

MULTI_____













MULTI4 BENEFITS

- Easier to use: simplified user interface, intuitive navigation, new and improved features (zooming, cutting/pasting, test ...)
- Resolution: high definition color screen
- Intuitive: icon based navigation menu allows for quick understanding and operation of the software
- Ergonomics: new design with a second handle (optional accessory)
- Handling: support foot, controller handgrip and handle on the marking head (optional)
- <u>Light weight</u>: marking head weight reduced by around 0.88 lbs (400 grams)
- Robust: use of cast aluminum parts
- Performance: increase of the marking speed by 20% and optimization of the overall X/Y movement, standard management of 3 axes
- Resourceful: 40Mb of memory can accommodate up to 20,000 stored, marking files (40 characters, 1 line), serial communication, USB, Ethernet (option) and Inputs/Outputs



TECHNOLOGICAL INTELLIGENCE





IDI Mark :

The quality of marking is ensured, whatever the difference in height between the part (flat or cylindrical) and the stylus. Its adjustment is managed by the Multi4 software.



IDI Track :

Real-time Multi4 monitoring for analysis of maintenance needs, stylus wear and detection faults (auto-diagnosis feature with 5 control points).

- (1) Marking with IDI Track
- (2) Marking without IDI Track

Patent n°EP-06 764715.6

Patent No. US-9, 421, 598



STEP 1 : Read the safety instructions

- Depending on your application, we strongly recommend to wear protective glasses and gloves, as well as safety shoes.
- Keep the machine away from heat, humidity, and radio interferences sources (ex : welding machine).
- Never tighten or release the knurled nut of the percussion sub assembly* using a plier or any other tool.
- * Part where the stylus is located

- Hand tightening is sufficient (See User's guide 1-B-2).
- Avoid violent impact on the marking head or the control box.
- Never cover the control box.
- Do not insert your fingers between the stylus and the part to be marked.
- Never activate the machine when empty

- (without part to mark under the marking head).
- Think about positioning stylus between 0.039" and 0.37" (1mm and 9.5 mm) from the surface to be marked. Optimal configuration is 0.12" (3 mm).
- In hand held position, do not point or position the active part of the stylus towards yourself or anybody else.

<mark>STEP 2 :</mark> Unpacking, assembly and starting up



Unpack the different parts comprising the machine.



Tighten the locking handle on the column (see assembly plan ASC 10 included in the packing box).



Connect the power cable to the controller.



Assemble the base and the column (see assembly plan ASC10 included in the packing box).



Mount the marking head on the column $(\frac{1}{2})$, using the knurled nut at the back of the head $(\frac{2}{2})$.



Plug in the power supply cable into a power socket.



Fix the fixing plate on the column (see assembly plan ASC 10 included in the packing box).



Connect the marking-head cable to the controller $(\frac{1}{2})$ and lock it $(\frac{2}{2})$.



Power up the machine by switching the main switch to (1).



STEP 3: Main functions



- 01 Return to home page
- 02 Character height, position and marking force
- 03 Setting point density, spacing, ...
- 04 Cancel input/operation
- 05 Start/stop battery (optionnal)
- 06 Space bar
- 07 "Shift" key. Allow minuscule when kept pressed + letter
- 08 Marking or test stop button
- 09 Insert special characters
- 10 File (Open an existing file, create a new file, save, adjusting speed, activate D axis)
- 11 Marking simulation function without marking

- 12 Parameters setting (zoom, time, language, accessory, window size, ...)
- 13 Secondary functions (see step 4 underneath)
- 14 Battery and sleep mode indicator
- 15 Erase characters
- 16 Confirm input/operation
- 17 Marking or test start button

STEP 4: Secondary functions (once the main function has been selected) Yellow buttons open action windows



Enter data: text, figures...



Modify marking parameters



Add mechanical function: pause, ...



Edit Menu: copy/stick, insert, ...



File configuration: speed, accessory and IDI activation, ...



Manual positioning of data



Setting marking force



Adjust characters height/width



Adjustment of slope angle and radius



Centring text X, Y, or XY



Select point density



Select character font



Italic mode



Setting space between characters



Back to default values



Save file



Open existing file



New file



Import/Export data with USB key



Testing outline of the selected line



Testing outline of all the lines (file)



Test beginning/end of the line



Marking tost of the line



Marking test of the line without impact



Marking test of all the lines (file) without impact



Zoom



Setting date and time



Users, licences and password



Interface parameters (language, ...)



Machine parameters (maintenance, window,...)



STEP 5 : Producing a "simple" marking



Position part under the marking head



Fasten the part to the table



Adjust height of the marking head (tighten the locking handle (1), adjust height with the upper wheel (2), release the locking handle (3) then lock it



Position the stylus tip between 0.039" and 0.37" (1 mm and 9.5 mm); ideally (default value) 0.12"



Enter or modify text, figures; they are displayed on the screen



Enter the "position" menu



Press "position" key



Position marking following X and Y within the window, using arrows



Press "force" key and select 1 to 6 (intermediate setting is 2)



Select key: "character dimension" and adjust height/width with arrows



Enter "data parameters" menu



Select "point density" key and select one of the 4 matrix





Confirm entered data and configuration



Select "test" menu



Test marking (choose from: line outline (1), file outline (2), beginning end line (3), line without impact (4), file without impact (5)



Start marking



Select "file" menu



Press "save" key



Enter file name and eventually comments



Confirm entry



Turn off the mains switch (0)

STEP 6: Reminder of the main technical features

• Power: 250 VA

• Frequency: 50 or 60 Hz

 \bullet Controller dimensions (L x W x H): 145.67" x 84.65" x 54.72" (370 x 215 x 139 mm)

• Electrical supply: 90 to 240 V

 \bullet Range of working temperature: 0°C to + 45°C (32°F to 115°F)



STEP 1: Safety instructions

For safety reasons, you must unplug the power cable before performing any maintenance or service operation on the machine.

STEP 2: Maintenance and Daily Service

The new Multi 4 generation was designed to keep maintenance as low as possible. Only the mechanical part (marking head) requires minor maintenance.



Regular maintenance with manufacturer origine pieces ensures marking equipment lifetime of 20% gain. Over a 5-year period, the average operating cost of the product was reduced by 14% (excluding warranty period)



Think about cleaning and lubricating the stylus, following the disassembly instructions as explained in the user's manual (6-C).



Check the sharpness of the stylus (Standard 90°). It can be sharpened or replaced as necessary.



Check the spring condition. It should not be shorter than 51 mm!



Check if there is no dirt in the mechanic parts, and clean as necessary using a compressed air nozzle.

STEP 3: What to do when faced with a malfunction?

- 01 Unplug the power cable from the machine, to remove all power.
- 02 Refer to the user's manual.
- 03 Contact our after sale customer service team by either:
 - E-mail: technical.support@technomark-inc.com
 - Telephone: (936) 270-7180 or (888) 610-0151



Our technicians are committed to helping you identify and rectify the malfunction as quickly as possible.

04 - If the problem cannot be solved directly, we ask you to return the complete machine (controller + head).

If required, and depending on the guarantee conditions, our company will supply FREE of charge a loan machine during the period your equipment is unavailable.

We are committed quotation a repair estimate within 48h from the time we receive the machine.



STEP 4: Trouble shooting



The control screen does not work.

- Check the main power supply
- Check the On/off switch



The marking quality is bad and/or the characters are not well formed.

- Ensure the part is correctly fixed in place
- Check sharpness of the stylus
- Adjust:

Character height
Impact force
Part to stylus distance



The stylus stays stuck, tip downwards.

- Clean and oil the stylus
- Change the stylus spring (See user's manual 6-C)
- Replace the stylus



The part is not marked.

- Check if stylus is moving freely
- Check if force and/or distance are compatible
- Check position and tightening of the stylus assembly
- Check if the purple electro-magnet cable is damaged



The percussion assembly is not moving or makes a strange noise during the marking cycle and/or as it returns to its oriain.

- Check alignment and cleanliness of X and Y axis (see user's manual 6-F)
- Check the connection and locking of the marking head cable on the controller

For any other malfunction, please refer to the user's manual.



Your support

Many services are available to satisfy all your requirements. Our teams are at your service.



COMMERCIAL DEPARTMENT

For all inquiries concerning:

- Machine and accessory sales
- Maintenance and loan contracts
- Our product offers



ADMINISTRATIVE DEPARTMENT

For all inquiries concerning:

- Invoicing
- Payment facilities
- Contract follow up



LOGISTIC DEPARTMENT

For all inquiries concerning:

- Shipping policy
- Transport
- Return of equipment

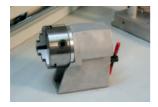


AFTER SALES SERVICE

For all inquiries concerning:

- Technical service
- Maintenance
- Loan equipment
- Repairs

MAIN ACCESSORIES



Heavy duty rotary D axis



Standard rotary D axis



Automatic plate feeder



Maintenance kit



Powered Z column base for automatic part detection



Bar-end tool



Plate support



Part support



Transport trolley



Magnetic head support



Software



Reading system

Our whole team thank you for choosing Technomark and wish you many good markings!



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