Cx34-4/cx50-1 main PCB programmer instruction

Needed Tools:

To do this install you will need to get access to the main circuit board.

1. a Philips head screw driver to remove the front access panel.
2. a Windows pc laptop that is portable to the chiller.

Included Tools:

Warning: Before uploading the software, you must disconnect the power supply to the main PCB.(Not just turn off heat pump, you must shut off power supply to heat pump at the circuit breaker or disconnect)

Quick overview

1. READ THIS WHOLE MANUAL
2. Request the download link from Chiltrix support dept. & download software to your Windows notebook pc and become familiar with it. You may also download the latest HMI (Human Machine Interface, i.e., “the controller”) software at this time.
3. Turn power off to the chiller by the disconnect or circuit breaker.
4. Get access to the chillers main PCB board.
5. Plug the programmer into the PC using a USB port.
6. Connect the programmer to the Chiltrix mainboard as shown below.
7. Install the software on to the heat pump.
8. Unplug the programmer and re install the covers onto the heat pump being careful to not strip any screws.
9. Restore power connection to the heat pump. Stop the heat pump with the OFF button and confirm STOP.
10. Install the HMI software using the instructions at the end of this document.
11. Perform a “Factory Reset”

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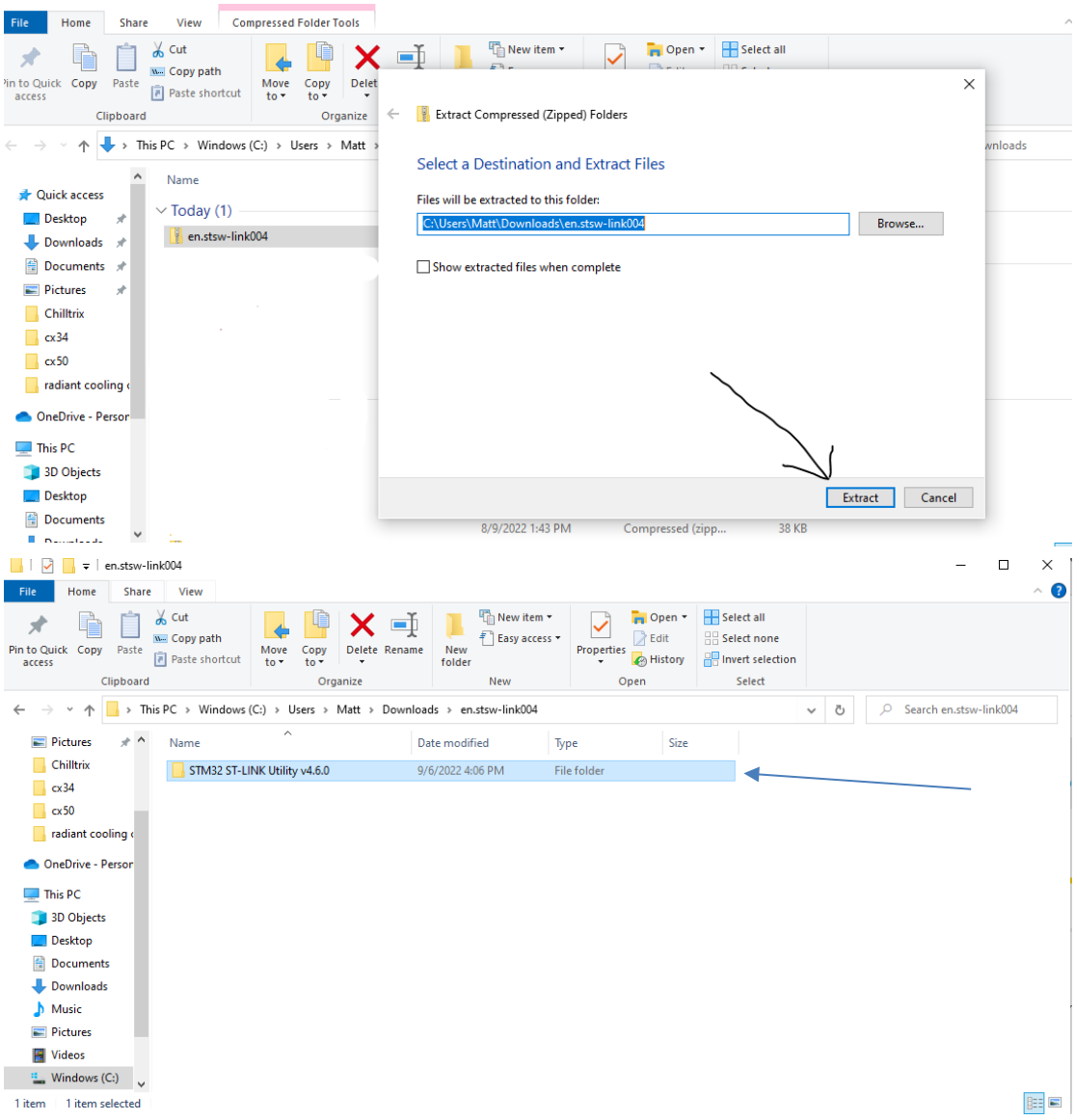
1. Install software STM32 ST-LINK Utility v4.5. on to your PC. Click the following link [STSW-LINK004 - STM32 ST-LINK utility (replaced by STM32CubeProgrammer) - STMicroelectronics]
And download according to the following instructions. You will have to input your email and you will get a download link in your email address. Extract this file as show below and follow the on screen instructions to install.



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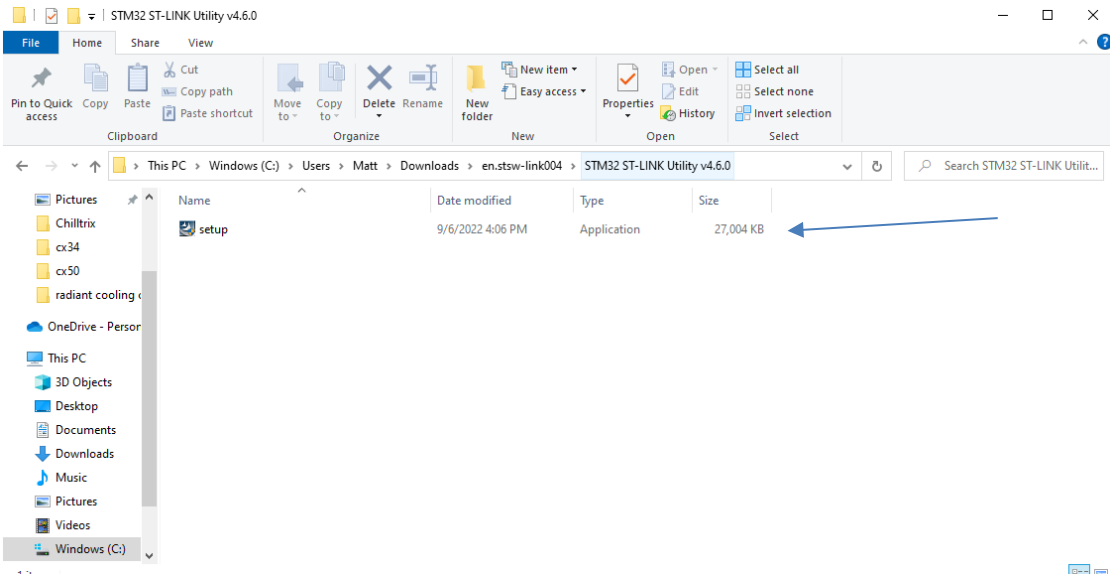
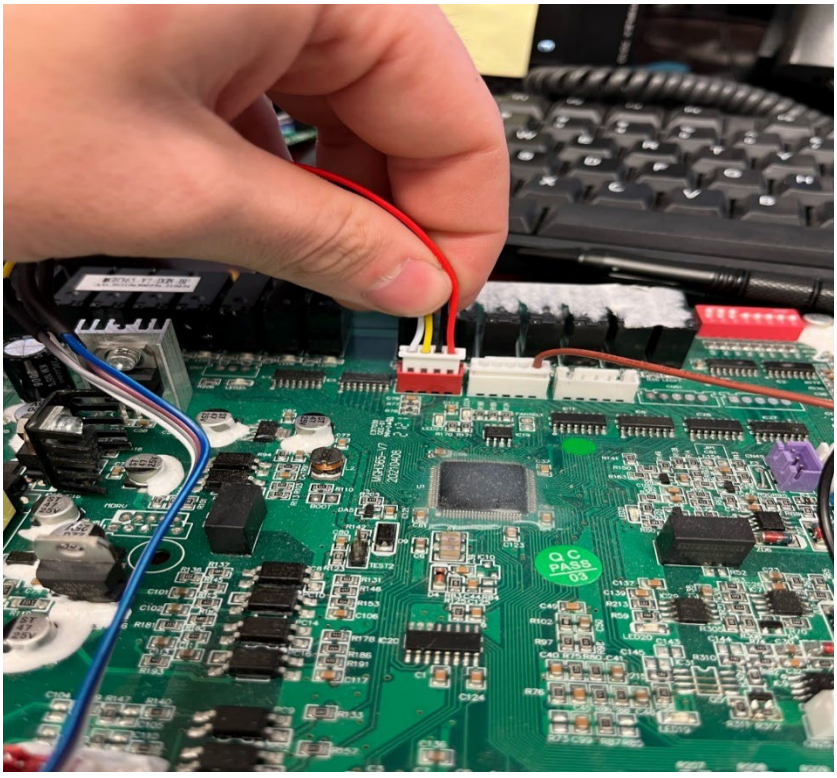
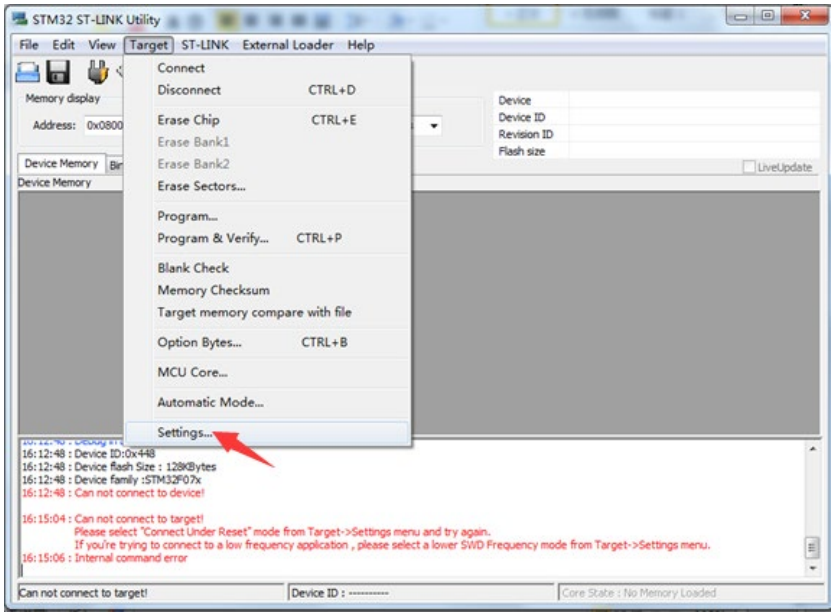


After software download and setup is complete:

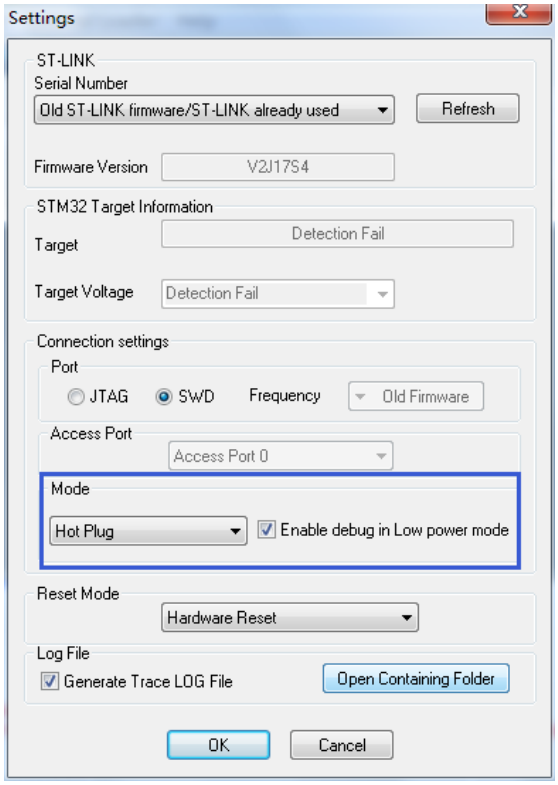
2. Plug in the programmer to computer, it should install driver automatically.
3. Connect Programmer to the main PCB CN23 socket.



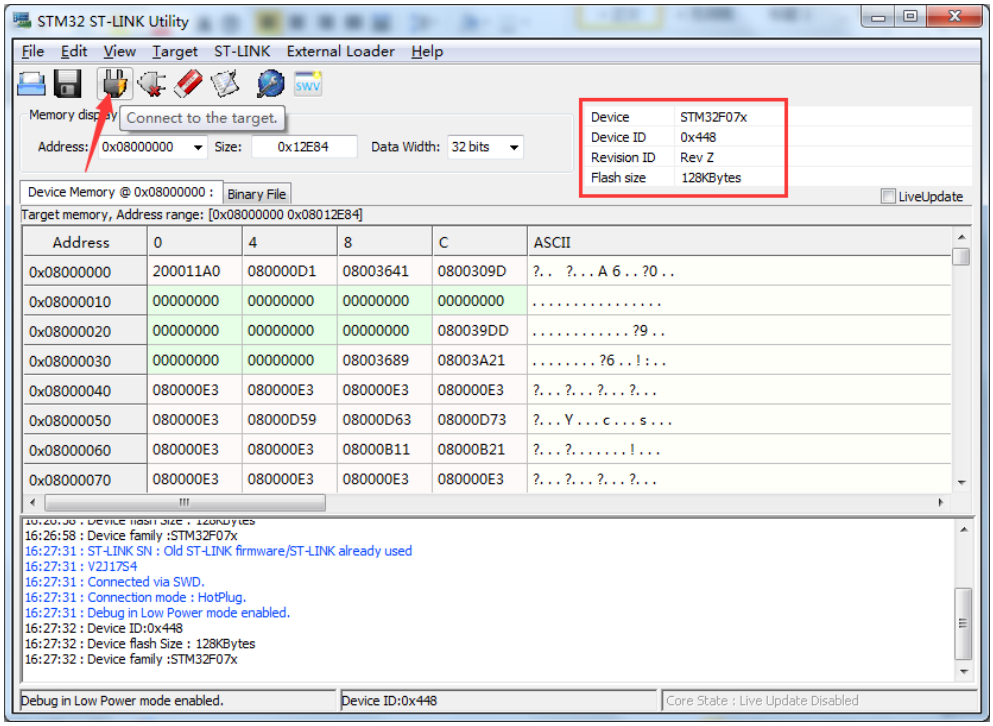
4. On the PC, open the STM32 ST-LINK Utility. And press Target->Setting



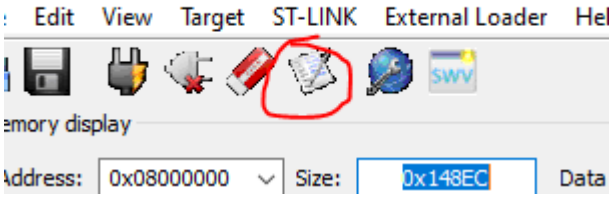
5. Select Hot Plug at the Mode. -> press “OK”



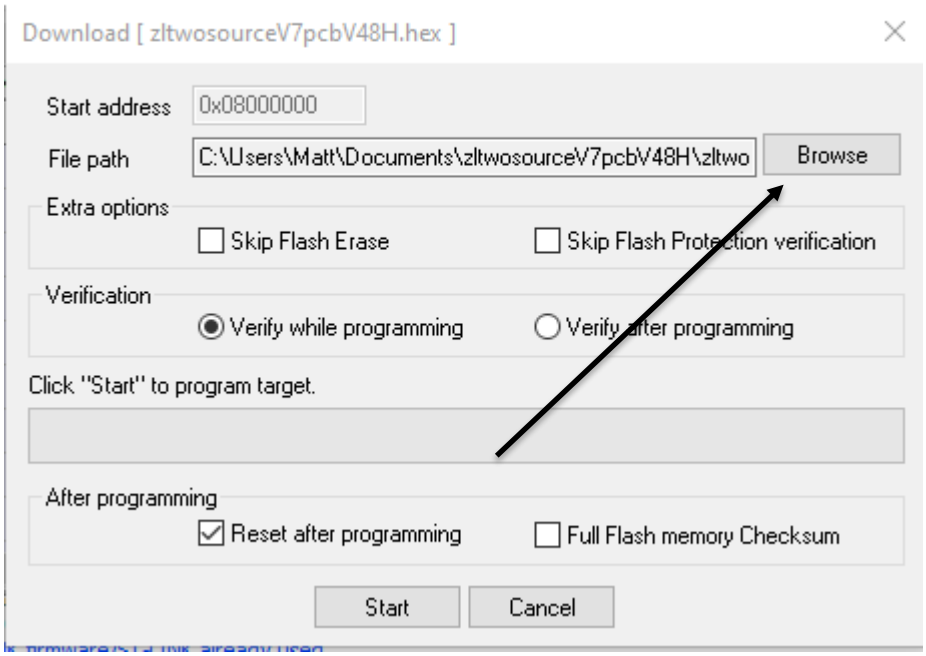
6. Click connect to the target as below. It will show the read Device is STM32….

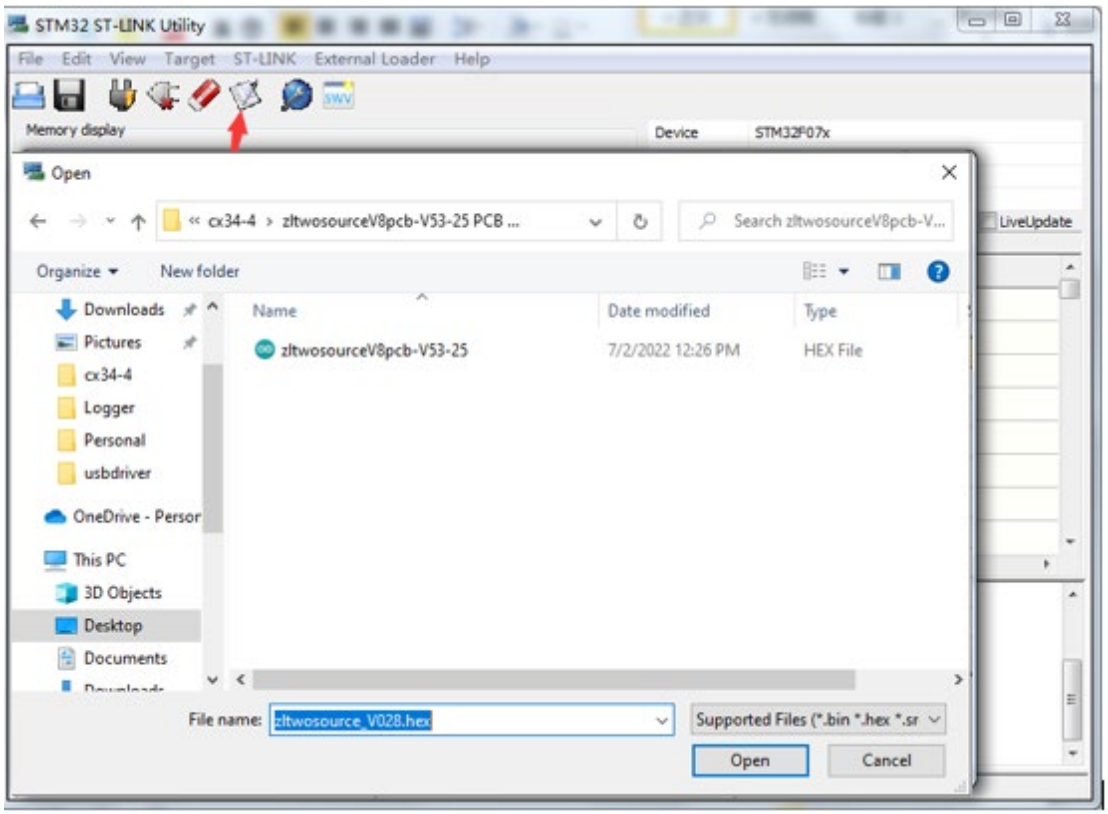


7. Click below “Program Verify” (the white button) button to select the hex file and open it.

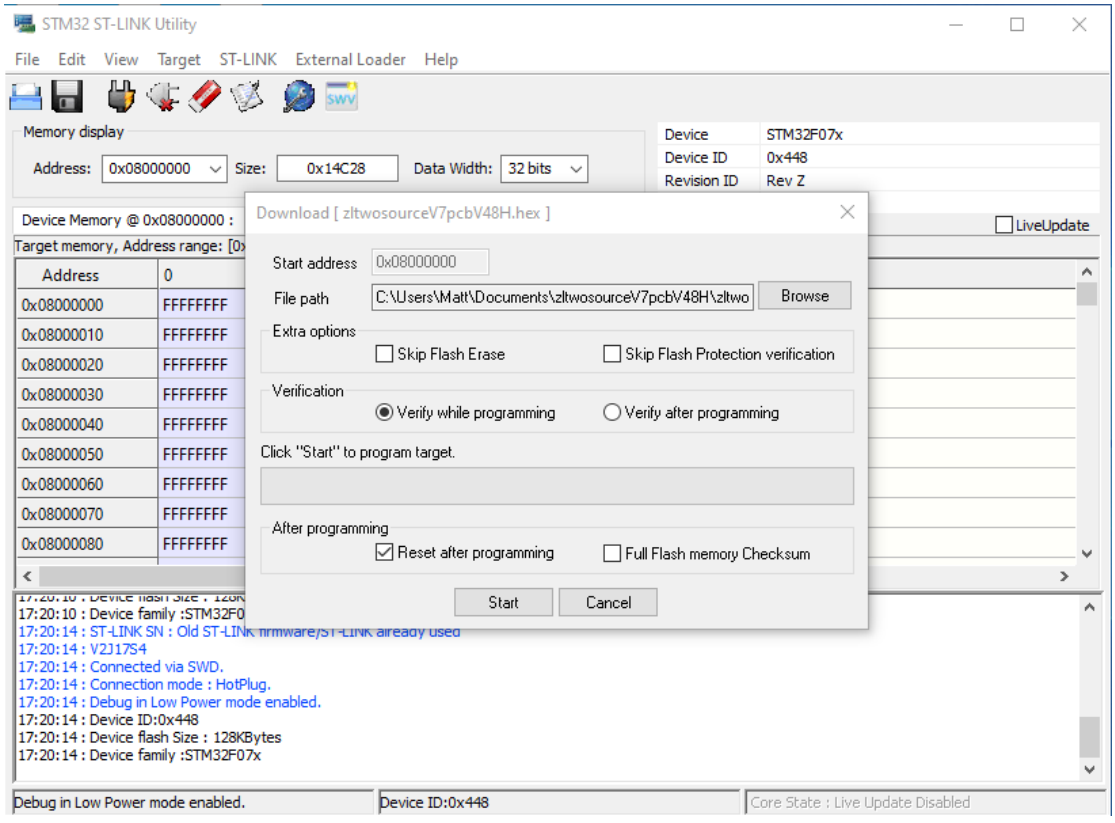


Click the Browse button to find the file you downloaded which is a hex file ONLY.
The file we sent may or may not be program V53-25 as shown in the example below.

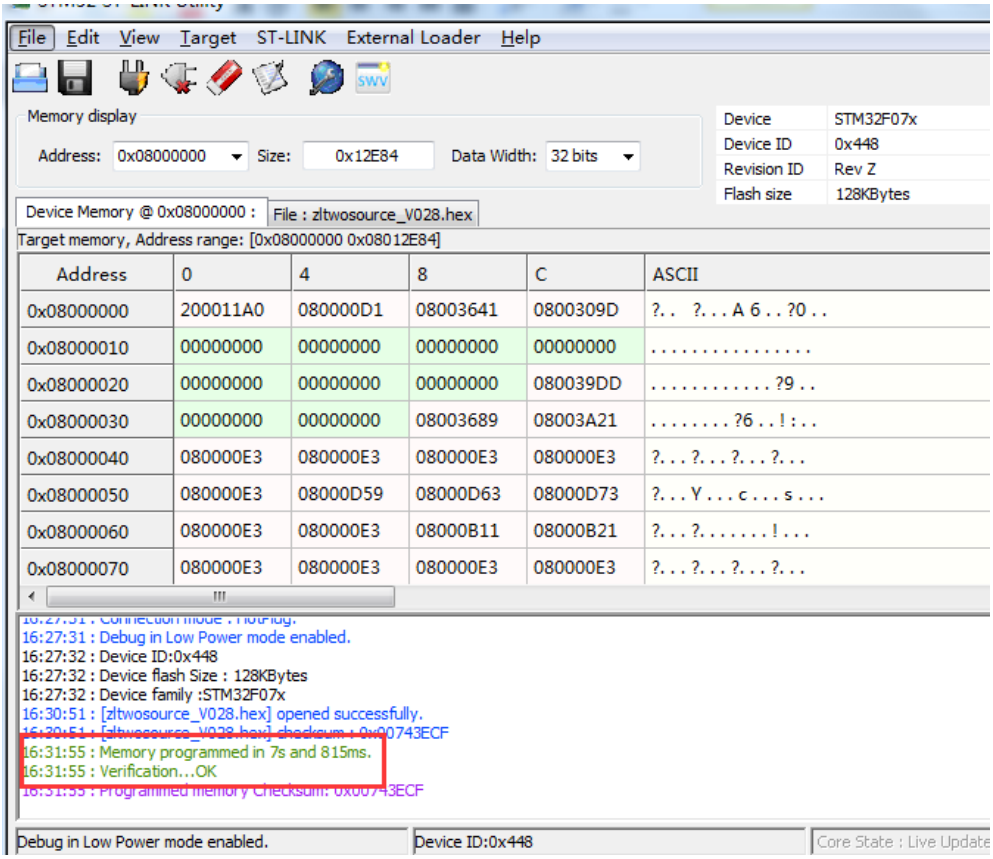




8. Click “Start” as below to start upload the software.



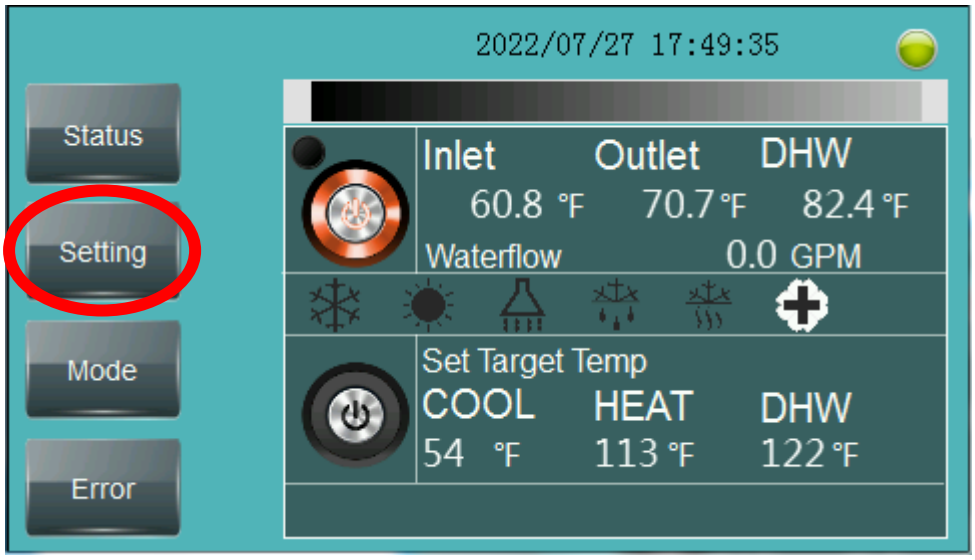
9. When you see below Memory programmed and verification ok. Then it means the software is upload successfully.



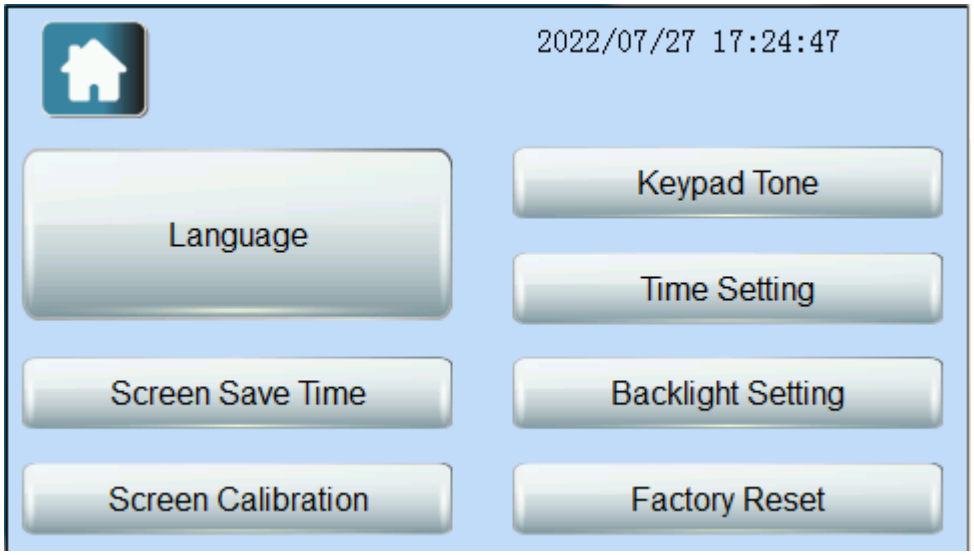
Now apply power to the unit and initialize the board by performing a Factory Reset in the controller under settings>settings.

10. Initializing the board

Go to settings on the home screen.



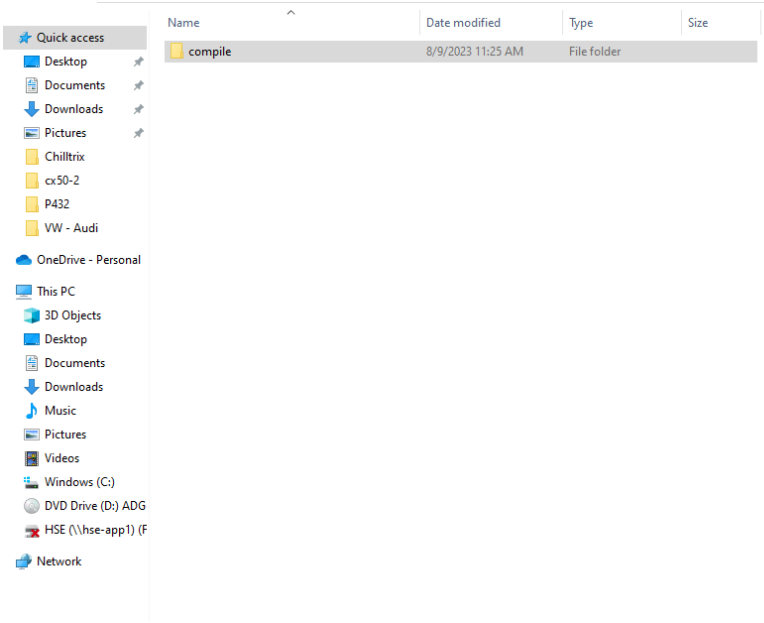
Then go to settings



Then go to factory reset, if you press this once then the board will initialize. (if you press it more than once that's ok too). Once you press factory reset, press the home button in the upper left and go back to the home screen.

HMI Updating using SD card.

To update the HMI, all you need is a micro SD card plugged into your PC. In the file you downloaded is a folder labeled “Chiltrix-amsv12-mgh365-xxx” there will be a subfolder labeled “Compile” Drag this to the SD card and follow the instructions below.



Note the above shows what the SD card should contain.

HMI Update Instructions
CX 34-4/CX 50-1

Step 1. If we sent you an SD card with the software already loaded then Insert the SD card into the SD card slot at the upper right corner of the Controller with power on but with the chiller shut down. If you are supplying your own SD card then contact Support for the latest file for your heat pump and load the folder labeled “Compile” onto the SD card.

Step 2. After inserting the SD card into the HMI, when the upgrade prompt appears, click "Upgrade HMI Data"

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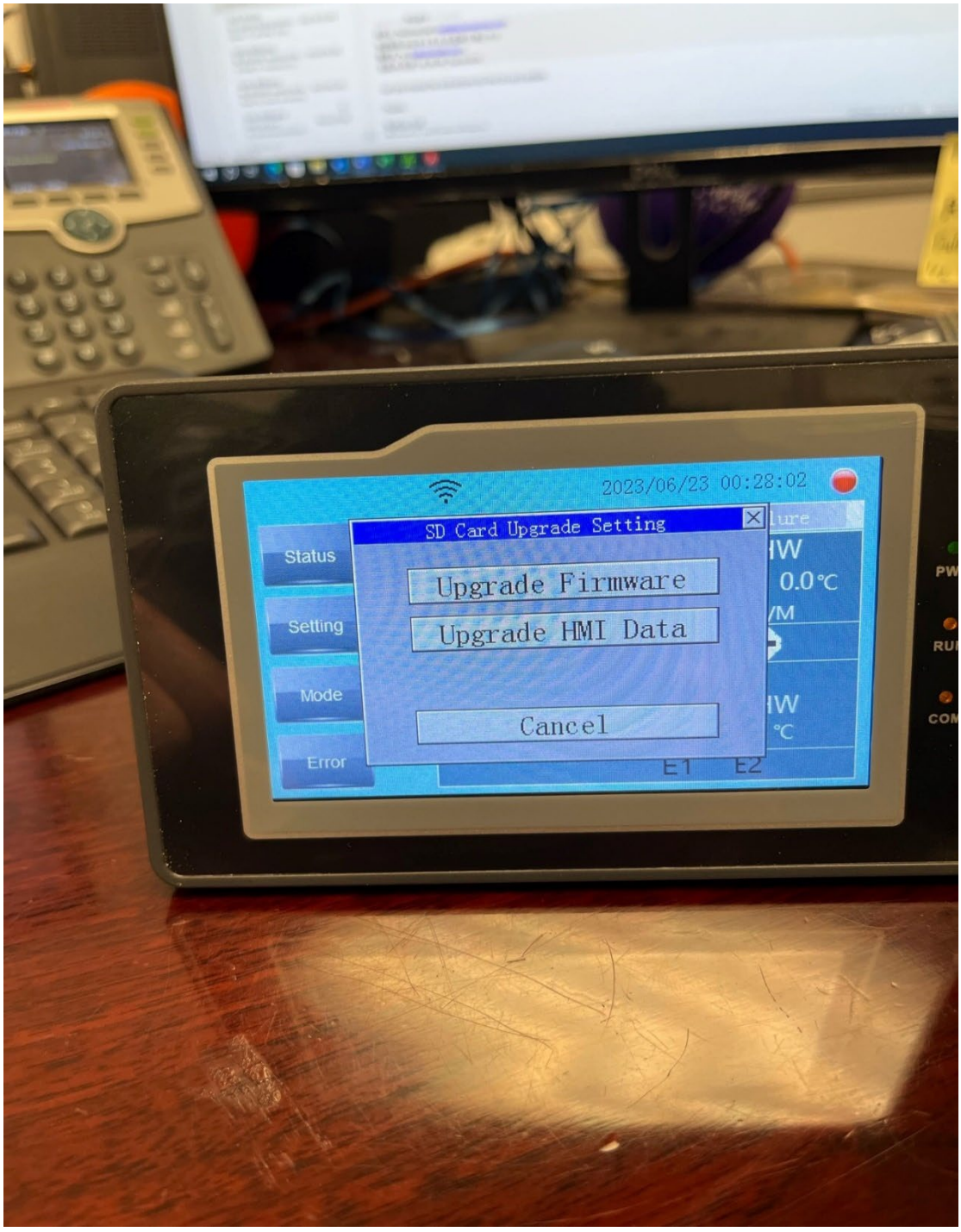
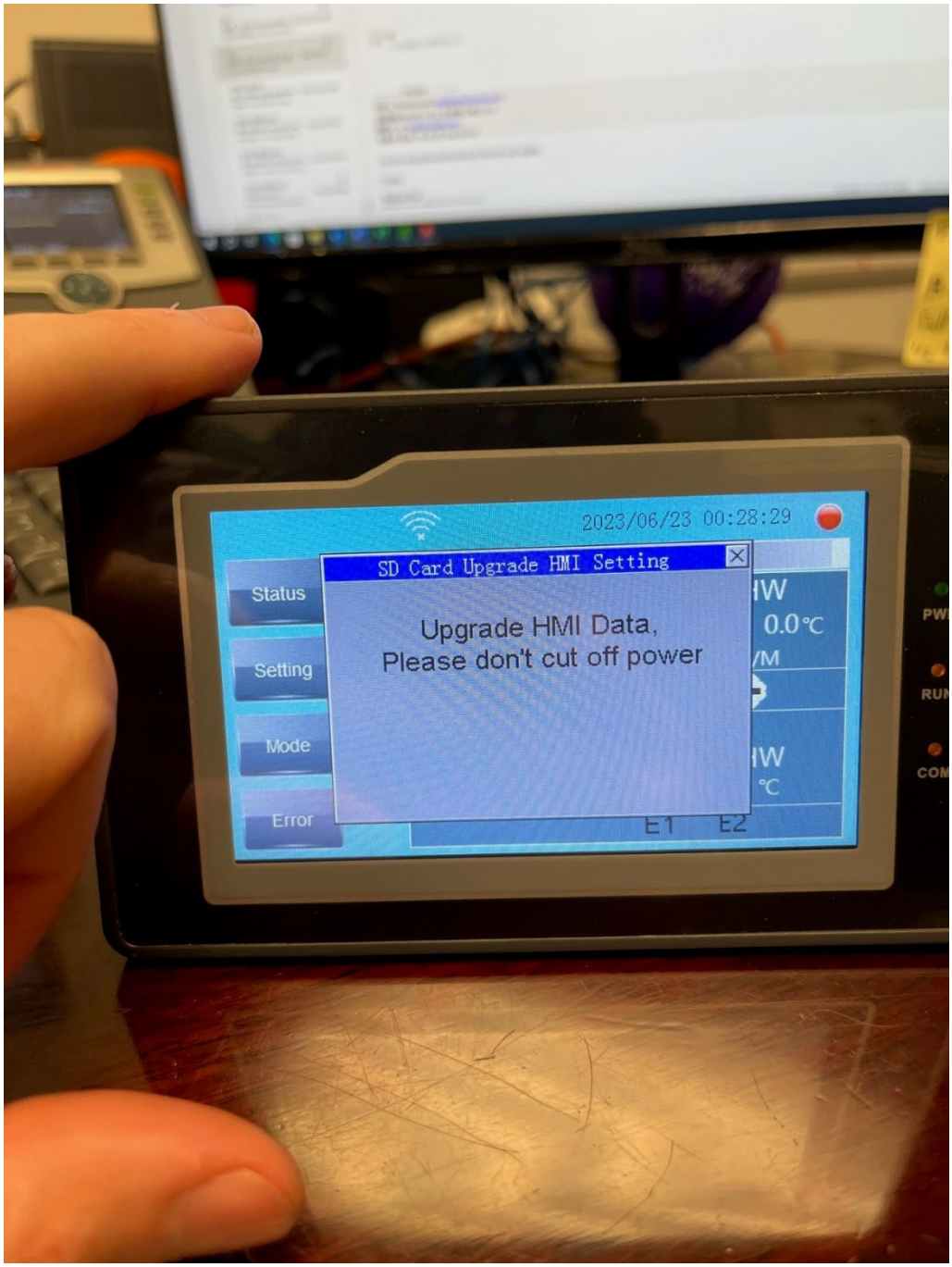
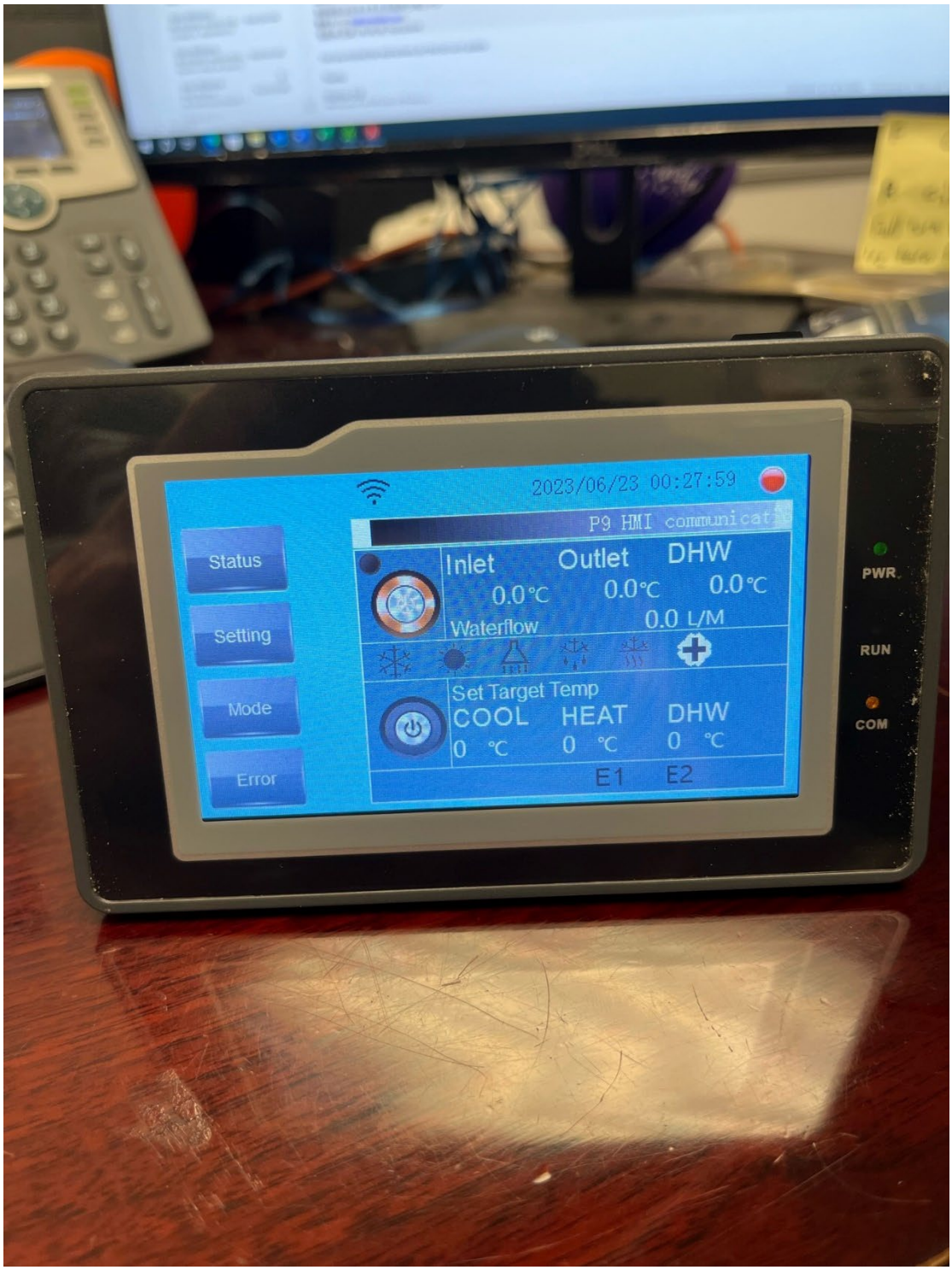


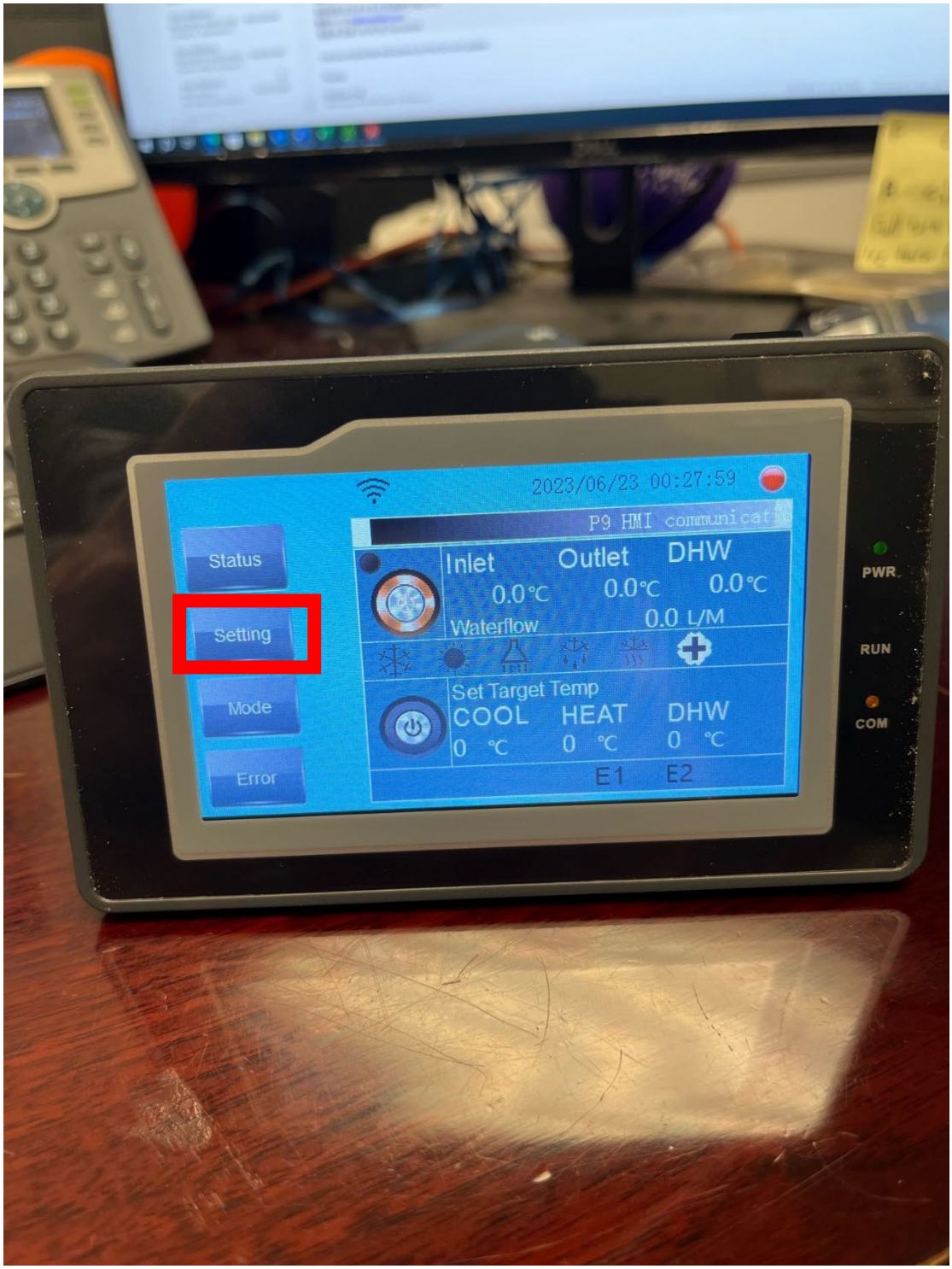
Step 3. In the process of updating, it will take about 1 minute.



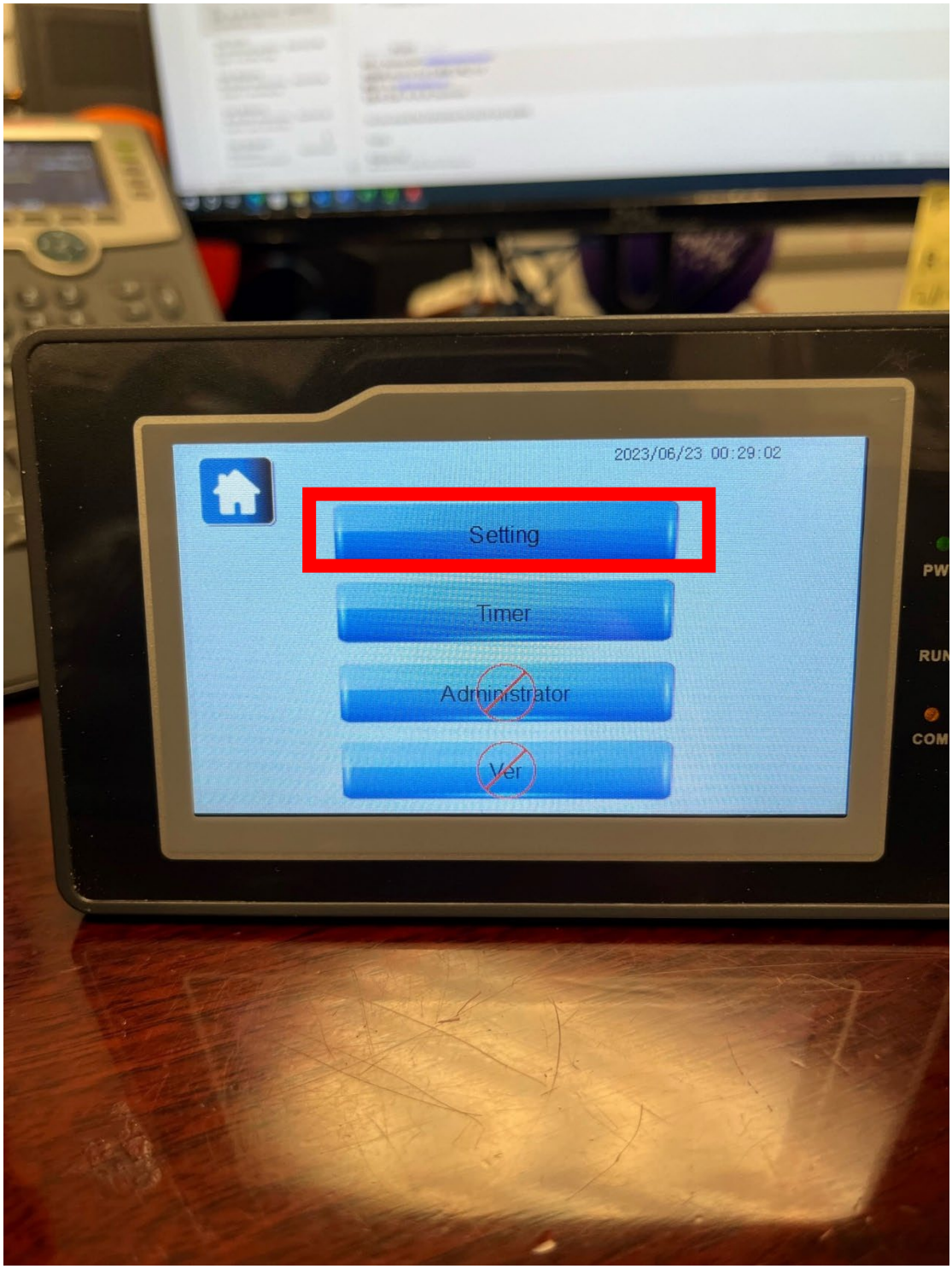
Step 4. The screen will go black and restart. Remove the SD card after the screen restarts. Save the card for future use.



Step 5. Click "Setting".



Step 6. Continue to click "Setting".



Step 7. Click "Factory Reset" before starting the heat pump to initialize the program.