

SHOPLINK FLASH XL

LOW COST USB 2.0 FLASH MEMORY UPGRADE FOR CNC'S



FUNCTIONS MAIN MENU

After turning on power the welcome screen will appear.



From main menu screen, use   key to select the function which you want to use.

MAIN FUNCTIONS EXPLORE



User use this function to manage files using built in memory or attached USB 2.0 device. Format, check properties, access built in memory or attached memory. For files and folders the user is able to: Read, Copy, Cut, Paste, Delete, check information of file, make new folder.

DNC TRANFER



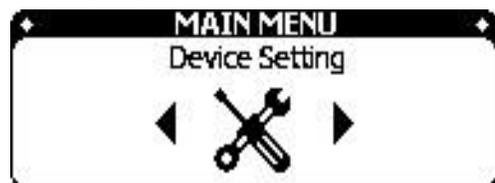
User use this function to transmit file to CNC machine in mode READ or DNC (mode Tape on Fanuc CNC)

READ FROM CNC



User use this function to take PUNCH out program or parameter from CNC machine and save to device

DEVICE SETTING



Users use this function to adjust the parameters of the device and the appropriate output port to communicate with CNC machines.

EXPLORE

From main screen press key   to choose function Explorer



Press  to open Explorer
Explorer's screen show 2 drives



Press   to choose the drive: you
want to select. Press  to access.

Press  to open Menu to select:

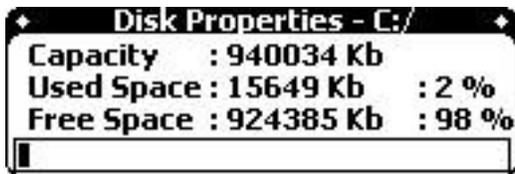
1. **Open:** Access into drive:
2. **Format:** Format drive:.
3. **Properties:** Check information about: Capacity, Total size, Free and Used Space.



Press    to choose the function.

Disk Properties

The screen shows the hard disk parameters such as:

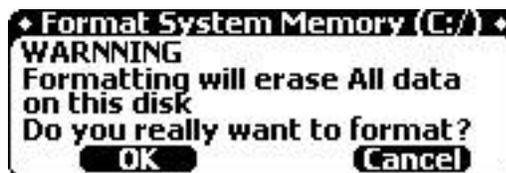


1. Name the hard drive are viewing: C: /, D: /
2. Hard drive capacity: Kbyte.
3. Used Space: % and Kbyte.
4. Free Space: % and Kbyte.

Disk Format

Observe the Warning message that data on the hard drive will be erased. Select OK 

to accept and Cancel , to quit Format .

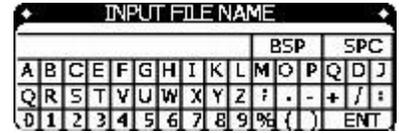


Disk Open

The screen will display the Folder and File available on the hard drive. Icon  in front of selected object means the object is Folder and icon  mean object is File.

Use   key to select object.

Press  to open the Menu you want to manipulate.



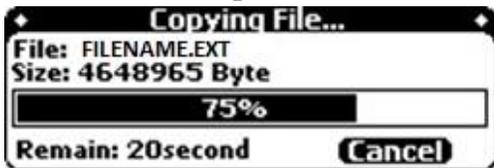
1. **Open:** Open file or Folder selected
2. **New Folder:** Make a new folder. Screen will display a virtual keyboard.

Use   to select character (left or right), press  to cursor down.

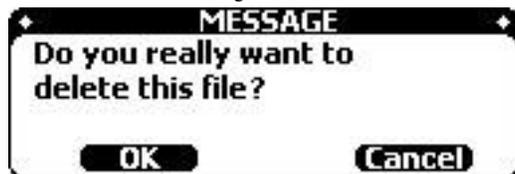
Press  to enter the character. Press  to escape and cancel. Position to and press

 on the virtual keyboard to complete making the folder.

3. **Copy/Cut:** It's only used for file, copy or copy file from this drive: to another drive: for example – from USB D:/ to device memory C:/.



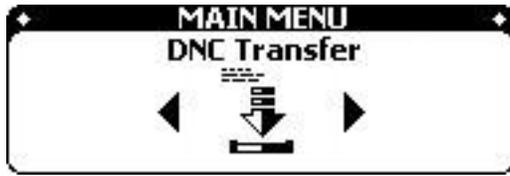
4. **Paste:** Paste object which you have copy or cut before
5. **Delete:** If the object is a Folder a fail message displays if the folder contains file(s) inside. If the object is a File a message to confirm the file deletion request appears.



6. **Properties:** Open this function to check the information of the selected object. Display the currently selected Folder\File information including name, path, and bytes used.

DNC TRANFER

From main screen press   to access the function “DNC Transfer”.



Press  to open the function.



MENU to select.

Title and Status bar:

1. **Title** Name of file which selected to transmit to DNC machine (if there's no file chosen the screen will show “DNC: No File”.) Press MENU key and select

Status

2. “RS232: 9600,7,2,E” : The parameters configured for the RS232 port.
3. “0%”: Percentage transmitted
4. "STOP": Status not transmitting
5. "WAITING": waiting for the signal from the CNC machine.
6. "SENDING": transmitting data to the CNC machine.

Open File:

1. Press  to open the drive to choose the file to transmit.

2. Use    to select File

3. Press  to escape.

Check file content:

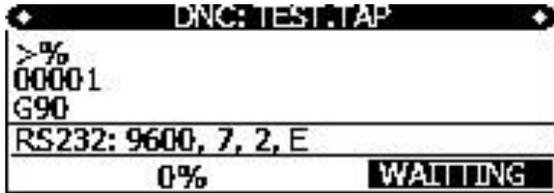
After loading file you want to transmit, the contents of file will be show on screen, the

user can press   to navigate through the contents of the file.

Transmitting DNC:

Press  to enable transmitting the file to the CNC machine. Observe WAITING..”
At the CNC initiate the read dialog, aka READ, INPUT, RECIEVE to load into memory.

Press “CYCLE START” in CNC machine to start receiving DNC, aka TAPE mode.



Note: some CNC's do not send the “initial” CNC machine (XON), in this case, press

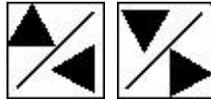


to emulate the XON signal and the file transfer will start.



To (STOP), user Press . Device will automatic reload file from the beginning.

READ FROM CNC

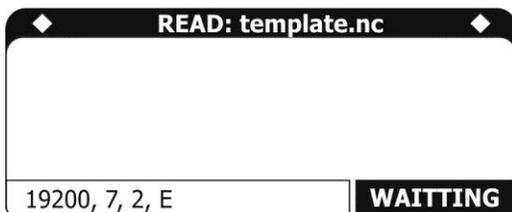


From main screen press to choose the function “Read From CNC”.



Press to open function.

Screen will show: File name, mode of port RS232, Status of device, and content of data.



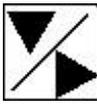
The device will automatically create one sample template file in the system's memory and enter the waiting mode. Press Punch aka SEND on the CNC machine and received data will be displayed until completion. A message will ask whether you want to save the file. The file name will be the first 15 characters



of the file sent from the CNC machine,



to save or press  to cancel.

After pressing  the screen will display the drive to select, press  

to select the drive that you want to save to and press . Use the root folder or

navigate to the desired folder and press  to **Select path.**

Press  to accept the selected path and observe the MESSAGE, “File save

Complete” Press  to OK.

DEVICE SETTING

From main Screen press   to choose the function “Device Setting”. Device Setting access can be enabled or disabled to avoid unintentional changes. See DISABLE DEVICE SETTING.



Press  to open function.

Press   to navigate up and down, press  to choose.

Press   to change value

COMMON - 1/4		RS232 - 2/4	
Startup Pro	:MainMenu	Rs232 delay	:0
Data out	:RS232	Baut Rate	:19200
Shake hand	:Software	Data Bits	:7
Auto resend	: Off	Stop Bits	:2
Lcd kontras	:20	Check Bits	:Even
USER TAPE - 3/4		READ MODE - 4/4	
Out Startup	:OFF	Read Stop	:Time Out
In Trigger	:ON	In Trigger	: 10 sec
Delay Char	: 1000us		
Data Invert	:OFF		
Wait Type	:W-N-N		

Parameter:

1. Startup Pro : Select function display power on (Main Menu, DNC, Explorer) defaulted to DNC.
2. Data out: such as RS232, Fanuc 6m ...
3. Shake hand: Mode shakehand when transmitting data to the machine. Usually set to Software for Xon\Xoff or defaulted to FANUC 6M for the BTR option.
4. Auto Resend: Automatically run the program from the beginning when processing is complete. Defaulted to ON.
5. Lcd kontras: adjust the contrast of the screen. Defaulted to 20.
6. RS232 delay: Usually set to 0ms
7. Baud Rate: Select Baud rate. Defaulted to 9600.
8. Data Bits: Select the number of bits of data (7.8). Defaulted to 7.
9. Stop Bits: Select Bit Sop (1.2). Defaulted to 1.
10. Check Bits: Select Check Bit (None, Even, Odd). Defaulted to EVEN.
11. Out startup, Intrigger, Data Invert, Wait type: These parameters are used to fine tune the parallel port, to follow the manufacturer's default.
- 12.Delay Char (ms): Delay time of parallel port, used to adjust the parallel port of the CNC machines
13. Read Stop: The feature is used to detect the end of the file of function Read From. There are 2 modes are Time Out and% Gcode%. In mode % Gcode%, the device will proceed to retrieve data until the symbol % indicates the program has finished, it will automatically stop and complete receive data from the machine.
- 14.Time out: After the first period, if the device does not read any more data it will understand that it has completed reading file from CNC machines, for example, if the setting is 10s, after no data is received for 10 seconds the device will finish receiving data

from cnc machine. Typically used for Okuma controls that send out \$FILENAME.MIN% name string before gcode.

Ethernet Option:

Ethernet is an option on selected models of ShopLink FLASH XL. The default setting IP is 192.168.1.30. In its simple configuration a Cat5 cable (10-100 ft. length) is connected from a host PC that will run the application SL_Explorer. The host PC network LAN connection is typically set for a static IP of 192.168.1.20. The host PC internet connection is typically not using the on board NIC but is using a WiFi connection. SL_Explorer is a common dialog Explorer that chooses the IP of the desired ShopLink FLASH XL unit from a drop down list to establish connection. Then the usual Windows(7\8\10) drag and drop and right click file manipulation options are available. SL_Explorer is installed by Highland on your internet connect host PC using www.logmein123.com.

Using the Ethernet option your files can be quickly sent to the built in 2gb memory C:/. The Ethernet option eliminates the operation and physical movement of copying a file to a flash drive and then taking it to the ShopLink FLASH XL.

Fanuc 6M BTR Option:

Ethernet is an option for the Fanuc 6m BTR configuration. By default only the **EXPLORE & DNC TRANSFER** menu functions are available. The Fanuc 6m BTR configuration does not receive any data via RS232 or Facit punch from the Fanuc. Since most Fanuc 6m programming is done offline this receive function is not required. Using the **DNC TRANSFER** a file up to 2gb long (2000 megabytes) can be transferred and executed by Fanuc using its TAPE function via the 50 pin tape reader cable. With power off during installation remove the 50 pin tape reader cable from the tape reader and connect it to the 50 pin KEYED connector on the FLASH XL.

DISABLE DEVICE SETTING

Contact Highland for the password to enable or disable this menu.