Folders
- 001
- 002
- + New

O: 01.0000
C: 01.0010

OK
RESET

Link to software

Calibration Date

DAY	MONTH	YEAR
01	01	2020

CHANGE

Temp. comp.

None Mode

+25.00 C

Timer

+000 sec.

RESET

Wireless Trans

Normal

1 min

COMPUTERIZED FORCE CALIPER

USER MANUAL

SPECIFICATION

Item No	Range		Resolution		Accuracy	External Force	Protection
	mm	inch	mm	inch	µm	N	
141077321	0-300	0-12″	0,005	0.0002	±20	8	IP54

TECHNICAL DATA

| Parameters	
LED display	color 1,54 inch
Resolution	240x240
Indication system	MICS 3.0
Power supply	Rechargeable Li-Pol battery
Battery capacity	450-800 mAh (depends of device)
Charging port	micro-USB
Case material	Aluminium
Buttons	Switch (Multifuntional), Reset
Wireless data transfer	up to 50m on open area

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!

MAIN INFO
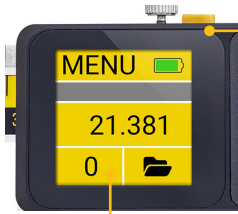
SWITCH ON DEVICE - button push (1 sec)
SWITCH OFF DEVICE - button push (3 sec)/ auto switch off
DATA TRANSFER - programming throw menu

ZERO SETTING - push 5 sec to ZERO setting

CHARGING

BUILT-IN BATTERY - rechargeable Li-Pol battery

For charging connect USB cable

FORCE CONTROL

FORCE control module 8N

For zero setting use Force control module- line inside lens must be came off with outside line. Press the **ZERO** button on Touchscreen for ZERO possition setting.
During a mesuring use Force control module to measure with optimal Force

BASE RECONNECTION

Sometimes, when battery was uncharges for a long time - necessery to make reading base reconnection
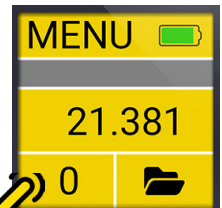
PUSH ZERO button (5sec.) on main screen

WIRELESS DATA TRANSFER

Activate WIRELESS data transfer in WIRELESS menu

	Wireless
Switch on Wireless data transmition	Standard
Activating multifunctional button to save value to memory or send data by touchscreeb ur button push	Send data Button OFF
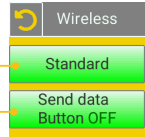
Connect instrument with MICS indication system to Tablet or PC
Send data tp Tablet or PC:
- by Touchscreen
- by Multifactinal button psuh (activted in Wireless menu)
- by Timer (activated in Timer menu)
- from Internal Memory

MEMORY

For save measuring data to internal caliper's memory touch data area on screen or short button push. You can view saved data throw menu or send Wireless connection to Windows PC, Android or iOS devices.
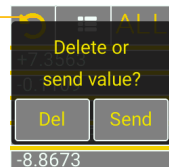
Basic STATISTIC functions:
MAX - maximum saved value
MIN - minimum saved value
AVG - average value
D - variance VAR(x)

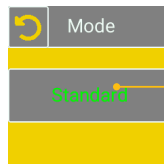| Statistic	
MAX:	+26.999
MIN:	8.8673
AVG:	+5.3213
D:	+26.863
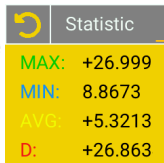
Saved values

Each value can be Deleted or Send to application

+7.3563
-0.1109
+1.2293
+26.9993
-8.8673

Delete or send value?
Del   Send
-8.8673

Button ALL select all values
All values can be Deleted or Send to application

MEMORY settings

Memory sub-menu

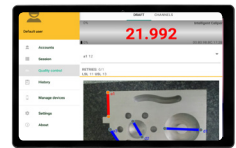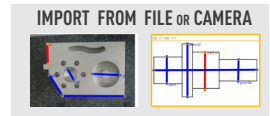| Mode	
Standard	

Selecting Standard mode or No saving data to internal memory

CONNECTION

UP TO 50M

WIRELESS CONNECTION

IMPORT FROM FILE OR CAMERA

USB-DONGLE

21.992

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**
		QUALITY CONTROL RESULTS

DATA TRANSFER DISTANCE FOR INTELLIGENT INSTRUMENTS
•All MICROTECH Intelligent instruments has internal memory.
You can collect data to memory and when it will be neccesary
transfer all data to the peripheral device with no data loosing.
•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

MENU NAVIGATION

USE TOUCHSCREEN TO OPERATE MENU

MENU button

Colour can be changed according function

Zero setting

MENU — Battery level

-0.0000 — Actual value

0 — Memory

MEMORY WITH STATISTIC

ALL		Statistic	
+7.3563		MAX:	+26.999
-0.1109		MIN:	8.8673
+1.2293		AVG:	+5.3213
+26.9993			
-8.8673		D:	+26.863

MENU CONFIGURATION

MAIN MENU

LIMITS
color Go/NoGo

+000.000
+000.000
MIN

MAX/MIN
indicating max or min value

Max/Min
Enable
MAX

FORMULA MODE
Ax^2+Bx+C

Formula
AX+BX+C
Set /AVG/

Timer
+000 sec.
RESET

ERROR COMPENSATION
mathematical correction

O: 0.8970
C: 0.8920
OK
RESET

TEMPERATURE COMPENSATION
manual correction

Temp.comp.
Glass, steel
Solid alloys, Mo
+00.00 C

RESOLUTION
selected up to 0.0001mm

Resolution
X.0000
Millimeters

Extra
Axis Mode
Normal
CONNECT

WIRELESS
modes of data transmition

Wireless
Standard
Send data
Button OFF

USB
USB connection configuration

Mode OFF
UART OFF
Keypad ON
CONFIG

DEVICE SETTING
pin, reset

Device
PIN   RESET

Display
Angle 180
Sleep OFF

MEMORY SETTING

Mode
Standard

SOFTWARE
link to download app

Link to software

CALIBRATION DATE

Calibration
DAY MONTH YEAR
01   01   2020
CHANGE

MICROTECH
www.microtech.ua
COMP.CALIPER 1
FW: 3.0.5
MAC: 12345

MICS SYSTEM FUNCTIONS

LIMITS GO/NOGO

MENU SETTING

Colour indication limits

MAIN SCREEN INDICATION

+000.000 — MAX value
+000.000 — MIN value
RANGE — zero values

MAX - NoGo more MAX value
MIN - NoGo less MIN value
RANGE - Go between MIN & MAX
NONE - disactivating mode

MENU
-10.005
0

NoGo

+8.0608
0   mm

Go

MAX/MIN

MENU SETTING

Indication and saving MAX or MIN values

MAIN SCREEN INDICATION

Max/Min
Enable
MAX

ENABLE - activating mode
MAX - indicating MAX measured value
MIN - indicating MIN measured value

MENU
-2.9184
0

MIN

MENU
7.2241
0

MAX

FORMULA

MENU SETTING

FORMULA Ax^2+Bx+C

EXAMPLE OF FORMULA USING

Formula:
Ax^2+Bx+C

Formula
AX+BX+C
Set Argv

A +000.000
B +001.000
C +000.000

Long push digit to select value

RESET

Reset to zero arguments

	A	B	C
Standard measuring	A=0,	B=1,	C=0
PRESET 50mm	A=0,	B=1,	C=50
Value magnification x3	A=0,	B=3,	C=0
Square value	A=1,	B=0,	C=0

TIMER

MENU SETTING

Saving data to memory or sending Wireless by Timer

Timer
+000   sec.
RESET

Select timer period
Reset to disactivate mode

Timer
Confirm reset?
Yes   No

MICS SYSTEM FUNCTIONS

MATHEMATICAL ERROR COMPENSATION

MENU SETTING

Mathematical correction points with big error to normal values

Select all points

Add new point for error compensation

O: 0.8970 — actual values

C: 0.8920 — correct values by up&down button

OK — confirm point correction

RESET

ACCURACY WITHOUT MATH COMPENSATION

ACCURACY AFTER MATH COMPENSATION   RANGE, mm

ERROR, µm
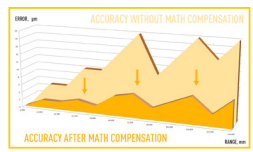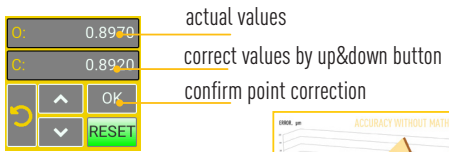
use gauge blocks or measuring machine for points correction

TEMPERATURE COMPENSATION

MENU SETTING

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

Temp.comp.

Glass, Quartz, Solid alloys, Mo — 7 types of material for selection

+00.00 — Manual Temperature setting
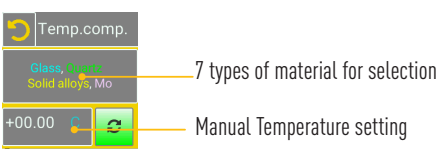
7 types of material:
- glass, quartz, solid alloys
- granite, graphite
- Fe, NI, Fe alloys
- stainless steel
- cooper, Cu alloys
- alluminium, al alloys
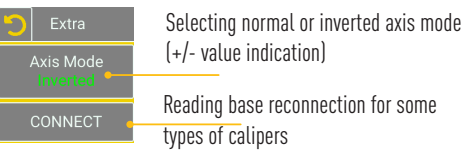- acrylic sheet

RESOLUTION

MENU SETTING

Resolution

X.0000 — Resolution selecting

Millimeters — mm/inch conversion

MAIN SCREEN INDICATION

+8.0608

Selecting resolution of value on main screen and memory
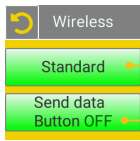
EXTRA (Axis mode)

MENU SETTING

Extra

Axis Mode
Inverted — Selecting normal or inverted axis mode (+/- value indication)

CONNECT — Reading base reconnection for some types of calipers

MICS SYSTEM FUNCTIONS

WIRELESS CONNECTION

MENU SETTING

Activating or disactivating wireless data transfer

Wireless	
Standard	
Send data Button OFF	

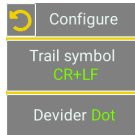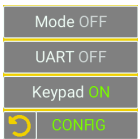Switch on Wireless data transmition

Activating multifunctional button to save value to memory or send data by touchscreeb ur button push

USB CONNECTION
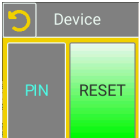
MENU SETTING

USB connection mode under construction

Mode OFF
UART OFF
Keypad ON
CONFIG

Configure
Trail symbol CR+LF
Devider Dot

PIN & RESET

MENU SETTING

Activating PIN to device setting

RESET to factory settings

Device
PIN RESET

1	2	3	4
5	6	7	8
9	0	‹	✓

Device
Confirm reset?
Yes No

DISPLAY SETTING

MENU SETTING

DISPLAY ROTATION, BRIGHTNESS, SLEEPING MODE

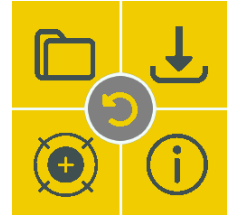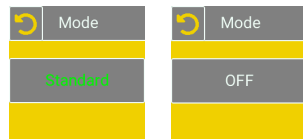| |
|---|
| Display |
| Angle 180 |
| Sleep ON |
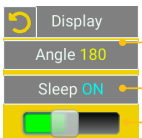
Display rotation 0°, 90°, 180°, 270°
- Sleep OFF (15 s low brightness off, sleep off)
- Sleep 15s (15 s low brightness on, sleep off)
- Sleep ON (15 s low brightness on, sleep on)
Brightness level

+8.0608 mm 0

ɯɯ 0
8090˙8+
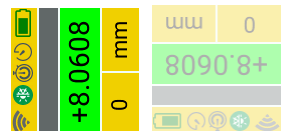
MEMORY SETTINGS

MENU SETTING   Activating or disactivating saving values to memory

Mode	Mode
Standard	OFF

Standard - saving values to memory
OFF - disable saving to memory

		ALL
+7.3563		
-0.1109		
+1.2293		
+26.9993		
-8.8673		

LINK TO SOFTWARE

MENU SETTING

Link to software
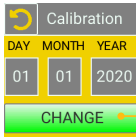
QR Link to MICROTECH web site page
with MDS Software download
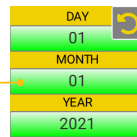- Android, iOS, Windows versions
- Free and Pro versions
- Manuals

Windows
iOS
ANDROID
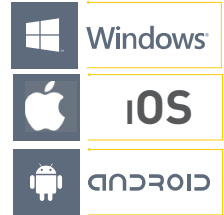
CALIBRATION DATE

MENU SETTING   Calibration date info

Calibration		
DAY	MONTH	YEAR
01	01	2020
CHANGE		

Push for change date info

DAY
01
MONTH
01
YEAR
2021

DEVICE INFO

MENU SETTING

MICROTECH
www.microtech.ua
COMP.CALIPER 1
FW: 3.0.5
MAC: 12345

Information about device
- device name
- firmware version
- MAC adress for easy connection

DIMESIONAL DRAWINGS
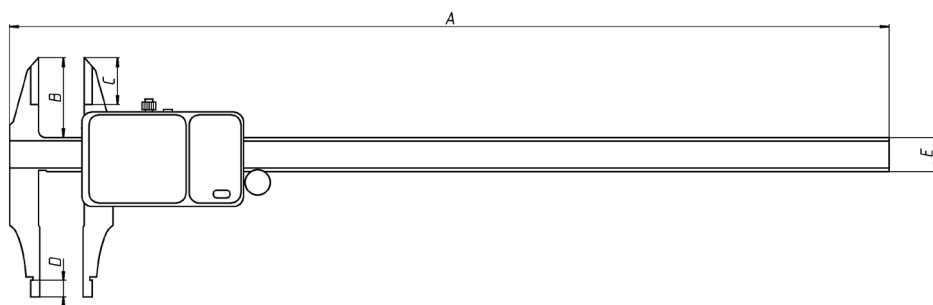
Range	DIMENSIONS				
	A	B	C	D	E
mm	mm	mm	mm	mm	mm
0-300	413	40	24	10	17

MICROTECH

innovative measuring instruments

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Change without prior notice
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