

# LONG JAW COMPUTERIZED CALIPER USER MANUAL





Item No	Range	Resolution	Jaws	Accuracy	Measuring force	Functions	Indication	Data output	Calibration	
	mm	mm	mm	mm	N			USB Wireless	ISO17025	
141005216	0-500	0,01	100	$\pm 0,030$	15N	Error & Temp comp. Preset. Memory Max/Min Limits	Color Touchscreen 1.5"	+	max 50 m	+
141005217		0,001		$\pm 0,020$	15N			+	max 50 m	+
141005226		0,01		$\pm 0,030$	15N			+	max 50 m	+
141005227		0,001	$\pm 0,025$	15N	+			max 50 m	+	
141005256		0,01	300	$\pm 0,030$	25N			+	max 50 m	+
141005257		0,001		$\pm 0,030$	25N			+	max 50 m	+
141006216	0-630	0,01	100	$\pm 0,030$	15N			+	max 50 m	+
141006217		0,001		$\pm 0,020$	15N			+	max 50 m	+
141006256		0,01	300	$\pm 0,030$	25N			+	max 50 m	+
141006257		0,001		$\pm 0,030$	25N			+	max 50 m	+
141010216	0-1000	0,01	150	$\pm 0,050$	15N			+	max 50 m	+
141010217		0,001		$\pm 0,040$	15N			+	max 50 m	+
141010256		0,01	300	$\pm 0,050$	25N			+	max 50 m	+
141010257		0,001		$\pm 0,040$	25N			+	max 50 m	+
141015216	0-1500	0,01	150	$\pm 0,060$	15N			+	max 50 m	+
141015217		0,001		$\pm 0,050$	15N			+	max 50 m	+
141015256		0,01	300	$\pm 0,060$	25N			+	max 50 m	+
141015257		0,001		$\pm 0,050$	25N			+	max 50 m	+
141020216	0-2000	0,01	150	$\pm 0,060$	15N	+	max 50 m	+		
141020217		0,001		$\pm 0,050$	15N	+	max 50 m	+		
141020256		0,01	300	$\pm 0,060$	25N	+	max 50 m	+		
141020257		0,001		$\pm 0,050$	25N	+	max 50 m	+		

Clean the oil from the measuring surfaces of caliper by cloth.

For recharging caliper (Li-Pol rechargeable battery) connect it with standard USB cable to charger device.

**DO NOT LEAVE UNCHARGED CALIPER FOR A LONG TIME.  
THIS MAY RESULT TO INTERNAL BATTERY FAILURE!**

Turn on caliper by pressing ON button (1 sec).

For zero setting use Force control module- line inside lens must be came off with outside line. Press the **ZERO** button (2 sec) on Touchscreen for ZERO position setting.

During a measuring use Force control module to measure with optimal Force (8N for this type of caliper).

For save measuring data to internal caliper's memory with touch data on screen. You can view saved data throw menu or send throw USB or Wireless connection to Windows PC, Android or iOS devices.

All functions of caliper you can see on p.5 of instruction or in demo video on [www.microtech.ua](http://www.microtech.ua)

# MAIN INFO



MICROTECH

Parameters	
LED display	1,5 inch
Power supply	Rechargeable Li-Pol battery
Lifetime	>80h (Medium brightness)
Charging port	micro-USB
Measuring force	15-25N
Wireless data transfer	15m/ 50m with external antenna (from set)

**SWITCH ON DEVICE** - button push (1 sec)

**SWITCH OFF DEVICE** - auto switch off (configuring throw DISPLAY SETTING menu)  
- button push (3 sec)

**ZERO SETTING** - 0 button in Touchscreen display (2 sec)



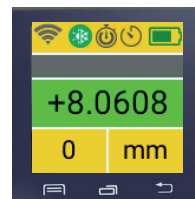
# CHARGING

For charging connect USB cable



**BUILT-IN BATTERY** - rechargeable Li-Pol battery

Charging process indicating  
on Battery status  
(switch on device)



# VIDEO INSTRUCTION





# MENU NAVIGATION

functions status

Battery status

color indication Go/NoGo

mm/inch conversion

ZERO setting

Folders	001
001	+0.0020
002	+1.5509
+ New Folder	+11.0781

**MAIN MENU**

**MEMORY MANAGER**  
 max 100000 values  
 folders system  
 transferring data from memory to PC

< +00.0001  
 > +00.0001  
 MIN

**LIMITS**  
 color Go/NoGo  
 Max/Min  
 Enable  
 MAX

MAX/MIN indicating max or min value

A +00.0000  
 B +00.0000  
 C +00.0000  
 RESET

**FORMULA MODE**  
 $Ax^2+Bx+C$

**Timer**  
 +000 sec.  
 RESET

**TIMER MODE**  
saving or transfer data on timer

01.0000  
 OK  
 RESET

**ERROR COMPENSATION**  
 mathematical correction  
 Temp. comp.  
 None Mode  
 +25.00 C

**TEMPERATURE COMPENSATION**  
manual correction 4 materials

Resolution  
 X.0000

**RESOLUTION**  
selected up to 0.0001mm

**Extra**  
 Axis Mode  
 Normal

**AXIS MODE**  
normal or inverted

Wireless Trans  
 Normal  
 1 min

**WIRELESS**  
 modes of data transmission  
 Mode OFF  
 UART OFF  
 Keypad ON  
 CONFG

**USB**  
USB connection configuration

**Device**  
 Auto start ON  
 PIN RESET

**DEVICE SETTING**  
autostart, reset, password

Angle  
 Sleep  
 Light High

**SCREEN SETTING**  
screen rotation, brightness

Mode  
 Folder  
 +000  
 RESET

**MEMORY SETTING**  
 folder configuration  
 Link to software

**SOFTWARE**  
link to download app

Calibration Date  
 DAY MONTH YEAR  
 01 01 2020  
 CHANGE

**CALIBRATION STATUS**  
calibration date control

app@microtech.ua  
 F411RE  
 FW: 1.1.1  
 MAC: 00000  
 ID: 00000000

**DEVICE INFO**  
service info about device



USB CONNECTION

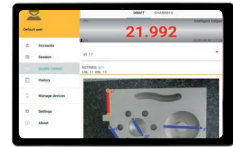
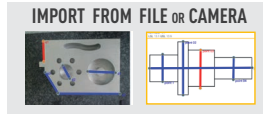


USB-DONGLE



UP TO 50M

WIRELESS CONNECTION



Windows



iOS



ANDROID



DOWNLOAD



DOWNLOAD



DOWNLOAD



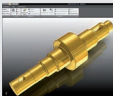
SAVING DATA TO XLS. CSV FORMATS



SAVING DATA TO XLS. CSV FORMATS



SAVING DATA TO XLS. CSV FORMATS



TRANSFER DATA TO CAD, SPC OR OTHER SOFTWARE



SAVING GRAPH



SAVING GRAPH



TRANSFER DATA TO EXCEL OR OTHER TABLE EDITORS



VOICE MODE



VOICE MODE

## DATA TRANSFER DISTANCE FOR INTELLIGENT INSTRUMENTS

- All MICROTECH Intelligent instruments has internal memory. You can collect data to memory and when it will be necessary transfer all data to the peripheral device with no data losing.
- It's possible transfer data, like in Wireless instruments up to 15 m or up 50 m with external antenna
- USB port can be used to transfer data directly to Windows PC



QUALITY CONTROL RESULTS



## LIMITS GO/NOGO

**MENU SETTING**

< +00.0001  
> +00.0001  
MIN

**MAIN SCREEN**

+8.0608  
0 mm  
NoGo Go NoGo

MAX - NoGo over MAX value  
MIN - NoGo over MIN value  
RANGE - selecting GO range  
NONE - No active mode

## FORMULA

A +00.0000  
B +00.0000  
C +00.0000  
RESET

**EXAMPLES:**  
- for value x2 - B=2  
- set PRESET 100mm C=100  
- square value A=1

Avialable Formulas:  
- $Ax^2+Bx+C$   
-Radius (for indicators)  
-Sphere (for indicators)

## MATH. ERROR COMPENSATION

0.010000 Red value  
0.010000 Green value  
OK  
RESET

- actual value on instrument  
- compensated value

Use up&down button to update actual value (green) to correct value.  
For compensation correction - push OK.  
After points correction computerized instrument will recalculate values according corrected points

## RESOLUTION

Resolution  
X.0000 +8.0608

Selecting instrument resolution

## MAX/MIN

Max/Min  
Enable  
MAX

Status indication on main screen

+8.0608  
0 mm

ENABLE/DISABLE mode indicating MAX dvalue indicating MIN value

## TIMER

Timer  
+000 sec.  
RESET

Timer indication on main screen

+8.0608  
0 mm

Saving or transfer data by Timer  
Select timer period  
For disactive - reset to zero

## TEMPERATURE COMPENSATION

Temp. comp.  
Glass, Quartz  
Solid alloys, Mo  
+25.00

+8.0608  
0 mm

Re-calculation value to calibration conditions 20C  
7 types of materilas for selection  
Manual temperature setting

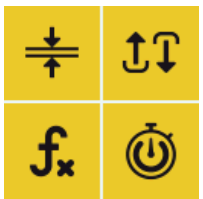
## EXTRA (Axis mode)

Extra  
Axis Mode  
Normal

+/- value indication

+8.0608  
0 mm

Selecting normal or inverted axis mode



# FUNCTIONS



MICROTECH

## WIRELESS CONNECTION

Wireless Trans

Normal

1 min

WIRELESS status

+8.0608

0 mm

## USB CONNECTION

Mode OFF

UART OFF

Keypad ON

CONFIG

Windows



## PIN

Device

Auto start ON

PIN RESET

## DISPLAY SETTING

Angle 0

Sleep off

Rotation 0, 90, 180, 270

Sleep mode

Brightness level

+8.0608

0 mm

8090'8+

## MEMORY MANAGER SETTINGS

Mode	001
Folder	+0.0020
+000	+1.5509
RESET	+11.0781

- Standard / Folder mode

In Folder mode possible to set qty values in each folder.

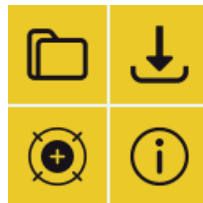
## LINK TO SOFTWARE

Link to software

Free Software for Windows, Android, iOS

Link to page with MDS Software download

- for Android, iOS, Windows
- Free and Pro versions



## CALIBRATION DATE

Calibration Date

DAY	MONTH	YEAR
01	01	2020

CHANGE

Saving or transfer data by Timer

Select timer period

For disactive - reset to zero

## DEVICE INFO

app@microtech.ua

F411RE

FW: 1.1.1

MAC: 00000

ID: 00000000

Information about firmware version and MAC adress for easy connection



**MICROTECH**



## **MICROTECH**

innovative measuring instruments

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