



# SUB-MICRON INTELLIGENT COMPUTERIZED INDICATOR

## USER MANUAL



ISO17025:2017



ISO 9001:2015



Item No	Range		Resolution		Accuracy	Fine adj.	Preset	Go/NoGo	Max/Min	Formula	Timer	Temp comp	Linear corr	Calibr date	Connect. status	Recharge batt	Memory	Wireless	USB	Color Display	
	grad	sec of arc	grad	rad	min of arc	wheel															
151136055	0-360°	1/12' (5")	0.005°	0.0001	±3'	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•

Parameters	
LED display	color 1,54 inch
Resolution	240x240
Indication system	MICS 4.0
Power supply	Rechargeable Li-Pol battery
Battery capacity	450 mAh
Charging port	micro-USB / Magnetic port
Case material	Aluminium
Buttons	Switch (Multifuntional), Reset
Wireless data transfer	Ultra long range
USB data transfer	USB HID

## TECHNICAL DATA

- SWITCH ON DEVICE** - button push (1 sec)
- SWITCH OFF DEVICE** - button push (2 sec)/ auto switch off
- DATA TRANSFER** - programming throw menu

## MAIN INFO



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

For charging connect USB cable



# WARNING!

**IN THE PROCESS OF WORKING WITH PROTRACTOR SHOULD BE AVOIDED:**  
Scratches on the measuring surfaces;  
Measuring the size of object in the process of machining;





## 3 MODES OF DATA TRANSFER (USB + 2 WIRELESS MODES)

### WIRELESS CONNECTION TO MDS APP



WIRELESS data transfer to MICROTECH MDS app for Windows, Android, iOS

### WIRELESS HID CONNECTION



KEYBOARD MODE

WIRELESS HID data transfer (like keyboard) direct to any customers app and system

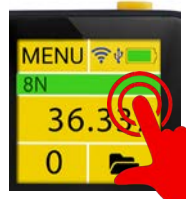
### USB HID CONNECTION



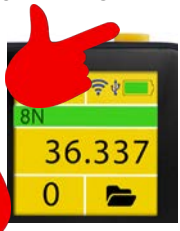
KEYBOARD MODE

USB HID data transfer (like keyboard) direct to any customers app and system

## 7 WAYS HOW TO TRANSFER DATA TO PC OR TABLET



TOUCHSCREEN TAP



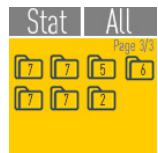
BUTTON PUSH



SELECTED FORCE



BY TIMER



FROM MEMORY



IN MDS APP



FROM PAIRED DEVICE

DOWNLOAD MDS APP FOR MICROTECH DEVICES  
WIRELESS CONNECTION FROM [www.microtech.ua](http://www.microtech.ua),  
GooglePlay & App Store

## DOWNLOAD APP



# MAIN SCREEN



**MICROTECH**

**CONNECTION STATUS**

- WIRELESS DISCONNECTED
- WIRELESS CONNECTED
- WIRELESS HID CONNECTED
- USB HID DISCONNECTED
- USB HID CONNECTED

# MEMORY

For save measuring data to internal device memory touch data area on screen or button push. You can view saved data throw menu or send Wireless or USB connection to Windows PC, Android or iOS devices.

It's possible to use Standard or Folders system with 2000 values in memory.

<table border="1"> <thead> <tr><th>Stat</th><th>All</th></tr> </thead> <tbody> <tr><td>7</td><td>7</td></tr> <tr><td>5</td><td>6</td></tr> <tr><td>7</td><td>2</td></tr> </tbody> </table> <p>FOLDERS SYSTEM</p>	Stat	All	7	7	5	6	7	2	<table border="1"> <thead> <tr><th>Stat</th><th>All</th></tr> </thead> <tbody> <tr><td>1:</td><td>0.0000</td></tr> <tr><td>2:</td><td>1.2334</td></tr> <tr><td>3:</td><td>1.2337</td></tr> <tr><td>4:</td><td>1.2333</td></tr> <tr><td>5:</td><td>1.2341</td></tr> </tbody> </table> <p>MEMORY 2000 VAL.</p>	Stat	All	1:	0.0000	2:	1.2334	3:	1.2337	4:	1.2333	5:	1.2341	<table border="1"> <thead> <tr><th>Stat</th><th>All</th></tr> </thead> <tbody> <tr><td colspan="2">Delete or Send?</td></tr> <tr><td>Del</td><td>Send</td></tr> </tbody> </table> <p>MEMORY EXPORT</p>	Stat	All	Delete or Send?		Del	Send	<table border="1"> <thead> <tr><th colspan="2">Statistic</th></tr> </thead> <tbody> <tr><td>MAX:</td><td>+26.999</td></tr> <tr><td>MIN:</td><td>8.8673</td></tr> <tr><td>AVG:</td><td>+5.3213</td></tr> <tr><td>D:</td><td>+26.863</td></tr> </tbody> </table> <p>STATISTIC</p>	Statistic		MAX:	+26.999	MIN:	8.8673	AVG:	+5.3213	D:	+26.863	<p><b>Basic STATISTIC functions:</b></p> <ul style="list-style-type: none"> <li>MAX - maximum saved value</li> <li>MIN - minimum saved value</li> <li>AVG - average value</li> <li>D - difference between MAX &amp; MIN</li> </ul>
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STANDARD or FOLDER system can be activated throw MEMORY menu

# MENU STRUCTURE

**MENU CONFIGURATION**

USE TOUCHSCREEN TO OPERATE MENU  
SWIPE TO MOVE INSIDE

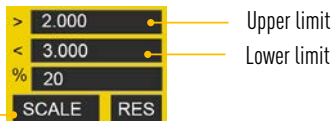


## LIMITS mode GO/NOGO



MAX - NoGo more Upper limit  
 MIN - NoGo less Lower limit  
 RANGE - Go between Limits

## COLOR INDICATION LIMITS ON MAIN SCREEN Go NoGo



## PEAK mode MAX/MIN



DISABLE - non active mode  
 ENABLE - activating mode  
 REFRESH - refresh peak value according timer

## INDICATION AND SAVING MAX OR MIN VALUES



MAX - indicating MAX measured value  
 MIN - indicating MIN measured value

## TIMER mode



## SAVING DATA TO MEMORY OR SENDING WIRELESS/USB BY TIMER



Select timer period  
 Reset to deactivate mode

## FORMULA mode



Select FORMULA Type (Math, Radius or other)  
 Select arguments

## RESOLUTION selection



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 rotation 0°, 90°, 180°, 270°  
 Brightness level

## LINEAR error compensation



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

## Linear correction error's on device actual values



correct values by up&down button confirm point correction

## TEMP compensation



Manual Temperature setting



4 types of material for selection:  
 - Glass, Quartz  
 - Stainless steel  
 - Cuprum and alloys  
 - Alluminium and alloys

# FUNCTIONS



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## WIRELESS data transfer



Reconnection button  
Wireless power regulation



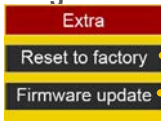
**ON** - WIRELESS data transfer to MDS App for Android, iOS, Windows  
**HID**- WIRELESS HID direct transfer data to any App in Windows, MacOS, Linux, Android devices (like keyboard). Configure data format in USB sub-menu  
**2D-S** - Slave device on WIRELESS connection on HUB mode

## USB OTG data transfer



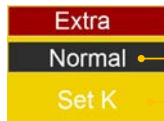
Connect USB cable to PC & Activate USB HID connection mode  
Select setting of data transfer  
Direct transfer data to any App in Windows, MacOS, Linux, Android devices  
Configuring data transfer Dot/Comma and Tab/Arrow Down/CR+LF

## 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)

## LINK to app's



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

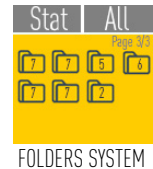


## MEMORY manager setting



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



**MICROTECH**

# INDUSTRY 4.0 INSTRUMENTS



0,1µm



1µm

**FORCE CONTROL**  
1-20N



0,1µm



0,1µm



1µm

## **MICROTECH**

innovative measuring instruments

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Change without prior notice