

TEXAS INSTRUMENTS EZ430-CHRONOS WATCH REVIEW

Packaging

The product was delivered in a middle size box. It is noticed when opened the box that the box size is well enough for the product.

Package Contents

The components included in the box are;

1. Chronos Watch
2. Usb programming and debugging stick
3. Wireless to Usb Serial RF Access Point
4. 1 Philips screwdriver
5. 2 pieces of spare screws
6. Software and Documentation CD

Hardware Information

There are 3 hardware components in the product box. Now let us explain those components in detail.

1. Chronos Watch

You like the Chronos too much when you get it. At least, i feel like that. The Watch has a screen used as two lines. It can be seen signs and information on the screen according to the state of the mode that it runs. It can be found under Application section of the review to get more info about the details. The watch has 5 buttons which two of them are at the left side and three of them are at the right side. The watchband is made of plastic but it is Ok because it makes a soft feel when it is worn. The watch is well for my wrist. In fact, you do almost not feel the watch because of its low weight

The Left upper button enables to change the function, the left bottom button enables to change the mode, the right upper button enables to change item value, the right bottom button enables to start/stop wireless signal and the right middle button enables to light backlit of the watch.

It can be found the detailed info about the Watch hardware and detailed info about the usage and functions of the watch in the file SLAU292a.pdf (it is located in the CD in the product box and can also be found in www.ti.com site).

2. Programming Stick

The programming stick consists of two parts; a serial interface between computer and MCU and an interface between MCU and the unit that is to be programmed.

3. Chronos RF Access Point

RF Access Point builds a bridge between the computer and the Watch. There is created a serial virtual port when it is plugged to the usb port of the computer.

Installation

The installation starts and finishes with no problem when you insert the CD located in the product box and follow instructions met during installation. There is created a menu under Programms/Texas Instruments/ez430-Chronos which has items below;

1. Chronos Control Center
2. Chronos Data Logger
3. eZ430-Chronos User's Guide
4. Uninstall eZ430-Chronos

More detailed info about these items can be found under Application section.

Application

1. Chronos Control Center

While being loaded Chronos Control Center application, RF Access Point Usb stick is checked if it is plugged or not. If it is not plugged then a warning message is displayed indicating this issue. If Chronos Control Center is loaded and then RF Access Point is plugged, Control Center can not detect RF Access Point. To detect it , it must be unplugged and then plugged again. This is what i faced during the tests.

There are many Tabs in the Chronos Control Center window. In every tab there are different features. The Tabs and their functions are;

1. SimpliciTI ACC/PPT

What you can do in this Tab is as follows;

1. It can be seen the position of Chronos Watch in the form of X,Y,Z and in graphical form with the help of 3-axis accelerometer. The graphic is based on the changes of the Watch position according to the reference point. To enable this feature, the ACC mode on the Chronos watch should be enabled and then wireless signal must be started to enable data transmission between Chronos Watch and the RF Access point.

2. When it is clicked [Button] button then whichever function is assigned to the buttons in the Key Config Tab on the left upper, left bottom, right upper of the Watch is executed. Namely, if you assign Windows+E key to the left upper button of the Watch and then you press the left upper button of the Watch, an Explorer Windows is opened in the computer screen.

3. When it is clicked [Mouse] button, now the Mouse moves according to the position changes of the watch. In another way, this feature simulates Mouse movement via Watch movement.

4. When it is clicked [Calibrate] button, the new reference values for each axis according to the position of the Watch are set for further processing.

To view the feature of the axis change result displaying, the Chronos mode should be set to ACC. For the other features, the mode may be ACC or PPT.

2. Key Config

In this Tab, it can be assigned to the buttons of the Watch with the keys predefined in the list boxes. Already defined configuration can be saved or a saved one can be reloaded.

3. SimpliciTI Sync

In this Tab, there are fields named time, date, temperature and altitude. These fields can be filled by clicking [Read Watch] button. After the necessary changes made then clicking the [Set Watch] button will cause the Watch updated with the new values. To be able to use this feature, the Watch should be in [Sync] mode.

4. BlueRobin Heart Rate Sim

In this Tab, the Heart Rate and the Sweep Speed can be monitored. But, to be able to use this feature, it is needed a Heart Rate monitor device externally. It is not included in the Chronos Kit.

5. Wireless Update

In this Tab, it is possible to update chronos firmware via wireless connection. To be able to use this feature, [rFbSL] mode on the Chronos Watch should be set and then [Update Chronos Watch] button must be clicked.

6. About

7. Help

It can be found the detailed info in the file SLAU292a.pdf (it is located in the CD in the product box and can also be found in ww.ti.com site).

2. Chronos Data Logger

The Tabs in the Chronos Datalogger program window and the functions of them are;

1. SimpliTI Datalogger

In this Tab, there is a field to define a log file to save the data received from sensors for further processing. In the mean time, like in the Chronos Control Center program, reading and updating Watch contents is possible.

2. Wireless Update

In this Tab, it is possible to update chronos firmware via wireless connection. To be able to use this feature, [rFbSL] mode on the Chronos Watch should be set and then [Update Chronos Watch] button must be clicked.

3. About

4. Help

POSS

There are too many POSSs in the Watch that i can not decide where to start to explain. But if it is needed to make a quick list, here we go;

1. It suits the wrist very much, you feel in comfort.
2. It has Alarm feature.
3. It has Chronometer feature.
4. It has Accelerometer feature.
5. It has Thermometer feature.
6. It has Altimeter feature.
7. It has Heart Rate Monitoring feature with an external device.
8. It has Sweep Speed feature with an external device.
0. It can be re-programmed

CONS

I could not find anything negatives for the Chronos Watch. So i am leaving this field empty

Conclusion

I definitely liked the Chronos Watch. It is a well thought product. It deserves being in the front side in the market with its design and usability, with reach features that it has and it is really a great product. And it is mainly a Development Kit, even if we forget this main feature that it has, its being a watch which is able to display the temperature, altimeter, heart rate, sweep speed, its having accelerometer feature, it is absolutely a must-have product. And it deserves the money you pay for it