

MICROTECH 141088015A Micron Computerized Multi Force Caliper User Manual

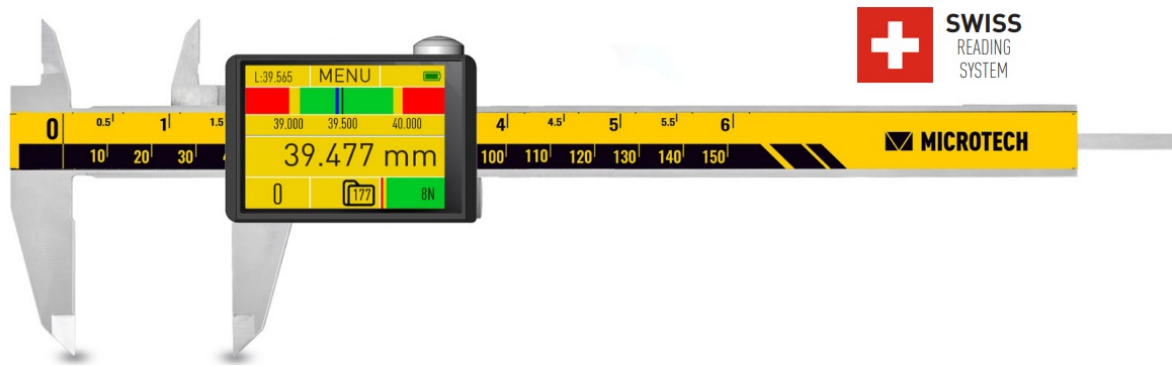
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MICROTECH 141088015A Micron Computerized Multi Force Caliper



Product Specifications

- Calibration Date: Rechargeable
- Auto Off: Yes
- Password Memory: Yes
- Statistics Memory: Yes
- Wireless: Yes
- USB: Yes
- HID: Yes
- FW Update: Available
- Formula Timer: Yes
- Temperature Compensation: Yes
- Linear Correction: Yes
- Analog Scale: Yes

Product Usage Instructions

Cleaning and Maintenance

Clean the oil from the measuring surfaces of the caliper using a cloth. Do not leave the caliper uncharged for an extended period as it may result in internal battery failure.

Charging and Power

For charging, connect the USB cable to the device's built-in rechargeable Li-Pol battery. To switch on the device, push the button for 1 second. To switch off the device, push the button for 3 seconds or allow it to auto switch off. Data transfer can be done through programming via the menu.

Force Control

The electronic multi-force control module allows for measuring with a requested force in the range of 1-20N. Different force modes are available such as Disable, Indicate, Auto, and Force. The force indication on the force bar is color-coded for easy reference.

Data Transfer and Memory

You can save measuring data to the internal device memory by touching the data area on the screen or pushing a button. The saved data can be viewed or sent wirelessly or via USB connection to Windows PC, Android, or iOS devices. Different memory modes like Standard or Folder system can be activated through the memory menu.

Analog Scale and Probe Mode

The analog scale can be activated for probe mode, and folders system memory allows for storing up to 2000 values. The product also supports memory export and statistics tracking.

Frequently Asked Questions (FAQ)

Q: How do I know if the wireless connection is established?

A: The device will indicate “Wireless Connected” on the screen when the wireless connection is established.

Q: How can I set limits using the product?

A: You can set limits using the Limits mode with color indications on the main screen for Go and NoGo zones.

SPECIFICATION

Item No	Range		Resolution	Accuracy*	Force	Jaws	Measuring HUB	Analog scale	Graphic	Presets	Go/NoGo	Max/Min	Formula	Timer	Tempcomp	Linearcorr.	Calibrate	Recharge	Auto off	Password	Memory	Statistics	WIRELESS	USB H/D	FW update	
	mm	inch	mm	μm	N	mm																				
141088015A	0-150	0-6"	0,0001	±5	1-20	40/16	•	•	•	•	•	•	•	•	•	•	•	•	•	•	1000val	•	•	•	•	
141088020A	0-200	0-8"		±8		50/17	•	•	•	•	•	•	•	•	•	•	•	•	•	•		•	•	•	•	•
141088030A	0-300	0-12"		±10		60/20	•	•	•	•	•	•	•	•	•	•	•	•	•	•		•	•	•	•	•

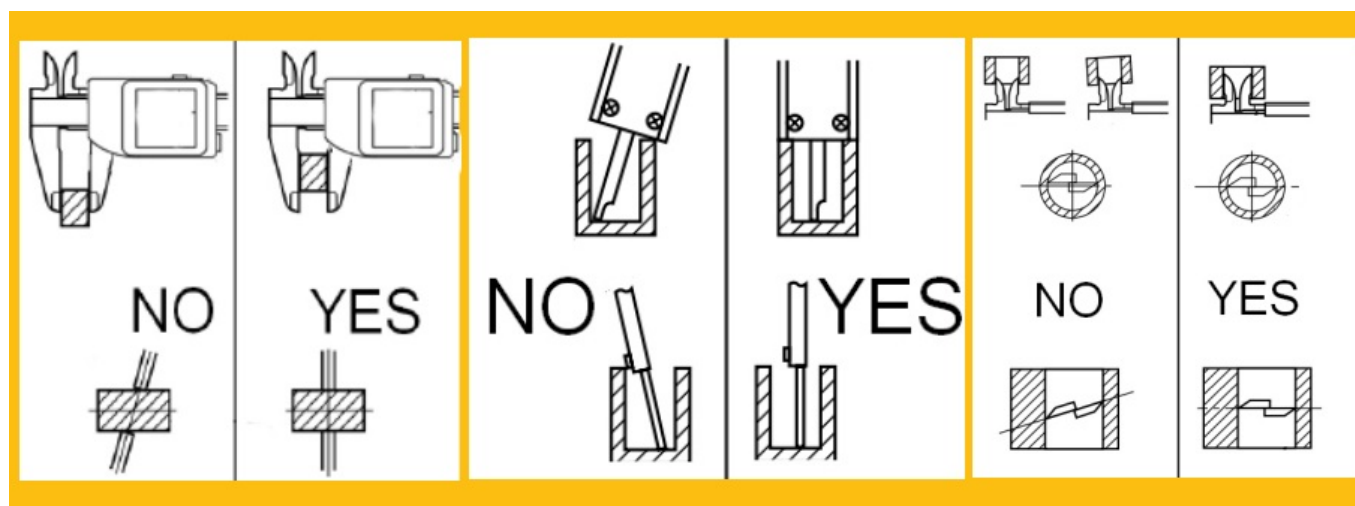
* For internal jaw and depth bar accuracy according DIN 862

TECHNICAL DATA

Parameters	
LED display	color 2,0 inch
Resolution	320×240
Indication system	MICS 3.0
Power supply	Rechargeable Li-Pol battery
Battery capacity	400mAh
Charging port	micro-USB / Magnetic port
Case material	Aluminum
Buttons	Switch (Multifunctional)
Wireless data transfer	Long range/HID

Clean the oil from the measuring surfaces of caliper by cloth. DO NOT LEAVE UNCHARGED CALIPER FOR A LONG TIME. THIS MAY RESULT TO INTERNAL BATTERY FAILURE!

CORRECT MEASURING

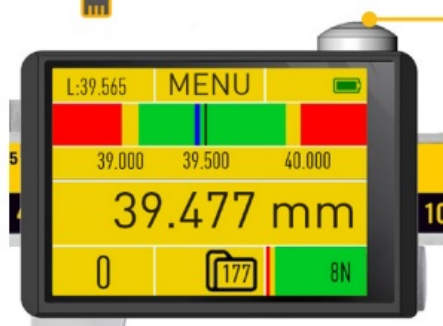


MAIN INFO



For charging connect USB cable

BUILT-IN BATTERY - rechargeable Li-Pol battery

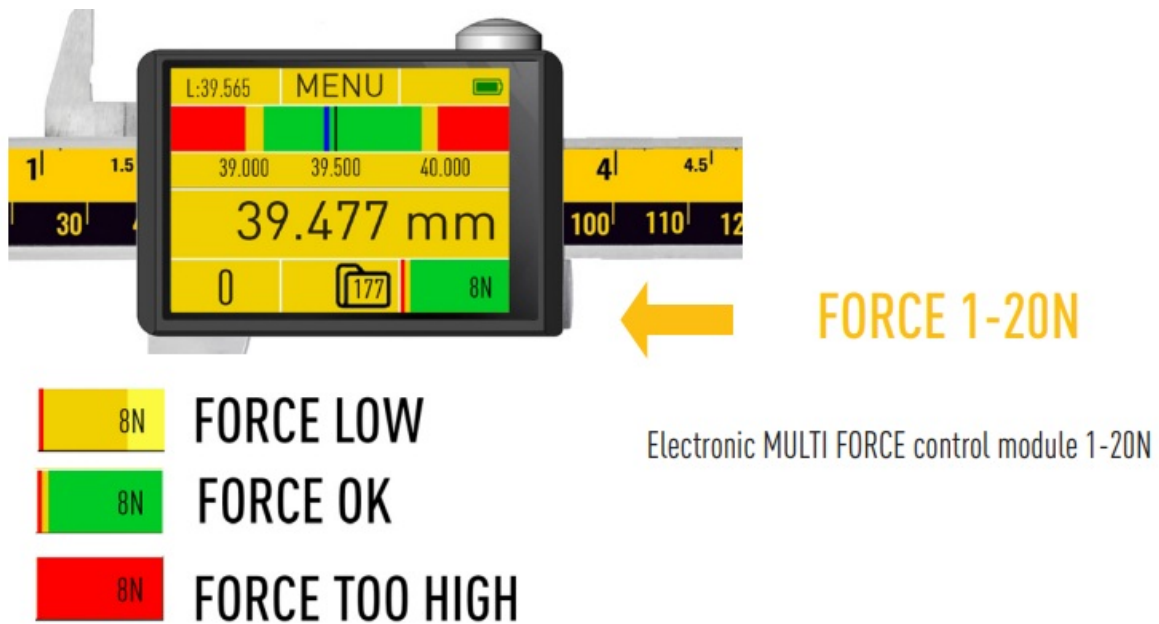


SWITCH ON DEVICE - button push (1 sec)

SWITCH OFF DEVICE - button push (3 sec)/ auto switch off

DATA TRANSFER - programming throw menu

FORCE CONTROL



Caliper with electronic multi-Force control module, gives possibility measure all time with a requested FORCE in range 1-20N

FORCE MODES:

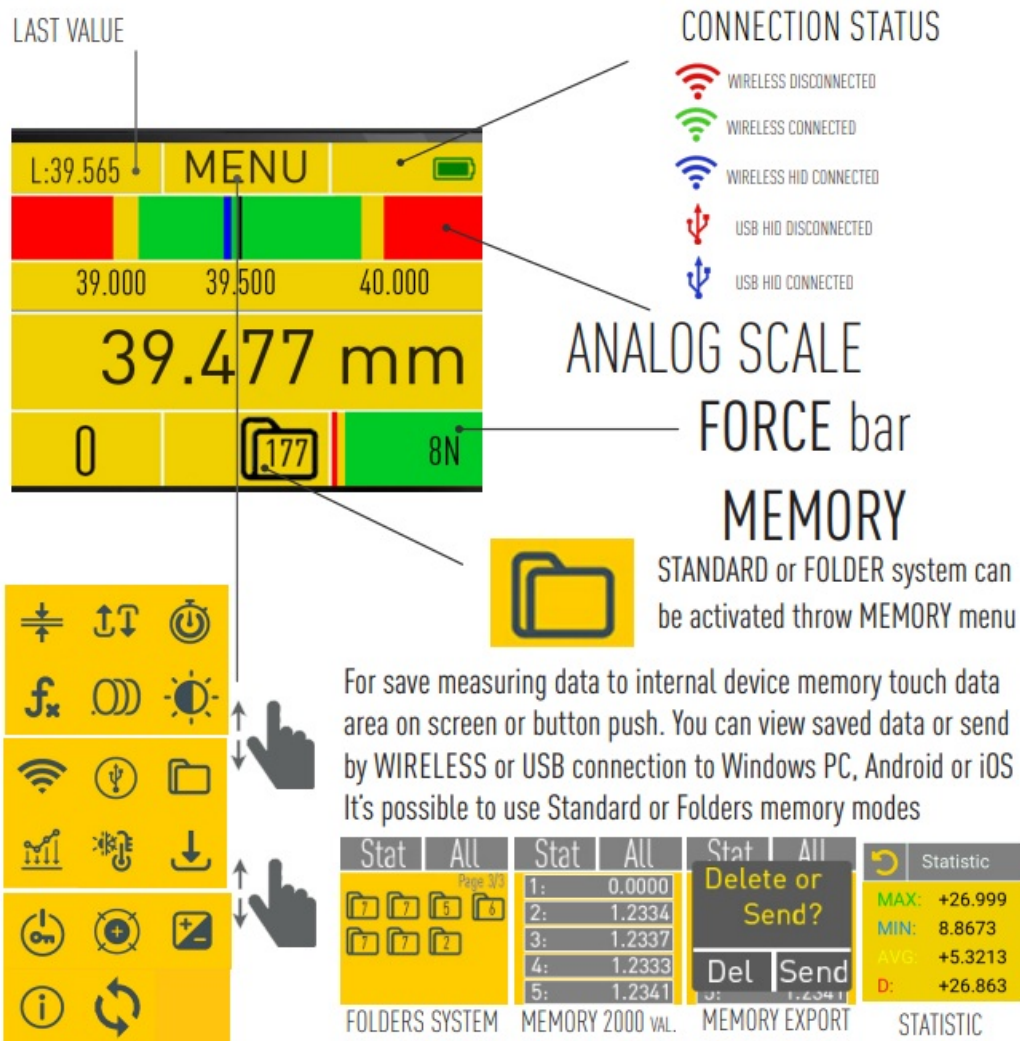
- DISABLE – FORCE mode OFF
- INDICATE – Indicating requested FORCE and status on FORCE bar
- AUTO – Indicating requested FORCE and status on FORCE bar and Saving to memory actual length value upon reaching requested FORCE (1-20N). FORCE -Indicating actual FORCE value during pushing

FORCE Indication on FORCE bar:

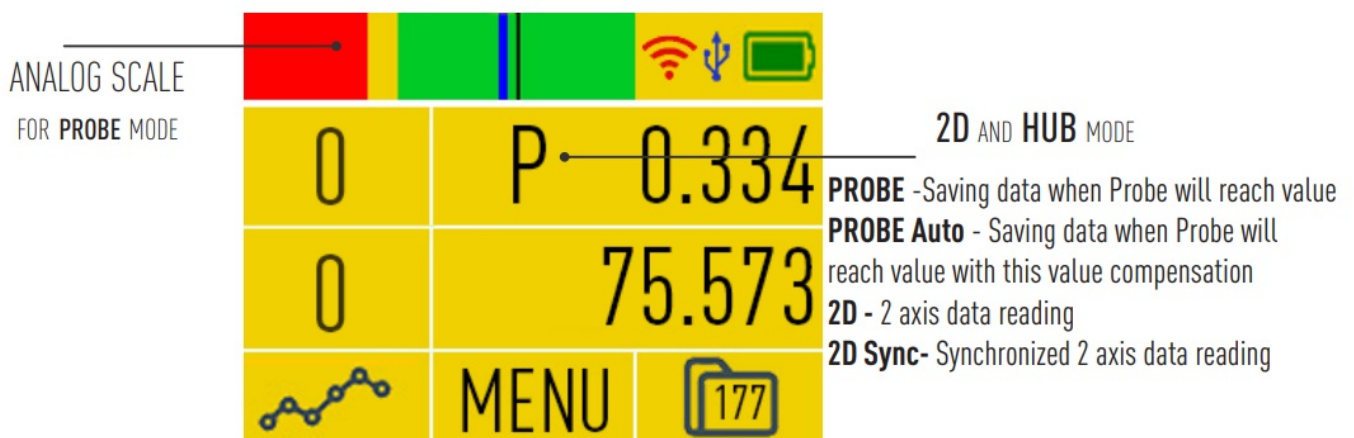
- Green color – actual FORCE OK
- Yellow color – lower FORCE
- Red color – over FORCE

For ZERO setting also use Force control module (push Force up to Green indication and set ZERO by push for 0 button.

MAIN SCREEN



MAIN SCREEN on 2D mode



FUNCTIONS

LIMITS mode GO/NOGO



COLOR INDICATION LIMITS ON MAIN SCREEN Go NoGo

MAX - **NoGo** more Upper limit

MIN - **NoGo** less Lower limit

RANGE - **Go** between Limits

SCALE - Analog scale active

>	2.000
<	3.000
%	20
SCALE	RES

Upper limit

Lower limit

Yellow zone on
analog scale

PEAK mode MAX/MIN/MODULE/RANGE



DISABLE - non active mode

ENABLE - activating mode

REFRESH - refresh peak value
according timer

Max/Min
Enabled
MAX

MAX - indicating MAX measured value

MIN - indicating MIN measured value

MODULE - indicating MAX module

RANGE - indicating deviation between
MAX and MIN

SAVING DATA TO MEMORY OR SENDING WIRELESS/USB BY TIMER

TIMER mode



Timer
0.000 sec
Reset

Select timer period

Reset to disactivate mode

FORMULA mode



Formula	
Ax ² +Bx+C	
Set Argv	

Select FORMULA Type (Math, Radius or other)

Select arguments

RESOLUTION selection



Resolution	
X.0000	
mm	

Resolution selecting

mm/inch conversion

DISPLAY settings



Sleep OFF (15 s low brightness off, sleep off)

Sleep 15s (15 s low brightness on, sleep off)

Sleep ON (15 s low brightness on, sleep on)

Display	
Angle 270	
Sleep ON	

Display rotation 0°, 90°, 180°, 270°

Brightness level

Linear correction error's on device

LINEAR error compensation



Re-calculation detail size to calibration conditions (20°C)

O: 17.251	
C: 17.258	
UP	OK
DN	RES

actual values

correct values by up&down button

confirm point correction

TEMP compensation



Manual Temperature setting

Temp.com.	
Cu, Cu alloys	
27.5°C	RES

4 types of material for selection:

- Glass, Quartz
- Stainless steel
- Cuprum and alloys
- Alluminium and alloys

WIRELESS data transfer



Reconnection button

Wireless power

regulation

Wireless	
HID	
CLEAR	

ON - WIRELESS data transfer to MDS App for Android, iOS, Windows

HID - WIRELESS HID direct transfer data to any App in Windows, MacOS, Linux, Android devices (like keyboard). Configure data format in USB sub-menu

2D-S - Slave device on WIRELESS connection on HUB mode

2D-M - Master device on WIRELESS connection on HUB mode

USB OTG data transfer



Connect USB cable to PC & Activate USB HID connection mode

Select setting of data transfer

Direct transfer data to any App in Windows, MacOS, Linux, Android devices

Configuring data transfer Dot/Comma and Tab/Arrow Down/CR+LF

HUB connection



A.C.on - Auto Connection active

A.C.off - Auto Connection no active

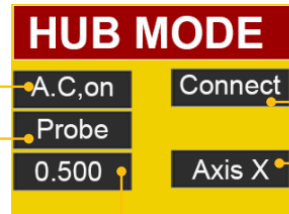
PROBE - Saving data when Probe will reach value

PROBE Auto - Saving data when Probe will reach value with this value compensation

2D - 2 axis data reading

2D Sync - Synchronized 2 axis data reading

Disable - switch off modes



External Wireless device connection

Axis priority selecting

Setting PROBE limit value

2D MODE

A.C.on - Auto Connection active

A.C.off - Auto Connection no active

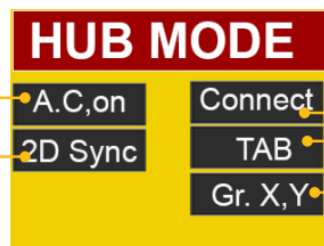
PROBE - Saving data when Probe will reach value

PROBE Auto - Saving data when Probe will reach value with this value compensation

2D - 2 axis data reading

2D Sync - Synchronized 2 axis data reading

Disable - switch off modes



External Wireless device connection

Symbol between Axis

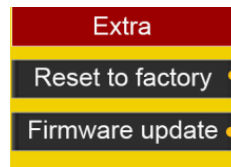
Graphic mode indication setting

FORCE



- **DISABLE** – FORCE mode OFF
- **INDICATE** – Indicating requested FORCE and status on FORCE bar
- **AUTO** – Indicating requested FORCE and status on FORCE bar and Saving to memory actual length value upon reaching requested FORCE (1-20N). FORCE -Indicating actual FORCE value during pushing

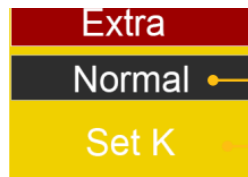
RESET to Factory settings



Push 10 times to RESET device to factory settings

Push 10 times to FIRMWARE UPDATE

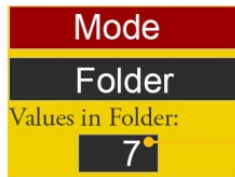
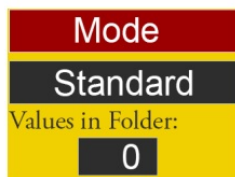
EXTRA



Selecting normal or inverted axis mode (+/- value indication)

Coefficient setting (for distributor and calibration only)

MEMORY manager setting



Activating STANDARD or FOLDER SYSTEM

Values in each Folder



FOLDERS SYSTEM

CALIBRATION date info



Push for change calibration date info

Device INFO



Information about device

- Firmware version
- MAC adress for WIRELESS connection

INDUSTRY 4.0 INSTRUMENTS



MICROTECH

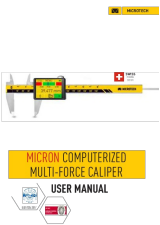
innovative measuring instruments

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Documents / Resources

	<p>MICROTECH 141088015A Micron Computerized Multi Force Caliper [pdf] User Manual 141088015A Micron Computerized Multi Force Caliper, 141088015A, Micron Computerized Multi Force Caliper, Computerized Multi Force Caliper, Multi Force Caliper, Force Caliper, Caliper</p>
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References

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- [User Manual](#)

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