-faced clamp.



4-FACED CLAMP compatible with earlier duplicating machines (dakota, titan, saratoga...)



LED ILLUMINATION innovative illumination using low consumption led to illuminate the cutting area



SAFETY BLOCKING SYSTEM unblocking by means of a button



TRAY FOR REMOVAL **OF SWARF**



MICROMETRIC ADJUSTMENT micrometric depth adjustment







REMOVAL BRUSH

BURR





CODE	MOTOR
VIENNA SMART(- single phase)	220 V 50 Hz - 0.18 Kw 1350 rpm 1.7Amp.
VIENNA SMART 110 (optional single phase)	110 V - 60 Hz - 0.18Kw - 1700 rpm3.14 Amp.
TECHNICAL DATA	
Cutter (High-Speed Steel)	Steel 4-face jaw M-4L
Clamps	Optional:
	4-faces M-SOF (Portugal).

Width

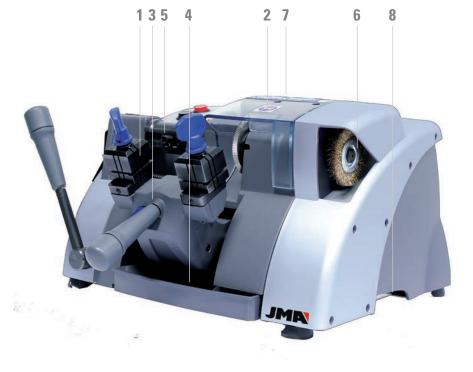
Height

Depth Weight

<i>10TOR</i>
20 V 50 Hz - 0.18 Kw 350 rpm 1.7Amp.
10 V - 60 Hz - 0.18Kw - 700 rpm3.14 Amp.

Uptional:
4-faces M-SOF (Portugal
430 mm
280 mm
420 mm
27 kg

Speed	650 rpm	
Useful run	X axis = 53 mm	
Illumination	DIODES	
Transmission	Ribbed belts	
Displacement	Over self-lubricated bearings	
Brush	Yes	
SAFETY		
Rear start-up button		
Duplicating carriage unblocking button		
Large cutter protection		
Brushing area protection		
Tray for collecting swarf		





BERNA

BERNA is the new compact professional model of duplicating machine that combines simplicity and versatility. The last generation techniques and materials make it a resistant and precise duplicating machine.



4-FACED CLAMP compatible with earlier duplicating machines (dakota, titan, saratoga...)



LED ILLUMINATION innovative illumination using low consumption led to illuminate the cutting area



SAFETY BLOCKING SYSTEM unblocking by means of a button

TRAY FOR REMOVAL **OF SWARF**



MICROMETRIC ADJUSTMENT micrometric depth adjustment

REMOVAL BRUSH

ACCESSORY TRAY

HANDLES for moving the machine

BURR







В р В si 7 Cı St for accessories, keys, tools, etc... easily accessible for the operator CI И Не De

Speed

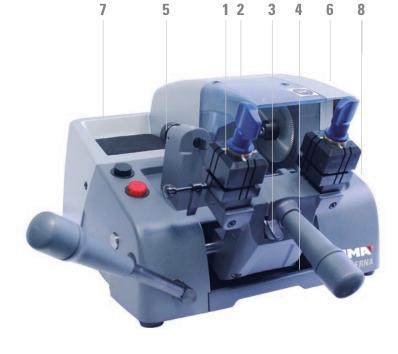
CODE	MOTOR
BERNA(single phase)	220V, 50 Hz, 0.18Kw, 1350 rpm, 1.7 Amp
BERNA 110(optional single phase)	110V, 60Hz, 0.18 Kw, 1700 rpm, 3.14 Amp
TECHNICAL DATA	
Cutter (High-Speed Steel)	FP24 HSS (Ø80 x 5 x 16)
Clamps	Steel 4-face jaw M-4L
	Optional: 4-faces M-SOF (Portugal).
Width	340 mm
Height	243 mm
Depth	435 mm
Weight	17kg

712 rpm.

Useful run	Axis X = 46 mm.
Illumination	LED DIODES
Transmission	Ribbed belts
Displacement	On glycodur ® bearings
Brush	YES
SAFETY	
Duplicating carriage unblocking button	
Large cutter protection	
5 1	

Brushing area protection

Tray for collecting swarf



MECHANICAL MACHINES FOR FLAT KEYS

ECCO

Semiautomatic machine for duplicating flat keys for cylinder locks and for vehicles, cruciform keys (cross-shaped) and special keys. The ECCO is the simplest expression of a duplicating machine without losing precision in the duplication. Its cutter directly fitted to the motor axle makes it the most economic model of the flat key duplicator machine family.



COPYING INDEX WITH **MICROMETRIC ADJUSTMENT**

MACHINED

CLAMP

PROTECTION SCREEN



CODE	MOTOR
ECCO(single phase)	220V 50 Hz - 0.18 Kw- 1350 rpm
ECCO 110(optional single phase)	110V 60 Hz - 0.18 Kw- 1700 rpm
TECHNICAL DATA	
Cutter (High-Speed Steel)	FP11 HSS (Ø63 x 5 x 16)
Clamps	Reversible 2-faced M-2L
	Optional: M-2L-S 2-faced (Portugal)
Width	470 mm
Height	280 mm

Depth	245 mm
Weight	15 kg
Cutter speed	1350 rpm
Useful run	Axis X = 62 mm.
Illumination	No
Transmission	Direct
Displacement	Over self-lubricated bearings
Brush	No
SAFETY	
Tempered Tracer	

Protection screen

10



ECCO PLUS

Semiautomatic machine for duplicating flat keys for cylinder locks and for vehicles, cruciform keys (cross-shaped) and special keys. The ECCO PLUS is the simplest expression of a duplicating machine without losing precision in the duplication. Its cutter directly fitted to the motor axle makes it the most economic model of the flat key duplicator machine family.





COPYING INDEX WITH MICROMETRIC ADJUSTMENT

PROTECTION SCREEN

MACHINED 2-FACED CLAMP



BURR **Removal Brush**



LATERAL



CODE	MOTOR
ECCO PLUS (single phase)	220V 50 Hz - 0.18Kw - 1350 rpm
ECCO PLUS 110(op- tional single phase)	110V 60 Hz - 0.18 Kw- 1700 rpm
TECHNICAL DATA	
Cutter (High-Speed Steel)	FP11 HSS (Ø63 x 5 x 16)
Clamps	Reversible 2-faced M-2L
	Optional: M-2L-S 2-faced (Portugal)
Width	520 mm
Height	280 mm

Depth	245 mm
Weight	16 kg
Cutter speed	1350 rpm
Useful run	Axis X = 43 mm.
Illumination	No
Transmission	Direct
Displacement	Over self-lubricated bearings
Brush	Yes
SAFETY	
Tempered Tracer	
Protection screen	

MECHANICAL MACHINES FOR FLAT KEYS



ECCO AUTOMATIC

Semiautomatic machine for duplicating flat keys for cylinder locks and for vehicles, cruciform keys (cross-shaped) and special keys. THE ECCO AUTOMATIC is the simplest expression of a duplicating machine without losing precision in the duplication. Its cutter directly fitted to the motor axle makes it the most economic model of the flat key duplicator machine family.



ADJUSTMENT

MACHINED



PROTECTION SCREEN



BURR REMOVAL BRUSH



AUTOMATIC

BRUSHING FUNCTION



CODE	MOTOR
ECCO AUTOMATIC (single phase)	230V 50 Hz - 0.18 Kw- 1350 rpm
ECCO AUTOMATIC 110 (optional single phase)	110V 60 Hz - 0.18 Kw- 1700 rpm
TECHNICAL DATA	
Cutter (High-Speed Steel)	FP11 HSS (Ø63 x 5 x 16)
Clamps	Steel 4-face jaw M-4L
	Optional 4-faces M-SOF (Portugal).
Width	520 mm
Height	280 mm
Depth	245 mm
Weight	16 kg

Cutter speed	1350 rpm
Useful run	Axis X = 45 mm.
Illumination	No
Transmission	Direct
Displacement	Over self-lubricated bearings
Brush	Yes
SAFETY	
Tempered Tracer	
Protection screen	
Start switch	
Button for brushing	

MECHANICAL MACHINES FOR BIT KEYS



ECCO COMBI

Semiautomatic versatile machine (according to its carriages) for single or double bit keys, Abloy type keys, FORD keys (by code) and channel keys.



COPYING INDEX WITH MICROMETRIC ADJUSTMENT

PROTECTION SCREEN





BURR **REMOVAL BRUSH**



OPTIONAL CARRIAGES











ECCO RG (RG-E) 🛛 🗖

CODE	MOTOR
ECCO COMBI (single phase)	220V 50 Hz - 0.18 Kw 1350 rpm
ECCO COMBI 110 (optional single phase)	110V. 60 Hz - 0.18 Kw 1700 rpm
TECHNICAL DATA	
Cutter (High-Speed Steel)	FP8 HSS (Ø63 x 1.4 x 16)
Clamp:	Bit Clamp
	Optional Clamp Argentine
Width	520 mm
Height	280 mm
Depth	245 mm
Weight	16 kg
Cutter speed	1350 rpm

SAFETY	
Brush	Yes
Displacement	Over self-lubricated bearings
Transmission	Direct
Illumination	NO
Useful run	72 mm

Protection screen

MECHANICAL MACHINES FOR BIT KEYS



TITAN BIT

Bit-key duplicating machine for single and double bit keys, frontal and special keys.



REVERSIBLE **DOUBLE CLAMP** SYSTEM for two positions: a) duplicating of bit keys b) duplicating of frontal keys



COPYING INDEX WITH MICROMETRIC ADJUSTMENT



LAMP INCORPORATED

4

BURR REMOVAL BRUSH



2 SPEEDS



SPRING ACTION SYSTEM





CODE	MOTOR	Illumination	Halogen lamp incor- porated
TITAN BIT (single phase)	230V. 50 Hz. 0.18/0.24 Kw 675/1350 rpm	Transmission	Trapezoidal belt
TITAN BIT 110 (optional single phase)	110V 60 Hz 0,18/0.24Kw 850/1700 rpm	Displacement	Over self-lubricated bearings
TECHNICAL DATA		Brush	Yes
Cutter (High-Speed	FP19 HSS (Ø80 x 1.4 x 16)	SAFETY	
Steel)		Micro switch on ca	rriage
Clamp:	Self-centring Bit clamp	Protection screen	
Width	400 mm	Controlled step tracer, adjustable in depth a lateral	cer, adjustable in depth and
Height	230 mm		
Depth	420 mm	Spring action syste	m on tracer
Weight	28 kg	Tray for collecting s	swarf
Cutter speed	325/650 rpm		
Useful run	62 mm		

SENA

The SENA is the new JMA duplicating machine for bit keys with single and double bits, frontal and vertical channel keys, all on the same carriage.

It has a tracer (interchangeable) with micrometric adjustment for precision Using the same lever it makes X and Y movements of the carriage, which is guided by skids on rollers. The SENA has an exclusive JMA system of movable clips in the bit clamps to facilitate the fixing of all the bit keys; and adjustable lateral clamps that can easily copy all types of keys to figure.

The innovations of the Sena machine make it unique in its range.



Professional duplication of bit keys, ribbing of bit, figure keys and frontal keys and MUEL® 45° IN THE

SAME CARRIAGE



2-SPEED MOTOR for brass and steel keys



CARRIAGE BLOCKING on axis X and Y



ADJUSTABLE CLAMPS clamps with adjustable jaws for the correct fixing of bit keys with different lengths.

INNOVATIVE SYSTEM for torque on frontal and inclined keys





CLA adjust

LATERAL CLAMPS adjustable for any type of figure key

CODE	MOTOR
Sena (single phase)	220V 50 Hz - 0.37 Kw - 2800 - 1400 rpm.
TECHNICAL DATA	
Cutter	FP26W Hardened steel (Ø80 x 1.5 x 16)
	FP22 HSS (Ø80 x 1 x 16)
Clamps	Zone 1: Bit keys with one bit and two bits
	Zone 2: Frontal keys with flat cylinder spind- les, Muel type keys.
	Zone 3: Keys with vertical channels, figure keys and ADPLE 1-2-3- 4-5 keys.
Width	300 mm
Height	350 mm
Depth	550 mm



Weight	50 kg
Speed	700 rpm (STEEL)
	1400 rpm (BRASS)
Useful run	60 mm
Illumination	Halogen lamp 12V 25W
Transmission	Trapezoidal belts
Displacement	<i>Guides with bearing</i> cages
Brush	Yes
SAFETY	
Tempered Tracer	
Brushing area protection	n
Start switch	
Button for brushing	

MECHANICAL MACHINES FOR BIT KEYS AND FLAT KEYS

SARATOGA

Mixed duplicating machine for flat keys, cruciform keys, and also for single and double bit keys, frontal and special keys, being able to duplicate other models of keys with its optional carriages like channel, FORD® and ABLOY® keys.

The Saratoga is a strong, solid and reliable machine. These characteristics and its versatility have made it a necessary machine for any duplicating point.



CODE	MOTOR
SARATOGA (single phase)	230V 50 Hz - 0.22 w 1350 rpm
SARATOGA 110(single phase optional)	110V 60 Hz - 0.22 Kw- 1700 rpm
TECHNICAL DATA	
Cutter	Block A: FP24 HSS (Ø80 x 5 x 16)
	Block B: FP19 HSS(Ø80 x 5 x 16)
Clamps	Block A: M-4L (machi- ned 4-faced)
	Optional: M-SOF 4-faces
	Block B: BIT-S (BIT)
Width	590 mm
Height	260 mm
Depth	470 mm

Weight	43 kg	
Speed	500 rpm	
Useful run	53 mm	
Illumination	Halogen lamp incor- porated	
Transmission	Teethed belt	
Displacement	Over self-lubricated bearings	
Brush	Yes	
SAFETY		
Protection screen		
Start switch		
Safety device for start-up		
Button for brushing		
Tray for collecting swarf		







BLOCK A

BLOQK A

- Transmission-cutter motor by belt
- 1. Machined 4-faced clamp
- 2. Lever for unhooking the carriage





BLOCK B

- **Transmission-cutter motor by belt1.** 1. Reversible double clamp system, at three posi-tions that allows: a. Duplication of single bit keys and double bit. b. Duplication of frontal keys c. Duplication of special keys (FO-24P)
- Safety device for start-up
 The carriages have two special guides for precise centring.
 AUTONOMOUS BRUSH OPERATION





BLOCK B

MECHANICAL MACHINES FOR SECURITY KEYS

CAPRI

CAPRI is the new JMA duplicating machine for security, channel, tubular and special keys. With the CAPRI duplicating machine we make a qualitative jump over the rest of manual duplicating machines on the market, by incorporating an innovative patented system for measuring the strength or pressure in the duplication, making the copy task easy and precise.

This innovation makes the professional machine also simple for those with long experience in duplicating, with a few simple steps for adjustment with the electronic system to guarantee optimal duplication results.

The strength of its design, the incorporation of new technologies and last generation materials, make this a long-lasting duplicator that always maintains precision of duplication.

It has a new design with clean lines and ergonomic use. The diverse safety guards covering all the moving parts of the machine afford safety to the operator during the duplicating process. All the activation and stoppage buttons are easily accessible.

years of experience at JMA in the duplicating world have become a reality in the CAPRI duplicating machine, which is a new generation duplicator with many innovations implemented in its system.











CODE	MOTOR
CAPRI(UNIVER- SAL)	220 V 50 Hz - 0.4 Kw 14000 rpm
CAPRI 110(OPTIO- NAL)	110 V - 60 Hz - 0.4Kw - 14000 rpm
TECHNICAL DATA	
Cutter	F1, F13
TRACER	P1, P13
Clamps	Patented double clam- ping area swivelling form 0° to 45°
Width	430 mm
Height	465 mm
Depth	382 mm
Weight	25 kg

SAFETY	
	Tool-holder support
	Electronic adjustment
Characteristics	Force sensor
Displacement	Lineal guides with rolling rollers
Transmission	Flat belt
Illumination	LED DIODES
	Axis Z = 40 mm.
	Axis Y = 62 mm.
Useful run	Axis X = 71 mm
Speed	5500-10000 rpm

Protection screen

Rear start-up button

VERSIONS
CAPRI - F



9 Axis Y blocking system

TECHNICAL DATA		
Cutter	F1, F8	F11, F21.
Tracer	P1, P8, P8B	P11, P21.

MECHANICAL MACHINES FOR SECURITY KEYS

CAPRI SMART

CAPRI-SMART is the new JMA duplicating machine for security, channel and special keys, designed by professional from the duplicating world. A simple version of the most advanced duplicating machine of the market, the CAPRI.

The strength of its design, the new technologies and last generation materials, make this a long-lasting duplicator that always maintains precision of duplication.

It has a new design with clean lines and ergonomic use. The diverse safety guards covering all the moving parts of the machine afford safety to the operator during the duplicating process.

SIMPLE

by means of lights





LED ILLUMINATION new illumination system with led

HEIGHT ADJUSTMENT

3

SPRING ACTION HANDLE of the tracer.



FIXED CLAMP with a new plate system, easier to change and much easier to adjust











ACTIVATION MICRO SWITCH on the engine to lower the head

CODE	MOTOR
CAPRI SMART (UNIVERSAL)	220 V 50 Hz - 0.2 Kw 9000 rpm
CAPRI SMART 110 (optional)	110 V - 60 Hz - 0.2Kw - 9000 rpm
TECHNICAL DATA	
CUTTER	F1
Tracer	P1
Clamps	Fixed with interchangea- ble jaw system
	Optional: FIC-TUB. Tubu- lar and FICHET keys
Width	430 mm
Height	465 mm
Depth	385 mm

Weight	25 kg
Speed	5500 rpm
Useful run	X axis = 71 mm
	Axis Y = 62 mm.
	Axis Z = 40 mm.
Illumination	LED DIODES
Transmission	Flat belt
Displacement	Lineal guides with rolling rollers
Characteristics	Electronic adjustment
SAFETY	
Protection screen	
Rear start-up button	



DAKKI

DAKKI is JMA duplicating machine for security, automation channel and special keys. Simple conception but precise in use, make this an economic machine for duplicating security keys.

A compact machine with clean lines, makes this machine a strong duplicator and ergonomic in use.





LATERAL AXIS BLOCKING lateral axis displacement blocking

SEMIAUTOMATIC ADJUSTMENT Semiautomatic tracer adjustment



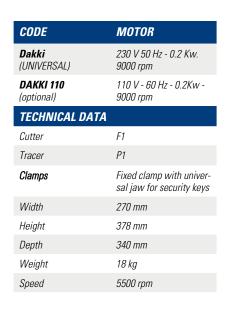
SINGLE-FACED FIXED CLAMP

VERTICAL AXIS BLOCKING

vertical axis displacement blocking

OPTIONAL ADAPTORS







Useful run	Axis X = 32 mm
	Axis Y = 40 mm
	Axis Z = 27 mm
Illumination	NO
Transmission	Flat belt
Displacement	On glycodur ® bearings
SAFETY	
Start switch	

ELECTRONIC MACHINES

BUILT TO PERFECTION



FLAT KEYS SECURITY KEYS

THE KEY TO EXCELLENCE GLOBALLY UNLOCKING MILLIONS OF DOORS DAILY

ELECTRONIC MACHINES FOR FLAT KEYS

AVANTCODE

Avantcode is the JMA most advanced new generation electronic machine for duplicating cylinder and car keys that allows the teething of keys with single or double sided machining. Its speed and strength guarantee the optimal quality of the cutter when duplicating keys

THIGH PRECISION READING



Simultaneous reading and cutting the key, decoding of the key, with direct reading of the real heights of the key shown on the screen. The first machine that saves readings of known keys, for later duplication without the need of the original key.

3 FROM THE **ESSENTIAL** TO THE **INTEGRITY**



A versatile machine with many possibilities of expansion in the future, thanks to its modular design that allows changing the cutter, clamps, and loading system (Plug & Play). Being electronic it does not require any pneumatic installation.

\mathbf{Z} the easiest



Thanks to its graphic display and simple menus its incorporation of teething codes in the machine and its flexibility in managing the data of the key makes this an easy to use machine with all the information accessible in stand-alone mode, like blank keys, manufacturers of locks, etc.

4 ELECTRICAL **CONTACT**



The electrical contact system for adjustment incorporated into the tool allows automatically determining the correct depth of the cut of the key independently of the clamp or side being used



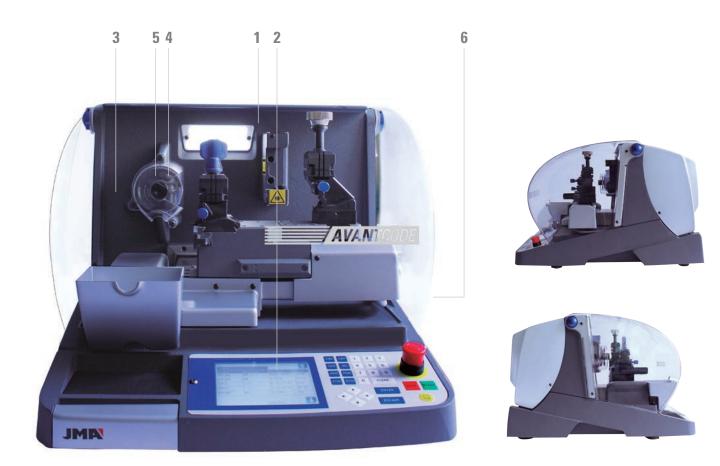


CODE	MOTOR
AVANTCODE (single phase)	230 V 50/60 Hz - 0,25 Kw 2700 rpm
TECHNICAL DATA	
Cutter	FP16W Hardened steel (Ø70 x 5.2 x 16)
Tracer	
Clamps	4-faced steel MP1
Width	495 mm
Height	420 mm

Depth	650 mm
Weight	55 kg
Speed	1500 rpm
Useful run	X =40 mm.
	Y =100 mm.
Illumination	LED DIODES
Transmission	Ribbed belt
Displacement	With flexball activated any stepper motors on rectified roller guides

Display	5.7" Touch Screen LCD
SAFETY	
Enclosed machining a switch.	area, with opening detection
Emergency stop butt	on
OPTIONS	
Electronic automatic	charger









ELECTRONIC MACHINES FOR SECURITY KEYS

X-CODE

The X-Code is a duplicating machine for special code, security and automobile keys with electronic control. It can operate independently or by connection to a PC

AUTONOMOUS



This machine allows, using the attached file and a known teeth cut (code books, code programme, original de-code key...), correct reproduc-tion of the key based on direct code, by only introducing the teeth code on the keyboard.

Thanks to the editor included in the machine, new keys can be done or the technical data of the latest keys launched on the market can be introduced without the need for an updating.

The reader allows using the X-Code machine for:

- Reading the code of a key with a known file. - Correcting errors of copies and teething a new key

2 CONNECTION TO PC



No No No No No No No No

This machine allows con-nection to an Intel (PC) com-patible personal computer that has the Interactive Key Software (optional) installed. This programme is a database of flat, automotion, security and special key codes This system allows a completely integrated work model (searching for the code, selection of teeth cut, additional key data, and digital ca-talogue of JMA keys...). The IKS software is compatible with

The IKS software is compatible with other master software

Characteristics of the Software:

JMA digital catalogue - Search for codes Record of clients and keys













CODE	MOTOR
X-CODE (single phase)	220 V. 50 Hz 0,18 Kw. - 2700 r.p.m.
X-CODE 110 (optional single phase)	110 V 60 Hz -0,18 Kw. - 3400 r.p.m.
TECHNICAL DATA	
Cutter	F5W F11W
TRACER	PT01 PT02 PRG
Clamps	M1
Width	400 mm
Height	612 mm

Depth	550 mm
Weight	45 kg
Speed	7000 rpm
Useful run	Axis X = 71 mm
	Axis Y = 62 mm.
	Axis Z = 40 mm
Illumination	Halogen lamp 15W
Transmission	Flat belt
Displacement	Lineal guides with rolling rollers
Display	Dot matrix 128x64.

Electronic adjustment

Tool-holder support

SAFETY Enclosed machining area, with opening detection switch. Emergency stop button

CHARACTERISTICS

8MB FLASH memory

RS-232 connection

Automatic adjustment

ELECTRONIC MACHINES FOR ENGRAVING

MULTIMARK

Electronic marking machine by electromagnetic coil. This machine allows marking the codes on the key, drum or plate. For these different functions there are different clamps (*Standard series clamp for marking keys)

This is an easy to use machine that as well as the conventional marking of codes on the key it allows us to do many other functions. I





INTERCHANGEABLE
CLAMPS



SIMPLE **SETTINGS**



CLAMPS

Standard clamp for **MJ1K** flat keys



Clamp for MJIP plate



Clamp for Europe MJ1C profile Cylinders



Clamp for Scandinavian cylinders **MJ2C**



CODE	MOTOR
MULTIMARK (single phase)	220 V. 50 Hz 0,2 Kw.
MULTIMARK 110 (single phase optional)	110 V 50 Hz -0,2 Kw.
TECHNICAL DATA	
Width	200 mm
Height	480 mm
Depth	480 mm
Weight	20 kg
Useful run	X =50 mm
	Y =70 mm.
Illumination	NO
Marking	Electromagnetic coil
OPTIONAL	Pneumatic
Displacement	Ball lineal guides

Marking area	
Connectors:	

70x50 mm Serial line: RS-232 Keyboard input: PS/2

SAFETY

Engraving Button Stop Button CHARACTERISTICS Memory = 126 text files + 96 logotype image files Marking force control Angled marking Arch marking Logos, Data Matrix, Shifts... Self-scaling for defined patterns

ELECTRONIC MACHINES FOR MAGNETIC KEYS

CO9

Universal coder of magnetic keys with electronic reader included



READING INDICATOR AND KEY CODE VISUALISER





STATUS INDICATOR

MARKING **COUNTER**



SWITCHES FOR SELECTION OF BASIC CODES



SWITCHES FOR SELECTION OF COMPLEMENTARY CODES











JAW FOR MARKING COMPLEMENTARY CODES

	13878AC	E O C CTOR	
S COAR ACTOME		DFH C	
		10000	
	a and a state		

21

4 5 76

9

CODE	
C09 (single phase)	230 V. 50 Hz
TECHNICAL DATA	
Width	270 mm.
Height	120 mm.
Depth	180 mm.

CODE

Weight

ΜΛΤΛΡ

1,650gr.

3 8

MG-6D: Magnetic key Standard 6 magnets with right guide

MAGNETIC KEYS

MG-6I: Magnetic key Standard 6 magnets with left guide.

MG-6S: Magnetic key Standard 6

magnets with central guide

MG-9: Magnetic key Multicode 9 magnets

TRANSPONDER TECHNOLOGY

THE SIMPLEST CLONING SOLUTION



TP05, TPH1, TPX1, TPX2, TPX4

THE KEY TO EXCELLENCE GLOBALLY UNLOCKING MILLIONS OF DOORS DAILY

TRANSPONDER TECHNOLOGY FOR TRANSPONDER KEYS

TRS-5000 EVO

Electronic machine for duplicating transponder keys of the main trademarks, Philips[®] and Texas[®] in their code and crypt variations using TPX1, TPX2 and TPX4 transponders, with technology developed by JMA







TWO CABLES power supply and updating via usb





TRANSPONDER ORIGINAL	TRANSPONDER ORIGINAL	TRANSPONDER JMA
TEXAS CRYPTO	TEXAS CRYPTO	TPX2
PHILIPS	TP01	TP05
TEXAS FIXED CRYSTAL	TP02	TPX1
MEGAMOS	TP03	TP05
ТЕМІС	TPO4	TP05
NOVA	TP05	TP05
TEXAS CRYPTO CRYSTAL	TP06	TPX2
TEXAS FIXED CRYSTAL	TP07	TPX1
MEGAMOS CRYPTO CRYSTAL	TP08	<i>TP08</i>
PHILIPS CRYPTO	TP09	TP05 - TP09
PHILIPS CRYPTO 1st GENERATION	TP10	TPH1

TRANSPONDER ORIGINAL	TRANSPONDER ORIGINAL	TRANSPONDER JMA
MEGAMOS CRYPTO CRYSTAL	TP11	TP11
PHILIPS CRYPTO 2nd GENERATION	TP12	TPX4
PHILIPS CRYPTO 2nd GENERATION	TP12CH	TPX4
PHILIPS CRYPTO 2nd GENERATION	TP12GM	TPX4
PHILIPS CRYPTO 2nd GENERATION	TP12HN	TPX4
PHILIPS CRYPTO 2nd GENERATION	TP12MT	TPX4
PHILIPS CRYPTO 2nd GENERATION	TP12NS	TPX4
PHILIPS CRYPTO 2nd GENERATION	TP12RN	TPX4
PHILIPS CRYPTO 2nd GENERATION	TP12SZ	TPX4

	TP05	TPH1
TPX1	TPX2	TPX4







TRANSPONDER ORIGINAL	TRANSPONDER ORIGINAL	TRANSPONDER JMA
PHILIPS CRYPTO 1st GENERATION	TP13	TPH1
PHILIPS CRYPTO 1st GENERATION	TP14	TPH1
PHILIPS CRYPTO	TP15	TP15
PHILIPS CRYPTO 1st GENERATION	TP16	TPH1
TEMIC CRYPTO	TP17	TP17
MOTOROLA INDALA	TP18	TP18
TEXAS CRYPTO CERAMIC	TP19	TPX2
TEXAS CRYPTO	TP20	TPX2
TEXAS CRYPTO	TP21	TPX2
MEGAMOS CRYPTO	TP22	TP22
MEGAMOS CRYPTO	TP23	TP23

TRANSPONDER ORIGINAL	TRANSPONDER ORIGINAL	TRANSPONDER JMA
MEGAMOS CRYPTO	TP24	TP24
MEGAMOS CRYPTO	TP25	TP25
TEXAS CRYPTO	TP26	TPX2
TEXAS CRYPTO	TP27	TPX2
TEXAS CRYPTO	TP28	TPX2
TEXAS CRYPTO	TP29	TPX2
TEXAS CRYPTO	TP30	TPX2
TEXAS CRYPTO	TP31	TPX2
SOKYMAT CRYPTO	TP32	TP32
TEXAS CRYPTO 2nd Generation	TP33	TP33
TEXAS CRYPTO 2nd Generation	TP34	TP34
TEXAS CRYPTO	TP35	TPX2

CODE	
TRS-5000 EVO External power supply	240-100VAC 9VDC 2Amp . 50/60Hz.
Consumption	9V. D.c. / 2 Amp.
TECHNICAL DATA	
Width	180 mm
Height	90 mm
Depth	150 mm
Weight	600 g.
Screen	LCD 20 characters x 4 lines
Antenna frequency	125 KHz / 134.2 KHz
Interface	RS232 serial port and USB

REMOTE CONTROL TECHNOLOGY

DISCOVERING NEW TECHNOLOGIES





SR TECHNOLOGY FOR REMOTE CONTROLS

REMOTE CONTROLS

JMA launches the most innovative technology for copying remote controls for opening doors. We have developed a high capacity product for both Fixed and Rolling codes and for all the frequencies used in the different markets



COMPLETE SOLUTION



Copy fixed and rolling codes into the same remote control 2 different frequencies on any of the 4 buttons Innovative scanner system (for occupied receivers)





SR-4V



For the 433.92 MHz and from 220 MHz to 420 MHz for countries outside of the EU.

SR-48



For the frequencies 433.92 MHz and 868 MHz

SR-Q



For the frequencies from 26 MHz to 41 MHz

ACCESSORIES





* Frequency meter with communication cable to PC

* PC Software with guided copy sequence and generation of remote controls





* Application for Android to make copies of remote controls via Bluetooth

* Bluetooth-USB Module for communication from the remote control with the Android application or with the PC application

ROLLING CODES

1st GENERATION

Mutancode [©], JCM [©], Vario [®], Norton [©], Roper [©], Erreka [®], Doormatic [®], Celinsa [®], Aprimatic TR [©], Gibidi [®], Dea [®], Smilo [®], Benica [®], Seav [®], AERF [®].

2nd GENERATION

GO [®], V2 [®], Nice Flor [®], Ditec [®], Aprimatic TXM/T2P [®], FAAC SHL [®](Master y Esclabo).





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