FASTECH
Fast, Accurate, Smooth Motion

Ezi-SERVO® Closed Loop Stepping System 20th ANNIVERSARY 2001-2021

Linux Ethernet DLL User Manual

1. Usage environment

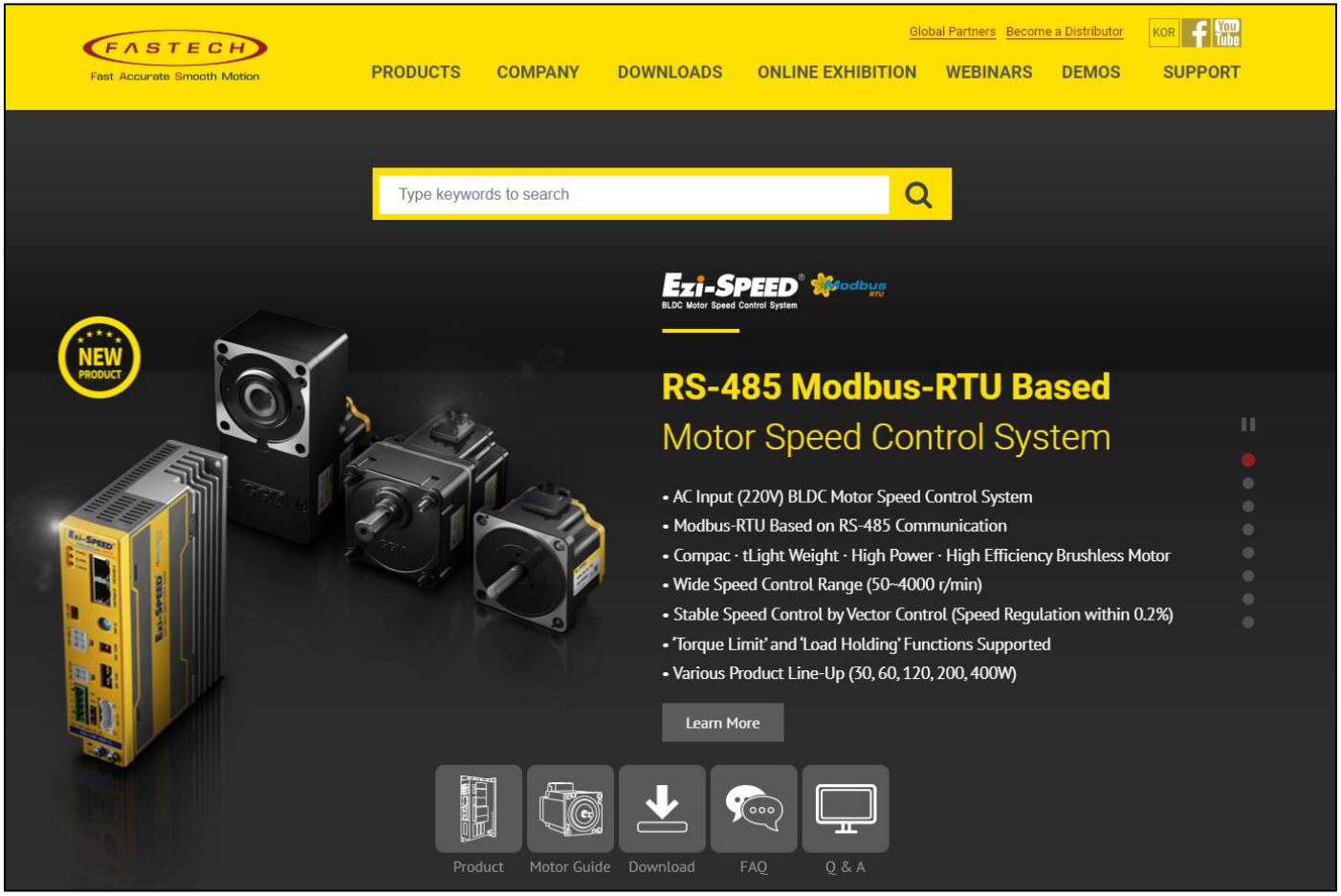
❖ Test environment

- Ubuntu - 22.04.3
- Raspberry Pi OS - Bullseye (23.05.03 Release)
- Raspberry Pi OS - Bookworm (23.12.05 Release)

2. How to Download

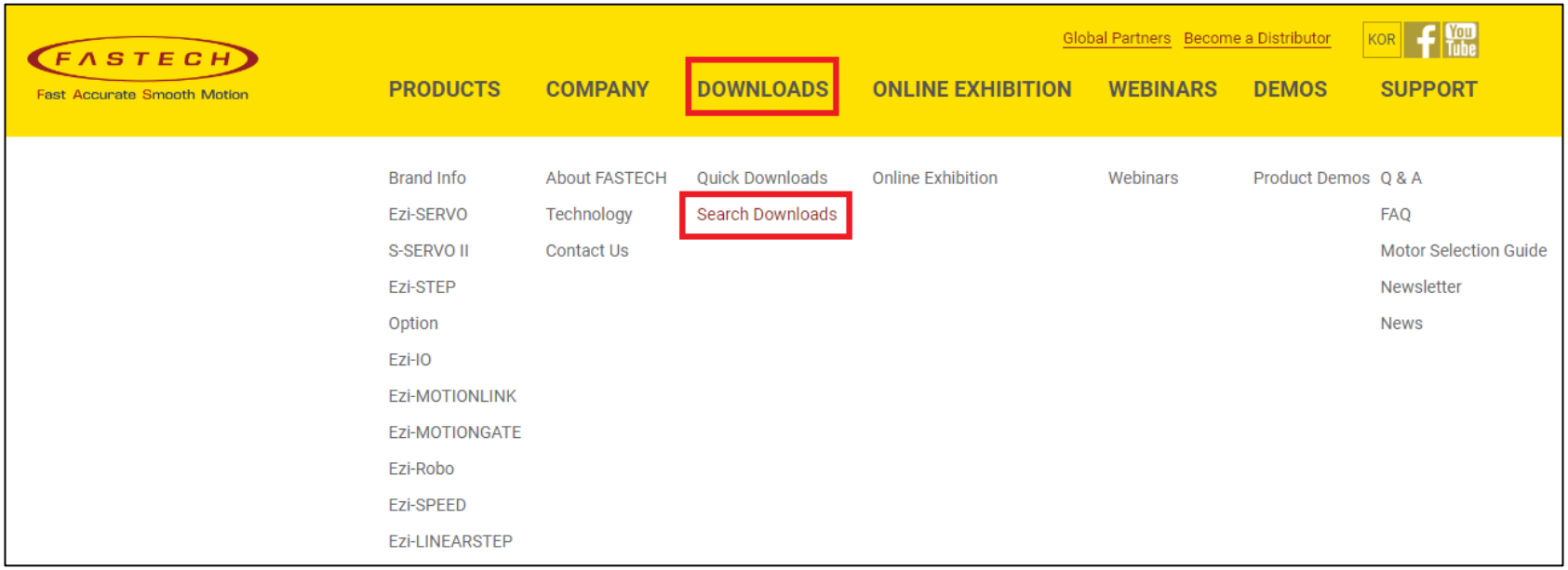
1) Visit the FASTECH website.

https://fastech-motions.com



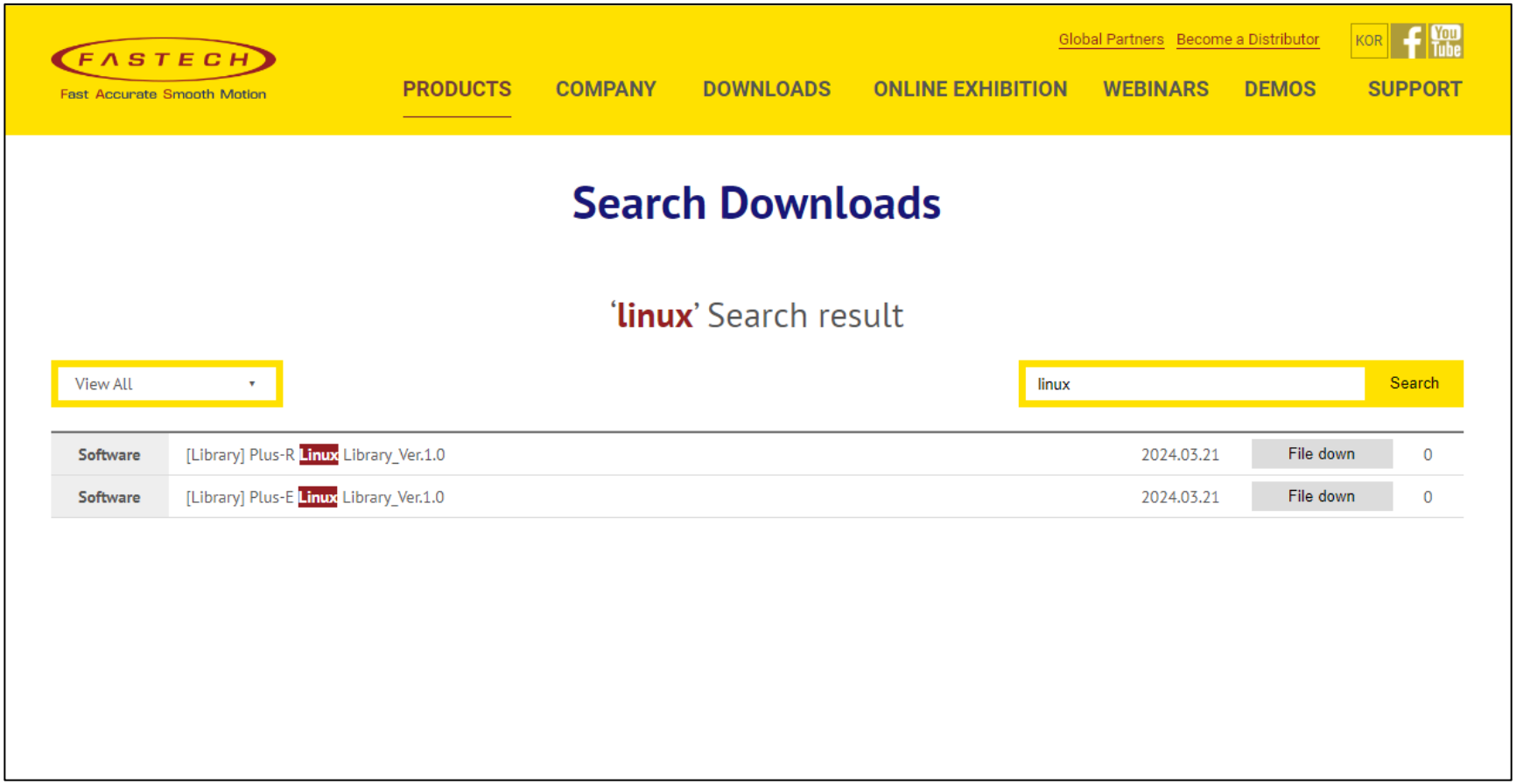
2. How to Download

2) Click ‘DOWNLOADS – Search Downloads’



2. How to Download

3) Search “linux” and download Ethernet Linux Library



3. Linux System Setting – Static IP

You need to set a static IP address for the Ethernet Port that shares the gateway with FASTECH products.

1. Open the OS network configuration file in Terminal.

 > 'sudo nano /etc/dhcpcd.conf' or 'sudo nano /etc/network/interfaces' (It may vary depending on your system.)

2. After the last line of the network configuration file, type the following statement. (It may vary depending on your system.)

(Please modify the blue text to match your PC settings.)

interface eth0 (Address for Ethernet communication with Fastech products)

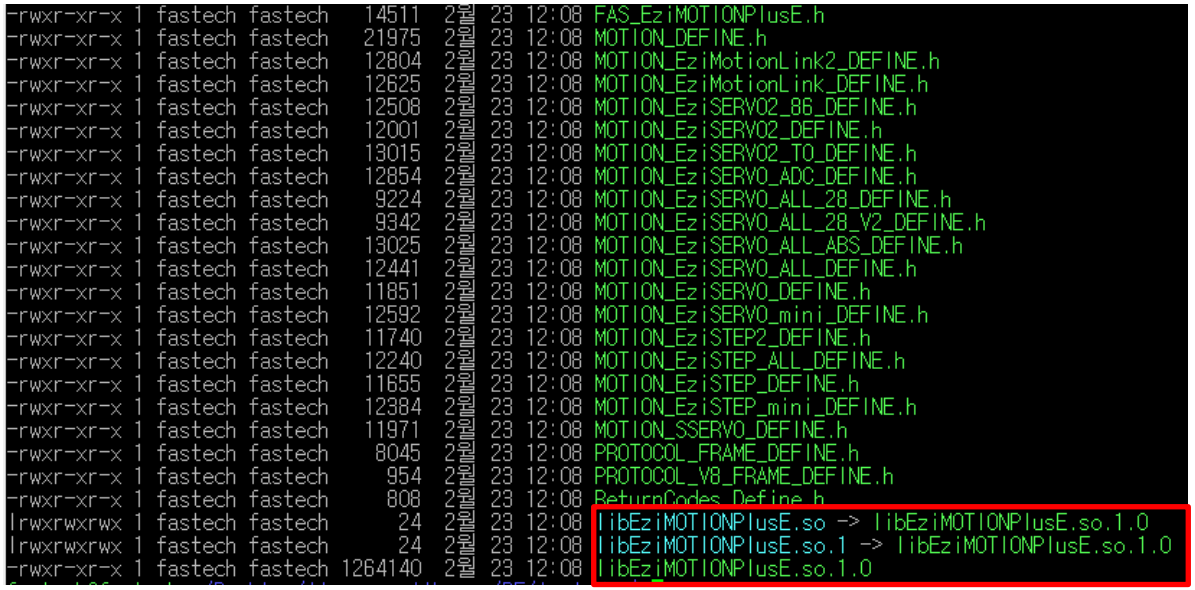
static ip_address=192.168.0.100 (Static IP address that doesn't cause conflicts)

static routers=192.168.0.1

3. After saving and exiting the file, reboot the system.

3. Linux System Setting – Library Setting

The structure of the 'Include' directory containing the FASTECH library is as follows.



1) Copy the 'Include' directory to your project path.

2) Copy FASTECH shared library files and symbolic links to the Linux shared library directory.

sudo cp –df ./libEziMOTIONPlusE.so* /usr/local/lib

sudo ldconfig

4. How to Use Ethernet Library

1. To use the FASTECH API, you need to include EziMOTIONPlusE.h first.

```
#include <stdlib.h>
#include <iostream>

#include "./Include/FAS_EziMOTIONPlusE.h"

using namespace PE;

int main(void)
{
        int nRtn;

        nRtn = FAS_Connect(192, 168, 0, 2, 0);
        if( TRUE != nRtn )
        {
                printf("Connect Failed₩n");
        }

        nRtn = FAS_ServoEnable(0, 1);
        if( FMM_OK != nRtn)
        {
                printf("Servon Enable Failed₩n");
        }

        FAS_Close(0);

        return 0;
}
```

2) When building a program, you need to import the FASTECH library first.

```
fastech@fastech:~/Desktop/Linux_lib_Test $ g++ -o test test.cpp -lEziMOTIONPlusE
```

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