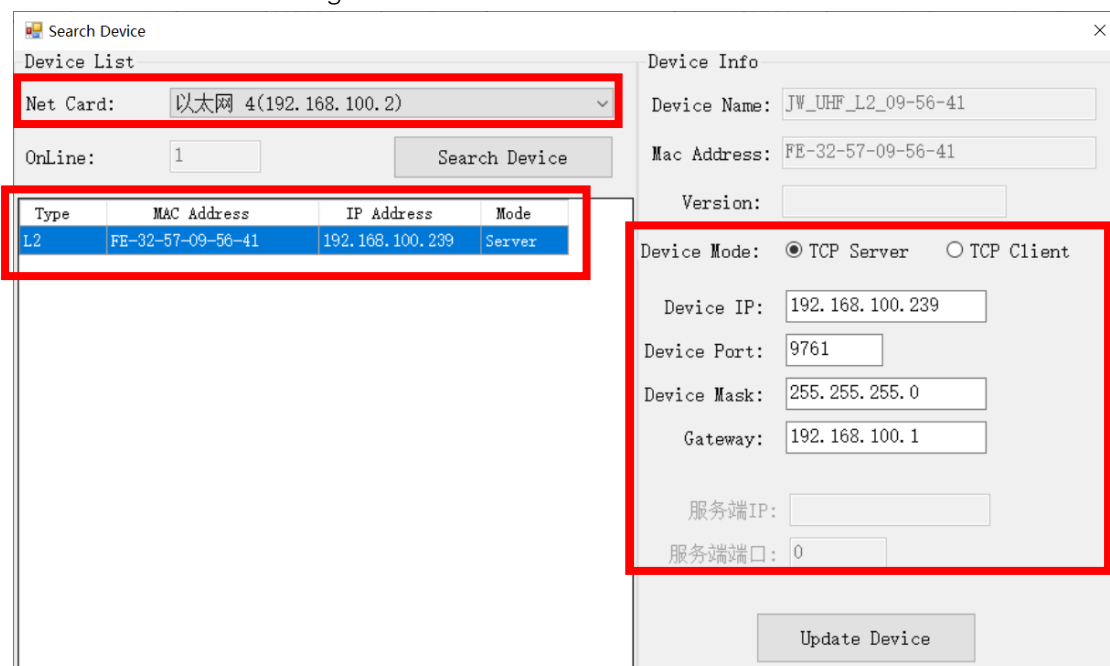# B5204、FR4A User Guide

Index

Search reader or modify reader IP

Open 【UHFDemo.exe】
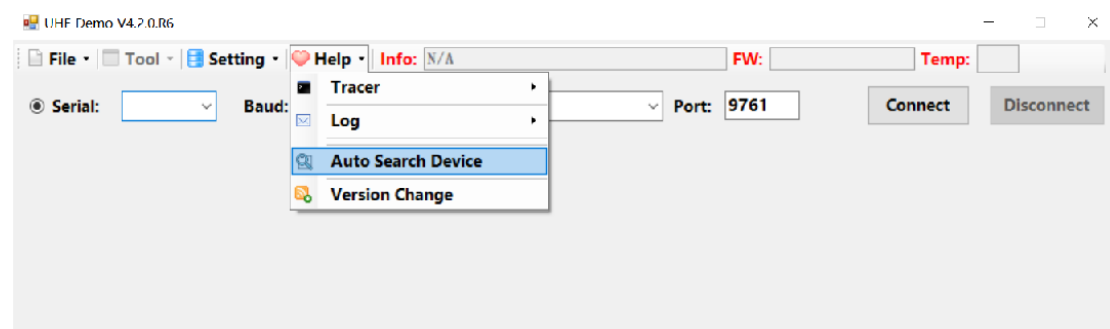
Select the network card on the PC, press [Search Device] button, then click the IP location, press [update device] button.

PS：TCP Client is still being tested！

Use SearchReader to change the settings of Reader, this Tool can also change IP.

Note: If you want to use RS232, you need to set the log to disable, and then press the [Settings] button!
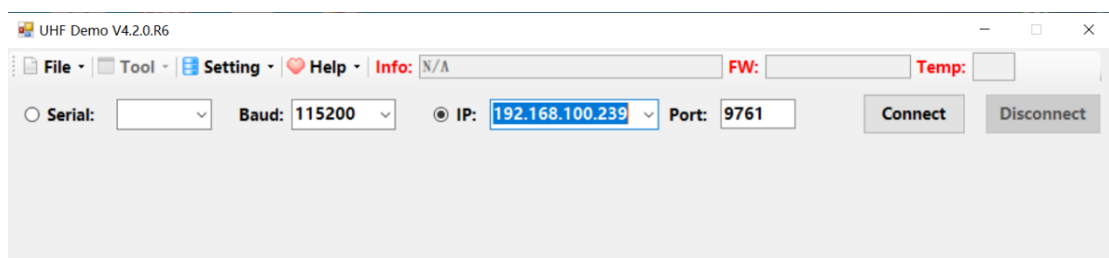
Connect reader

There are two ways to connect the reader, one is through network IP, and the other is through RS232.
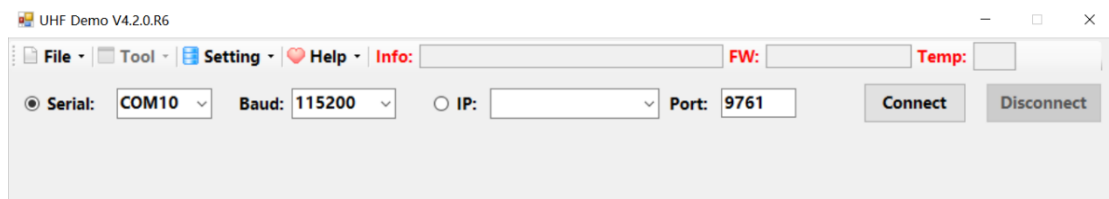
through network IP

Pull down the IP menu, it will broadcast the reader of the entire network, select an IP. Then, press the [connect] button.
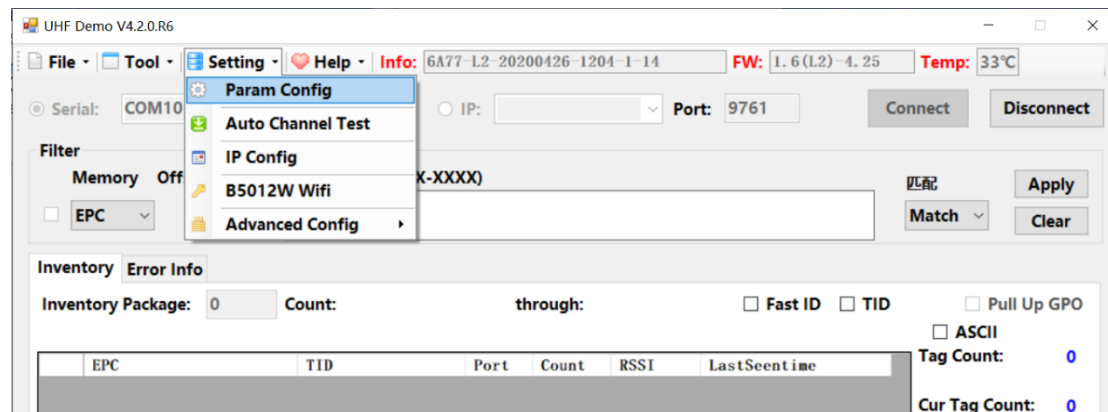

RS232

Click Serial and drop down to select the RS232 port number of the PC. Then, press the [connect] button.
PS: Use the USB to RS232 cable to view the RS232 port number of the device manager.

Reader Setting

Click Setting->Param Config, the setting windows of Reader appears.

Antenna and Power setting：

B5204 and FR4A series supports 4 antennas, check the antenna to enable, and type output power. The following figure is to select antenna 0 [corresponding to the reader's antenna 1, the actual reader's antenna port is from 1 to 4].
The maximum power is 30dBm, and finally press [apply] or [OK], the setting is successful.
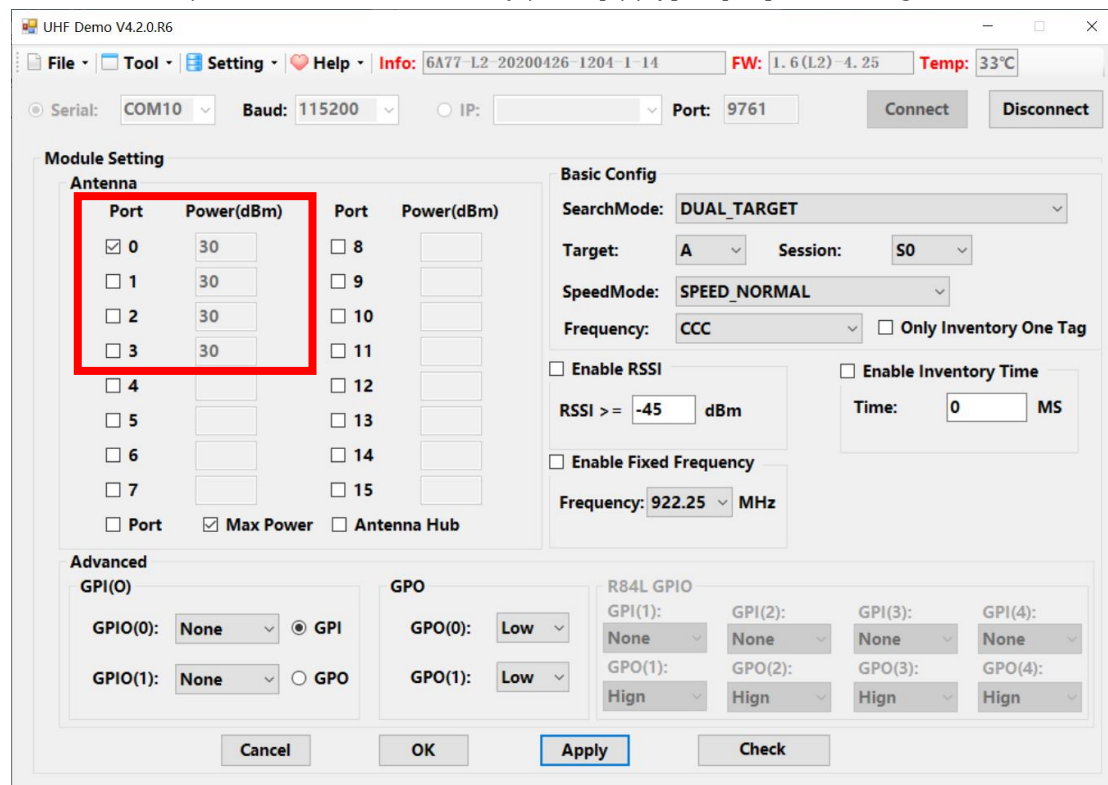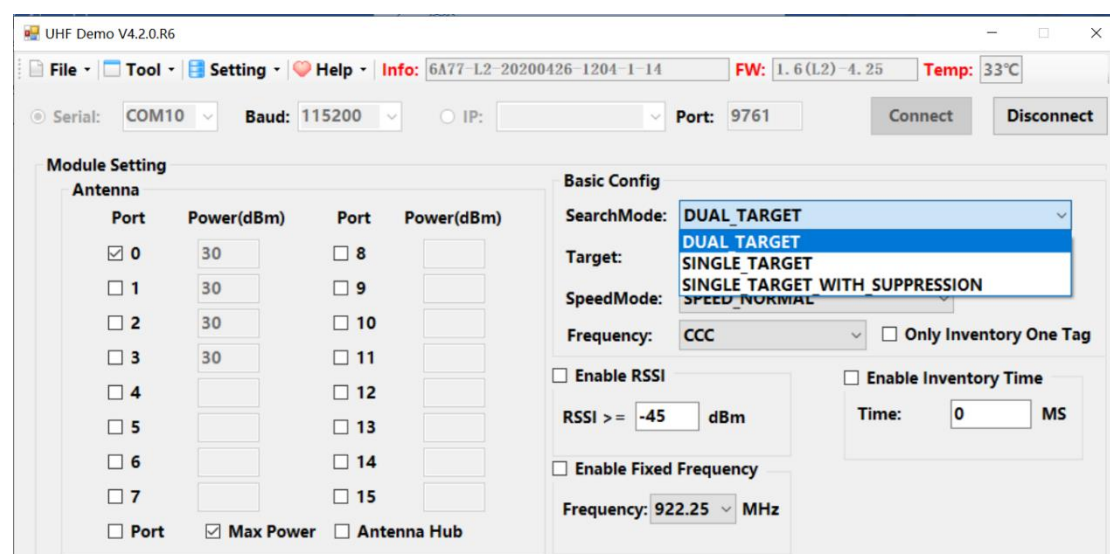
Search Mode

They are Dual Target、Single Target、Single Target with suppression

Dual Target: select Target A and Target B
Single Target: select Target A and Target B, depends on target setting.
Single Target with suppression: It is a unique setting of Impinj. The tags within the antenna coverage are read once.

Target

Set whether to read A-mode or B-mode tags. If you only need to read one of the modes A and B, you need to match the SearchMode setting to be effective.

Session

Session can be set to 0~3
When the Tag is read, the default Target A will become Target B. When Target B is about to become A again, it depends on the difference of Session 0~3, and the time to return to Target A is also different.

SpeedMode

You can set the reading speed of the reader. When the reader reads the tag, it will generate a lot of heat. If the reading speed is not required, please select Speed_PowerSave.

Frequency

Choose UHF frequency band, mainly FCC frequency band (902~928MHz), FCC includes NCC (Taiwan) and CCC (China).

RSSI Filter

When RSSI is enabled, the RSSI value below the input will be filtered out. The RSSI value must be negative.

Fixed frequency

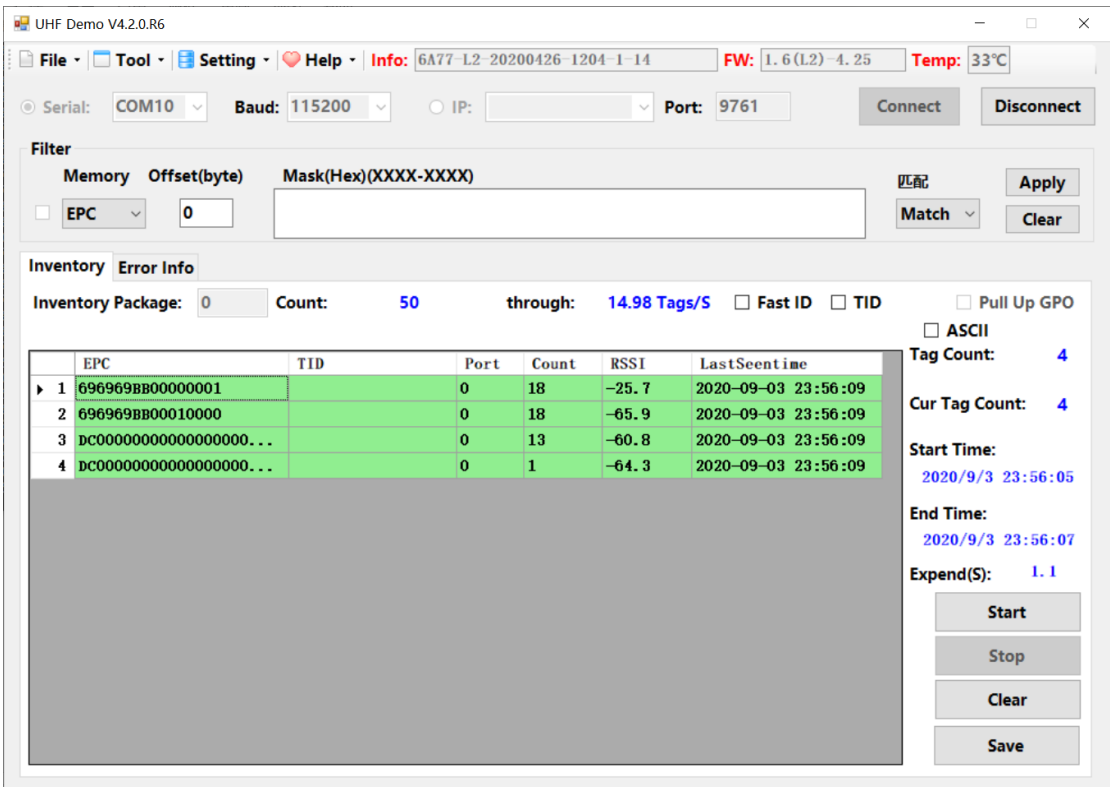When fixed frequency is enabled, a fixed frequency can be output. This setting is for testing only.

Inventory Time

Enable Inventory Time is setting the automatic inventory time. When the inventory time is up, the inventory will stop automatically.
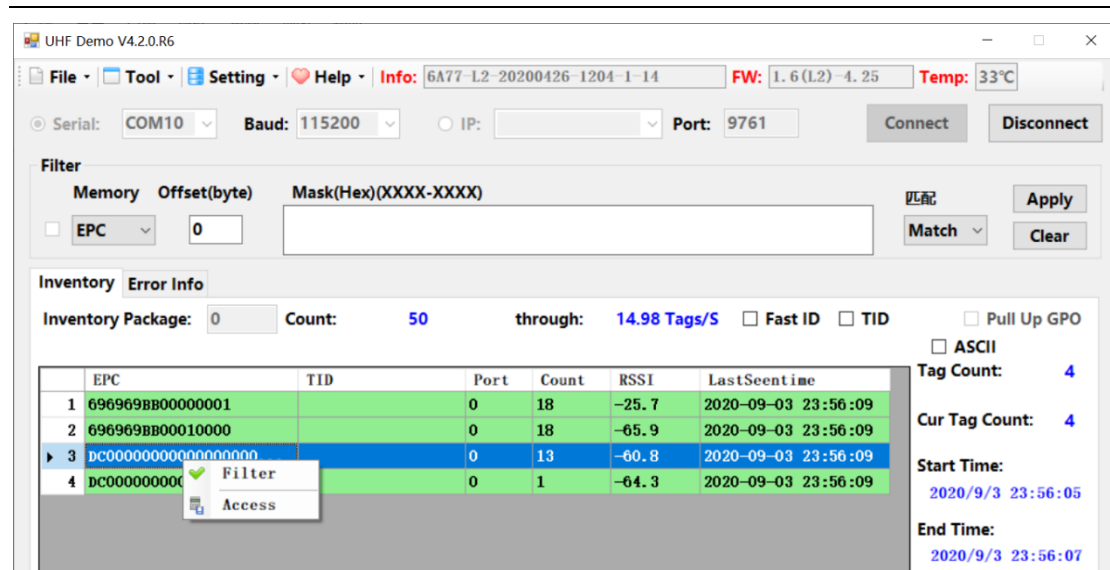
Inventory, read and write tag

Inventory

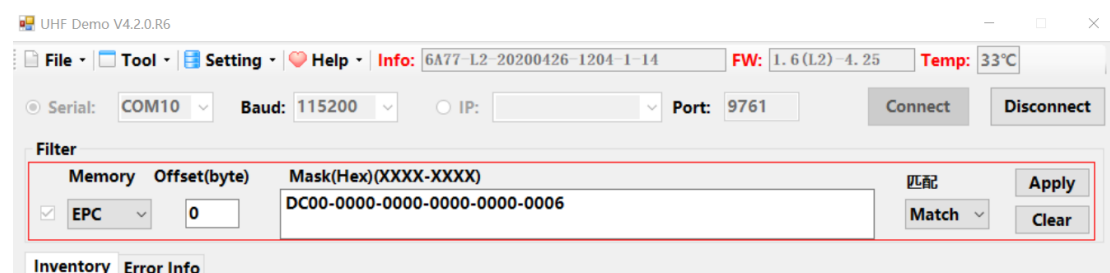Press [start] to start inventory, and press [stop] to stop inventory.

Filter Tag

Click the right mouse button on the EPC, pop up the Filter and Access options, and select Filter.

The label EPC will be copied to the mask field, you can edit the mask data, and finally press [apply]. When re-start, the filter will take effect.

Press [Clear] to clear the filter conditions.

Read and write

Read a tag：
Click the right mouse button on epc, pop up the Filter and Access options, and select Access.

To read the data of which bank, check it and press [Read] button.

Write a tag：

After modifying EPC data, press [Write EPC] button.

Change the EPC length while writing the tag:

After modifying EPC, cancel [Block Write] and press [Write EPC] button.

Write USR Bank of tag：

After modifying the USR data, press [Write User] button.
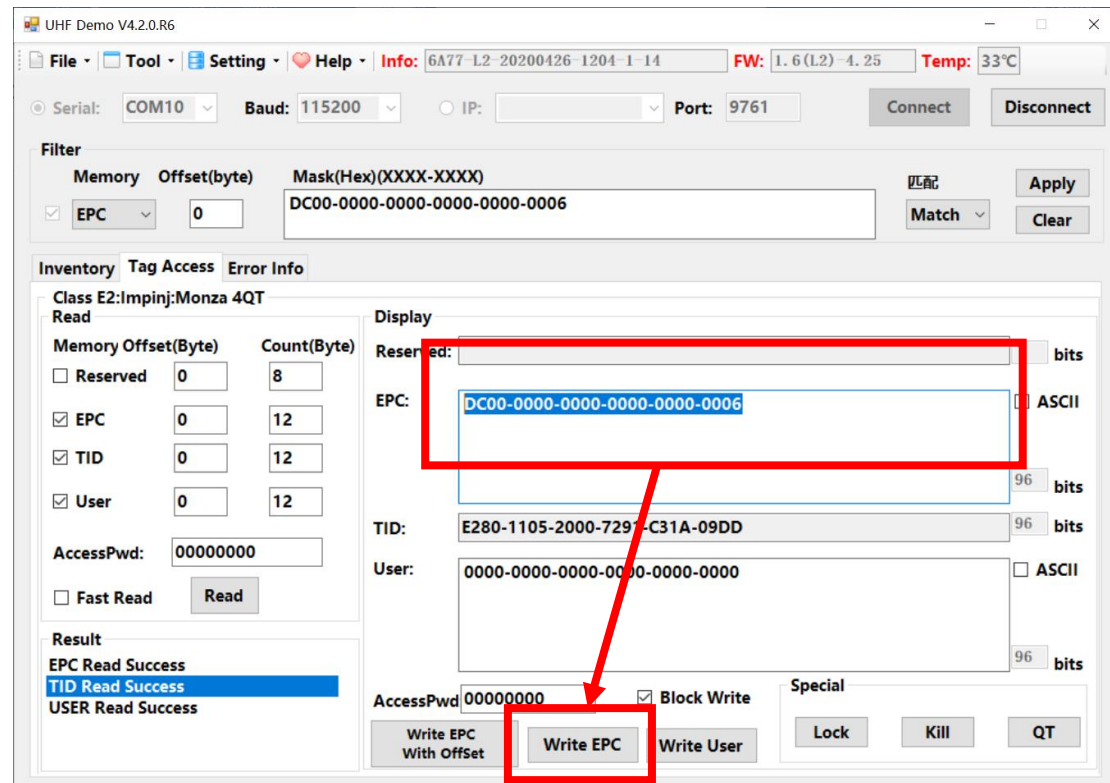
Other functions

Tracer can help users understand the communication commands between UHFDemo and Reader.

Start Tracer
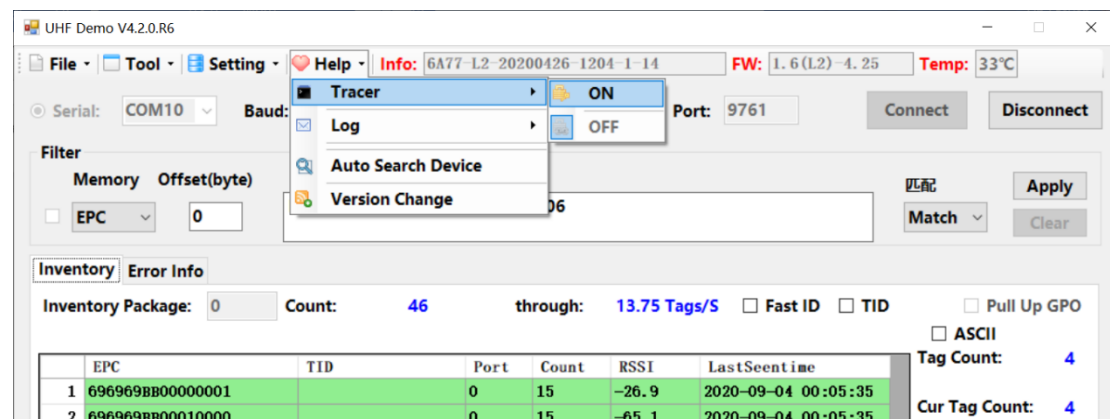
After click Tracer-ON, the command window appears

Enable Log

When Debug is started, all the communication data between UHF Demo and Reader will be recorded in the log file, and the log file generation location is the same directory as the execution file.

FCC Statement

15.105

This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to part 15 of the FCC Rules.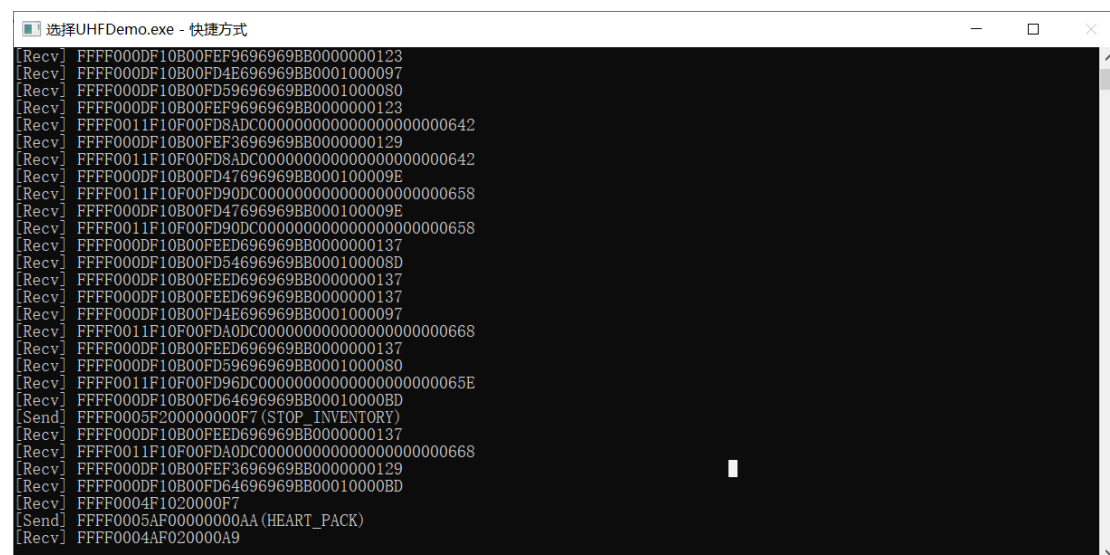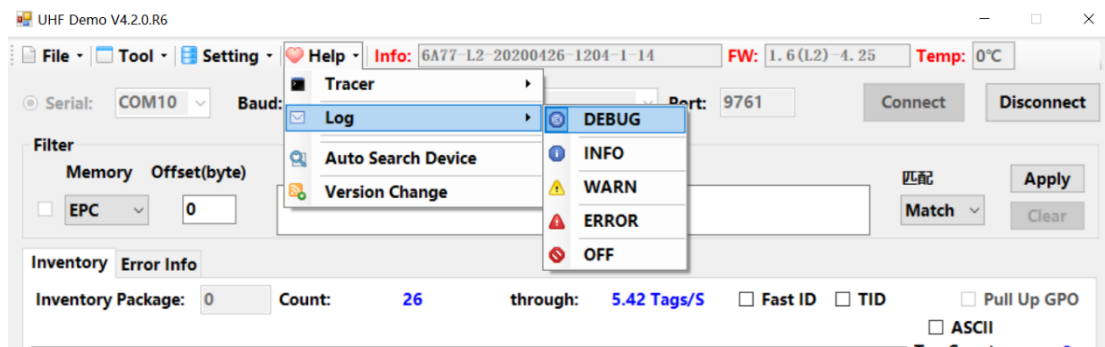 These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

—Reorient or relocate the receiving antenna.

—Increase the separation between the equipment and receiver.

—Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.

—Consult the dealer or an experienced radio/TV technician for help.

KDB447498 D01 v05r02 (P5)

FCC Radiation Exposure Statement

This device complies with FCC radiation exposure limits set forth for an uncontrolled environment and it also complies with Part 15 of the FCC RF Rules. This equipment must be installed and operated in accordance with provided instructions and the antenna(s) used for this transmitter must be installed to provide a separation distance of at least 20 cm from all persons and must not be co-located or operating in conjunction with any other antenna or transmitter. End-users and installers must be provided with antenna installation instructions and consider removing the no-collocation statement.

15.19

This device complies with Part 15 of the FCC Rules. Operation is subject to the following two conditions:

(1) this device may not cause harmful interference, and

(2) this device must accept any interference received, including interference that may cause undesired operation.

15.21 / KDB784748 D01 v08 (P4)

Caution!

Any changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.