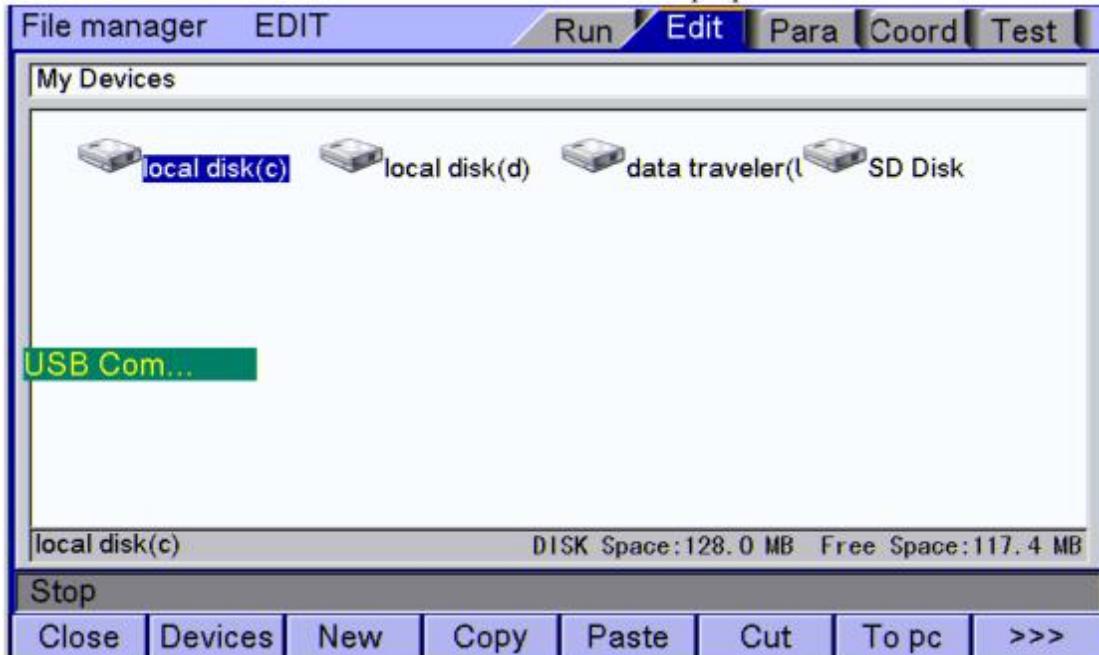


MACRO TRAINING

- 1) CNC4 Series controller using macro for all logic control .

Customer can easily using macro to edit some input / output signals logic and axis moving
 All the I/O like spindle ,coolant , lubricating are all in FUNC.NC file.

Customer can edit and save this file to controller Disk D / MACRO folder and change
 Management parameter 023 to User-define , then reboot controller ,it will be working



- 2) MACRO COMMAND

+ - * / == != >= <= > <

Basic command

WHILE

DO

IF

GOTO

E.g.: check input signal IN23 within (time 5s) , if get signal will execute next line(Coolant open), if not will alarm

```
O0001  
#1=0  
WHILE[1]DO1  
IF[#1023==0]GOTO1  
IF[#1>=5000]  
{  
#3000=1 (TIME IS OVER!)  
}  
G4P10  
#1=#1+10 (count)  
END1  
N1  
M8  
M30
```

User-defined M code

In FUNC.NC File O0068-O0101 can using for user - defined M code
O0068-O0101= M0068 -M0101

E. G.

```
O0068  
(备用输出开 OUT32)  
#2=1400+32  
##2=1  
M3000  
%
```

This is original code from FUNC.NC File

If we command M68 , OUT32 will Active. Also we can edit some other logic inside
For example , if run M68, OUT32 ON and after 1 second A axis rotating 90° ,after A
axis stop , delay 1 second to turn off OUT32

```
O0068  
(备用输出开 OUT32)  
M89P23L1  
G4X1  
G91G1A90  
G4X1  
M89P23L0  
M3000  
%
```

Read controller status and do some logic

F. g. Using F1 Key for OUT23 ON and OFF, but it can only working in JOG mode.

Original code in FUNC.NC file is this

```
O0055  
O0054  
(F1 开 OUT19)  
#2=1400+19  
##2=1  
#1848=1  
M3000  
%  
  
So we can change to  
O0054  
(F1 开 OUT19)  
IF[#3906==2]  
{  
#2=1400+19  
##2=1  
#1848=1  
}  
M3000  
%
```