USER MANUAL

TORQUE WRENCH CALIBRATOR

PCE-TCT SERIES

ENGLISH



User manuals in various languages (français, italiano, español, português, nederlands, türk, polski) can be found via our product search on:
www.pce-instruments.com

USAGE

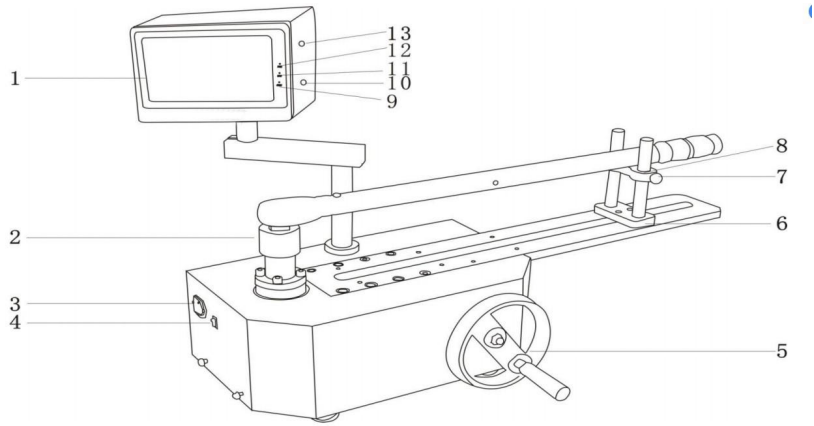
PCE-TCT Series Torque Wrench Tester is an intelligent multi-functional measuring instrument which is designed for testing torque wrench,torque screwdriver. It main used in testing and calibrating various kinds of concentration type torque wrench, digital type torque wrench, preset type torque wrench, torsion screwdriver, screwdriver and all kinds of products involving tighten force instrument.

Widely used in electrical manufacturing, mechanical manufacturing, automotive light industry and in scientific research and the testing industry.

FUNCTION AND CHARACTERISTICS

1. High precision, high resolution, quick sampling speed, full-screen display.
2. Meter display, curve display, curve zoom function and full touch screen display.
3. Adopting high precision torque sensor, with torque direction display.
4. Upper and lower limit value setting, red indicating lights and buzzer audible and visual alarm.
5. Three units can be switched each other (N·m, kgf·cm, Lb·in).
6. Real-time, peak, automatic peak three models of optional switch.
7. System time for setting.
8. Large storage capacity via USB flash disk.

THE NAME AND FUNCTION OF EACH PARTS

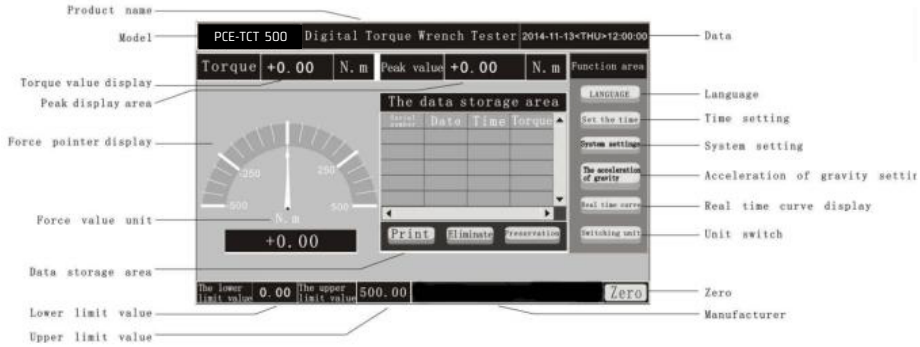


1. LCD touch screen
2. Mortise
3. Power interface
4. Hard switch
5. Hand wheel
6. The length of adjusting block
7. Height adjusting nut
8. Height adjusting block
9. Window Indicator
10. Zero Key
11. CPU Indicator
12. Power Light
13. LCD Screen Switch

1. LCD touch screen

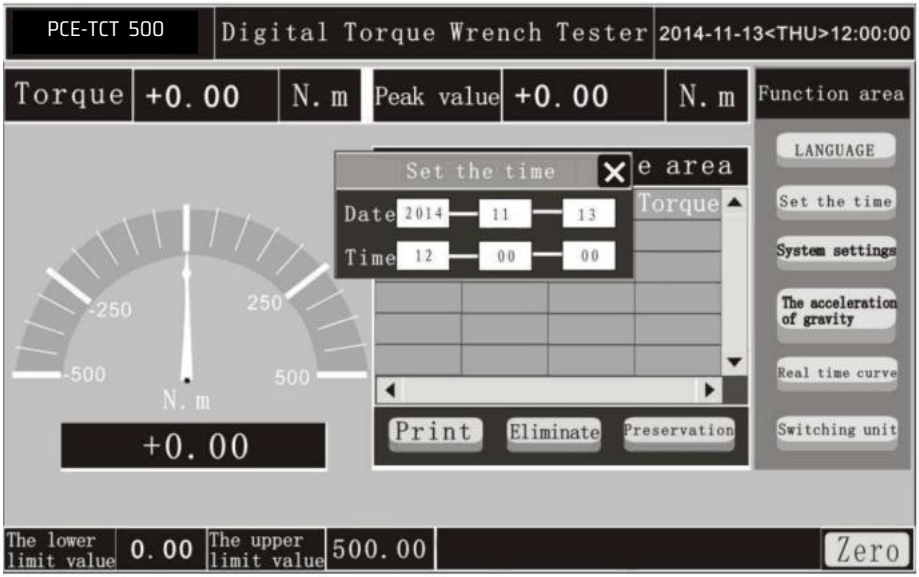
A) Boot Display
Boot usually displays manufacturer information. We do not put the manufaturer information when products are for distributors. It can also show distributors information when required.

B) Enter into the measuring interface



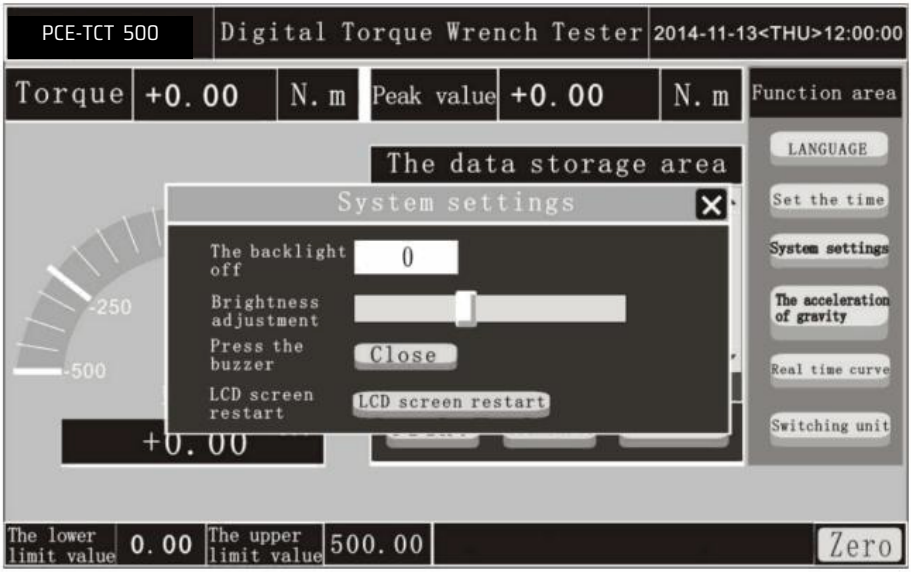
2. Functional key

A) "LANGUAGE"key: Click this to switch from Chinese to English
B) "Time setting" key: Time setting key, it will occur dialog box when click this key, can modify date and time freely, see the picture as below:

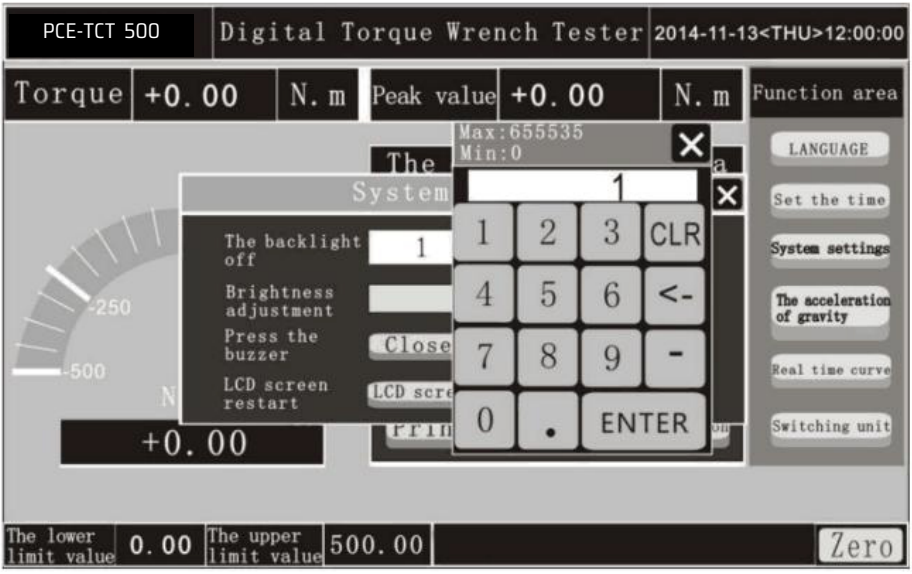


C) "System setting" key: Including 4 function"backlight", "screen brightness", "press the buzzer", "LCD display restart"

See the picture below:

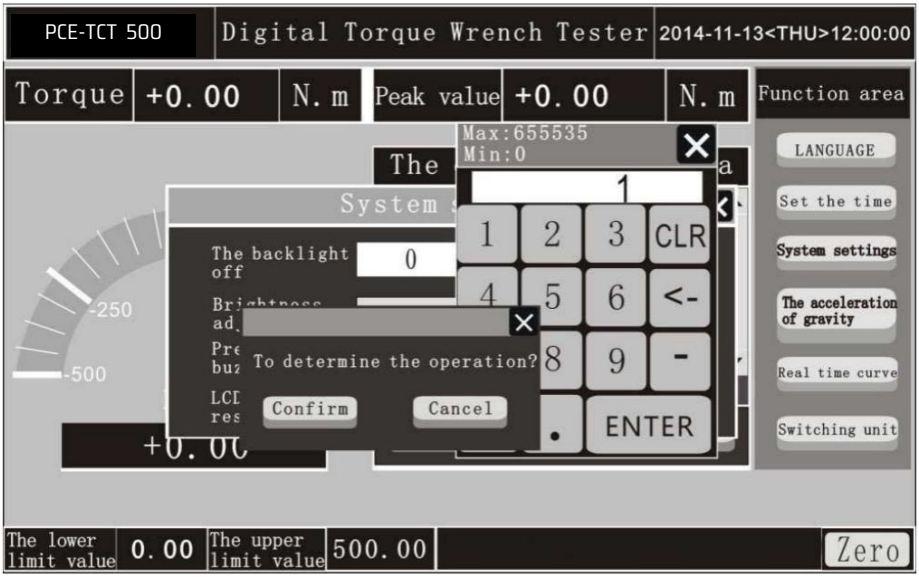


“Back light off” setting: Click “backlight off” dialog box, the dialog box will appear as shown in the picture below:



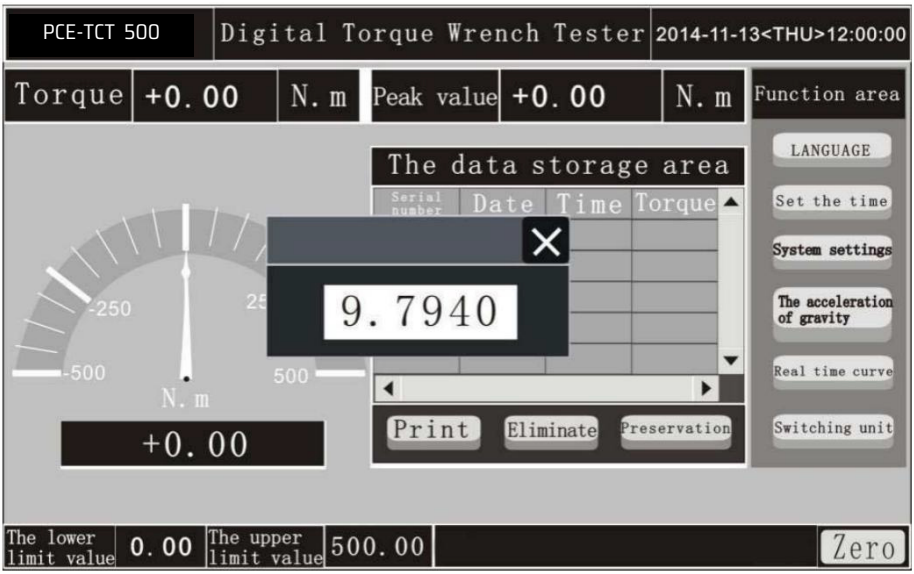
Enter the desired number, for example: ”1” (time unit: minutes), the dialog box will appear:
“Max: 655535, Min: 0”, it shows that the the max. is “655535”, the min. is “0”, then click “ENTER” key, it will appear.

A new dialog box will appear. Press confirm to set it. As shown in the picture below:

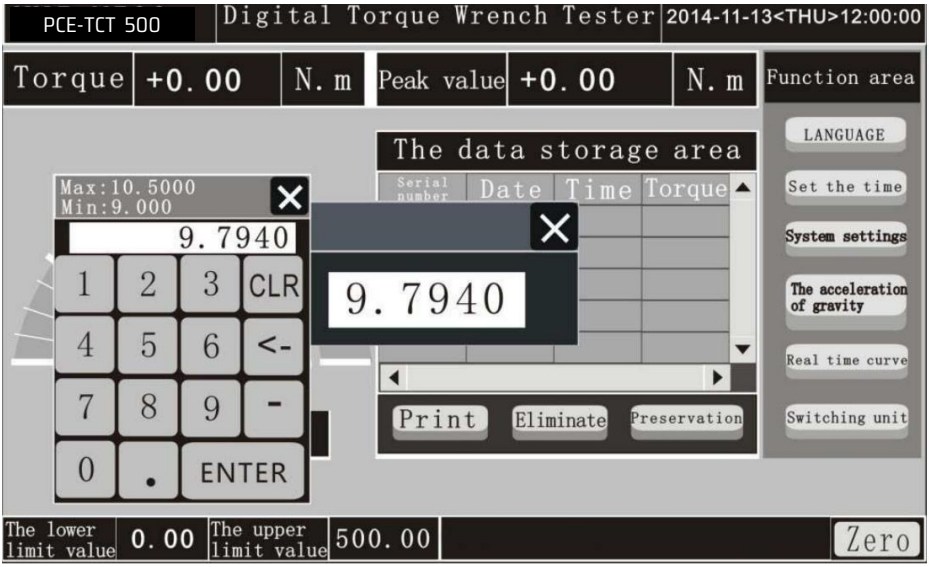


"Buzzer key": After clicking "close", the button sound will cancel.
"LCD screen restart": Click this key, the screen will restart.

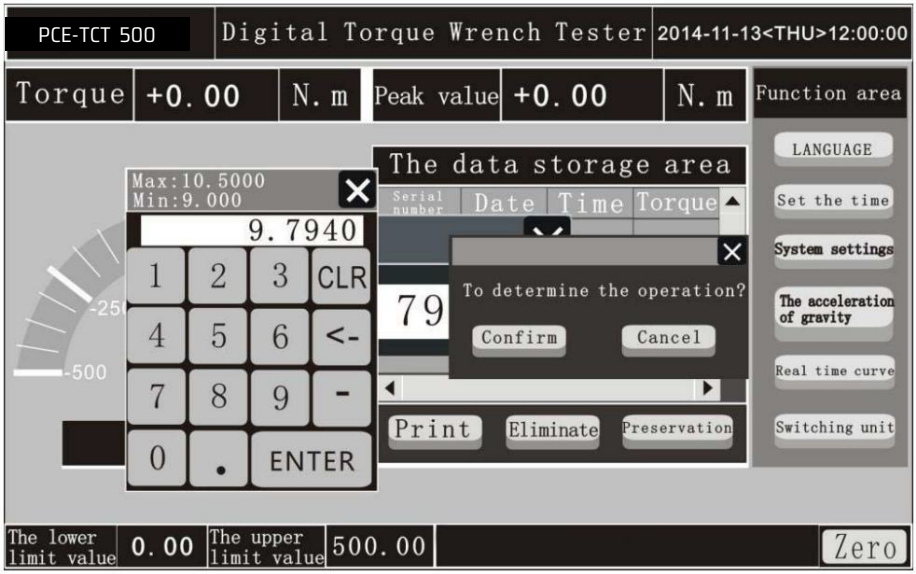
D) "The acceleration of gravity" key: A dialog box will appear as shown in the picture below:



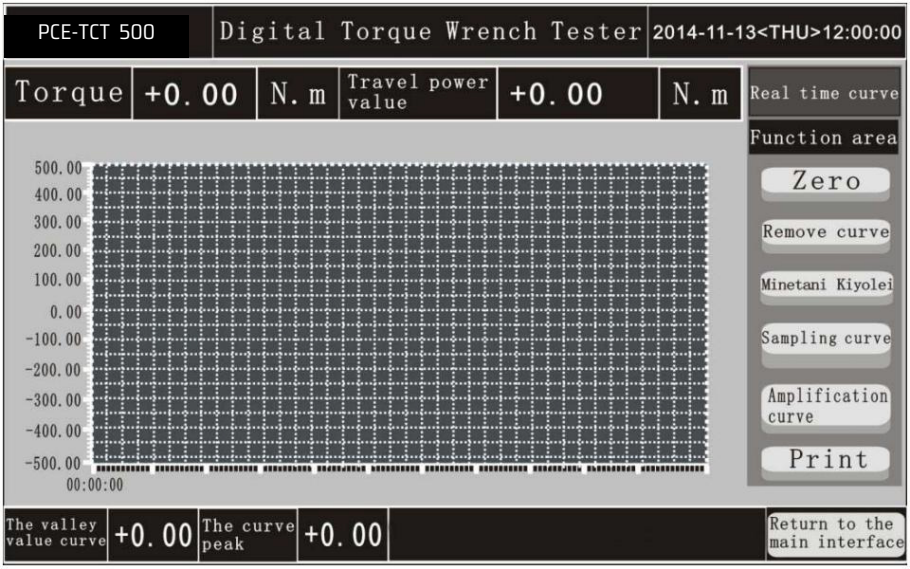
The default of acceleration of gravity is “9.7940”. If you need to modify it, please click the white space. A new dialog box will appear, as shown in the picture below:



Input the value you need (on the top of the dialog Max. vaule is 10.5000, Min. value is 9.000 it shows that the max. value can be set to 10.5000, the min.value can be set to 9.000), click “enter”. A new dialog box will appear, click “confirm” for sure (as the picture below).



E) "Real time curve": Shows the real time force value in the curve mode. Click this key to enter the interface of "real time curve, as shown in the picture below:



"Vernier force value": Refers to the force value at any point on the curve (by pressing any point on the curve, the "vernier force value" will display the value).

"Zero": To clear the peak curve, press the "ZERO" key.

"Clearance curve": Clears the curve on the picture. After clicking "curve amplify", the curve cannot be cleared. Double click the screen when the curve recover to the normal size, click this key and the curve will be cleared.

"Peak valley zero": Clears the "curve peak value" and "curve valley value" on the screen (Clear "curve peak value" when testing peak value, clear "curve valley value" when testing valley value).

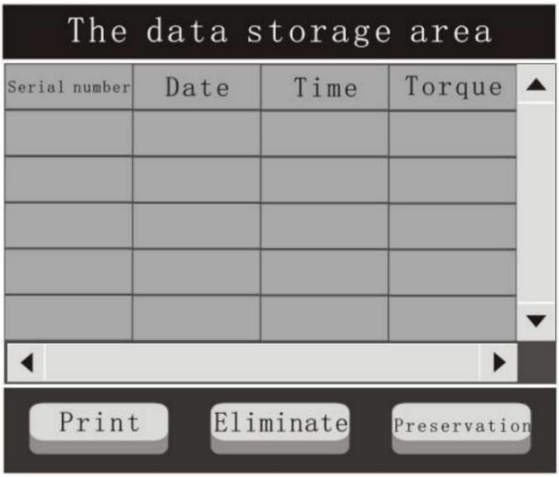
"Curve sampling": The force value will display in the curve way, click this key to display curve of force value, click again to pause.

"Curve amplify": The curve on the screen will be amplified after clicking this key.

"Return to main interface": Click this key to return to the main interface.

F) Unit switch: Click this key to switch the unit. This instrument includes 3 units (N·m, kgf·cm, lb·in).

3. Data storage area



"Storage" key: To save data.
"Clear" key: Data cleaning.

4. Power interface: Connect the power supply (this machine does not have a charging function).
5. Mortise: To connect to the square probe of the testing object.
6. Test object: Such as torque wrench.
7. Hand wheel: Rotate the hand wheel to make the testing.

WORKING ENVIRONMENT

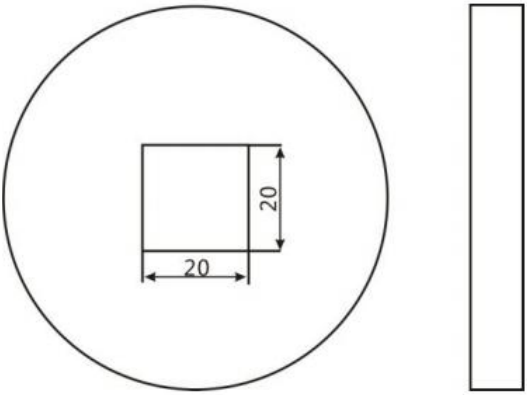
1. Operation temperature: -10°C ... 40°C
2. Operation humidity: ≤90%RH
3. No vibration source and non corrosive environment

OPERATION PROCEDURES

1. Plug in the power cable, put into the load-carrying square hole.
2. Turn on the main switch.
3. Put the testing object, put the square probe of the test object into the square hole of the instrument.
4. The end of the testing object can not touch anything, adjust the height adjusting block and length adjusting block, clear the screen.
5. Shake the hand wheel to start.
6. If you need to change the unit during testing, click the "unit switch" key to change the unit. This instrument has 3 units (N·m, kgf·cm, lb·in).
7. If you need to see the curve display when testing, click the "real time curve" key to into the interface of "real time curve", and then click "curve sampling". The curve will appear on the screen when rotate the hand wheel. If you want to pause, click "curve sampling" again.

THE SIZE OF LOAD-CARRYING SQUARE HOLE

In order to avoid damage, don't crash the load-carrying square hole. Below is the ichnography of load-carrying four square hole.



NOTE, MAINTENANCE AND REPAIR

- Please do not overload the testing torque. It must be used within the scope of the testing range. Otherwise it will damage the instrument, and cause danger.
- Don't knock the LCD screen or put objects on the LCD screen.
- Do not use nails, edge tool, or sharp objects to press the function keys.
- Please do not use the torque tester in water, oil, or other liquid splashed place. Put the torque tester in cool, dry and a non vibration environment.
- Do not open the lid of the back, more cannot adjust inside trimming resistor.
- Don't loosen the setscrew in the head of torque tester.
- Please use the matching battery to charge. Otherwise a circuit fault, or even fire could be caused. The AC charger should be inserted into the socket fully, then to use, loose plug may cause short-circuit and cause shock or fire.
- Do not use other power except the charger's rated voltage. Otherwise it could cause an electric shock or fire.
- Please do not pull out the plug with wet hands or insert it, as this may result in electric shock.
- Please use the soft cloth to clean the machine. Immerse the dry cloth into water with cleaner, wring out after the removal of dust and dirt. Do not use vaporific chemical substances, such as essential oil, thinner, alcohol etc.

- Handle with care during use and while carrying.
- Do not disassemble, repair or reconstruction this machine. These actions may cause permanent fault.
- If broken down, please contact with the original place of purchase or our company.
- Within one month from the date of buying, if customers found product quality problems under normal use and without appearance damage cases, they can change the same specifications and type product rely on original sales invoice, effective warranty card and complete product packaging in the original place of purchase or our company.
- Since the date of sale for one year, under normal using condition, if the products appear non-artificial fault, it's in the scope of warranty (users open the machine voluntarily or maintain in other maintenance point, the warranty will not apply). Customers rely on the original sales invoice, effective warranty card to contact with he original place of purchase, can get our company free guaranteed for one year. The freight through the warranty is paid by customer.

DISPOSAL

For the disposal of batteries in the EU, the (EU) 2023/1542 directive of the European Parliament applies. Due to the contained pollutants, batteries must not be disposed of as household waste. They must be given to collection points designed for that purpose. In order to comply with the EU directive 2012/19/EU we take our devices back. We either re-use them or give them to a recycling company which disposes of the devices in line with law. For countries outside the EU, batteries and devices should be disposed of in accordance with your local waste regulations. If you have any questions, please contact PCE Instruments.

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