Proxmark3 Easy quick start Manual

Hardware description：

LF area: For Low Frequency ID card
HF area: For High Frequency IC card
Usb: connect to PC
Button: for stopping command or reset

Card：ID-T5577 is Low Frequency，the ones that start with IC are High Frequency, the blue key is High frequency IC card.

Software description：

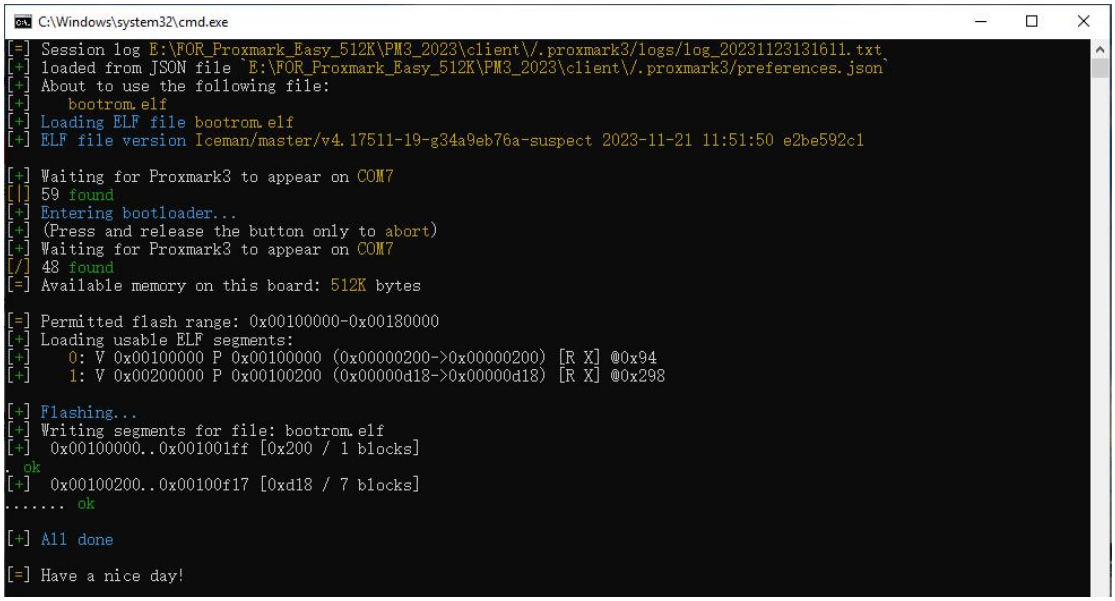
For the convenience of beginners, we downloaded the latest compilation-free Proxmark Easy software from github (the software version is v4.17511 2023, the download method can be found at the end of the document.) and copied the software to a USB flash drive. You insert the USB flash drive into your computer and you can use the software directly. (It is recommended to copy it to your computer and keep a copy)

The following program uses win10 as an example.

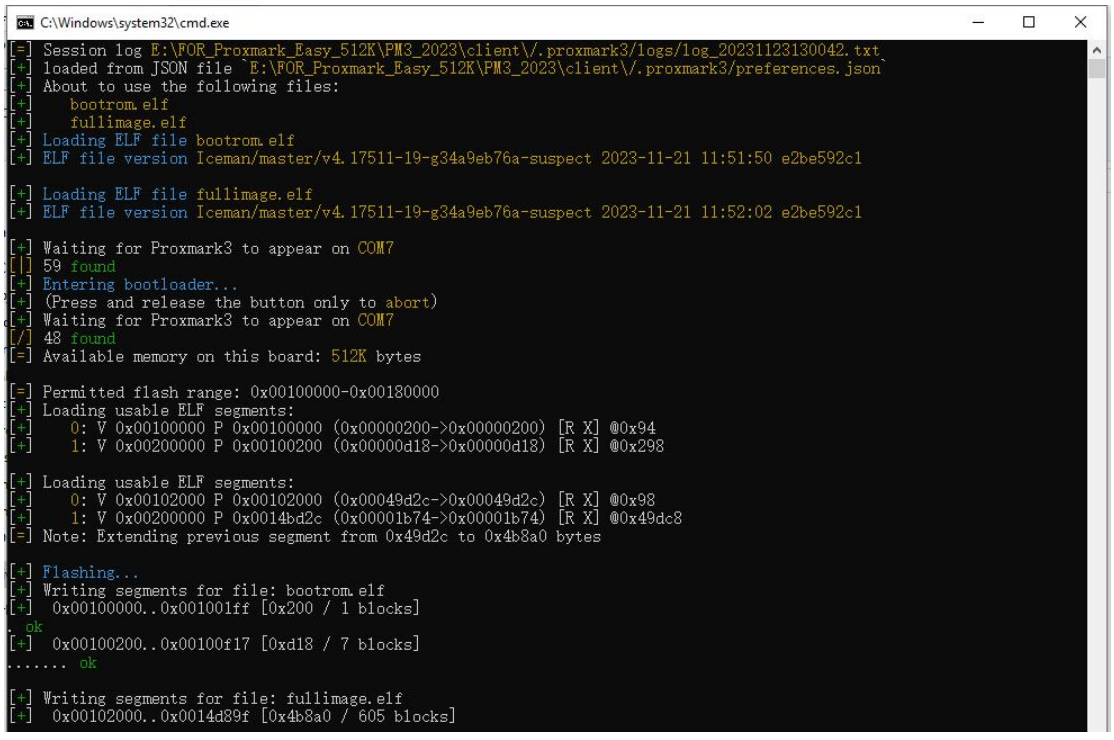
1. Use the original data cable to connect the proxmark easy device and PC. Under normal circumstances, the computer will beep to indicate that a device is connected.

2. Insert the USB flash drive in the box and enter the E:\FOR_Proxmark_Easy_512K\PM3_2023 directory. The specific drive letter is subject to the actual display.

3. Double-click pm3-flash-bootrom.bat to run the script



4.Double-click pm3-flash-all.bat to run the script



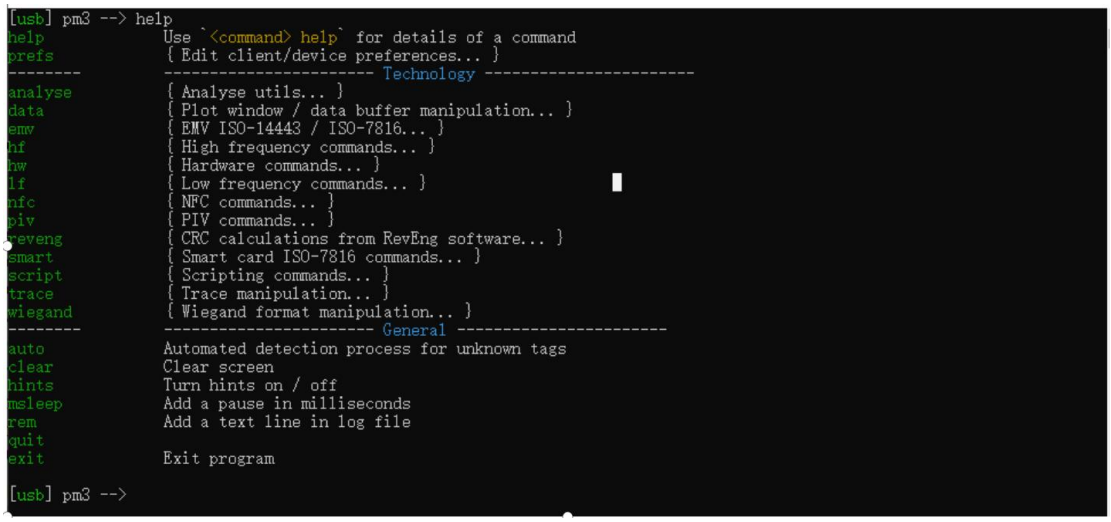
5.Double-click pm3.bat to run the script：

When you see pm3-->, congratulations, you have completed the environment construction and can execute specific command lines.

The order is pm3-flash-bootrom.bat, then pm3-flash-all.bat, and pm3.bat at last.

Common commands：

Help



Hf

```
[usb] pm3 --> hf help
--------          ---------------------- High Frequency ----------------------
14a               { ISO14443A RFIDs...                  }
14b               { ISO14443B RFIDs...                  }
15                { ISO15693 RFIDs...                   }
cipurse           { Cipurse transport Cards...          }
epa               { German Identification Card...       }
emrtd             { Machine Readable Travel Document... }
felica            { ISO18092 / FeliCa RFIDs...          }
fido              { FIDO and FIDO2 authenticators...    }
fudan             { Fudan RFIDs...                      }
gallagher         { Gallagher DESFire RFIDs...          }
ksx6924           { KS X 6924 (T-Money, Snapper+) RFIDs }
jooki             { Jooki RFIDs...                      }
iclass            { ICLASS RFIDs...                     }
legic             { LEGIC RFIDs...                      }
lto               { LTO Cartridge Memory RFIDs...       }
mf                { MIFARE RFIDs...                     }
mfp               { MIFARE Plus RFIDs...                }
mfu               { MIFARE Ultralight RFIDs...          }
mfdes             { MIFARE Desfire RFIDs...             }
ntag424           { NXP NTAG 4242 DNA RFIDs...          }
seos              { SEOS RFIDs...                       }
st25ta            { ST25TA RFIDs...                     }
tesla             { TESLA Cards...                      }
texkom            { Texkom RFIDs...                     }
thinfilm          { Thinfilm RFIDs...                   }
topaz             { TOPAZ (NFC Type 1) RFIDs...         }
vas               { Apple Value Added Service           }
waveshare         { Waveshare NFC ePaper...             }
xerox             { Fuji/Xerox cartridge RFIDs...       }
-----------       --------------------- General ---------------------
help              This help
list              List protocol data in trace buffer
plot              Plot signal
tune              Continuously measure HF antenna tuning
search            Search for known HF tags
sniff             Generic HF Sniff

[usb] pm3 -->
```

Lf

```
[usb] pm3 --> lf help
help              This help
-----------       -------------- Low Frequency --------------
awid              { AWID RFIDs...                }
cotag             { COTAG CHIPs...               }
destron           { FDX-A Destron RFIDs...       }
em                { EM CHIPs & RFIDs...          }
fdxb              { FDX-B RFIDs...               }
gallagher         { GALLAGHER RFIDs...           }
gproxii           { Guardall Prox II RFIDs...    }
hid               { HID Prox RFIDs...            }
hitag             { Hitag CHIPs...               }
idteck            { Idteck RFIDs...              }
indala            { Indala RFIDs...              }
io                { ioProx RFIDs...              }
jablotron         { Jablotron RFIDs...           }
keri              { KERI RFIDs...                }
motorola          { Motorola Flexpass RFIDs...   }
nedap             { Nedap RFIDs...               }
nexwatch          { NexWatch RFIDs...            }
noralsy           { Noralsy RFIDs...             }
pac               { PAC/Stanley RFIDs...         }
paradox           { Paradox RFIDs...             }
pcf7931           { PCF7931 CHIPs...             }
presco            { Presco RFIDs...              }
pyramid           { Farpointe/Pyramid RFIDs...   }
securakey         { Securakey RFIDs...           }
ti                { TI CHIPs...                  }
t55xx             { T55xx CHIPs...               }
viking            { Viking RFIDs...              }
visa2000          { Visa2000 RFIDs...            }
-----------       --------------------- General ---------------------
config            Get/Set config for LF sampling, bit/sample, decimation, frequency
cmdread           Modulate LF reader field to send command before read
read              Read LF tag
search            Read and Search for valid known tag
sim               Simulate LF tag from buffer
simask            Simulate ASK tag
simfsk            Simulate FSK tag
simpsk            Simulate PSK tag
simbidir          Simulate LF tag (with bidirectional data transmission between reader and tag)
sniff             Sniff LF traffic between reader and tag
tune              Continuously measure LF antenna tuning
```

Operate specific cards：

HF command

1.Place the ic-uid card in the hf area and enter hf search

```
[usb] pm3 --> hf search
[|] Searching for ISO14443-A tag...
[+]  UID: 10 16 30 19
[+] ATQA: 00 04
[+]  SAK: 08 [2]
[+] Possible types:
[+]    MIFARE Classic 1K
[=] proprietary non iso14443-4 card found, RATS not supported
[+] Magic capabilities : Gen 1a
[+] Prng detection: weak
[#] Auth error
[?] Hint: try `hf mf` commands


[+] Valid ISO 14443-A tag found
```

Get ISO 1443-A tag tips. It means that it is a 14a type card.

Enter hf 14a help

```
[usb] pm3 --> hf 14a help
----------      ---------------------- General -----------------------
help            This help
list            List ISO 14443-a history
----------      --------------------- operations ---------------------
antifuzz        Fuzzing the anticollision phase.  Warning! Readers may react strange
config          Configure 14a settings (use with caution)
cuids           Collect n>0 ISO14443-a UIDs in one go
info            Tag information
sim             Simulate ISO 14443-a tag
sniff           sniff ISO 14443-a traffic
raw             Send raw hex data to tag
reader          Act like an ISO14443-a reader
----------      ------------------------ apdu -------------------------
apdu            Send ISO 14443-4 APDU to tag
apdufind        Enumerate APDUs - CLA/INS/P1P2
chaining        Control ISO 14443-4 input chaining
----------      ------------------------ ndef -------------------------
ndefformat      Format ISO 14443-A as NFC Type 4 tag
ndefread        Read an NDEF file from ISO 14443-A Type 4 tag
ndefwrite       Write NDEF records to ISO 14443-A tag
```

Enter hf 14a reader

```
[usb] pm3 --> hf 14a reader
[+]  UID: 10 16 30 19
[+] ATQA: 00 04
[+]  SAK: 08 [2]
```

Change another ic-uid card, Enter hf 14a reader

```
[usb] pm3 --> hf 14a reader
[+]  UID: 6A 89 2E 19
[+] ATQA: 00 04
[+]  SAK: 08 [2]
```

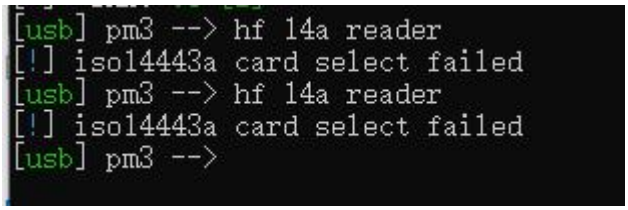
2.Place the ic-cuid card in the hf area and enter hf 14a reader

```
[usb] pm3 --> hf 14a reader
[+]  UID: 85 C9 F5 4E
[+] ATQA: 00 04
[+]  SAK: 08 [2]
[usb] pm3 --> hf 14a reader
[+]  UID: 85 E2 A8 4E
[+] ATQA: 00 04
[+]  SAK: 08 [2]
[usb] pm3 -->
```

3.Place the blue key card in the hf area and enter hf 14a reader

4. Place the ID-T5577 card in the hf area and enter hf 14a reader.

Get nothing, because it is a LF card.

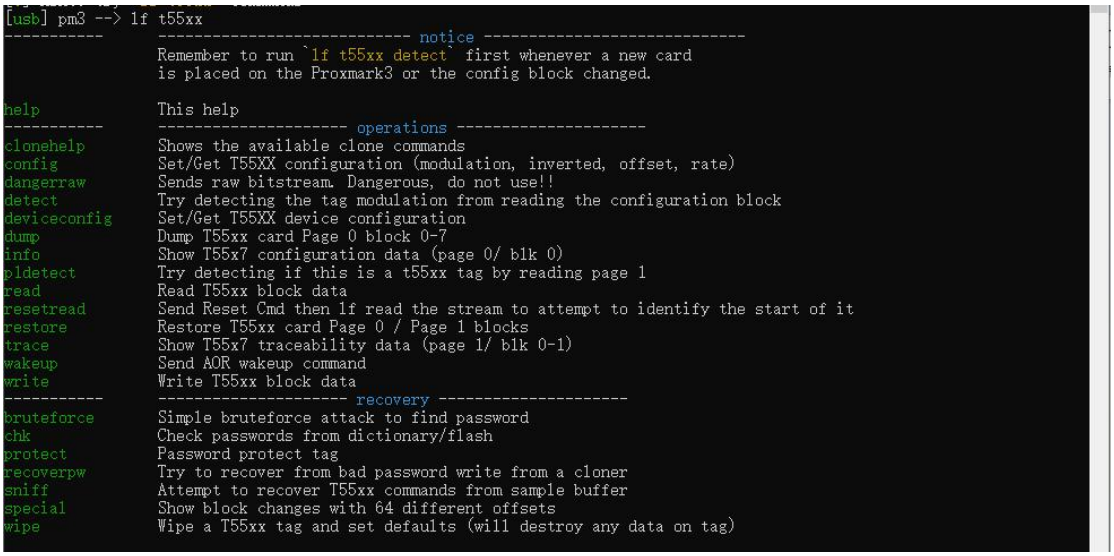


Lf Command

1.Place the ID-T5577 card in the Lf area and enter Lf search

Get tip to use lf t55xx command

enter LF t55xx



enter LF t55xx detect

```
[usb] pm3 --> lf t55xx detect
[=]  Chip type......... T55x7
[=]  Modulation........ ASK
[=]  Bit rate.......... 2 - RF/32
[=]  Inverted.......... No
[=]  Offset............ 32
[=]  Seq. terminator... Yes
[=]  Block0............ 000880E8 (auto detect)
[=]  Downlink mode..... default/fixed bit length
[=]  Password set...... No
```

Get the info.

2.Place the ID-4100 card on the Lf area and enter Lf search

```
[usb] pm3 --> lf search

[=] NOTE: some demods output possible binary
[=] if it finds something that looks like a tag
[=] False Positives ARE possible
[=]
[=] Checking for known tags...
[=]
[+] EM 410x ID 52003252E4
[+] EM410x ( RF/64 )
[=] -------- Possible de-scramble patterns ---------
[+] Unique TAG ID      : 4A004C4A27
[=] HoneyWell IdentKey
[+]     DEZ 8          : 03298020
[+]     DEZ 10         : 0003298020
[+]     DEZ 5.5        : 00050.21220
[+]     DEZ 3.5A       : 082.21220
[+]     DEZ 3.5B       : 000.21220
[+]     DEZ 3.5C       : 050.21220
[+]     DEZ 14/IK2     : 00352190616292
[+]     DEZ 15/IK3     : 000317832579623
[+]     DEZ 20/ZK      : 04100000041204100207
[=]
[+] Other              : 21220_050_03298020
[+] Pattern Paxton     : 1380356324 [0x524690E4]
[+] Pattern 1          : 5818769 [0x58C991]
[+] Pattern Sebury     : 21220 50 3298020  [0x52E4 0x32 0x3252E4]
[=] ------------------------------------------------

[+] Valid EM410x ID found!

[=] Couldn't identify a chipset
[usb] pm3 -->
```

enter Lf em 410 reader

```
[usb] pm3 --> lf em 410 reader
[+] EM 410x ID 52003252E4
```

ID-t5577 card support writing, we can clone ID-4100 card to ID-t5577 card.

3.Put the ID-t5577 card on the Lf area.

Enter Lf em 410 clone --id 52003252E4

```
[usb] pm3 --> lf em 410 clone --id 52003252E4
[+] Preparing to clone EM4102 to T55x7 tag with EM Tag ID 52003252E4 (RF/64)
[#] Clock rate: 64
[#] Tag T55x7 written with 0xffa8a0018aa2f536

[+] Done
[?] Hint: try `lf em 410x reader` to verify
[usb] pm3 -->
```

Enter LF em 410 reader, get the id info.

```
[usb] pm3 --> lf em 410 reader
[+] EM 410x ID 52003252E4
[usb] pm3 -->
```

Enter LF search, get more info of the current ID-t5577 card.

```
[usb] pm3 --> lf search

[=] NOTE: some demods output possible binary
[=] if it finds something that looks like a tag
[=] False Positives ARE possible
[=]
[=] Checking for known tags...
[=]
[+] EM 410x ID 52003252E4
[+] EM410x ( RF/64 )
[=] -------- Possible de-scramble patterns ---------
[+] Unique TAG ID      : 4A004C4A27
[=] HoneyWell IdentKey
[+]     DEZ 8          : 03298020
[+]     DEZ 10         : 0003298020
[+]     DEZ 5.5        : 00050.21220
[+]     DEZ 3.5A       : 082.21220
[+]     DEZ 3.5B       : 000.21220
[+]     DEZ 3.5C       : 050.21220
[+]     DEZ 14/IK2     : 00352190616292
[+]     DEZ 15/IK3     : 000317832579623
[+]     DEZ 20/ZK      : 04100000041204100207
[=]
[+] Other              : 21220_050_03298020
[+] Pattern Paxton     : 1380356324 [0x524690E4]
[+] Pattern 1          : 5818769 [0x58C991]
[+] Pattern Sebury     : 21220 50 3298020  [0x52E4 0x32 0x3252E4]
[=] ----------------------------------------------

[+] Valid EM410x ID found!

[+] Chipset detection: T55xx
[?] Hint: try `lf t55xx` commands
[usb] pm3 -->
```

Abnormal situation recovery:

Scene 1: When the device is connected to the PC but is not recognized by the PC,

A. press and hold the button, wait a few seconds, then connect the USB cable to the PC.

B.Wait a few seconds again, then release the button.

C.Wait a few seconds again, the PC will recognize the device.

Scene 2: After executing pm3-flash-bootrom.bat, the device is not found in the second step Of running pm3-flash-all.bat. At this time, the cmd page is in waiting state.

At this time, unplug the USB, keep pressing the button, and then connect the USB. After recognizing the device, the command line page will automatically execute the current script, output the printing content, and return to normal.

Tips：

A.When entering the command line, enter the upward arrow to quickly enter the previous command.

B.The command line executes the automatic matching principle: Lf t55xx detect and lf t5 detect are the same.

C.The command line is not case sensitive.

Software download address:

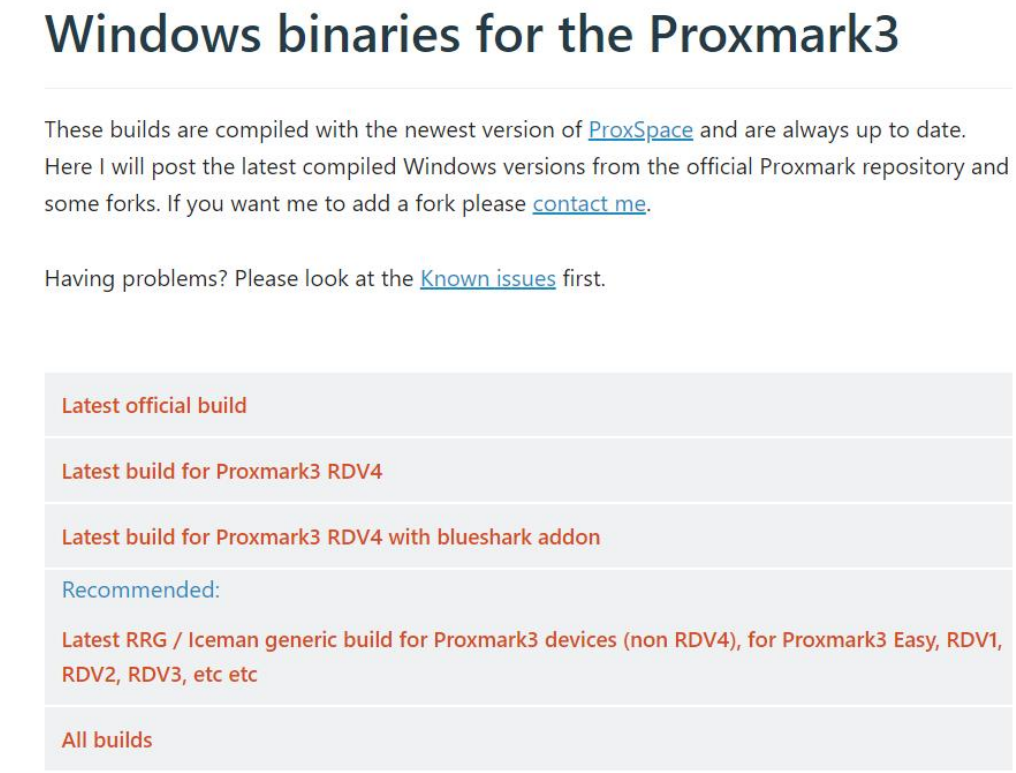
https://github.com/RfidResearchGroup/proxmark3

In the middle section, find

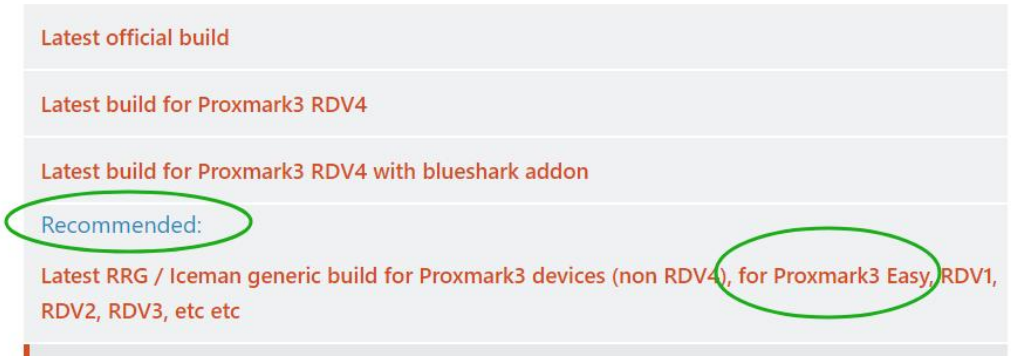
Precompiled binaries

See Proxmark3 precompiled builds

The jump link is https://www.proxmarkbuilds.org/



Click the link below Recommended, because the current device is Proxmark3 Easy



After clicking, the compressed package of rrg_other-20231122-43f64887f7714919e8bce03a12e16c715d0ace97.7z will be automatically downloaded. The software in the USB flash drive is obtained from here. (The software on the website may continue to be updated, and we will also keep updating the software on the USB flash drive)

After-sales support: Thank you for purchasing the Proxmark3 Easy device from our store. If you have any questions after using it, you can also contact us by email hamsdr123@163.com

We have also placed operation demonstration videos on the USB flash drive, hoping to help you reduce your learning time.

If you feel that this instruction document and video have really helped you reduce your learning time, please feel free to share your using experience with other consumers in the Review and feedback area.

For more learning materials, you will definitely find a lot on YouTube and google.

Enjoy it.