



Badeco

GENEVE



MX-4 TOUCH ***EVOLUTION***

1 TO 4 ***AUTOMATIC*** SELECTORS



MX-4 ***EVOLUTION***

1 TO 4 ***MANUAL*** SELECTORS



09/2015
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 **SWISS
MADE**



MX-4 TOUCH *EVOLUTION*

1 TO 4 *AUTOMATIC SELECTORS*



Inverseur (sens rotation moteur)
Drehrichtungsumschalter (Motor)
Reversing switch (for the motor)
Invertitore (senso rotazione motore)

gauche
links
left
sinistra

neutre
aus
off
neutro

droite
rechts
right
destra

Potentiomètre réglage de vitesse moteur
Motordrehzahlregelung
Speed control Potentiometer
Potenziometro regolamento velocità motore

Commutateur "pied/main"
Umschalter "Gerät/Pedal"
"foot/hand" selector switch
Interruttore
cambio "piede/mano"

Interrupteur secteur "marche/arrêt"
Netzschalter "ein/aus"
"on/off" switch
Interruttore "accesso/spento"

Contacteur on/off ou variateur
Ein / Ausschalten oder Dimmer
Switch on/off or dimmer
Interruttore on/off o dimmer

Micromotor holder with
light sensor switch. This
switch turns the motor
installed on the side to
support.

If there is not an engine at
that location, it must cover
with black tape sensor (
doesn't cross the light).

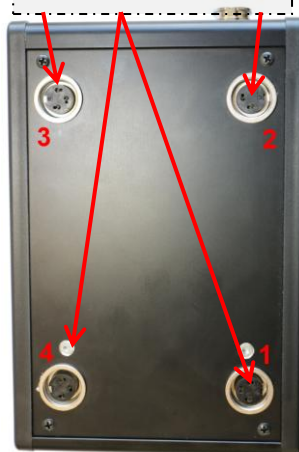
Connecteur moteur
Steckverbinder Motor
Motor connector
Motore connettore

MX-4TOUCH EVOLUTION remote
control is intended to be with 1 to 4
micromotor micromotors. To select ,
connect the desired number of
micromotor . Each micromotor must
be placed in its assigned slot. Black
housing (lateral support) No. 1 with
the socket for micromotor next - so on
until 4

An order of 1 to 4 is not important. It is
imperative to respect the micromotor
taken with the support next to the
socket. The customer can put only a
micromotor in slot # 4 if desire.

Each motor operates with a light
sensor switch within the media. This
switch turns the engine installed on
the side to support.

If there is not an engine at
that location, it must cover
with black tape sensor (doesn't cross the light).



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MX-4 *EVOLUTION*

1 TO 4 MANUAL SELECTORS

Interrupteur choix du moteur
Anschlussumschaltung
Motor selector switch
Interruttore cambio motore



MX-4 EVOLUTION remote control is intended to be with 1 to 4 micromotor micromotors. To select , connect the desired number of micromotor . Each micromotor must be placed in its assigned slot. Black housing (lateral support) No. 1 with the socket for micromotor next - so on until 4 .

An order of 1 to 4 is not important. It is imperative to respect the micromotor taken with the support next to the socket. The customer can put only a micromotor in slot # 4 if desire.

Each motor operates with a rotatif selector switch. This switch need be turn where the motor installed.

1 or 2 or 3 or 4



Supplied with : (MX-4 Evolution or MX-4 TOUCH Evolution)



Foot holder



RS2000



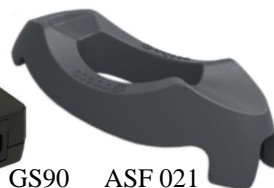
450



PC200
Switch on/off



SEC115USA
SEC230EU
SEC230CH



GS90 ASF 021

Optional accessories



Motor RS2000 => 2000 rpm to 20'000 rpm – 180W



Micro-Filer 4LC100 => 500 rpm to 20'000 rpm – stroke length 1 mm – for tools Ø3mm and 1 x 0.5 mm



Mallet 318 Combi => 500 to 5'000 strokes/ min – Adjustable 4 level stroke (normal to strong stroke).



Mallet 318 SP => 500 to 5'000 strokes/ min – Adjustable 4 level stroke (fine stroke to very fine stroke).



Handpiece 388 => 2'000 to 20'000 rpm –universal interchangeable collets (0.50 to 3.20).



Handpiece 450 => 2'000 to 20'000 rpm – Quick exchange ¼ turn (with collet Ø2.35).



Handpiece 380 => 2'000 to 20'000 rpm – Quick exchanging chuck Ø0.0 to 4.5mm.



M4-RS400 => Reduction gear attachment ¼ (4 times more power with less speed 4 times). Attached with all handpieces connections.


































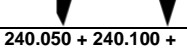
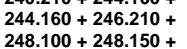
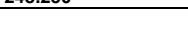

M4-026 => Holder for fixing on the workbench



PC800 => Double foot pedal (contactor on/off and speed select with hand – Variateur with all speed with foot)

Exchangeable chucks for handpiece => Original high quality and concentric of 0.03mm
Original high quality tips for mallet

Article	Diameter	 0.03 mm
560004	Box of 9 chucks (Ø 0.55 to 3.20)	
055012	Ø 0.55 mm	
055021	Ø 0.80 mm	
055030	Ø 1.05 mm	
055039	Ø 1.55 mm	
055048	Ø 2.05 mm	
054373	Ø 2.35 mm	
055057	Ø 2.55 mm	
055066	Ø 3.05 mm	
055075	Ø 3.20 mm	
054367	Tightening nut (Md 274)	
560055	Chuks automatic 0 to 4.5mm (C200)	
054516	Quick exchange kit 2.35 mm (400 SSC)	

REF.	Form of tips Silver steel	Description	Diameter
240.000		Point Round Unhardened	Ø 4.00 mm
240.050 *		Point Round Smooth	Ø 0.50 mm
240.100 *		Point Round Smooth	Ø 1.00 mm
240.210 *		Point Round Smooth	Ø 2.10 mm
240.250		Point Round Smooth	Ø 2.50 mm
241.210		Point Round Grooved	Ø 2.10 mm
242.080		Point Round Concave	Ø 0.80 mm
242.100		Point Round Concave	Ø 1.00 mm
248.100 *		Point Rectangle Smooth	0.50 x 1.00 mm
248.150 *		Point Rectangle Smooth	0.80 x 1.50 mm
248.200		Point Rectangle Smooth	1.00 x 2.00 mm
248.250 *		Point Rectangle Smooth	1.20 x 2.50 mm
249.250		Point Rectangle Grooved	1.20 x 2.50 mm
246.210 *		Point Oval Grooved	2.10 x 1.20 mm
244.100 *		Point Square Smooth	1.00 x 1.00 mm
244.160 *		Point Square Smooth	1.60 x 1.60 mm
250.250		Point High speed steel Round	Ø 2.50 mm
260.250		Point Super carbide Round	Ø 2.50 mm
254.250		Point High speed steel Angle 45°	Ø 2.50mm – 45°
264.250		Point Super carbide Angle 45°	Ø 2.50mm – 45°
230.000	240.050 + 240.100 + 240.210 + 244.100 + 244.160 + 246.210 + 248.100 + 248.150 + 248.250	Box of 9 different hardened points *	

English

BADECO Micromotor Box MX-4

We would like to thank you for purchasing this BADECO product and feel sure you will be happy with your choice, as it has been designed to meet your requirements and provide you with trouble free usage.

Technical Characteristics

- a. MX-4 TOUCH EVOLUTION (automatic select from 1 to 4).
- b. MX-4 EVOLUTION (manual selector from 1 to 4).
- c. Speed: from 500 to 20'000 rpm.
- d. Box with 4 branching.
- e. Double voltages (230V & 115V).
- f. A rotation reversing switch is fixed on the front plate (usual rotation on "R").
- g. Box equipped with a protection against overheating. Should overheating happen, micromotor will stop automatically in order to protect the electronic system. Micromotor can be used again once system has cooled down.
- h. Pedals with 2 functions including. (Switch on/off and variator). On option with PC800.

Before use

In order to avoid deterioration and any danger for the utilizer, it is absolutely indispensable to use only BADECO original accessories (incompatibilities!)

Before use, every user should read carefully the Directions for Use and keep them handy. BADECO will not accept any responsibility in case of damage caused by wrong or inappropriate manipulation. This micromotor is intended for gold and silversmiths, jewellery and watchmaking specialists. It is not a toy, nor a medical apparatus. Local supply circuit tension has to correspond to that of the apparatus. It has to be plugged only in a protected socket with earth connection which has been installed by a professional electrician.



Safety

- a. **Never dismantle !** Material to be sent only to BADECO Geneva for repair.
- b. Do not plug out by pulling the cable. The box should be disconnected to move it.
- c. Whole system should not get in contact with dusts, metallic chips and liquids.
- d. System should not be used if electric cable is in bad condition or if the box has fallen on the floor and damages have been caused.
- e. It is recommended to wear spectacles.
- f. Too ample clothes could get caught with the drill.
- g. Low speed will considerably increase the life expectancy of all tools.
- h. Motor, handpiece and mallet should not run when not in use.
- i. Stop the motor to change the handpiece, mallet as well as drills, milling, cutters, wheels, points, etc.
- j. Motor and electronic box should not be oiled.
- k. Diameter of the spindle has to be exactly the same as that of the burr holder of the handpiece and has to be perfectly clean and even on all its length. A spindle in poor condition will damage the handpiece.
- l. After each utilization, micromotor has to be put back on its bracket.



Utilization

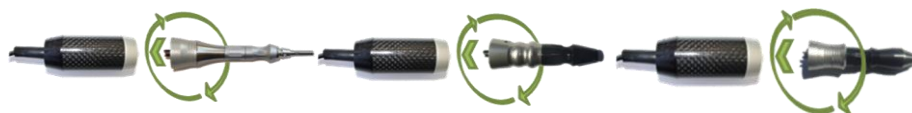
- a. Plug the electronic box in the local supply circuit (with earth connection).



- b. Plug your micromotor with its motor cord on the front plate of the box (in the plug 1 – 2 – 3 – 4) and screw well.



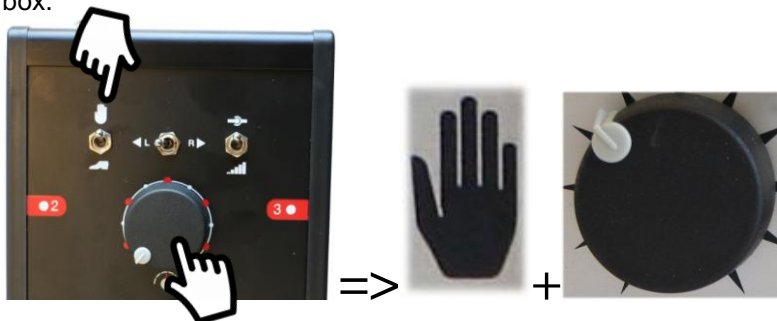
- c. Screw your handpiece or mallet on your micromotor.



- d. On the front plate : Push better the reversing switch on "R" (usual rotation direction of the motor).



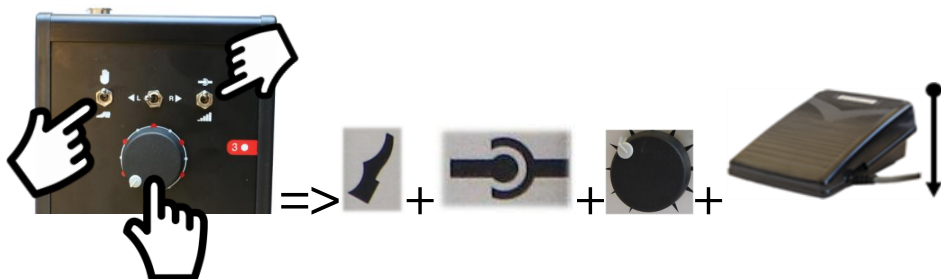
- e. **For manual command (100% with hand):** Set the switch on "hand" and adjust the speed manually using the potentiometer on the front plate of the box.



- f. **Using a pedal:** Plug your pedal on the back panel and set the "foot" position on the front plate.

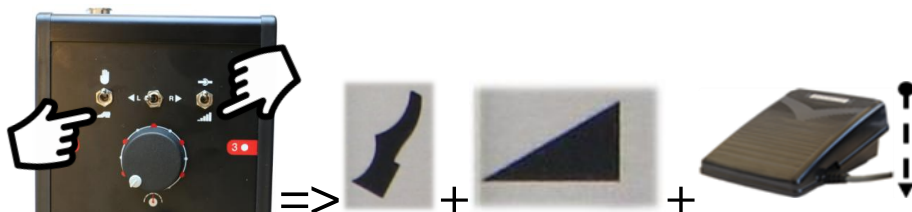


The on/off footswitch works as a contactor. You adjust the speed on the potentiometer on the front plate of the box. Contact on the pedal assures chosen speed.



The COMBI multifunction pedal works as follows : (100% with foot)

- Pedal-lever: pedal operates as a variator of speed. You control speed progressively from 2'000 to 20'000 rpm with the foot.



- g. **Foot attachment** Screw on the workbench or to be screwed on the optional support arm.



In case of Breakdowns

- a. Check all the connections.
- b. Check the fuses (on back panel of the box) and replace them if necessary.
- c. Are all the switches well connected?

Repair

Never dismantle!

Repair to be done only by BADECO in Geneva in order to guarantee that the electronic box operates perfectly with maximum power.



Warranty Provisions

- a. BADECO SA guarantee for a period of 2 years.
- b. This guarantee is valid only if the original invoice or sales receipt (indicating the date of purchase, product and seller's name) can be presented and if the information contained within it is complete and legible.
- c. This guarantee will not apply if the serial number on the product has in any way been altered, removed or made illegible.
- d. The BADECO office will repair or replace the product within a reasonable time-scale subject to country specific parts being available.
- e. This Guarantee does not in any circumstances cover damage resulting from adaptations or adjustments which may have been made to the product without BADECO's prior written consent.

To obtain warranty service

- a. Warranty service is available in the authorized BADECO service centres. Addresses of the main service centres are attached.
- b. Any costs of secure transportation of the product to and from the BADECO service centre will be borne by the customer.
- c. If the product is brought into a country which is not covered and which does not accept the warranty card, the product must be returned to the country where it was purchased in order to benefit from the warranty.

This Guarantee expressly excludes the following items:

- a. Consumable items
- b. Periodic maintenance and repair or replacement of parts due to normal wear and tear
- c. Damage resulting from any abuse or misuse of the product. Usage should be compatible with that described in the User's Guide.
- d. Any failure caused by not following BADECO's instructions in relation to the correct maintenance procedures to be adopted in connection with the product.
- e. Installation or use of the product in a manner inconsistent with the technical, safety or legal standards in force in the country where it is used.
- f. Damage resulting from repairs carried out by non-authorized service personnel or the customer himself.
- g. Transport damage caused by inadequate or incorrect packaging (we would suggest you retain the original packing for shipping the product should you need to transport the unit for any reason).
- h. Accidental damage, and damage resulting from lightning, water, fire, improper ventilation or any cause beyond BADECO's reasonable control.

This Guarantee does not affect the statutory rights of the customer under any applicable national laws in force nor the rights of the consumer against the dealer arising from their sales / purchase contract.

CE Declaration of Conformity

We declare under our sole responsibility that this product is in conformity with the following standards.



European Union (and EEA) only

This symbol indicates that this product is not to be disposed of with your household waste, according to the WEEE directive (2002/96/EC) and your national law. This product should be handed over to a designated collection point, e.g., on an authorized one-for-one basis when you buy a new similar product or to an authorized collection site for recycling waste electrical and electronic equipment (EEE). Improper handling of this type of waste could have a possible negative impact on the environment and human health due to potentially hazardous substances that are generally associated with EEE. At the same time, your cooperation in the correct disposal of this product will contribute to the effective usage of natural resources. For more information about where you can drop off your waste equipment for recycling, please contact your local city office, waste authority, approved WEEE scheme or your household waste disposal service. (EEA : Norway, Iceland and Liechtenstein)

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