



# WiFi Fastclock 1.4

Thank you for the purchasing the WiFi Fast Clock System. Related Questions and Answers can be found on Facebook under the “WiFi Fastclock” page.

<https://www.facebook.com/wififastclock/>

You may also contact me (Andrew Deak) via email at [adeakrr@gmail.com](mailto:adeakrr@gmail.com).

This document provides you the following information:

- Fastclock Server Software Installation
- Hardware Setup: WiFi Adapter
  - Installation of the AirGateway WiFi Adapter
  - Installation of the AirCube WiFi Adapter
- Hardware Setup: Analog Clock and Digital Clock
- Running the Fastclock Server Program
  - Setting the Fast Clock Ratio and Start Time
  - Saving the Ratio Setting and Current Time
  - Adjusting the Analog Clock Trim Speed
  - Restarting the Program with Last Session Time and Ratio
  - Changing the Default Web Port
- Web Server
- Web Server Customization

# Fastclock Server Software Installation

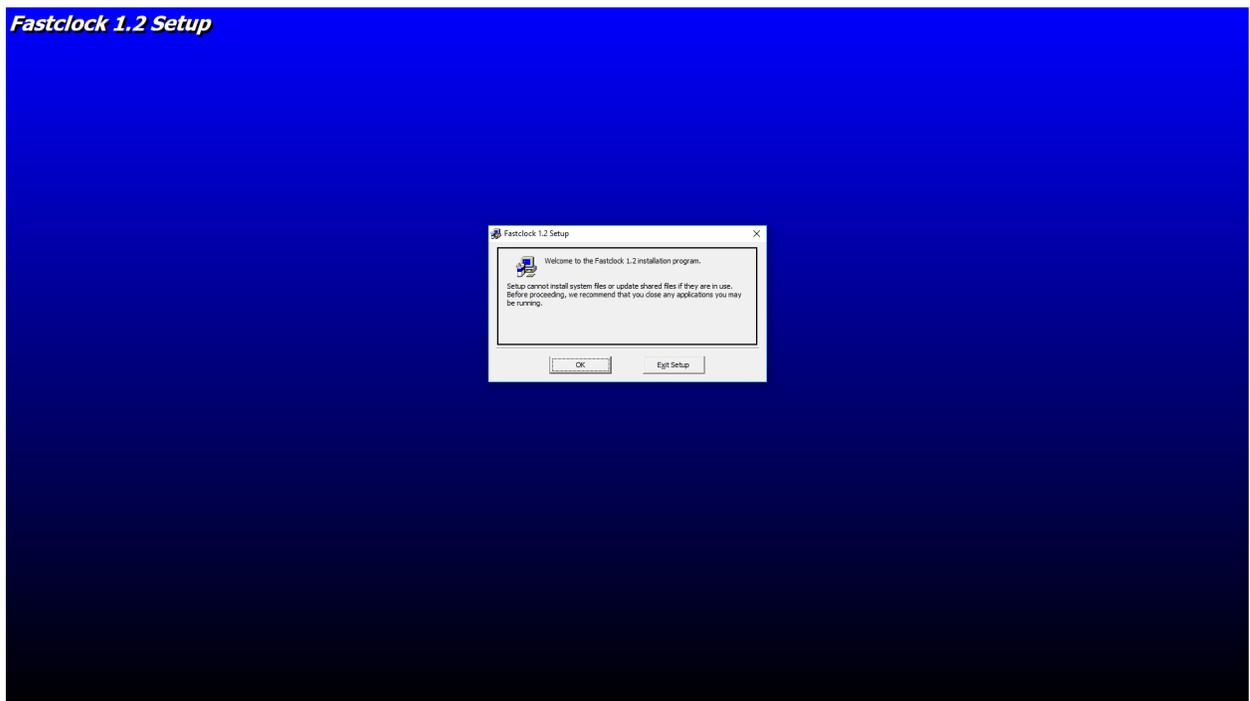
Download the latest WiFi Fastclock Server software at <http://www.modelrailroadcontrolsystems.com/wifi-server-software-windows-only>

This download will create a “**fastclock.zip**” file on your PC.

Unzip the “**fastclock.zip**” file, which will create a “**fastclock**” folder on your PC.

Open the “**fastclock**” folder and execute the “**setup**” application.

(In the following screens, the Fastclock program version number may be different from what you see on your PC, but the installation instructions are the same.)



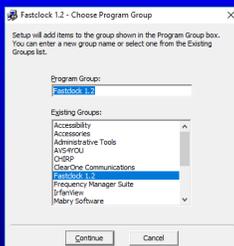
Click “**OK.**”

## Fastclock 1.2 Setup

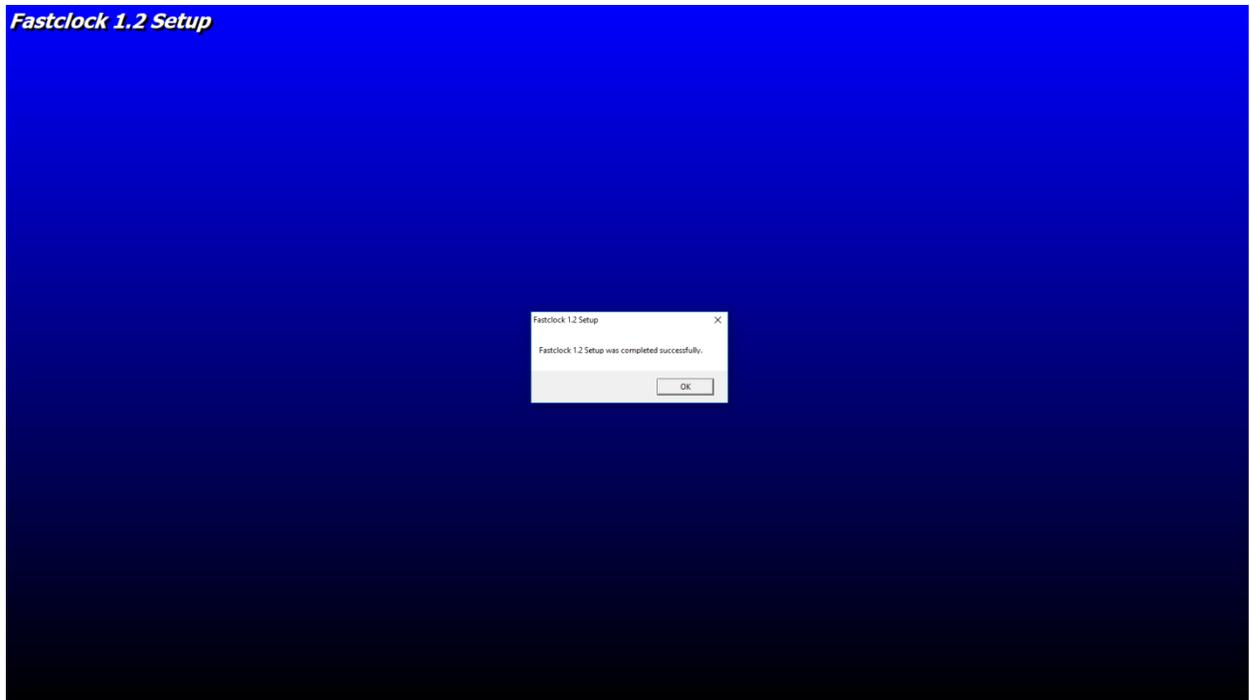


Click on the **PC Button** to begin the setup.

## Fastclock 1.2 Setup



Click the **“Continue”** button.



Click "OK."

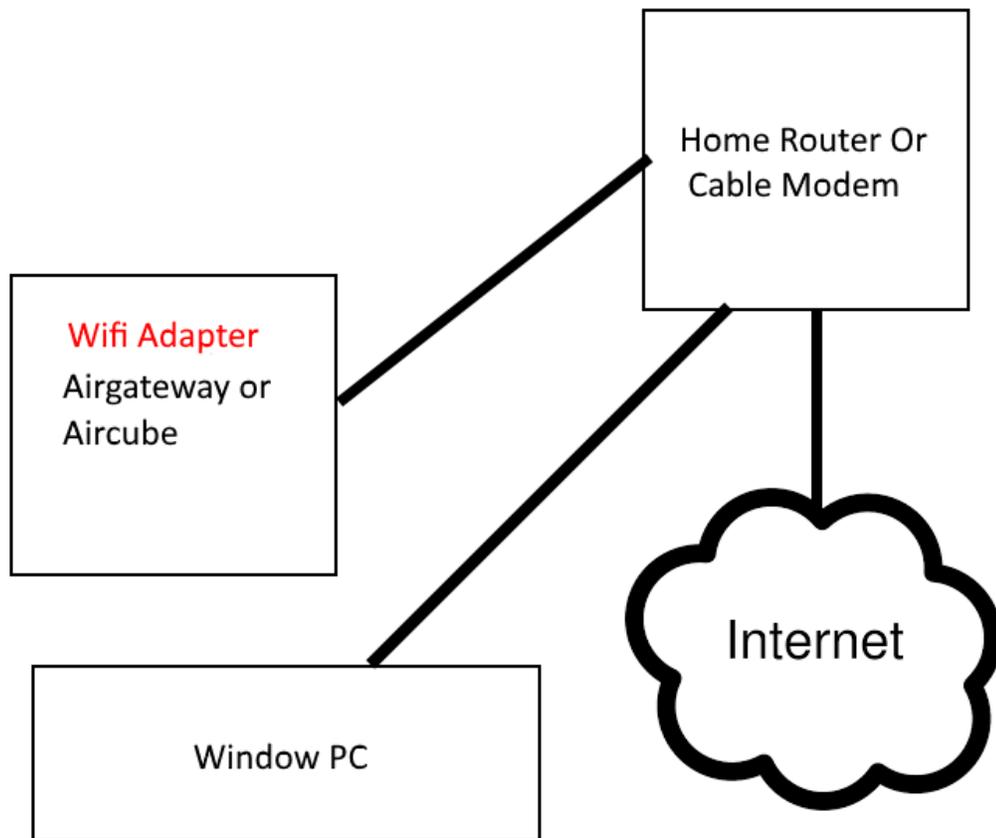
Installation of the WiFi Fastclock Server program is now complete and ready for your use.

## Hardware Setup: WiFi Adapter

The diagram below shows a general schematic how the WiFi Adapter is connected to a Cable Modem or Home Router. The WiFi Fastclock Server software runs on the Windows PC shown in the diagram, which is also connected to the modem/router.

The WiFi Adapter comes fully pre-configured from the factory. All you need to do is connect it to your modem or router and plug in the AC power, as described below.

**Note: You will receive one of two types of WiFi adapters – an AirGateway or an AirCube. Both types of adapters perform the same function (i.e., create a wireless local area network access point); however, their hardware setup is slightly different, as described below.**



## 1) Installation of the AirGateway WiFi Adapter



Connect a network (Ethernet) cable (supplied by user) from the AirGateway WiFi Adapter port labeled "LAN" to your Cable Modem or Home Router. Plug in the AC power cord.

Installation of your WiFi Adapter is complete and ready for use.

## 2) Installation of the AirCube WiFi Adapter



Connect a network (Ethernet) cable (supplied by user) from the AirCube WiFi Adapter port labeled “24v Poe IN” to your Cable Modem or Home Router. Plug in the AC power adapter.

Installation of your WiFi Adapter is complete and ready for use.

## Hardware Setup: Analog Clock and Digital Clock

Connect the power adapter to each analog clock and digital clock by plugging the micro-USB connector into the back of the clock. Plug in the AC power adapter.

**Digital Clock:** The display on the digital clock (including the start time) is controlled entirely by the Fastclock Server program running on your PC.

**Analog Clock:** The start time on the analog clock must be manually set. This can easily be accomplished by turning the round knob on the back of the clock. Once the start time

is set on the analog clock, all other fast clock operations are controlled by the Fastclock Server program running on your PC.

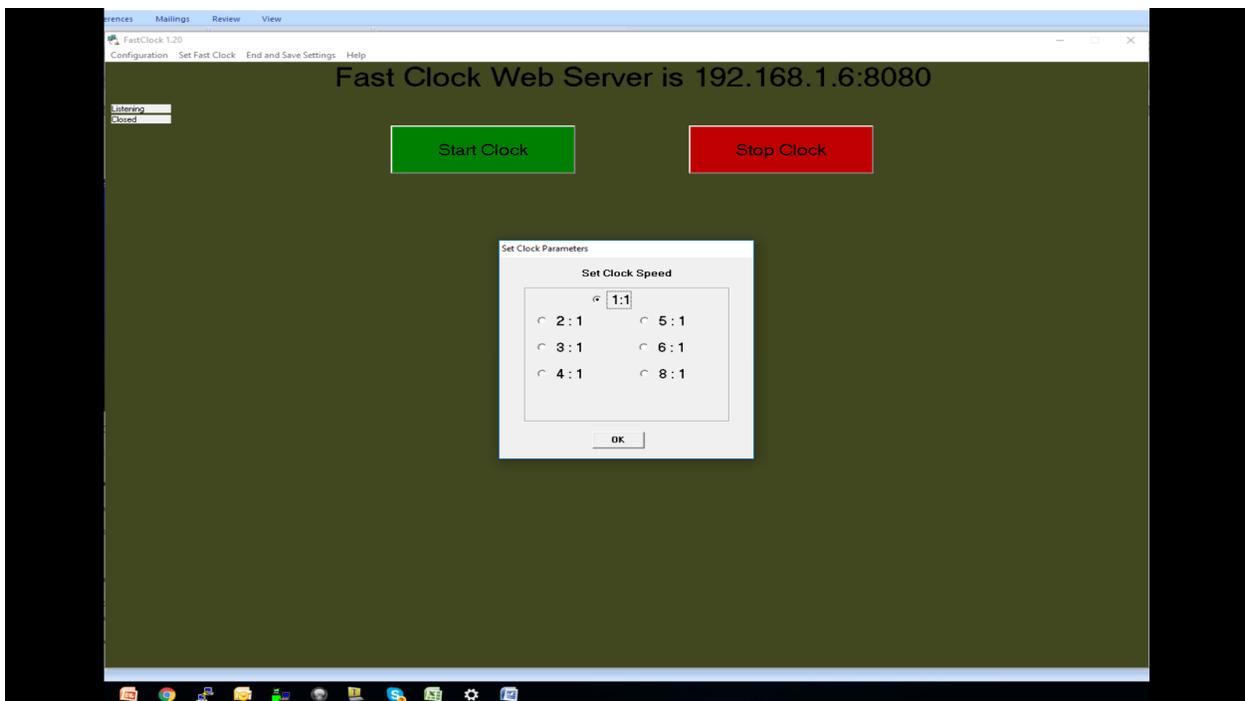
## Running the Fastclock Server Program

Locate the Fastclock Program Folder in your Windows Startup menu.

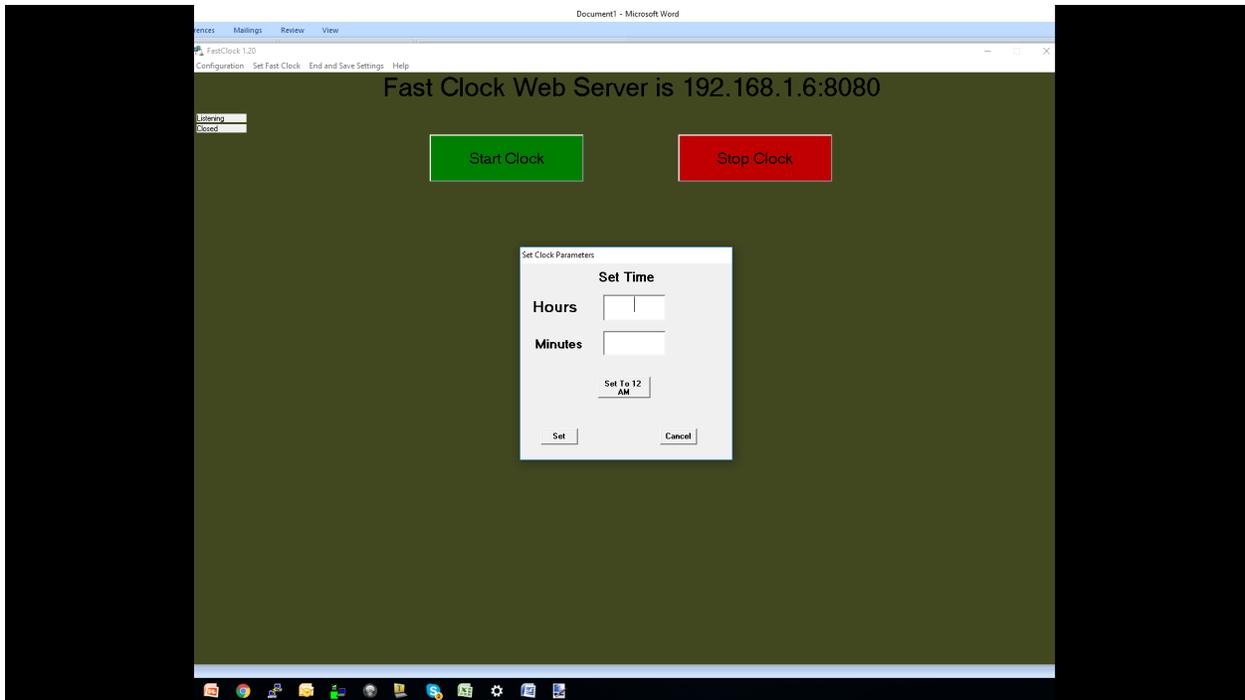
Execute the program “**Fastclock 1.4**” (the version number of your program may differ but the following instructions are the same).

### (A) Setting the Fast Clock Ratio and Start Time

On the toolbar at the top of the Fastclock screen, click on the “**Set Fast Clock**” selection.



In the “**Set Clock Speed**” window, select the desired **Ratio**, and then click “**OK.**”



In the “**Set Time**” window, enter the desired start time – **Hours** and **Minutes**.

Alternatively, you may click on the “**Set to 12 AM**” button to set the start time to midnight. (Note: If no time is set the clock will start at 12:00 am.)

Please note that hours are set in military time, where 13:00 equals 1:00 pm.

After setting the time, click “**OK**.”

You are now ready to start the Fastclock by clicking the green “**Start Clock**” button on the main screen.

At any time, you may click the “**Start Clock**” or “**Stop Clock**” button, and all remote clocks will respond accordingly.

## **(B) Saving the Ratio Setting and Current Time**

If you want the Fastclock program to save the current fast clock time and ratio, and exit the Fastclock program, click on the “**End and Save Settings**” selection on the toolbar at the top of the Fastclock screen. This selection will enable you to start the next fast clock session at the same time and ratio as you ended the previous session (see Section D, below).

If you close the program without using the “**End and Save Settings**” selection, your current fast clock time and ratio will not be saved.

### **(C) Adjusting the Analog Clock Trim Speed**

The analog clock ratio speeds have been set from the factory, but your clock may run slightly slower or faster for each different ratio speed. You can change the speed by clicking on the “**Configuration**” selection on the toolbar at the top of the Fastclock program screen.

In the Fastclock “**Configuration**” window, you may change the trim setting for any or all ratio speeds as desired. The Configuration window shows a trim setting for each ratio.

- If you increase the trim setting for a particular ratio, the analog clock will run at a slightly slower speed when using that ratio.
- If you decrease the trim setting for a particular ratio, the analog clock will run at a slightly faster speed when using that ratio.

After changing the desired trim settings, click on the “**Save Trim Settings**” button at the bottom of the Configuration window. Then close the window.

If you changed any of the trim settings as described above, click on the “**End and Save Settings**” selection in the menu at the top of the Fastclock program screen. This will save the new values in the Server program, and exit the program. You may now restart the Fastclock Server program and run as normal. The program will now use your new trim settings.

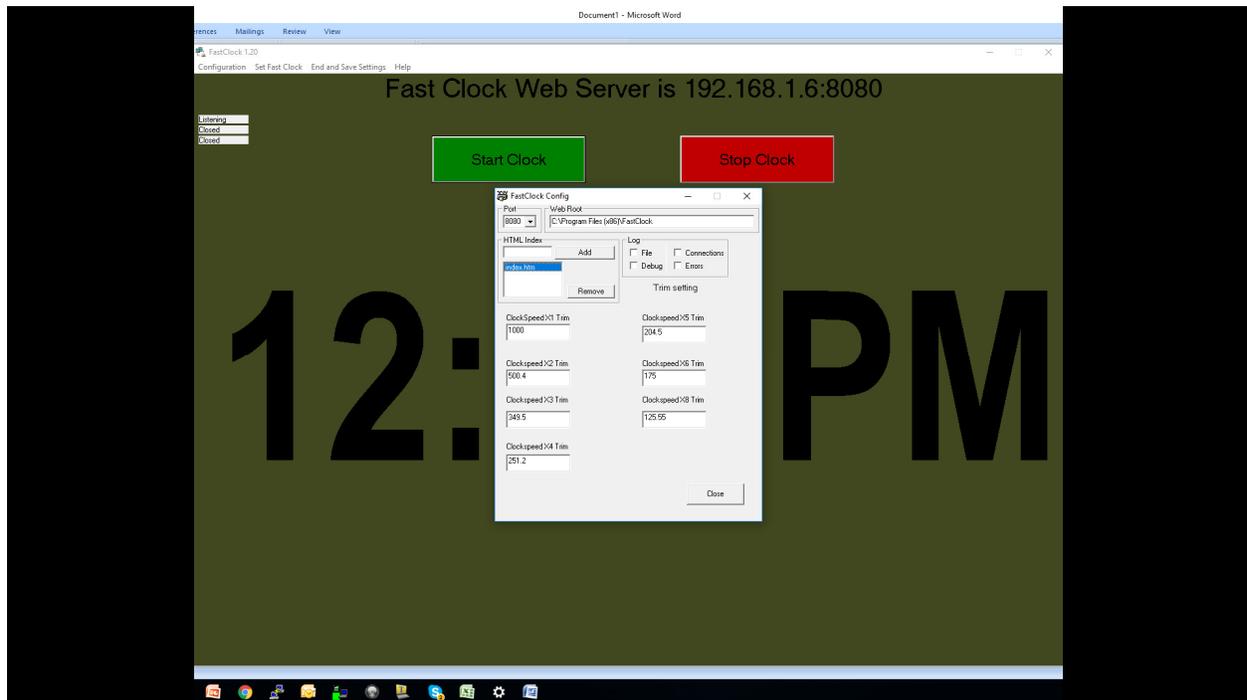
### **(D) Restarting the Program with Last Session Time and Ratio**

If you used the “**End and Save Settings**” selection in your previous session, you may execute the Fastclock Server program and continue with the exact time and ratio from the last session, if desired. This is done by simply clicking the “**Start Clock**” button on the main screen of the Fastclock program.

If you click on the “**Set Fast Clock**” selection at the top of the Fastclock program screen, the previously saved time and ratio will be deleted.

## (E) Changing the Default Web Port

The default web port for the WiFi Fastclock Server is **8080**. Some computer systems, however, will not allow port **80**. If you encounter any problems, click on the “**Configuration**” selection at the top of the Fastclock program screen. In the Configuration window, click the menu pull-down arrow in the “**Port**” option at the top of the window, and select port **8080**.



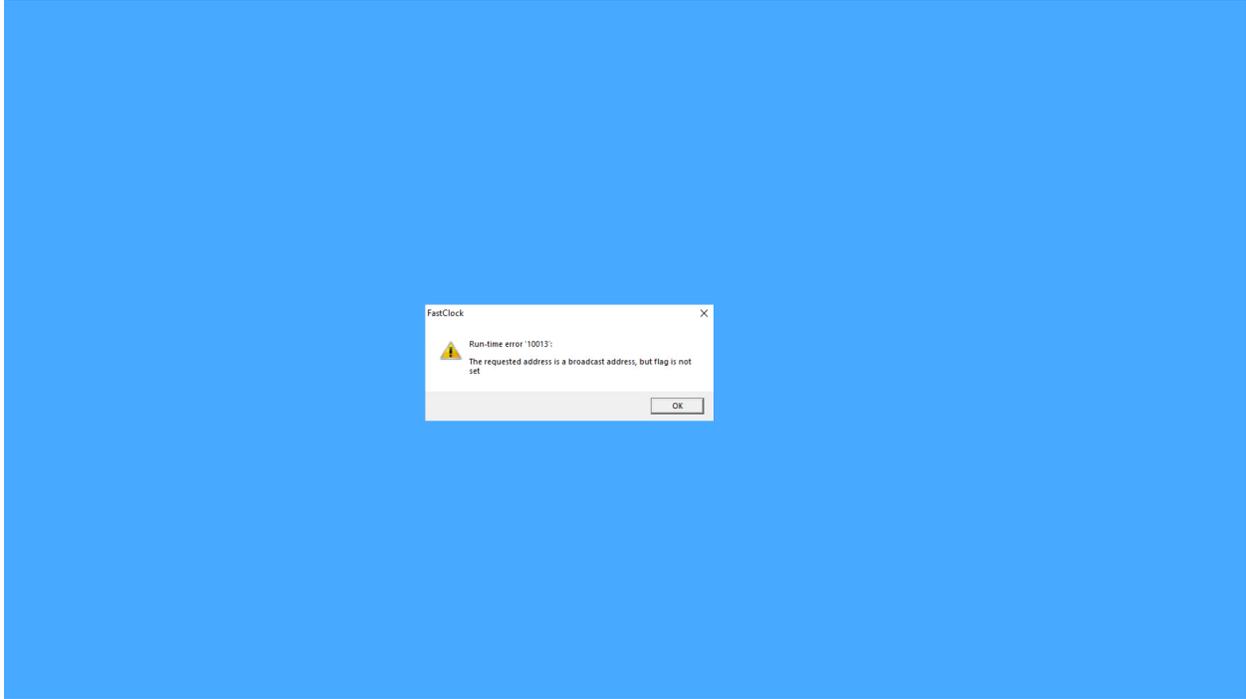
Click on “**Close**” to close the Configuration window; then click on the “**End and Save Settings**” selection at the top of the Fastclock program screen. This will save the new port setting. You may now restart the Fastclock program and run as normal.

If you change to port **80** and you start the program and an error pops up at the start the program “**Error 10013** The requested address is a broadcast address, but flag is not set”

Port **80** is being used by another program or by windows operating systems

Please close the program using Port **80**.

**If you cannot get the program to run after changing to port 80 uninstall program and reinstall the program and the default Port setting is 8080.**



## Web Server

The WiFi Fastclock has a built-in web server and can be seen from any PC, tablet or smartphone that is connected on your WiFi system.

On the PC, tablet or smartphone, open any web browser and type the web server address into the query window of the browser (for example, "192.168.1.6:8080"). You should then see the Fastclock running.

## Web Server Customization

If desired, you can add your logo and/or railroad name to the Fastclock program.

In the Windows system folder "C:\Program Files (x86)\Fastclock" there is a file "index.htm." You can edit this file and add your logo and/or railroad name using an HTML editor.