

EUROTOOLS SARL

Parc d'activités des Nations 8, Rue d'Italie 67230 BENFELD - France

www.eurotools-precision.com commercial@eurotools-precision.com

Tél.: +33 (0)3 88 08 24 09



2023

MICROTECH INSTRUMENTS

Notice d'utilisation MDS App- anglais

Instructions de Connection d'instruments de mesure sans fil à écran tactile à MDS App



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MICROTECH INSTRUMENTS CONNECTIONS

COMPUTERIZED INSTRUMENTS WITH MICS SYSTEM CONNECTION



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









SAVING GRAPH





WIRELESS CONNECTION TO MDS APP











NO DONGLE





TRANSFER DATA TO **EXCEL OR OTHER TABLE EDITORS**

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



mac09



TRANSFER DATA TO ANY BROWSWE OR **APP**

MODBUS PLC CONNECTION RELEASE: MAY 2023



CONNECTION STATUS INDICATION





WIRELESS DISCONNECTED





USB HID DISCONNECTED



USB HID CONNECTED



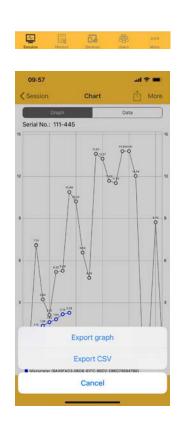


MDS ios functions (5)



FUNCTIONS

MDS for iOS			
	FREE	PR0	
	299100060	299100070	
Platform	iOS		
Max. instruments	2	8	
mm/inch conversion	+	+	
Max Distance, m	up to 50m		
Foot-Switch connection	-	-	
Display value	+	+	
Go/NoGo functions	+	+	
Graphical mode	+	+	
Timer	+	+	
Measuring history	+	+	
Save data to csv	+	+	
Save graph	+	+	
User manager	+	+	
Device battery status indication	+	+	
Voice mode	+	+	
Multilanguage	English, Ukrainian, Russian		



MDS IOS INSTALLATION (C)





VIDFO

DEMO video with Installation, Connection and Measuring process



APP INSTALLATION

Install the latest MDS App from App Store. Standard version (2 connections) for FREE. PRO version of MDS_app for iOS can be order throw App Store.



APP ACCESS

Confirm application access to Bluetooth module of Smartphone.

Make sure that Bluetooth is switched on (App request it to receiving data from Wireless and Computerized MICROTECH instruments



INSTRUMENTS CONNECTION

COMPUTERIZED INSTRUMENTS CONNECTION

- The distance between the Computerized MICROTECH instrument and the iOS device is 7-50 meters depends on transfer mode and premises conditions
- All MICROTECH Computerized instrumetrs with MICS system has internal memory. It's possible to collect data to memory and transfer all data to your device with no data losing to any distance.
- Computerized MICROTECH instruments have only

STANDARD MODE of Wireless data transfer:

- non-stop data transfer 4 value/sec.



WIRELESS DIGITAL INSTRUMENTS CONNECTION

• Distance between the Wireless MICROTECH instrument and iOS device is 5-25 meters depends of transfer mode and premises conditions

MICROTECH Wireless instruments have 2 modes of data transfer:

STANDARD MODE

- non stop data transfer 4 times/sec
- CR2032 battery works in non stop data transfer up to 100h

ECONOMY MODE

- data transfer only by Wireless button press
- CR2032 battery works in this mode up to 6 months

We recommend to use ECONOMY MODE for MICROTECH Wireless instruments







Add MICROTECH instruments to **DEVICES** list:

- Switch on the MICROTECH instrument. Activate Wireless mode on instrument.
- Open DEVICES menu in MDS App and TAP SEARCH button
- Wireless devices around the Smartphone will be displayed.
- Find desired device with MICROTECH

name and + button in app to add it.

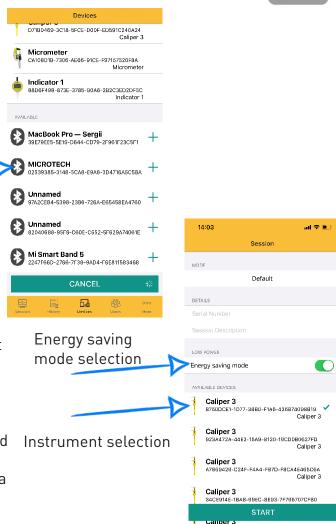
- You can add any qty of instruments to Device list.

Start SESSION:

- Select one of available devices (added to devices list before
- For using Wireless instruments (non Computerized electronics) recommended to select «Energy saving
- Don't use «Energy saving mode» with Computerized instruments
- In FREE version you can use up to 2 instruments in a session at the same time.
- In PRO version you can use up to 8 instruments in a session at the same time.

INSTRUMENTS CONNECTION (\$105)





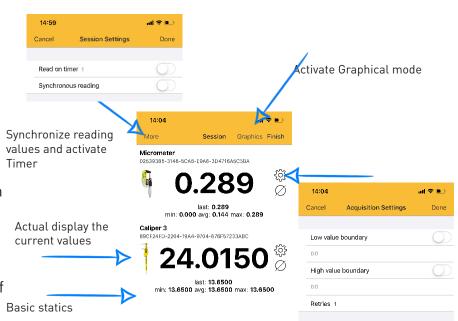
MEASURING PROCESS AND DATA **SAVING**

When SESSION started you can receive data from connected instruments. In Standard mode (data transferring non-stop 4 times/sec) for saving value:

- press the button or tap Touchscreen on instruments
- tap to actual value area on MDS App
- save values by Timer on App or instrument
- receive values from internal memory of instruments

In Energy saving mode for saving values:

- Press Wireless button on instrument





MEASURING PROCESS GIOS

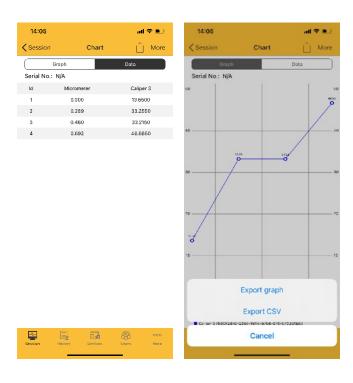




GRAPH AND DATA MODE

Tap Graph button to activate the Graphical mode.

- view graph
- export graph
- view and export actual data



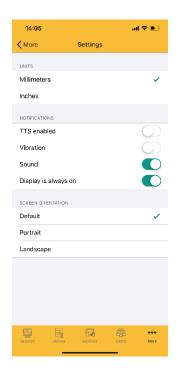
HISTORY

You can save current SESSION to HISTORY. All saved sessions and values in HISTORY can be viewed and exported.



SETTINGS:

Use SETTINGS menu to select Language, Units (Metric or inch system), TTS settings (Voice mode), Display rotation, Backlight, etc.



ACCOUNTS:

You can create users account by account menu. Info about Users displaying in measuring History. Measuring history can be associate with Users.





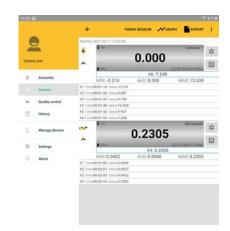
MDS ANDROID FUNCTIONS (plandroid

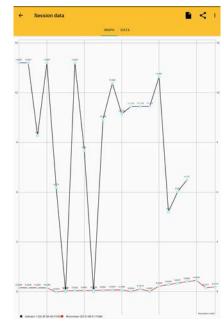




FUNCTIONS

MDS for Android			
	FREE	PRO	
	299100040	299100050	
Platform	Android 6,0 +		
Max. instruments	2	8	
Energy saving mode	+	+	
Max Distance, m	up to 50m		
mm/inch conversion	+	+	
Go/NoGo functions	+	+	
Graphical mode	+	+	
Reading on Timer	+	+	
Measuring history	+	+	
Save data to xls	+	+	
Save data to csv	+	+	
Save graph	+	+	
User manager	+	+	
Device battery status indication	+	+	
Quality control mode	+	+	
Import & processing details draws, photos	+	+	
Voice mode	+	+	
Multilanguage	English, Spanish, French, Italian, Ukrainian, Russian, Chinese, Korean, Turkish, Czech, Poland, Hungarian, etc.		





MDS ANDROID INSTALLATION





VIDEO

DEMO video with Installation, Connection and Measuring process



APP INSTALLATION

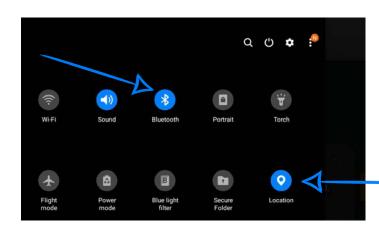
Install the latest MDS App from GooglePlay.
Standard version (2 connections) for FREE.
PRO version of MDS_app for iOS can be order throw GooglePlay.



APP ACCESS

Confirm application access to Bluetooth module of Smartphone.

Make sure that Bluetooth and Location are switched on (App request it to receiving data from Wireless and Computerized MICROTECH instrumetns)



INSTRUMENTS CONNECTION

COMPUTERIZED INSTRUMENTS CONNECTION

- The distance between the Computerized MICROTECH instrument and the Android device is 7-50 meters depends on transfer mode and premises conditions
- All MICROTECH Computerized instrumetrs with MICS system has internal memory. It's possible to collect data to memory and transfer all data to your device with no data losing to any distance.
- Computerized MICROTECH instruments have only **STANDARD MODE** of Wireless data transfer:
- non-stop data transfer 4 value/sec.



WIRELESS DIGITAL INSTRUMENTS CONNECTION

• Distance between the Wireless MICROTECH instrument and Android device is 5-25 meters depends of transfer mode and premises conditions

MICROTECH Wireless instruments have 2 modes of data transfer:

STANDARD MODE

- non stop data transfer 4 times/sec
- CR2032 battery works in non stop data transfer up to 100h

ECONOMY MODE

- data transfer only by Wireless button press
- CR2032 battery works in this mode up to 6 months

We recommend to use ECONOMY MODE for MICROTECH Wireless instruments



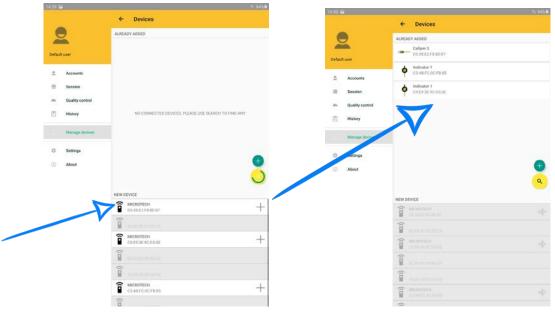




Add MICROTECH instruments to DEVICES list:

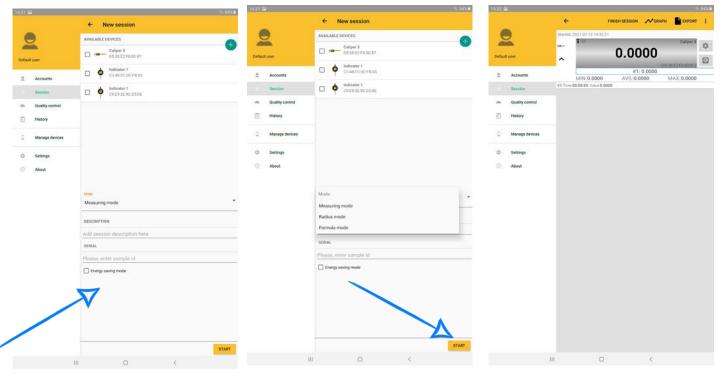
- Switch on the MICROTECH instrument. Activate Wireless mode on instrument.
- Open MANAGE DEVICES menu in MDS App and Press SEARCH button
- Wireless devices around the Tablet or Smartphone will be displayed.

 If you can't find any Wireless device around check App setting (Bluetooth and Location must be switch on)
- Find desired device with MICROTECH name and MAC adress and touch + button in app to add it.
- You can add any qty of instruments to Device list.



Start SESSION:

- Select one of available devices (added to devices list before, if necessery press + to add more)
- For using Wireless instruments (non Computerized electronics) recomended to select **Energy saving mode**».
- Don't use «**Energy saving mode**» with Computerized instruments
- Radius and Formula mode can be used for special measurings
- In FREE version you can use up to 2 instruments in a session at the same time.
- In PRO version you can use up to 8 instruments in a session at the same time.



MEASURING PROCESS Grandroid





MEASURING PROCESS AND DATA SAVING

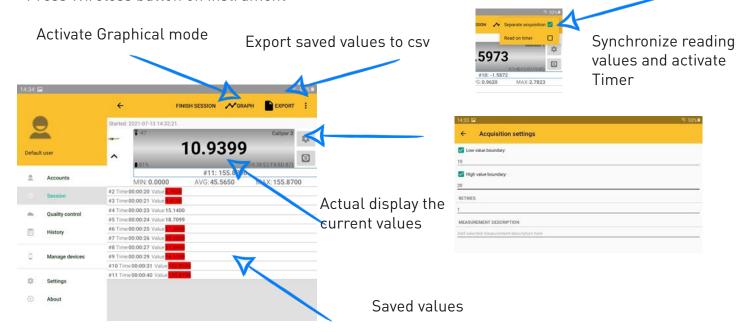
When SESSION started you can receive data from connected instruments.

In **Standard mode** (data transfering non-stop 4 times/sec) for saving value:

- press the button or tap Touchscreen on instruments
- tap to actual value area on MDS App
- save values by Timer on App or instrument
- receive values from internal memory of instruments

In Energy saving mode for saving values:

- Press Wireless button on instrument



GRAPH MODE

Tap Graph button to activate Graphical mode.

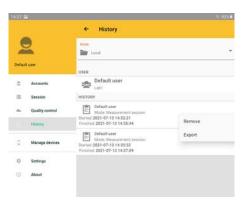
- possbile to view online values updates on Graph or view the saved values from SESSION window
- graph settings gives possibility show legend and time axis on graph.
- export graphic in png format

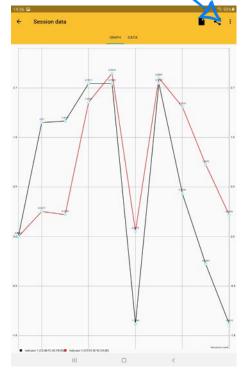


HISTORY

You can save current SESSION to HISTORY.

All saved sessions and values in HISTORY can be viewed and exported.









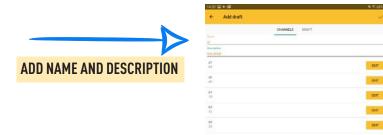


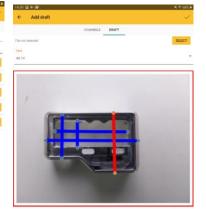
QUALITY CONTROL MODULE ON MDS Android Software gives new possibilities of metrological control:

- make control according draw or photo with established dimensions and limits
- draft creation
- choosing instruments for different dimensions control
- •control for partial goods
- extended statistic and data saving possibilities



HOW TO ADD NEW DRAFT





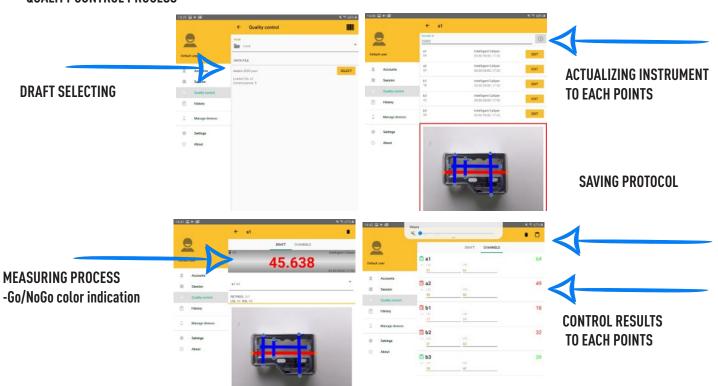
SELECTING PHOTO OR DRAW FROM MEMORY OR CAMERA

ADDING POINTS TO DRAW (MANUAL POSITIONING)

ADD CHECKING POINTS



QUALITY CONTROL PROCESS



SETTINGS

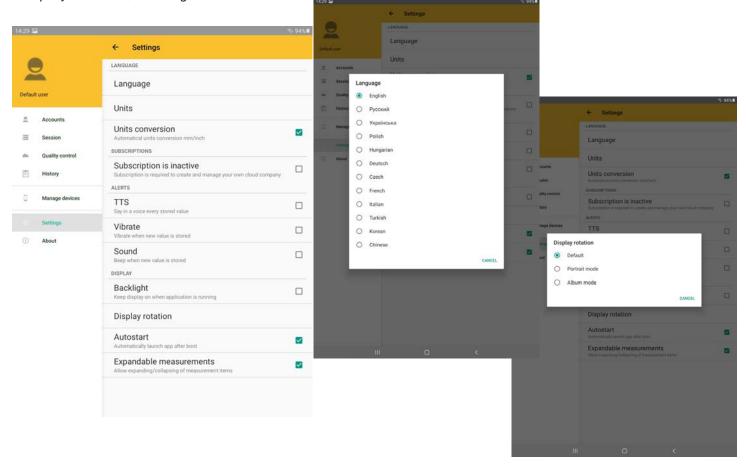




SETTINGS:

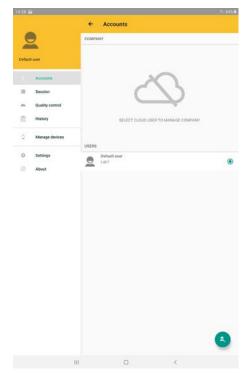
Use SETTINGS menu to select Language, Units (Metric/inch system), TTS settings (Voice mode),

Display rotation, Backlight, etc.



ACCOUNTS:

You can create users account by account menu. Info about Users displaying in measuring History. Measuring history can be associate with Users.









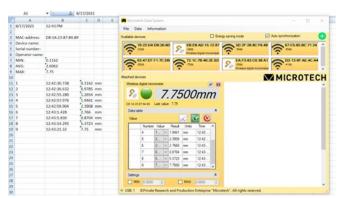




FUNCTIONS

Micro	techData for V	Vindows		
	FREE	STANDARD	PRO	
	299100530	299100550	299100570	
Platform		Windows 7, 8, 10		
Max. instruments	1	4	32	
USB-dongles (max qty)	1	1	8	
Standard/Energy saving mode	+	+	+	
Max Distance, m	up to 50m			
Autoconnection	+	+	+	
Filtering non MICROTECH devices	+	+	÷	
Data reading Synchronizing	-	+	+	
User manager	+	+	+	
Foot-Switch connection	+	+	+	
mm/inch conversion	+	+	+	
Go/NoGo functions	+	+	+	
Graphical mode	-	+	+	
2D-Graphical mode	-	+	+	
Timer	+	+	+	
Resolution selection	+	+	+	
Export to external programs	+	+	+	
Save data to csv	+	+	+	
Save data to xls*	+	+	+	
Save data to pdf*	+	+	+	
Save graph png	-	+	+	
Multilanguage	Українська, Русский, English, Deutsch, Italiana, Española, Český, Türk, Polski, Français, Magyar			
Supplying	microtech.ua	USB-drive	USB-drive	







MDS INSTALLATION Window VIDEO

DEMO video with Installation, Connection and Measuring process





APP INSTALLATION

Download & Install the latest MDS App for Windows from www.microtech.ua or order PRO and STANDARD version from nearest MICROTECH distributor





ACCESORIES FOR MDS APPLICATION

Item No	Туре
299100550	MDS 5.0 STANDARD app for Windows
299100570	MDS 5.0 PRO app for Windows
299190001	USB-Dongle for Windows
299190004	1m Cable extension for USB-Dongle
299190000	USB-Footswitch for Windows
299190009	Wireless / USB-Footswitch for Windows



CONNECTION SET

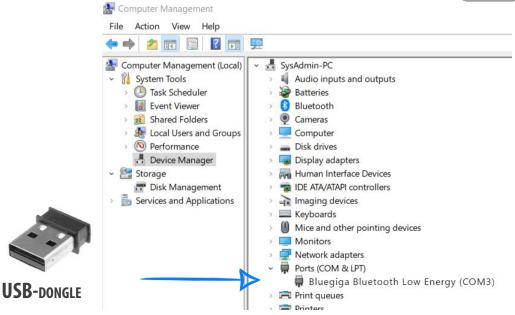


		Accesories in SET		Recommended	
Item No	Туре	Application	USB-dongles	Cable-Extentions	(max) connected devices
299110504	STANDARD MDS data set	MDS 5.0 STANDARD app for Windows	1	1	4
299110810	PRO MDS data set	MDS 5.0 PRO app for	2	2	10 (16)
299110840	PRO+ MDS data set	Windows	4	4	16 (32)



USB DONGLE CONNECTION

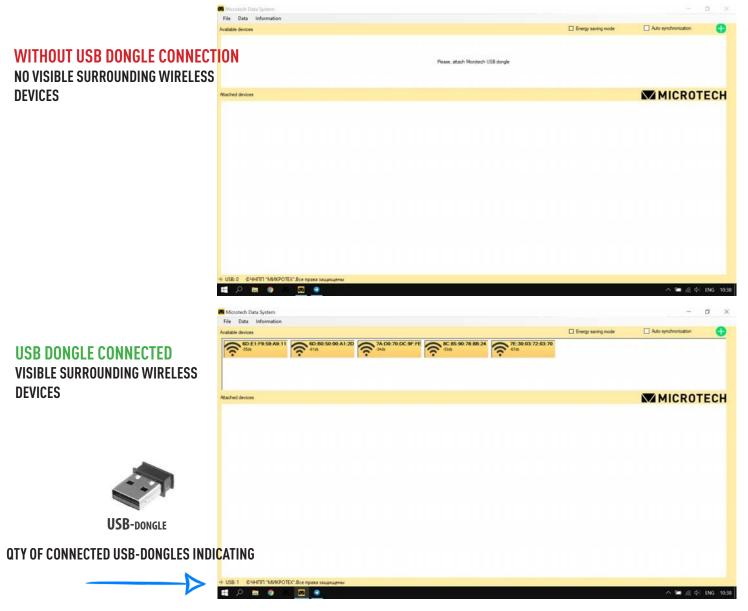




To connect instruments to PC, it is necessary to use USB-dongle on PC (*Item 299190001*) Connect USB -dongle to PC

- -Check driver status on device manager
- -In MDS software you can check how many USB-Dongle is active.

When USB-Dongle connected - all wireless devices around you will be displayed automatically



INSTRUMENT CONNECTION Window





Switch on Wireless data transfer on MICROTECH instruments

- -in COMPUTERIZED instruments using menu;
- -in WIRELESS instruments by holding the button for 2 seconds





- •The device will appear on «Available devices» area
- Move selected instrument from «Available devices» area to «Activated devices» area.
- Activate Auto Synchronization to automatic activating switched on MICROTECH devices
- Select Filtering device mode in Connection menu to view only MICROTECH instruments.



X Settings Select Filtering device mode in Connection menu to General Connection Value broadcast Extra view only MICROTECH instruments in Avialable devices Connection area Filter devices Interval 64 **...** -+ Timeout Microtech Data System Latency + D5:38:E2:F8:8D:87 DA:A7:37:AC:6D:B6 C3:4B:FC:0C:FB:85 C9:E9:3E:9C:D5:0E Interval + 50 + Window To defaults Cancel



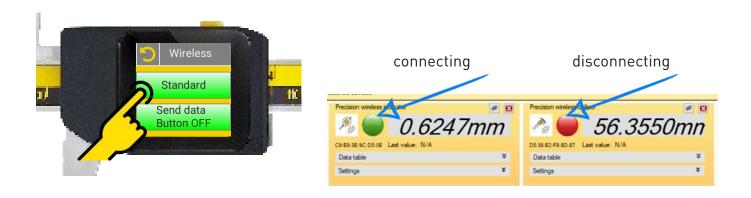
•ALL MICROTECH instruments have 2 data transfer modes:

STANDARD - non stop 4 times/sec

ECONOM - by button push only

- •You can switch the data transfer mode transfer mode using menu on your device
- Connection status indicating only in STANDARD mode
- •ECONOM mode strongly recommended for WIRELESS instruments for battery saving
- •for COMPUTERIZED instruments recomended to use STANDARD mode

Use STANDARD mode for COMPUTERIZED instruments



STANDARD mode advantages:

- -In **STANDARD** mode data transfer can be executed via pressing the button or use touchscreen on Computerized device, by Timer on Computerized device, by actual value push in Windows app, by Timer in Windows App, by Footswitch in Windows app.
- Possible to view of connection status in app (green connected, red-disonnecting)
- -STANDARD mode is activated by default

ECONOMY mode for WIRELESS instruments



In economy mode the data transfer is carried out only by pressing the button It is necessary to activate ECONOM mode (Energy saving mode) on main screen

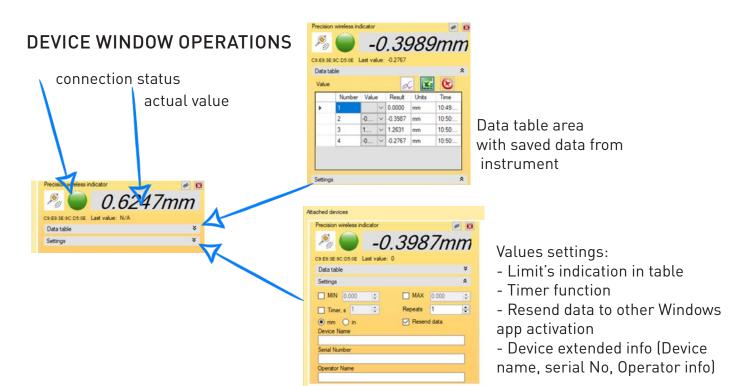


MEASURING PROCESS windows

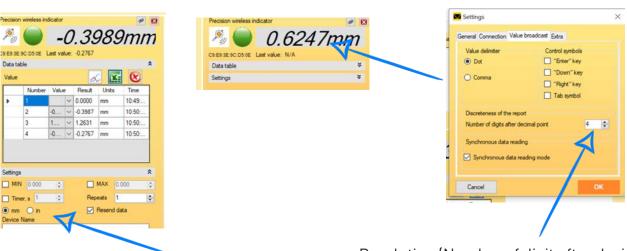


Connect USB dongle and power on Wireless or Computerized devices.
Wireless and Computerized devices will be appeared in Available devices area
To start data transfer move them to Attached devices area. If Auto synchronization is switched on, devices will be moved to Attached devices area automatically.





RESOLUTION & UNIT SELECTION



Resolution (Number of digit after decimal point) mm/inch selection selection in Setting menu



SAVE & RESEND VALUES windows



How to save values to table in STANDARD mode:

by pressing the button or tapping touch screen on your device

by timer activating inside instrument

by pushing actual value on MDS Windows app

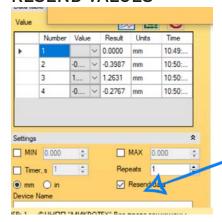
by timer activating on MDS Windows app

by footswitching on MDS Windows app





RESEND VALUES

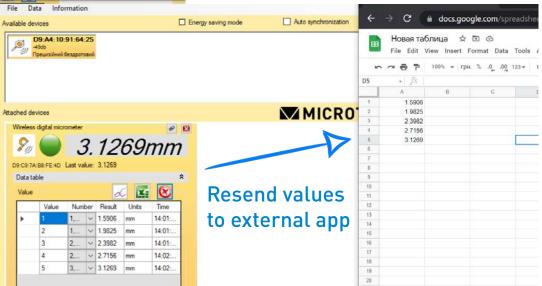


Actual values (receiving from instrument) can be

Activate Resend data



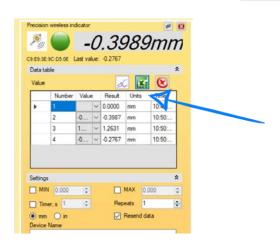
If necessary select value options (Dot/Comma) and Control symbol in Setting menu

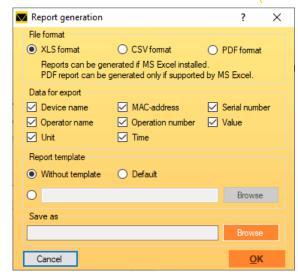


EXPORT DATA & GRAPH

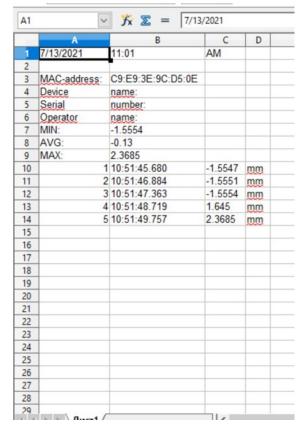








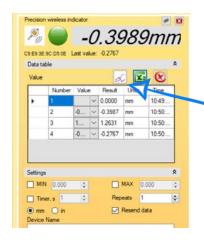
Export saved data table values for external files
Select necessary to save columns on Data for export subsection
csv report can be generated in any Windows PC
xls report can be generated if MS Excel installed on your PC
pdf report can be generated only if supported by MS Excel (the latest versions)



Example of exported xls file



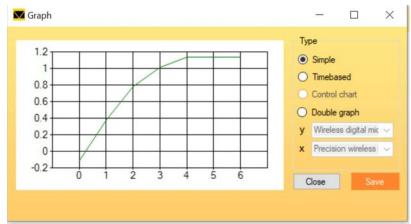




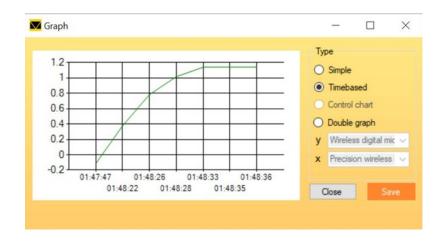
Export saved values to Graph mode Graph can be saved to png format

Single Graph or Graph with Tutorial.

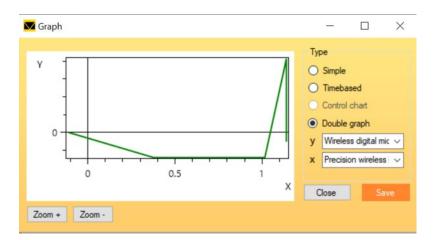
Simple Graph



Simple Graph with Timebased



2D Doublegraph For special measuring solutions



SETTINGS & REGISTRATION Window







Language selection in Setting menu



MDS app versions info



Short guide in Information menu

ACTIVATE PRO version ■ Window

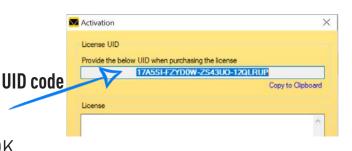


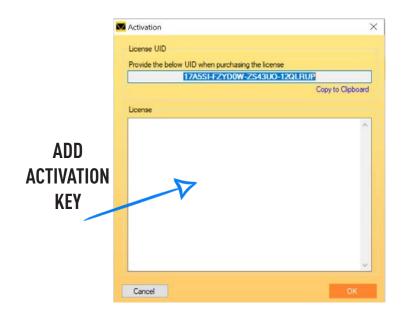
To activate PRO version (must be pre-paid with your local distributor)

- 1) Open Register product sub-menu
- 2) Copy and send activation UID code from appllication and Serial No from USB-drive to tool@microtech.ua
- 3) After checking we will send to your e-mail activation license key.

Add activation key to activation area and press OK.











WIRELESS HID DATA TRANSFER

MICROTECH COMPUTERIZED INSTRUMENTS have **WIRELESS HID** data output to transfer Data direct to any compatible operation systems and applications in keyboard mode.



CONNECTION

- 1) Switch on HID mode in WIRELESS menu
- 2) Connect MICROTECH device to you PC or Tablet
- 3) Select settings of Data transfer (Dot/Coma, Trail symbol -Tab, Arr Down, CL-LF)
- It gives possibility operate in different localizations, table editors
- 4) You can direct transfer data to any Windows or other OS application.



OPERATION

For transfer DATA throw WIRELESS HID you can use some variants:

- Button Push
- Touchscreen Push
- Timer function activation
- Send data from internal memory
- Data tansfer in auto-Force mode (Computerized eForce calipers only)



USB HID DATA TRANSFER



MICROTECH COMPUTERIZED INSTRUMENTS have **USB HID** data output to transfer Data direct to any compatible operation systems and applications in keyboard mode.





CONNECTION

- 1) Connect micro USB cable from instrument to computer/tablet USB Cable must be with data transfer wires
- 2) Activate USB connection mode on COMPUTERIZED instrument

DON't activate USB connection without cable connection

- 3) Select settings of Data transfer (Dot/Coma, Trail symbol -Tab, Arr Down, CL-LF) It gives possibility operate in different localizations, table editors
- 4) You can direct transfer data to any Windows or other OS application.



OPERATION

For transfer DATA throw USB cable you can use some variants:

- Button Push
- Touchscreen Push
- Timer function activation
- Send data from internal memory
- Data tansfer in auto-Force mode (Computerized eForce calipers only)





MEASURING HUB

- 2 DEVICE indication on main screen
- FORMULA
- SYNCRONIZATION
- 2D and ON-LINE SYNC GRAPTH
- QUICK autoconnection
- 2 axis MEMORY MANAGER

PROBE MODE

- **PROBE MODE**-saving data by Probe Touch
- AUTO-PROBE MODE Touch volue compensation
- quick WIRELESS Probe connection



2D MODE

HUB

- 2 AXIS measuring
- SYNC reading
- 2D GRAPH
- 2D DATA transfer
- WIDE CONFIGURABLE



MEASURING HUB



- 1) MASTER device: select in WIRELESS menu 2D-M Master device on WIRELESS connection on HUB mode
- 2) SLAVE device: select in WIRELESS menu 2D-S Slave device on WIRELESS connection on HUB mode
- 3) HUB mode on MASTER device select requested mode (PROBE, 2D) and Connect SLAVE device

A.C.on - Auto Connection active

A.C.off - Auto Connection no active

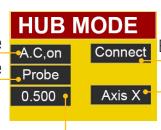
PROBE -Saving data when Probe will reach value

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 conneciton

Axis priority selecting

Setting PROBE limit value

2D MODE

PROBE MODE

A.C.on - Auto Connection active

A.C.off - Auto Connection no active

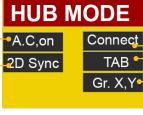
PROBE -Saving data when Probe will reach value **PROBE Auto** - Saving data when Probe will

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 conneciton

Symbol between Axis

Graphic mode indication setting

FIRMWARE UPDATE



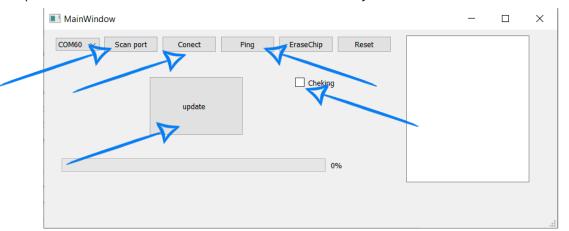
- 1) Connect USB cable to Windows PC (with data transfer possibilities)
- 2) Push FIRMWARE UODATE BUTTON to activate process



Push 10 times to FIRMWARF UPDATE

BOOTLOADER
Connect the device
to a computer and
download the new
firmware. Press the
button to enter
sleep

- 3) You will enter to BOOTLOADER secsion on device
- 4) Run NordBootloader.exe for WINDOWS file (request from MICROTECH)
- 5) Click Scan port -> Connect -> 2times Ping (on your device should display some numbers) -> Cheking -> Update and select *.bin file with lasted firmware that you have been downloaded.



6) After successful flashing will display "Loading finished" on device screen.

Now you can plug off Micro USB



7) After that, you need to reset the device to factory settings.

Tap «RESET TO FACTORY» 10 times.

The firmware update is complete



Push 10 times to RESET device to factory settings





MICROTECH

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EUROTOOLS SARL

Parc d'Activités des Nations 8, Rue d'Italie 67230 BENFELD - France

Tél.: +33 (0)3 88 08 24 09 www.eurotools-precision.com commercial@eurotools-precision.com

