



# MICROTECH SUB-MICRON Tablet Dial Comparator User Manual

[Home](#) » [microtech](#) » MICROTECH SUB-MICRON Tablet Dial Comparator User Manual 

## Contents

- [1 MICROTECH SUB-MICRON Tablet Dial Comparator](#)
- [2 Product Information](#)
- [3 Product Usage Instructions](#)
- [4 SPECIFICATION](#)
- [5 TECHNICAL DATA](#)
- [6 MAIN INFO](#)
- [7 DOWNLOAD APP](#)
- [8 DATA TRANSFER](#)
- [9 MAIN SCREEN](#)
- [10 FUNCTIONS](#)
- [11 INDUSTRY 4.0 INSTRUMENTS](#)
- [12 Documents / Resources](#)
  - [12.1 References](#)



**MICROTECH SUB-MICRON Tablet Dial Comparator**



## Product Information

- Product Name: MICROTECH Sub-Micron Tablet Dial Comparator
- User Manual: Included
- Certifications: ISO17025:2017, ISO 9001:2015
- Manufacturer: Microtech
- Website: [www.microtech.ua](http://www.microtech.ua)
- Display: Color display (2.4 inch, 320×240 resolution)
- Power Supply: Rechargeable Li-Pol battery (500 mAh micro-USB)
- Case Material: Aluminium
- Data Transfer: USB HID, Long range/HID Wireless

## Product Usage Instructions

1. To switch on the device, press the power button for 1 second. To switch off the device, press the power button for 3 seconds or wait for auto switch off.
2. Data transfer can be done through programming menu options.
3. The device is equipped with a built-in rechargeable Li-Pol battery.
4. To download the Microtech MDS app for wireless connection to the device, visit [www.microtech.ua](http://www.microtech.ua), GooglePlay, or App Store.
5. Data can be transferred through USB and two wireless modes.
6. The device allows wireless data transfer to Microtech MDS app for Windows, Android, and iOS.

7. Data can be saved in XLS and CSV formats and transferred to CAD, SPC, or other software.
8. No dongle is required for free software usage.
9. Data can be transferred to Excel or other table editors.
10. Data can be saved to internal device memory and viewed or sent via wireless or USB connection to Windows PC, Android, or iOS.
11. The device offers different memory modes: Standard or Folders.
12. Various methods are available for data transfer to PC or tablet, including CAD, SPC, other software, any browser, or app.
13. Force can be selected using touchscreen tap, button push, timer, memory, MDS app, or paired device.
14. The device offers an on-line graphic mode, with the last value displayed on the main screen.
15. The connection status is indicated as wireless disconnected, wireless connected, wireless HID connected, USB HID disconnected, or USB HID connected.
16. An analog scale is available for probe mode.
17. The device supports the Limits mode with color indication on the main screen for Go/NoGo limits.
18. Peak mode indicates and saves maximum or minimum values.
19. The timer mode allows data to be saved to memory or sent wirelessly/USB by timer.
20. The formula mode enables the selection of a formula type (Math, Radius, or other) and arguments.
21. Resolution selection is available for finer accuracy.

## SPECIFICATION

| Item No   | Range | Resolution | Accuracy | Force   | Stem D | Preset | Go/NoGo | Max/Min | Formula | Timer | Temp comp | Linear cor | Calibrate | Connect. | Recharge batt | Memory             | Wireless         | USB              | Color Display |
|-----------|-------|------------|----------|---------|--------|--------|---------|---------|---------|-------|-----------|------------|-----------|----------|---------------|--------------------|------------------|------------------|---------------|
|           | mm    | mm         | μm       | N       | mm     |        |         |         |         |       |           |            |           |          |               |                    |                  |                  |               |
| 120120288 | 0.03  | 0,0001     | ±0.5     | 1.8-2.2 | 28     | •      | •       | •       | •       | •     | •         | •          | •         | •        | •             | Folders / 2000 val | Long range / HID | USB HID / Update | 2.4'          |

## TECHNICAL DATA

|                        |                                     |
|------------------------|-------------------------------------|
| <b>Parameters</b>      |                                     |
| LED display            | color 2,4 inch 320×240              |
| Indication system      | MICS 4.0                            |
| Power supply           | Rechargeable Li-Pol battery 500 mAh |
| Charging port          | micro-USB                           |
| Case material          | Aluminium                           |
| Wireless data transfer | Long range / HID                    |
| USB data transfer      | USB HID                             |

## MAIN INFO



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



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

## DOWNLOAD APP

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



## DATA TRANSFER

### 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
- 



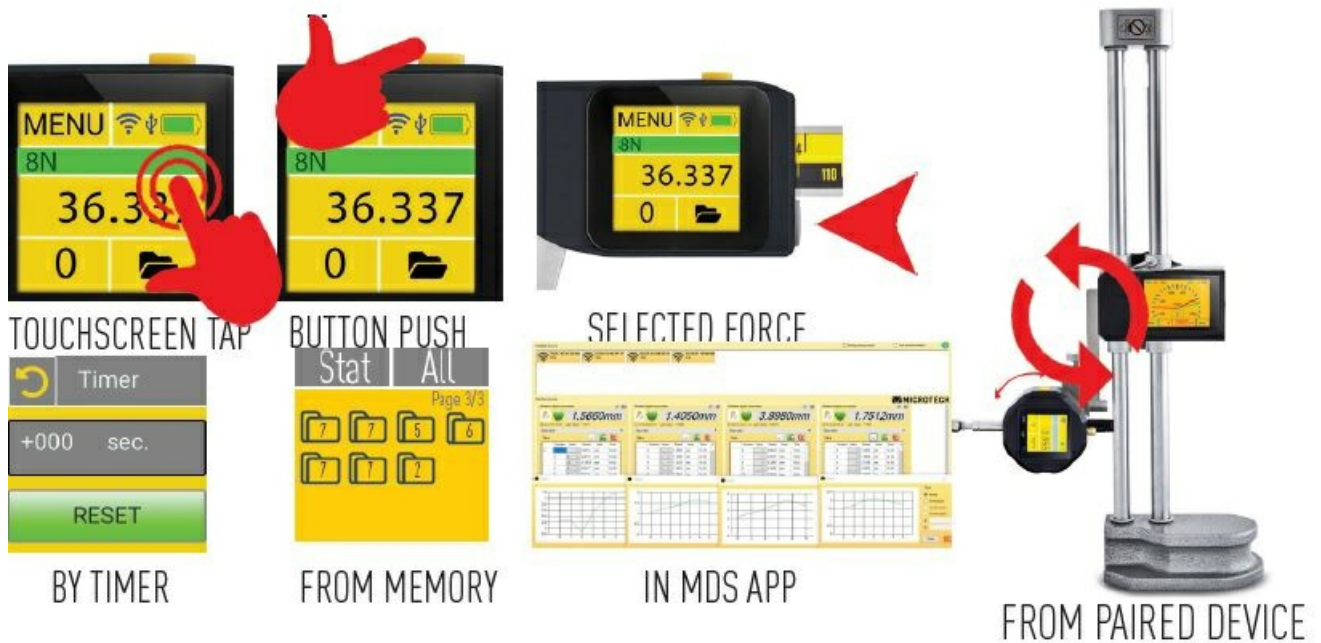
### WIRELESS HID CONNECTION

- **USB** HID CONNECTION



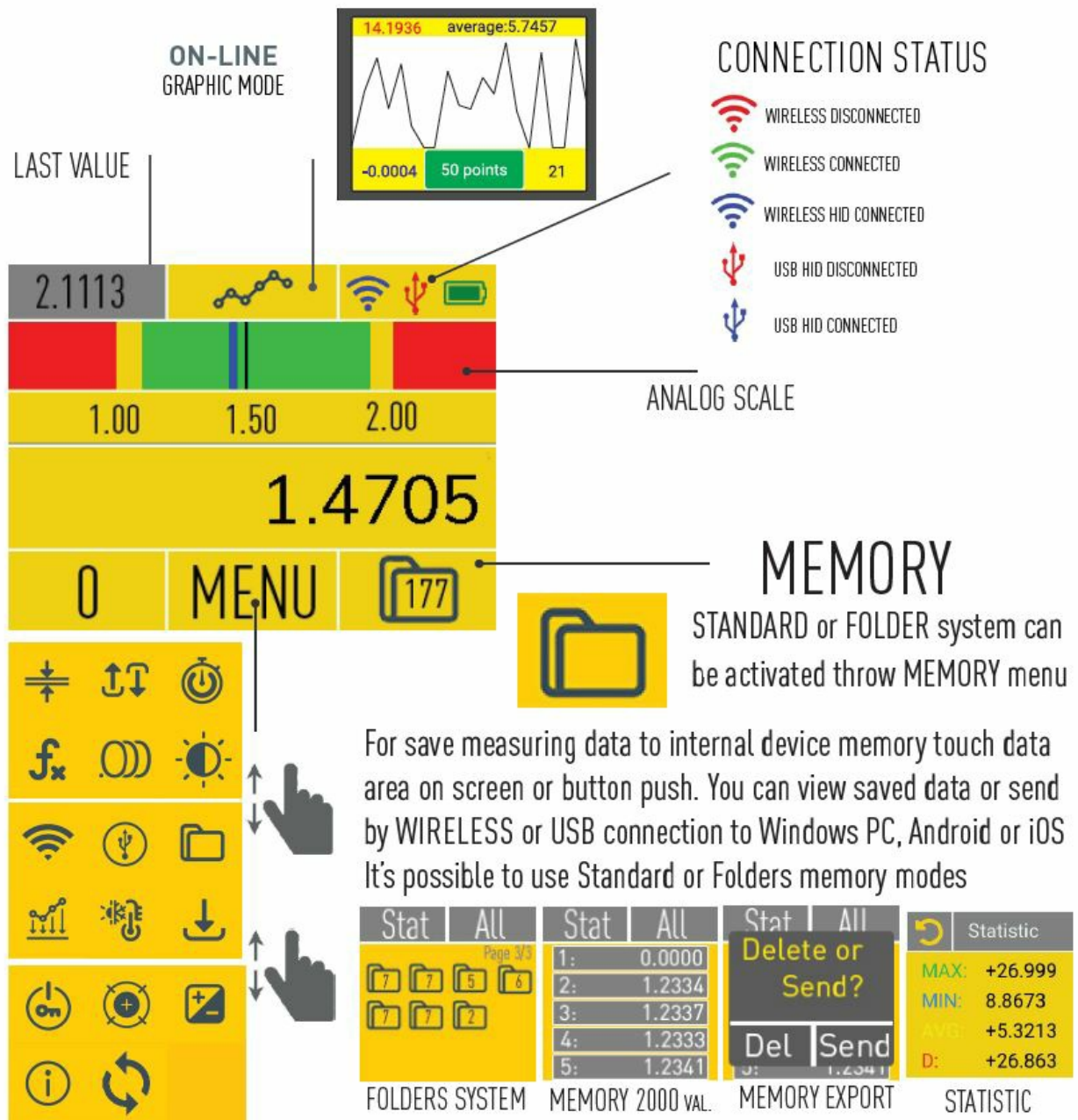
- WIRELESS HID and USB HID data transfer (like keyboard) direct to any customers app and system.

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

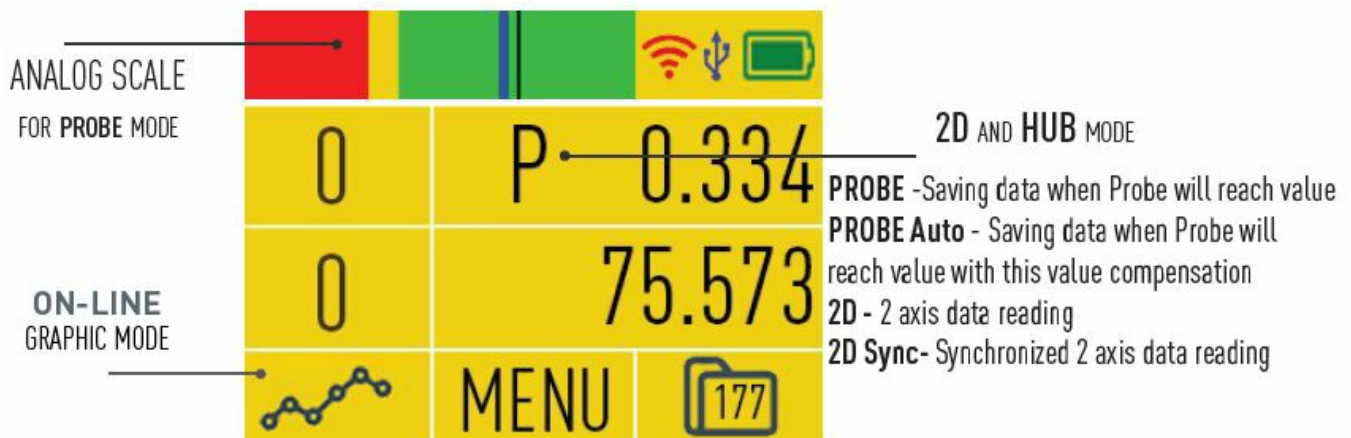


## MAIN SCREEN





## 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



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

### INDICATION AND SAVING **MAX** OR **MIN** VALUES

|         |
|---------|
| Max/Min |
| Enabled |
| MAX     |

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

### TIMER mode



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

|           |
|-----------|
| 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 error compensation



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

|           |     |
|-----------|-----|
| O: 17.251 |     |
| C: 17.258 |     |
| UP        | OK  |
| DN        | RES |

Linear correction error's on device

- 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                    |
| <input type="checkbox"/> |

- 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



|          |
|----------|
| USB      |
| USB ON   |
| CONF KEY |

- 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

## PROBE MODE



**A.C.on** - Auto Connection active

**A.C.off** - Auto Connection no active

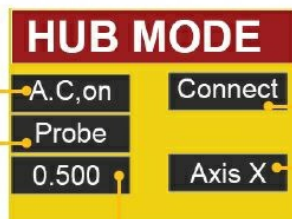
**PROBE** - Saving data when Probe will reach value

**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

Axis priority selecting

Setting PROBE limit value

## 2D MODE

**A.C.on** - Auto Connection active

**A.C.off** - Auto Connection no active

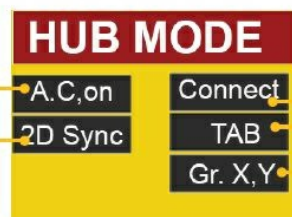
**PROBE** - Saving data when Probe will reach value

**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

## LINK to app's



QR Link to MICROTECH web site page with MDS Software download

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



## 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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- tel.: +38 (057) 739-03-50
- [www.microtech.ua](http://www.microtech.ua)
- [tool@microtech.ua](mailto:tool@microtech.ua)

## Documents / Resources

|                                                                                     |                                                                                                                                                                                              |
|-------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|  | <p><a href="#">MICROTECH SUB-MICRON Tablet Dial Comparator</a> [pdf] User Manual<br/> SUB-MICRON, SUB-MICRON Tablet Dial Comparator, Tablet Dial Comparator, Dial Comparator, Comparator</p> |
|-------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|

## References

-  [Main page - MICROTECH - Innovative measuring instruments](#)

Manuals+,