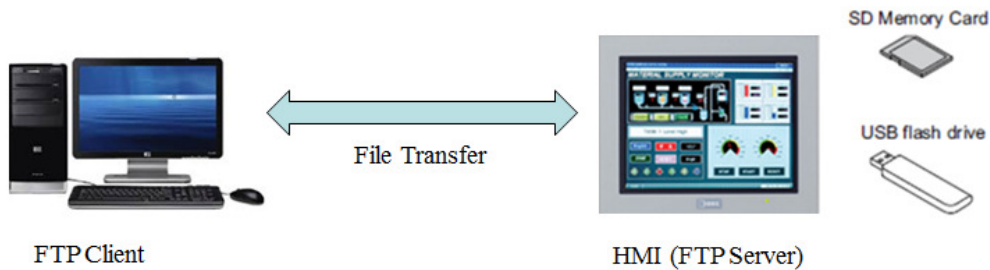# Application Notes
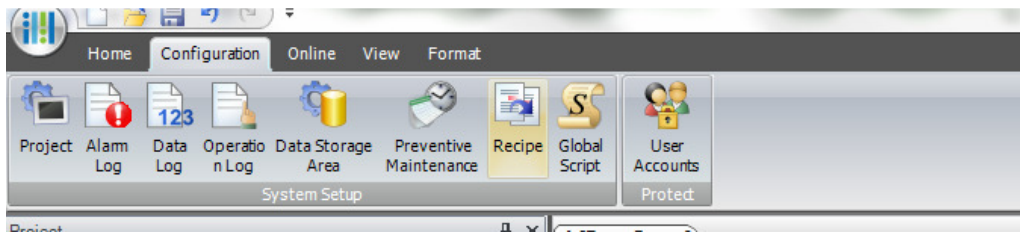## How to use FTP Server Function

FTP Server Function

FTP (File Transfer Protocol) is a method for exchanging files over a TCP-based network.

FTP communications allows users to transfer files between the HMI and a PC without having to load the IDEC HMI software on the PC.
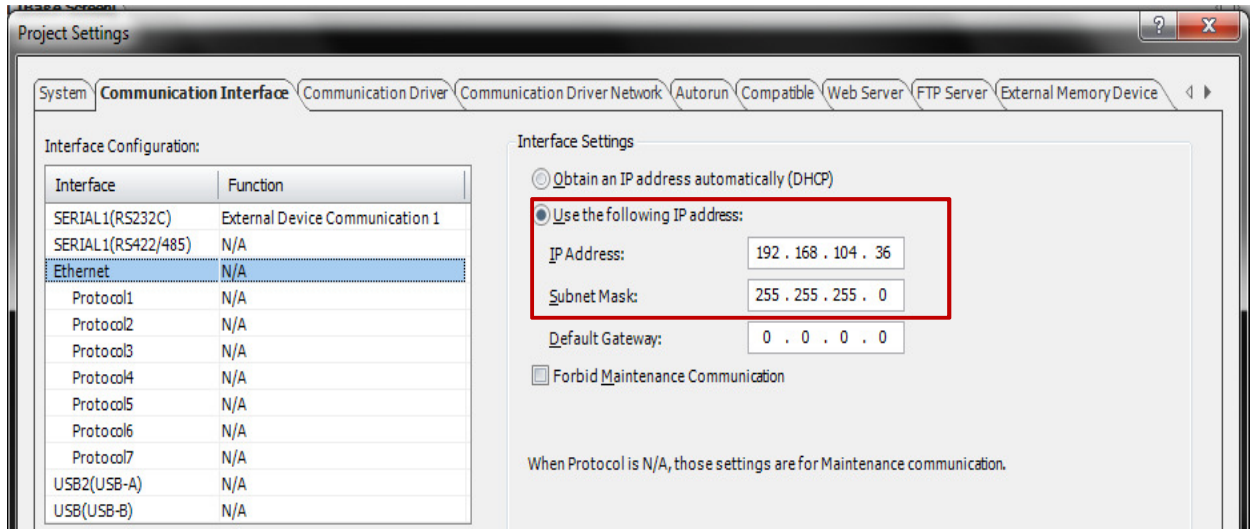

Below are the steps on how to use the FTP function by using FileZilla along with the WindOI-NV4.
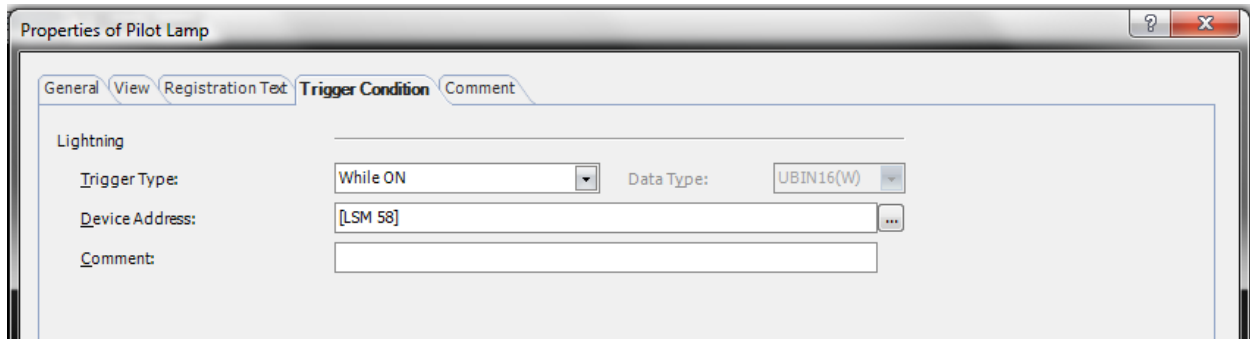
1) In WindOI-NV4, click on "Configuration" and "Project"

2) In the Project Settings, select "Communication Interface" tab and enter your HMI IP address along with the Subnet Mask.
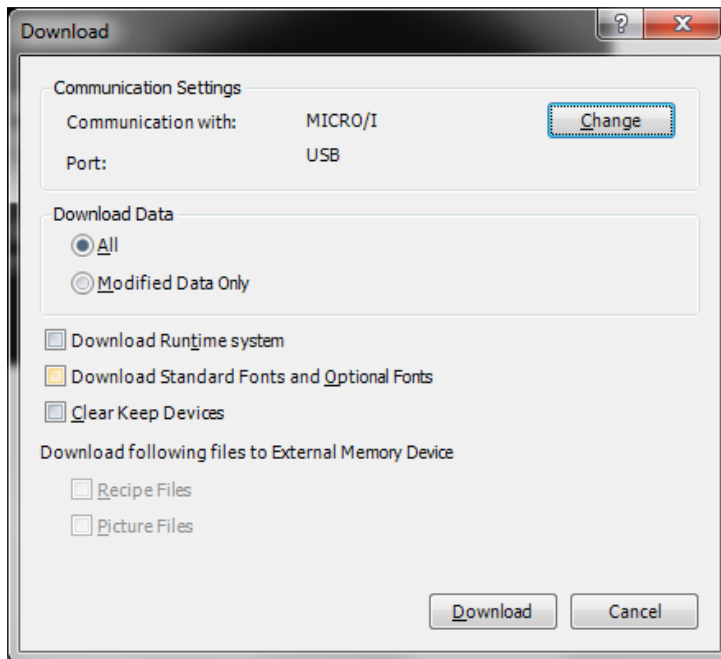

3) Then, select "FTP Server" tab. Enable the checkbox "Enable FTP Server Function". The default port number is 21. Select either "Value" or "Device Address" for a timeout period in "Inactivity Timeout", is the time to automatically disconnect the connection when there is no communication between the FTP client and HMI after login to the HMI. Click OK to continue.
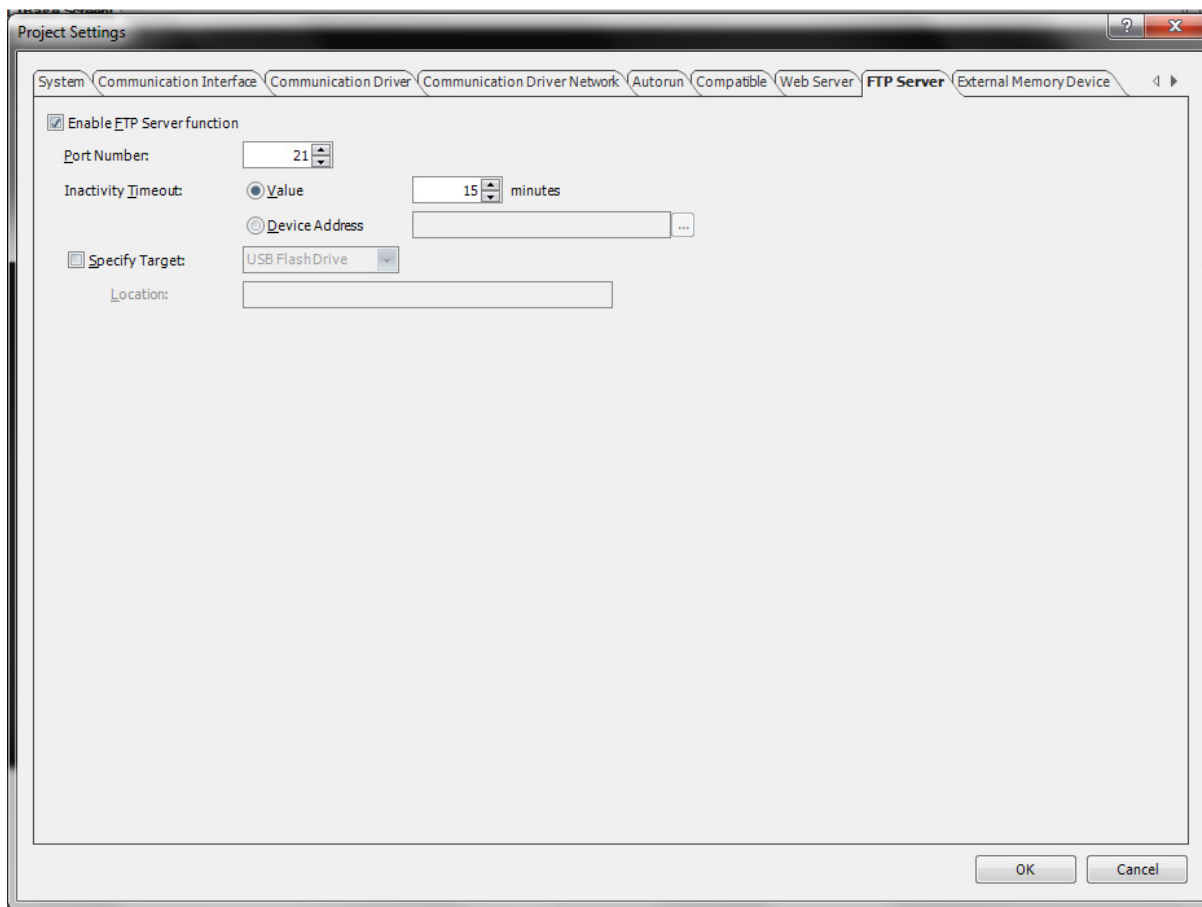
4) As an option to monitor the ftp connection, create a Pilot Lamp on the base screen and assign LSM58 as shown below. The LSM 58 is a special internal relay bit to store the connection status for the FTP connection. It will turn on if the connection is made.

Properties of Pilot Lamp

General | View | Registration Text | **Trigger Condition** | Comment

Lightning

Trigger Type: While ON   Data Type: UBIN16(W)

Device Address: [LSM 58]

Comment:

5) Download the entire project by selecting "Online" → "Download"

Download

Communication Settings

Communication with: MICRO/I   Change

Port: USB

Download Data

◉ All

◯ Modified Data Only

☐ Download Runtime system

☐ Download Standard Fonts and Optional Fonts

☐ Clear Keep Devices

Download following files to External Memory Device

☐ Recipe Files

☐ Picture Files

Download   Cancel

6) Visit https://filezilla-project.org to download a free FTP client software package and install this on your PC.
   • Open FileZilla
   • Go to File → Site Manager …
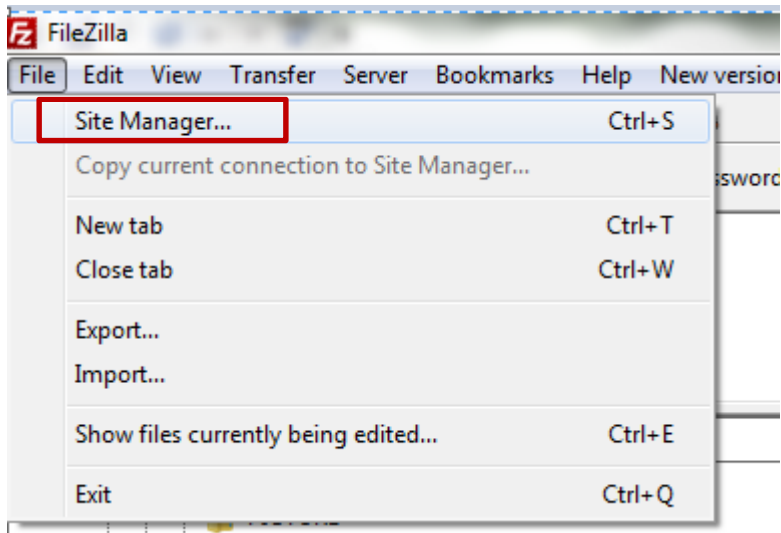
7) In "Site Manager" dialog box, click on "New Site" to create a new item.

Select "General" tab, enter the following information as shown below. Make sure to enter the HMI IP address in "Host" area and the port #. In this case, the default port # is 21. The User and Password depends on what is set in Administrator or Operator group of Security Function in WindOI-NV4. If the Security Function was not enabled, then enter "User" for User and for the "Password" leave it blank.
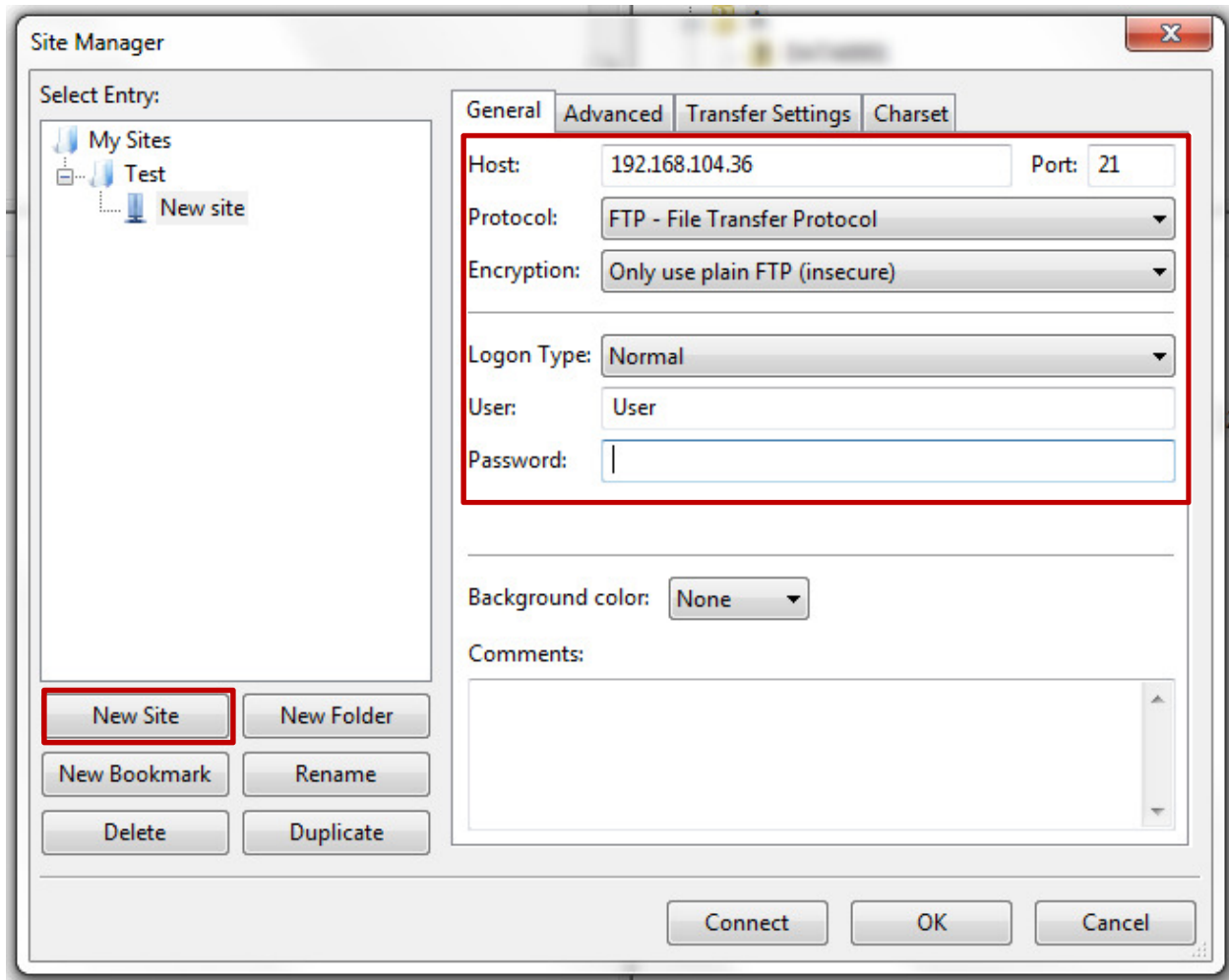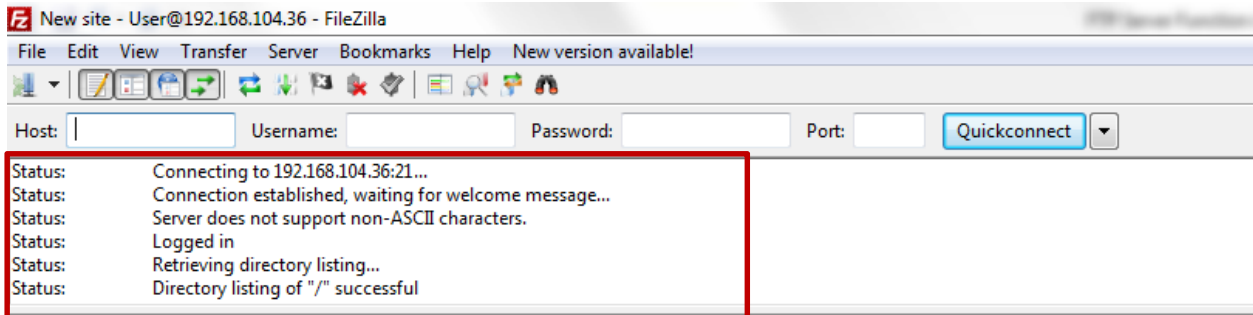
Select "Advanced" tab, and enable the checkbox "Bypass proxy"

IDEC
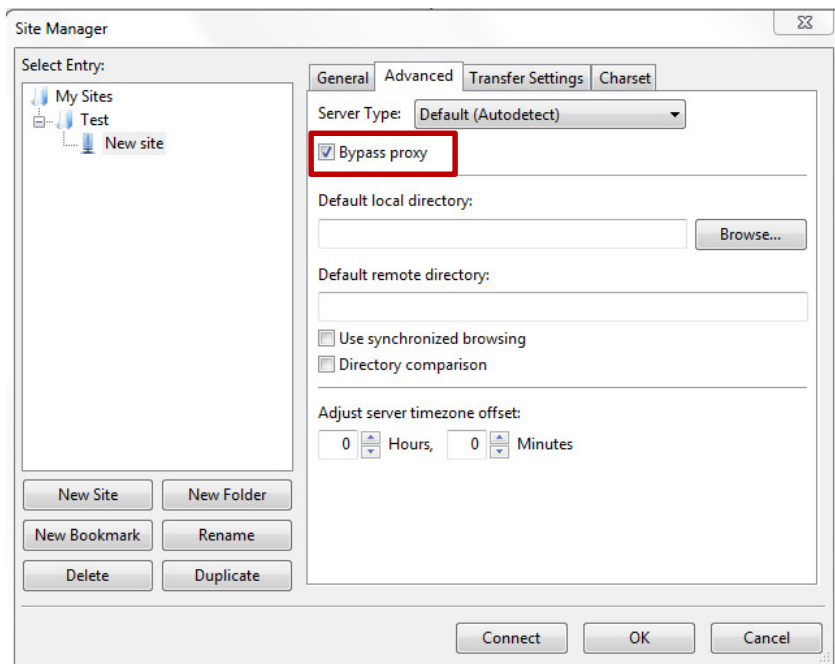
Select "Transfer Settings" tab, enable the checkbox "Limit number of simultaneous …. Connections"
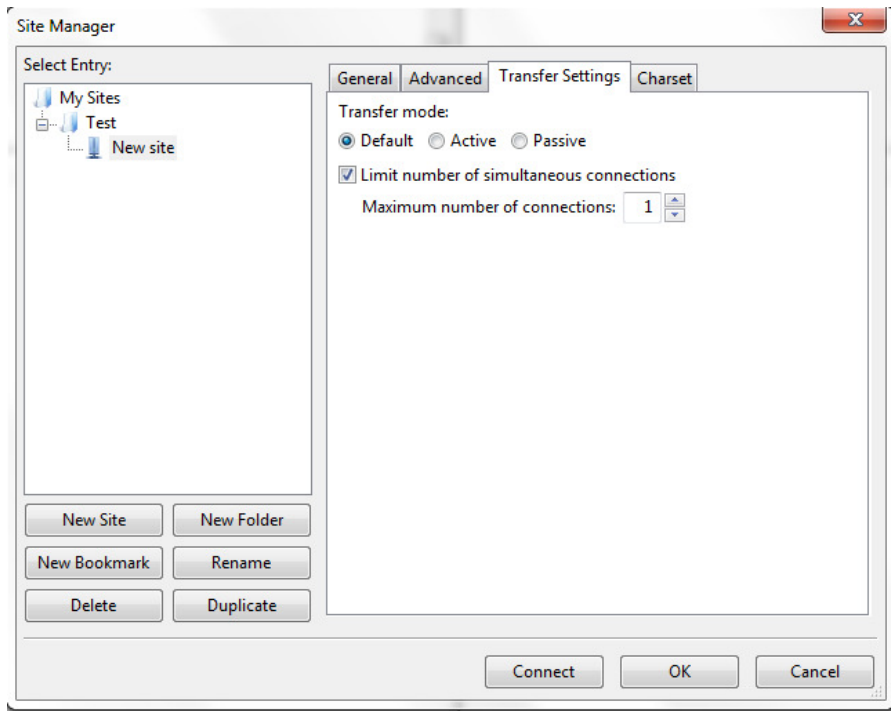
8) Click the "Connect" button to connect to the FTP server. If the connection between the client and server is made, the successful status messages will be shown as below.


Note: In the FTP server, the A drive is the SD card, and the B drive is the USB flash drive.
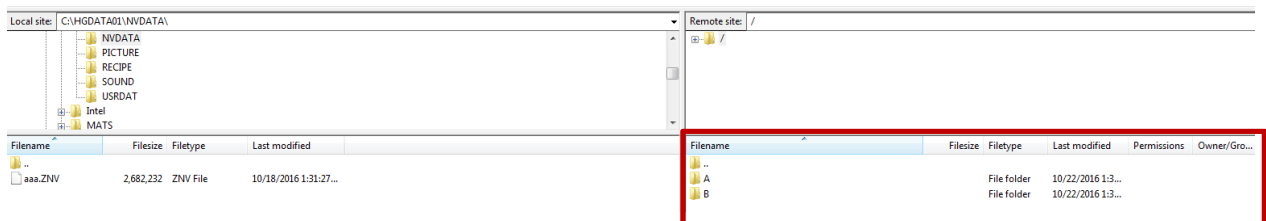
9) To transfer the file from the local site (PC) to the remote site (HMI) or vice versa, simply left-click and drag the file from the local site to the Remote site or vice versa. The file transfer will begin.

When the file transfer is completed, the successful status messages will be shown in FileZilla's information window as below.
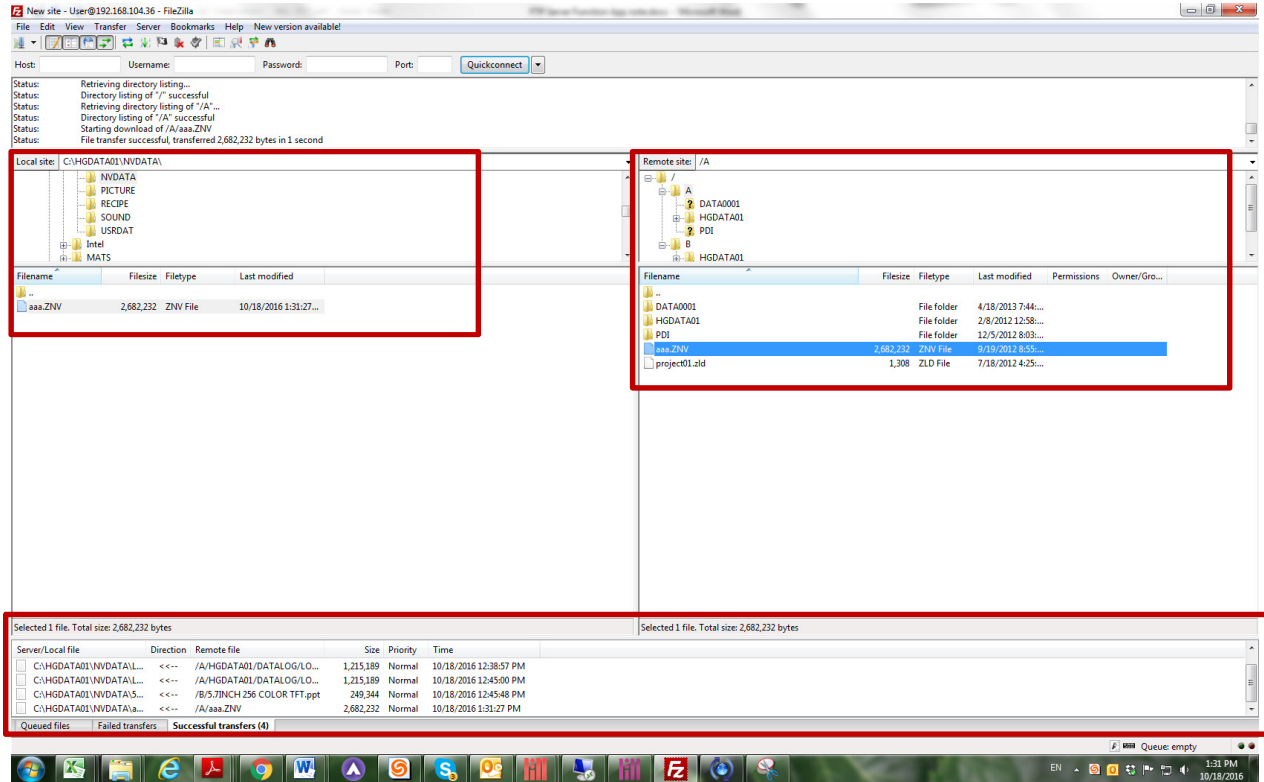
For detailed information on the FTP function, please refer to the user's manual.

Specifications of the FTP Server

Command	Function
User name	The user name configured in the running project. (Default: User)
Password	The alphanumeric password of 4 to 15 characters long configured in the running project. If a password is not set, leave the password blank.
Port No.	20, 21
Number of simultaneously connectable clients	1

IDEC

HMI Special Data Registers and Special Internal Relays

LSD 248	The bit changes to 1 when transferring file from FTP client (PC) to USB Flash Drive on HMI with FTP. The bit automatically changes to 0 when the transfer is finished. Bit 2 : CSV file(Recipe data) Bit 4 : ZNV file(Project file) Bit 5 : JPG file, JPEG file, JPE file, JFIF file or BMP file (Picture file) Bit 8 : WAV file (Sound file) Bit 9 : ZLD file (PLC program file) Bit 10 : MP4 file (Movie File) Bit 15 : Other file
LSD 249	The bit changes to 1 when transferring file from FTP client (PC) to SD Memory Card on HMI with FTP. The bit automatically changes to 0 when the transfer is finished. Bit 2 : CSV file(Recipe data) Bit 4 : ZNV file(Project file) Bit 5 : JPG file, JPEG file, JPE file, JFIF file or BMP file (Picture file) Bit 8 : WAV file (Sound file) Bit 9 : ZLD file (PLC program file) Bit 10 : MP4 file (Movie File) Bit 15 : Other file
LSM 58	Stores the connection status for FTP client (PC) and the FTP server (HMI) set to the Ethernet interface.
LSM 59	When this bit is turned from 0 to 1, the connections for the FTP client (PC) and the FTP server (HMI) set to the Ethernet interface are forcibly disconnected.