

KRS—SYSTEM

NC Data Communicator

D—VII

User's Guide Ver. 1.01

(Machine Ver. 5.1.0.2)

KYORITSU SYSTEM MACHINE, LTD.

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1. Outline

- D-Ⅶ makes high speed DNC transfer of large amounts of data and NC controller Memory In/Out functions possible with its compact size, easy operation and reasonable price.
- D-Ⅶ makes it easy and quick to upload and store large amounts of NC program data, created on systems such as CAD/CAM, through out the network.
- D-Ⅶ contains a safety semiconductor disk designed to be used in many varying environmental conditions, such as vibrations, extreme temperatures and electrical noise. It also retains data after power reset.
- The use of portable USB memory makes it possible to directly transferring large amounts of program data created on a PC to an NC machine and directly store data from NC machine.
- D-Ⅶ's compact size allows it to not only be used in environments which already have a local network system, but it also allows the machine to be carried out of an office which has a CAD/CAM system, to an operation area or place out side of the office.
- Users who have no equipment investment for network system, or have adverse environmental conditions such as electric noise, may be able to use D-Ⅶ, which is low priced, but capable of managing large amounts of NC program data. The long time operation with the large data makes better efficiency at the present facility.



2. Functions

D—VII uses the file sharing system of your Windows Network to send and receive NC program data to and from NC controllers. The flash disk in the D—VII which stores NC program data is a safety semiconductor disk designed for use in many varying environmental conditions. It can be seen as a hard disk which retains data after power reset.

Mode	Function	FROM	TO
1	OUT(Output Data)	Designated Directory	COM1 / COM2
2	IN(Input Data)	COM1 / COM2	Designated Directory
3	COPY(Copy File)	Designated Directory	Designated Directory
4	DEL(Delete File)	Designated Directory	
5	PRM(Set Parameter)		

2-1. Mode

OUT(Output Data) Output NC data in a designated NC data file to the NC machine.

IN(Input Data) Write NC data from NC machine to a designated file.

COPY(Copy File) Copy a designated data file into a designated directory.

DEL(Delete File) Delete a designated NC data file.

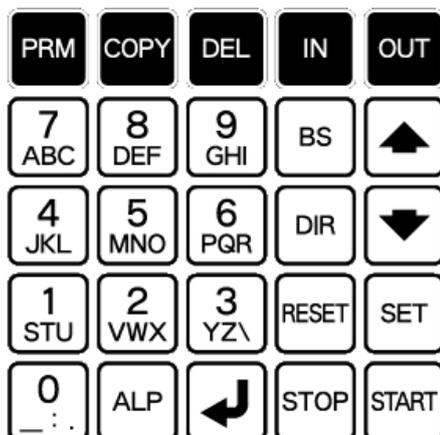
PRM(Set Parameter) Select a parameter file and edit the parameter data.

2-2. Operation Mode

Normal Mode Normal operation mode.

Remote Command Mode Automatic operation via NC.

2-3. Operational Keyboard



2-4. Display

LCD Display with back light, 20 characters x 4 lines

(1) (20 Characters)

3. Operation

- Start up Display

<Normal Mode>

The screenshot shows a display with the following content:

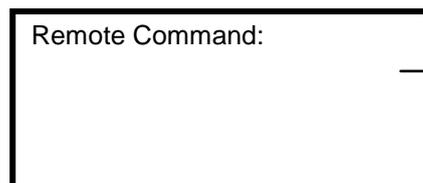
Mode ←	OUT	SEL	>DATA0005
	DATA-1		DATA0006
	F: 6		DATA0007
	R: 216.3M		DATA0008

Annotations: Blue circles highlight the 'DATA-1' directory name and the file list. An arrow points from 'Mode' to the left. An arrow points from the file list to the text 'Filenames in the designated DIR (directory)'. Below the display, an arrow points to the text 'Currently designated DIR (directory) Name', 'F: Number of files', and 'R: Remaining capacity'. To the right, instructions state: 'Push **6** PGR to scroll filenames to right and push **4** JKL to scroll filenames to left'.

> To switch to *Remote command mode* on this display, press **STOP** and it displays "Remote Command?". Please press **START** to confirm.

☞ For more details, please refer to **3-6. Switch Operation Mode**.

<Remote Command Mode>



The **D—VII** is waiting for a command from the NC when this display is shown, and will go to the next display once it receives a command. (For more details about the display after different commands are received, please refer to **9. Remote Mode**)

> To switch to *Remote command mode* from this display, press **RESET**.

☞ For more details, please refer **3-6. Switch Operation Mode**.

- Display Firmware version: Press **PRM** to display the **D—VII**'s firmware version in the bottom of Parameter Setting Mode display.

The screenshot shows a display with the following content:

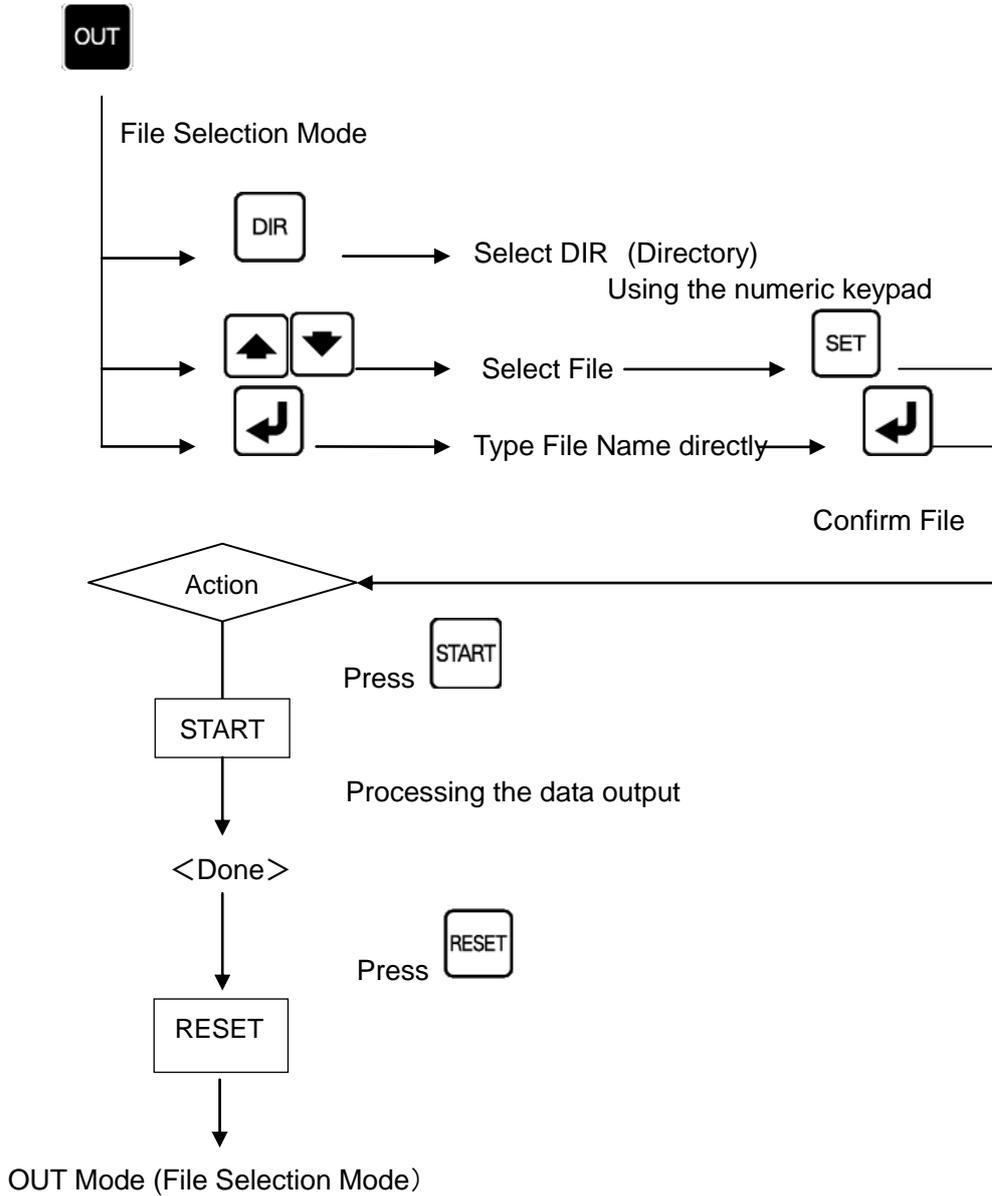
PRM	SEL	>DEFAULT
		USER001
		USER002
Ver 5.1.0.2		USER003

An arrow points from the 'Ver 5.1.0.2' text to the label 'Firmware Version'.

3-1. Output Data

(1) **Function** : Output NC data in a designated NC data file to the NC machine.

***Note: This is the default mode upon power on and on finishing an operation/reset.**



(2) Process

① Select Function: Press  to display File Selection Mode.

② Select Data File: Use the cursor keys to select a file.

Press  to display the file name which has over 9 characters and

press  to go back to the first line of the file name list on the display.

And, select "ALL" at the bottom of the list to select the all data in the shown directory.

<Display>

	1	10	20 Characters
1	OUT	SEL	>DATA0005
2	DATA-1		DATA0006
3	F: 6		DATA0007
4	R: 216. 3M		ALL

➤ Manually typing the filename

To type filename directly, press the  key for Direct Typing mode.

*Please refer [4. Supplement of Data](#) Input for Direct Typing data.

Note: If the typed file name cannot be found, D-Ⅶ displays "Not found".

To go back to File Selection Mode, please press .

➤ Filtering

Filter the file names to display only specified files whose name begins with same keyword characters. *Please refer [3-5. Display Files](#).

➤ Change Directory

The LCD will display the Directory name which is currently selected. (max: 10 characters)

To change Directory, press  and select the desired directory with the numeric keypad.

☐ DIR Number

0 : For USB Memory Stick

1-9 : Directories for data: [DIR1] ~ [DIR9]

<Display>

	1	10	20 Characters
1	OUT	SEL	>DATA0001
2	DATA-2		DATA0002
3	F: 6		DATA0003
4	R: 216. 3M		DATA0004

- ③ Confirm File: To confirm the file to output, press .

The date and size of file will be displayed on the 3rd line of the LCD.

And, the first two blocks of the file details will be displayed on the 4th line of LCD.

Maximum first 10 blocks of the data can be displayed on the LCD; to check, use the up/down cursor keys.

<Display>

1	10	20 Characters
1	OUT STOP P : PARAM000	← Currently valid parameter file
2	DATA-1 DATA0006	
3	00/01/01 00002048	← Date and Size of data
4	G01F200	← A block of data

Note: To change file, press . The display will be back to File Selection Mode.

- ④ Process Start: Press  to start processing. (Output)

Process status will be displayed on 3rd and 4th lines of LCD.

<Display>

1	10	20 Characters
1	OUT RUN P : PARAM000	← Currently valid parameter file
2	DATA-1 DATA0006	
3	00000123 00002048	← Output Data amount / Data Size
4	>>	← Indicator to show process status

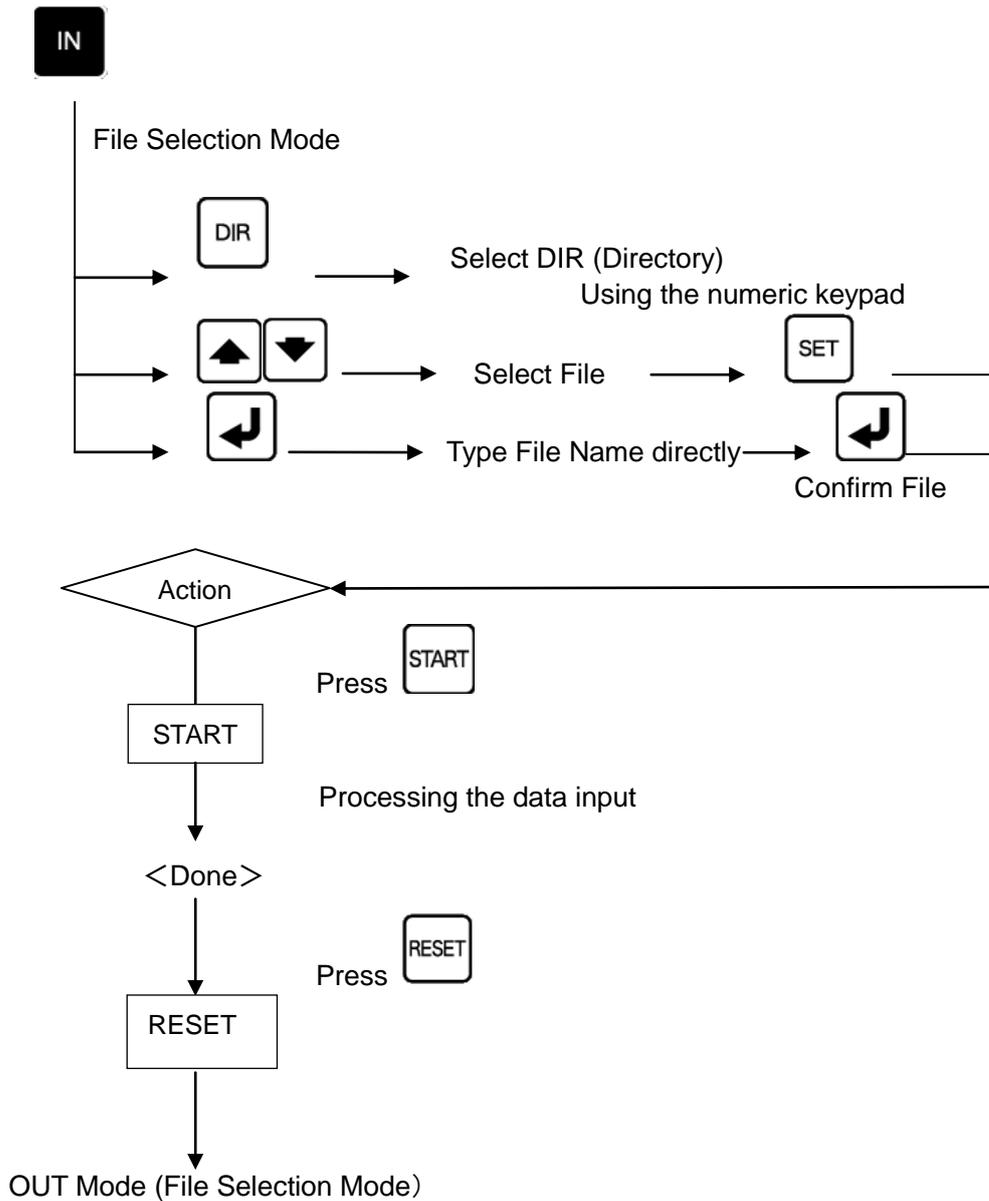
- ⑤ Process Finish: When the display shows the process is done, press  to go back to File Selection Mode.

<Display>

1	10	20 Characters
1	OUT END P : PARAM000	
2	DATA-1 DATA0006	
3	00000123 00002048	← Output Data amount / Data Size
4	***** END *****	← Indicator to show the process is done

3-2. Input Data

(1) **Function:** Write NC data from NC machine to a designated file.



(2) Process

① Select Function: Press  to display File Selection Mode.

② Select Data File:

(1) Choose existing file and overwrite.

Press  to display the file name which has over 9 characters and

press  to go back to the first line of the file list on the display.

Select a file. And press  to confirm.

<Display>

```
1 10 20 Characters
1 IN SEL >DATA0005
2 DATA-1 DATA0006
3 F: 6 DATA0007
4 R: 216. 3M DATA0008
```

(2) Manually type the filename as a new file.

To type filename directly, press the  key for Direct Typing mode.
*Please refer [4. Supplement of Data Input](#) for Direct Typing data.

<Display>

```
1 10 20 Characters
1 IN STOP P: PARAM000
2 DATA-1 DATA1234 ← New Filename
3 New File
4
```

➤ If the existing file is chosen or typed, D – VII will display the message 「**Overwrite? Yes/No**」 to make sure if the file is ok to be overwrote. After confirm if it is ok, press **Yes**, press **No** to go back to File Selection Mode.

*Attention

Once “**Yes**” was pressed, the existing file will be deleted completely and the overwriting operation cannot stop until it is done.

<Display>

```
1 10 20 Characters
1 IN STOP P: PARAM000
2 DATA-1 DATA0006 ← Chosen/Typed File name
3
4 Overwrite? [Yes] No
```

Use the cursor keys   to select **Yes/No**.

Or numeric keypad, Yes:  / No: , and press  to confirm.

(3) All Input Mode

When NC machine sends all files to D—VII (Punch all mode), choose [ALL] which is on the very last line of the file list. In All Input Mode, D—VII uses O-number to name the files from NC and stores them by order. If the file extension is set by parameter #21, the files will be stored with naming with file extension.

And press  to confirm.

<Display>

1	10	20 Characters
1 IN SEL	DATA0005	
2 DATA-1	DATA0006	
3 F: 6	DATA0007	
4 R: 216. 3M	>[ALL]	

➤ Change Directory

The LCD will display the Directory name which is currently selected. (max: 10 characters)

To change Directory, press  and select the desired directory with the numeric keypad.

Note: To change file, press . The display will be back to File Selection Mode.

③ Process Start: Press to start processing. (Input)

Process status will be displayed on the 3rd and 4th lines of the LCD.

<Display>

1	10	20 Characters
1 IN RUN	P: PARAM000	← Currently valid parameter file
2 DATA-1	DATA0006	
3 00000123	00002048	← Input Data amount / Data Size
4 >>		← Indicator to show the processing

④ Process Finish: When the display shows the process is done, press to return to File Selection Mode.

<Display>

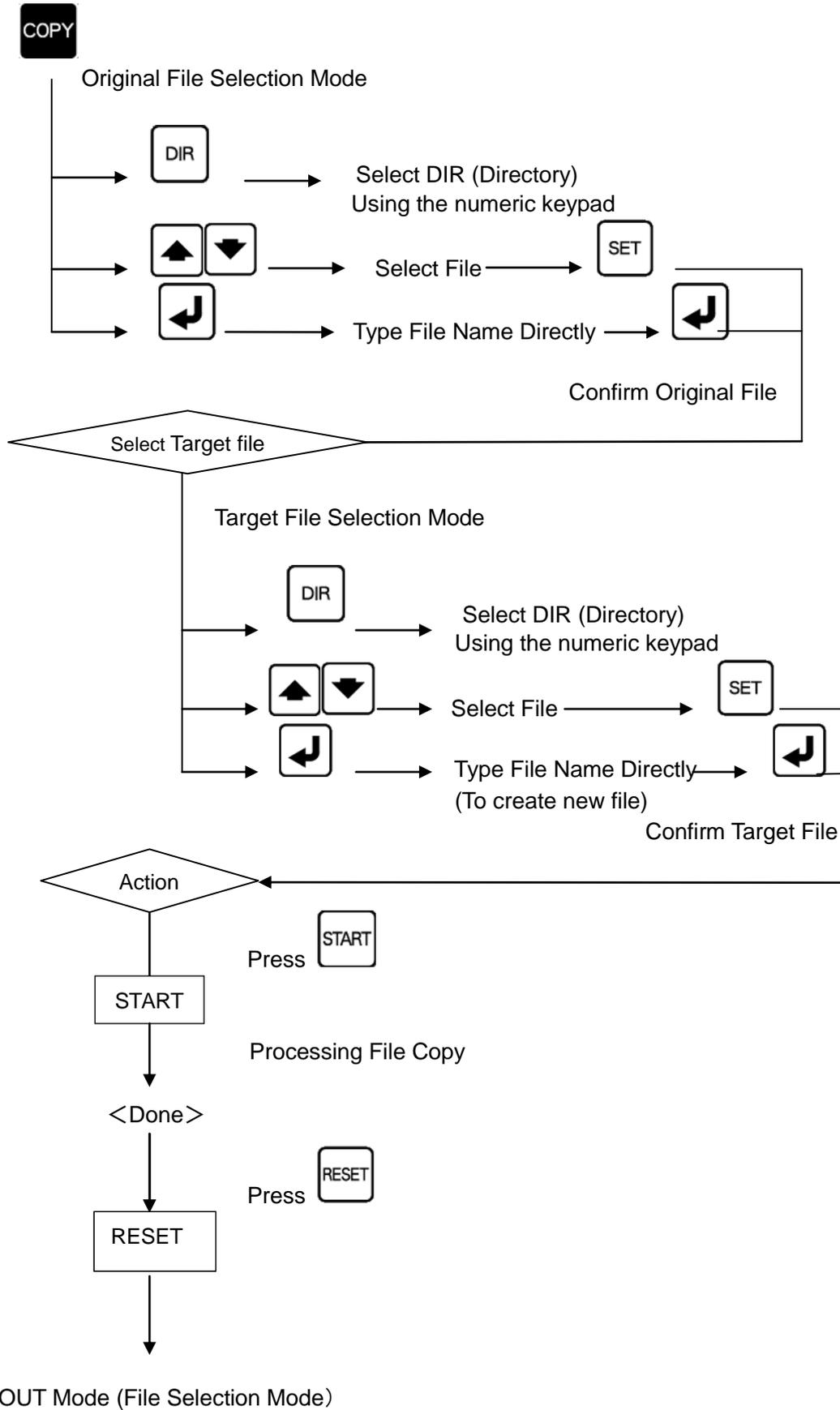
1	10	20 Characters
1 IN END	P: PARAM000	
2 DATA-1	DATA0006	
3 00000123	00002048	← Input Data amount / Data Size
4 ***** END *****		← Indicator to show the process is done

❑ **Attention: When parameter #19 is set [1] (% Set)**

When parameter #19 is set [1] (% Set) and you use  to finish the data input instead of DC4, the display will NOT show the process is done, but instead jump to File Selection Mode.

3-3. Copy File

(1) **Function:** Copy a designated data file or all files into the designated directory.



(2) Process

① Select Function: Press  to display Copy Mode.

② Select Original File: Use cursor keys to select original file.

Press , to display the file name which has over 9 characters and

press  to go back to the first line of the file list on the display.

To copy all files, select **ALL** on the very last line.

After selecting the file, press  to confirm.

<Display>

```
1          10          20 Characters
1 COPY SEL 1 >DATA0005
2 *DATA-1    DATA0006
3            DATA0007
4            [ALL]
```

➤ Manually typing the File Name

To type filename directly, press the key for Direct Typing mode.

*Please refer 4. Supplement of Data Input for Direct Typing data.

➤ Filtering

Filter the file names to display only specified files whose name begins with same keyword characters. *Please refer [3-5. Display Files](#).

➤ Change Directory

LCD will display the Directory name which is currently selected. (Max. 10 characters)

To change Directory, press  and select a directory with the numeric keypad.

☐ DIR Number

0 : For USB Memory Stick

1-9 : Directories for data: [DIR1] ~ [DIR9]

③ Select Target File: Use cursor key to select target file.

* Same way as "#2: Select Original File".

<Display>

```
1          10          20 Characters
1 COPY SEL 2 >DATA0005
2  DATA-1    DATA0006
3 *DATA-1    DATA0007
4            DATA0008
```

④ Process Start: Press  to start copying file.

<Display>

```
1           10           20 Characters
1 COPY RUN   P : PARAM000
2 DATA-1    DATA0006 ← Original DIR and File name
3 DATA-2    DATA-WK   ← Target DIR and File name
4
```

Note: If there is a file has same name already in the directory, D—VII shows alarm #17: Copy Disable [27].

Press  to return to File Selection Mode.

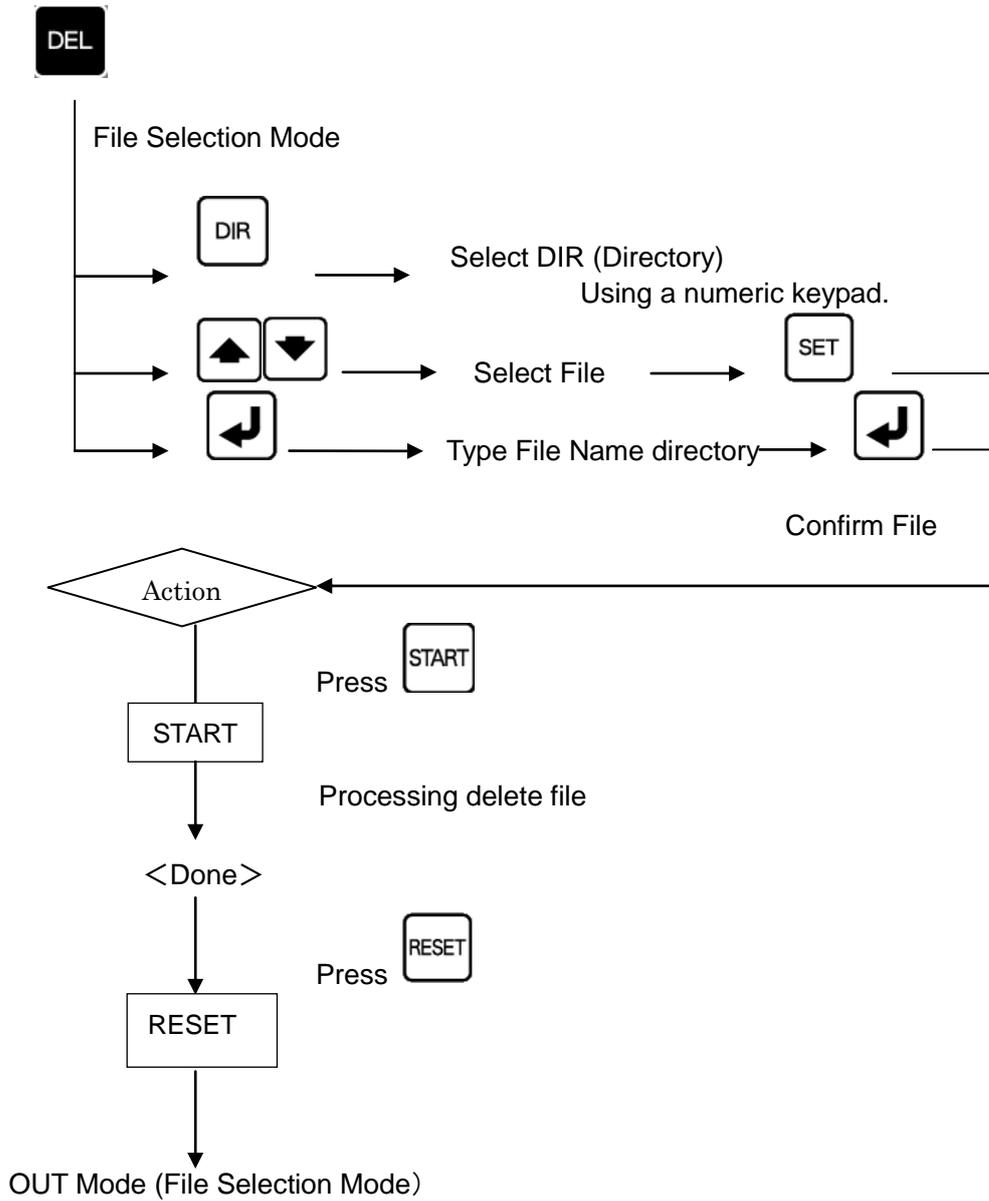
⑤ Process Finish: When the display shows the copy is done, press  to return to File Selection Mode.

<Display>

```
1           10           20 Characters
1 COPY END   P : PARAM000
2 DATA-1    DATA0006 ← Original DIR and File name
3 DATA-2    DATA-WK   ← Target DIR and File name
4 * * * * * END * * * * * ← Indicator to show the process is done
```

3-4. Delete File

(1) **Function** : Delete a designated NC data file.



(2) Process

- ① Select Function: Press  to display File Delete Mode.
- ② Select File to delete: Use cursor key to select file to delete.
Press , to display the file name which has over 9 characters and
press  to go back to the first line of the file list on the display.

To delete all files in the directory, select **ALL** at the very last line.

```
<Display>
  1                10                20 Characters
1 DEL   SEL   >DATA0005
2 DATA-1     DATA0006
3             DATA0007
4             ALL
```

- Manually type the filename as a new file.
To type filename directly, press the key for Direct Typing mode.
*Please refer [4. Supplement of Data Input](#) for Direct Typing data.
- Filtering
Filter the file names to display only specified files whose name begins with same keyword characters. *Please refer 3-5. Display Files.
- Change Directory
LCD will display the Directory name which is currently selected. (max: 10 characters)
To change Directory, press  and select the desired directory with the numeric keypad.

- ❑ DIR Number
0 : For USB Memory Stick
1-9 : Directories for data: [DIR1] ~ [DIR9]

```
<Display>
  1                10                20 Characters
1 DEL   SEL   >DATA0001
2 DATA-2     DATA0002
3             DATA0003
4             DATA0004
```

- ③ Confirm File: To confirm the file to input, press .

The date and size of file will be displayed on the 3rd line of LCD.

And, first two blocks of the file details will be displayed on the 4th line of LCD.

Maximum first 10 blocks of the data can be displayed on the LCD; to check with going up /down cursor key.

<Display>

1	10	20 Characters
1 DEL STOP P : PARAM000		
2 DATA-1 DATA0006		
3 00/01/01 00002048		
4 G01F200		

Note: To change file, press . The display will be back to File Selection Mode.

- ④ Process Start: Press  to start deleting file. D-VII will display the message to make sure if the file is ok to be deleted. After confirm if it is ok, press **Yes**, press **No** to go back to File Selection Mode.

Use the cursor keys   to select **Yes/No**.

Or numeric keypad, Yes:  / No: , and press  to confirm.

<Display>

1	10	20 Characters
1 DEL END P : PARAM000		
2 DATA-1 DATA0006		
3 00/01/01 00002048		
4 Sure? [Yes] No		

When [Yes] is selected, D-VII excuses delete.

<Display>

1	10	20 Characters
1 DEL END P : PARAM000		
2 DATA-1 DATA0006		
3 00/01/01 00002048		
4 ***** END ***** ← Indicator to show the process is done		

- ⑤ Process Finish: When the display shows the copy is done, press  to return to Output Mode.

3-5. Display Files

(1) Rearrange : Rearrange the data files in the designated directory to be displayed on the D – VII's display. Data files can be rearranged numbers first and alphabet next by ascending or descending order and be reset the order.

- ① Press  or  to go Output Mode or Input Mode.
- ② Order Files: Use numeric key to choose how to rearrange.
 -  : Ascending order (Number 0-9 → Alphabet A-Z)
 -  : Descending order (Alphabet Z-A → Number 9-0)
 -  : Reset (Reset to the original order)

* File display can be loop scrolled.

(It goes back to the beginning when the cursor key scrolls to the end.)

(2) Filtering : Filter the file names to display only specified files whose name begins with same keyword characters.

- ① Press  on the file selection mode.
- ② Type specified keyword characters on the display and press  to enter.
The display will go back to the file selection mode and only the file names which has the keyword characters will be displayed.

To cancel/change the keyword characters, press .

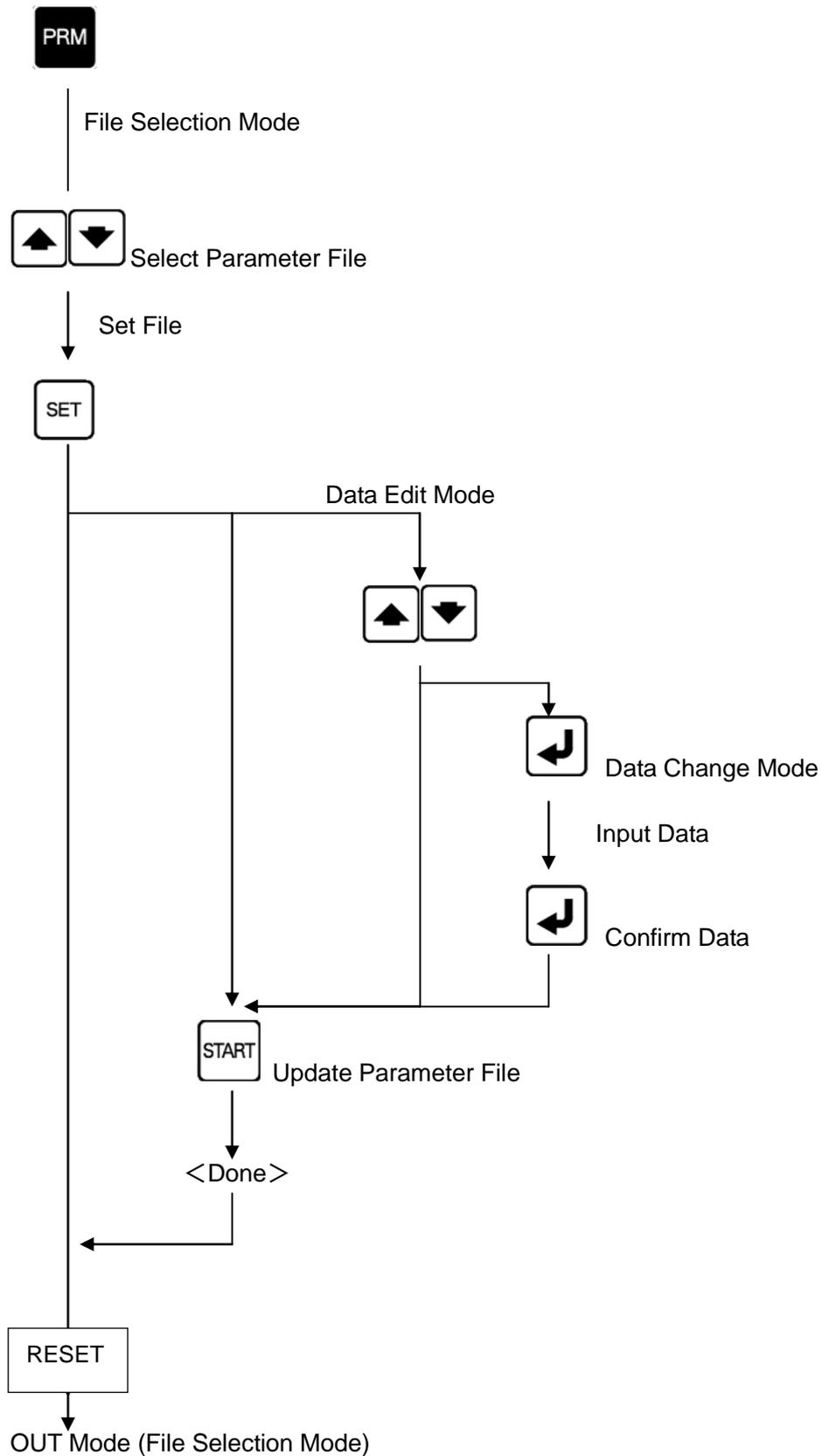
To cancel the filtering, delete all keyword characters by pressing , and press  to enter.

(3) Display long file name : Display long file names which has over 9 characters.

- ① Press , to display the file name which has over 9 characters and
press  to go back to the first line of the file list on the display.

3-6. Editing Parameters (Please refer to the “Parameter” section for more details)

(1) **Function:** Select a parameter file and edit the parameter data.



(2) Process

- ① Select Function: Press  to display Parameter Setting Mode and use the cursor keys to select a parameter file.

```
<Display>
  1                10                20 Characters
1 PRM   SEL   >DEFAULT
2
3        PARAM001
4        PARAM002
5        PARAM003
```

Note: To confirm the current network settings, please choose **[NW]** at the very last line of this display.

Please refer “(4) Confirm the current network settings” for more details.

- ② Confirm File: Press  to confirm the parameter file.

```
<Display>
  1                10                20 Characters
1 PRM   STOP P : DEFAULT
2 > 0 = DEFAULT ← Current cursor position
3  1 = 1
4  2 = 4800
```

- ③ Select Parameter Number: Use cursor keys to select parameter number to edit.

```
<Display>
  1                10                20 Characters
1 PRM   STOP P : DEFAULT
2  0 = DEFAULT
3  1 = 1
4 > 2 = 4800
```

- ④ Edit Parameter File: Adjust the cursor to the parameter file to edit and press  to enter Data Input Mode.

□ Data Input Mode

There are two modes to input data

Mode1: Input at current display.

Mode2: Input at Input Display.

Mode2 is only used for parameter #41-49 (Directory Pass Name). For other parameters, use Mode1.

(1) Mode1

At Mode1, input data directly to the selected parameter line on the display. Once the parameter is selected, current data will be disappeared and the blinking cursor will wait for the new data.

After inputting parameter data by via the numeric keys, press  to confirm.

If Alphabetical characters are necessary, please refer to

“4-1. Input Alphabet” for more information.

<Display>

```
1          10          20 Characters
1 PRM  STOP P : DEFAULT
2   0  =  DEFAULT
3   1  =  1
4 >  2  =  █
```

➤ Input Error

Each parameter has limitations: such as, type, range and character amount. If the data input is unmatched or over the limit, the display shows the alarm 「# 3: Incorrect」.

☞ Please refer [7. Parameter] for more detail of each parameter's limitations.

<Display>

```
1          10          20 Characters
1 PRM  ALRM P*DEFAULT
2   0  =  DEFAULT
3 >  1  =  3
4 #  3 : I n c o r r e c t  [ 1 ]  ← Alarm
```

➤ Return from input error (Alarm)

Press  to go back to Data Edit Mode. On the Data Edit Mode, the display shows [?] mark next to the invalid parameter data. If there is any invalid parameter data with [?] mark, the file cannot be saved but shows alarm until valid data input.

<Display>

```
1          10          20 Characters
1 PRM  STOP P*DEFAULT
2   0  =  DEFAULT
3 >  1  = ? 3          ← Error :[?] mark / Invalid data
4   2  =  4 8 0 0
```

(2) Mode2

The display switches to Input Display and the blinking cursor will wait for the new data input.

After inputting parameter data via the numeric keys, press  to confirm.

If Alphabetical characters are necessary, please refer to “4-1. Input Alphabet” for more information.

```
<Display>
  1                10                20 Characters
1 Input parameter :
2 ■
3
4
Error: Same as Mode1.
```

❑ **Cancel Data Input**

Press  to cancel Data Input Mode.

⑤ Save Data: To save input parameter data, press .

This process is necessary whenever the parameter settings are edited.

Parameters which have been edited will have a [*] mark before the 1st line of the parameter name.

```
(Before edit) PRM  STOP  P : PARAM000
              ↓
(After edit)  PRM  STOP  P*PARAM000
```

After saving the data, the display shows “END”.

```
<Display>
  1                10                20 Characters
1 PRM  END  P : DEFAULT
2
3
4 ***** END *****
```

⑥ Finish Parameter Setting: Press  to go back to File Selection Mode.

(3) Attention for editing parameters

D – VII can have plural parameter files and each file can be edited. After editing parameters, please press to confirm the changes. If is pressed before confirmation, the updates will not be saved to the parameter file. The parameter settings which are set before power off will restore upon the next power on.

(4) Confirm the current network settings

① To check the current network settings on D – VII's display, choose **[NW]** on the very last line of parameter selection mode, and press .

```
<Display>
  1                10                20 Characters
1 PRM   SEL      DEFAULT
2
3        PARAM001
4        PARAM002
                    > [NW]          ← last line
```

② D – VII displays detail of the current network settings

```
<Display>
  1                10                20 Characters
1 NW :  DHCP
2 IP :  192. 168. 0. 100
3 NM :  255. 255. 255. 0
4 GW :  192. 168. 0. 1
```

③ Finish the confirmation of network setting:

Press to go back to Parameter Selection Mode.

3-7. Switch Operation Mode

(1) **Function:** The operation mode upon power on, is depending on the parameter setting (parameter # 29). However, the operation mode is still able to be switched manually after the power on.

(Normal Mode ⇔ Remote command Mode)

(2) Process

> **Normal Mode** → Remote command Mode

① Press  display default mode (OUT Mode).

```
<Display>
  1                10                20 Characters
1 OUT   SEL   >DATA0005
2 DATA-1    DATA0006
3 F : 6      DATA0007
4 R : 216.3M DATA0008
```

② Press  to switch modes, and use  or   keys to select [START].

```
<Display>
  1                10                20 Characters
1 Remote Command?
2
3
4           [START]  RESET
```

> Remote command Mode → Normal Mode

① During Remote command mode, press  to go back to default mode (OUT Mode) of Normal mode.

4. Supplement of Data Input

4-1. Input Alphabet

Alphabetical characters are available for input when typing filename directly and editing parameter data.

Use a numeric keypad to type alphabetical characters.

Press a numeric key on which has an alphabet character you want to type, and keep pressing  until displaying the character you want.

It displays the numbers first, capital letters of alphabet next and small letters of alphabet last.

To backspace, press .

Ex: Type "N"

① Press .

<Display>

```

1                10                20 Characters
1 PRM  STOP P : DEFAULT
2 >0 = 5
3 1 = 1
4 2 = 4800
```

② Press  twice.

<Display>

```

1                10                20 Characters
1 PRM  STOP P : DEFAULT
2 >0 = N
3 1 = 1
4 2 = 4800
```

When any other key except for  is pressed, the character on the display is selected and the cursor moves to the next position to wait for the next character.

➤ Display by  key

Each time pressing  key, D-VII displays like following repeatedly.

[Number] ⇒ [Cap.1] ⇒ [I.c.1] ⇒ [Cap.2] ⇒ [I.c.2] ⇒ [Cap.3] ⇒ [I.c.3]

(Ex) 5 ⇒ M ⇒ m ⇒ N ⇒ n ⇒ O ⇒ o ⇒ 5

4-2. Characters Limit

There is a limit to how many Characters can be entered when typing filenames directly and/or entering parameter data. For typing filenames, the limit is max 59 Characters, and the parameter data depends on the parameter number.

☞ Please refer 7. Parameter for each individual parameter limits.

If Characters are typed over the maximum, the beginning of the string will be erased.

(Ex) Parameter Name (Max: 8 Characters)

0 = P A R A M O O O █ ← If [1] is typed here.

↓

0 = A R A M O O O 1 █ ← [P] will be erased.

4-3. Select Directory

Use to change the current Directory while in File Selection Mode.

Press to go to Directory Selection Mode, and use a numeric keypad:0-9 to select the directory.

DIR#0: For USB Memory Stick

DIR#1-9: For [DIR1] ~ [DIR9]

Set the Directory Pass Name for each directory, on parameter #41-49.

- #41 Directory Pass Name [DIR1] DAT:DATA1 ← Pass name of Directory #1
- #42 Directory Pass Name [DIR2] DAT:DATA2 ← Pass name of Directory #2
- #43 Directory Pass Name [DIR3] DAT:DATA3 ← Pass name of Directory #3
- #44 Directory Pass Name [DIR4] DAT:DATA4 ← Pass name of Directory #4
- #45 Directory Pass Name [DIR5] DAT:DATA5 ← Pass name of Directory #5
- #46 Directory Pass Name [DIR6] DAT:DATA6 ← Pass name of Directory #6
- #47 Directory Pass Name [DIR7] DAT:DATA7 ← Pass name of Directory #7
- #48 Directory Pass Name [DIR8] DAT:DATA8 ← Pass name of Directory #8
- #49 Directory Pass Name [DIR9] DAT:DATA9 ← Pass name of Directory #9

➤ Please refer 7. **Parameter** for parameter settings.

□ **No NC Data file in the directory.**

If the directory does NOT have a data file which has the same extension as the one set by parameter #21, the LCD will display “Not Found”.

(Display Ex.)

1	10	20 Characters
1	OUT	SEL
2	DATA-1	Not Found
3		
4		

!!! Attention !!!

D – VII can tell the difference between capital and small letter of the extension. For example, if parameter #21 is set as “DAT”, LCD does not display the files have the extension: “dat”, and will say “Not Found” instead. The files should have the same extension to be displayed.

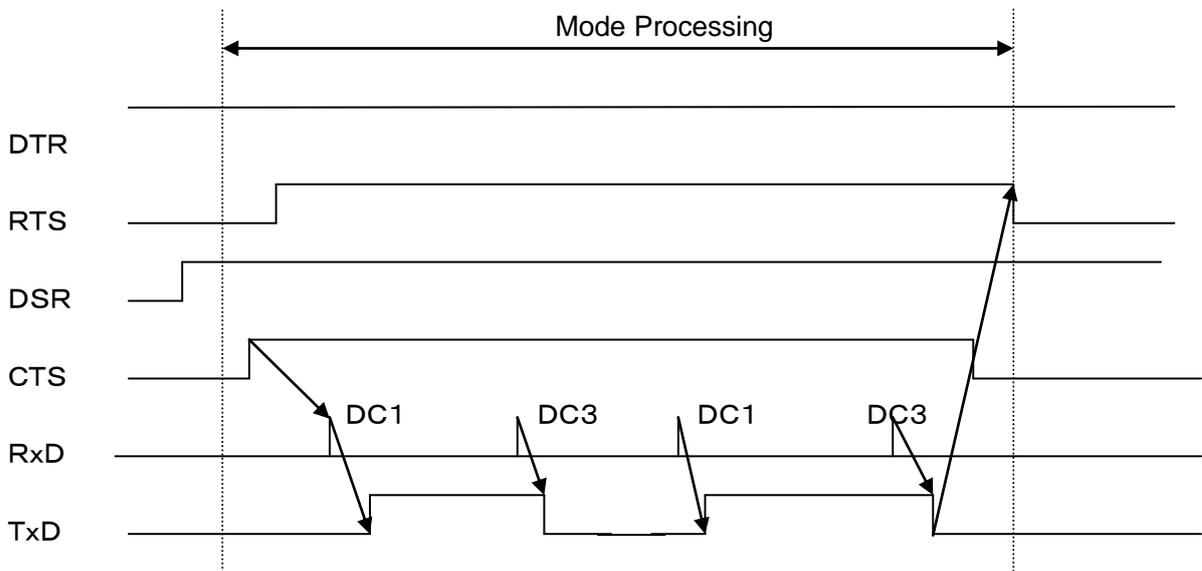
☞ In this manual, “Directory” is the same as “Folder” in Windows.

5. Communication Protocol

The Communication Protocol for data communication with NC machines or CAD/CAM systems is the RS232C interface.

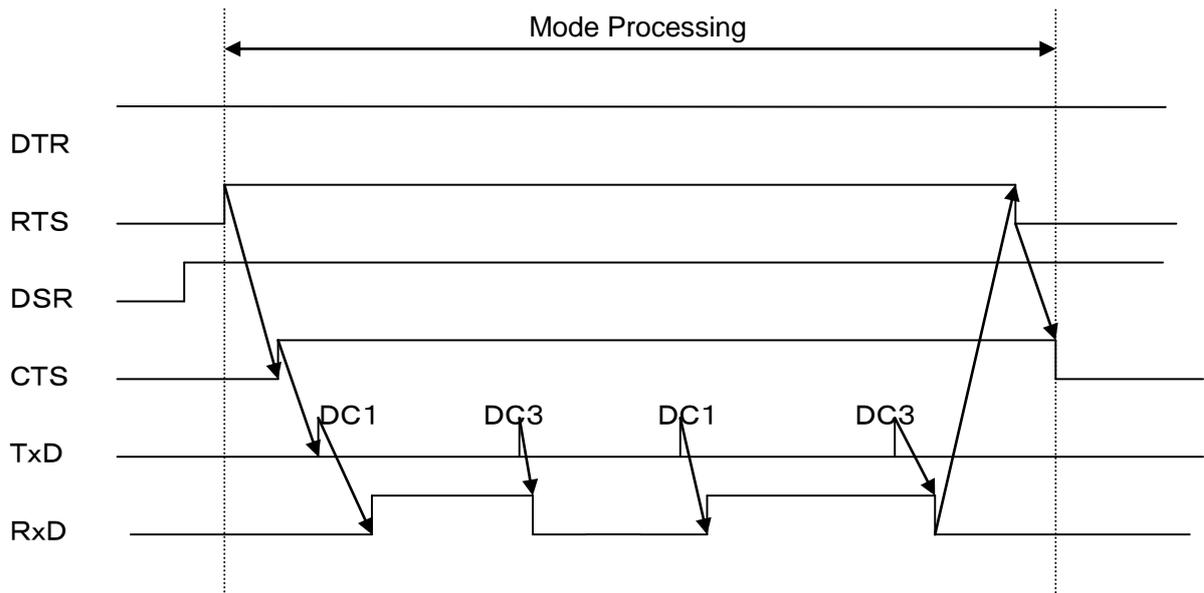
5-1. Output (Data out) : D-VII → NC

- ① Makes RTS signal, "H".
- ② Check if DSR signal is "H".
- ③ Wait until CTS signal becomes "H".
- ④ When receiving code DC1, start outputting data.
(It is possible to make outputting start without waiting DC1 by a parameter setting.)
- ⑤ Stop outputting data when receiving DC3.
- ⑥ When receiving code DC1, start outputting data again.
- ⑦ When all data is output, D-VII finishes the operation. It makes RTS signal "Lo" to finish the operation.
(It is possible to finish the operation when CTS signal becomes "Lo" after receiving code DC3 by a parameter setting.)



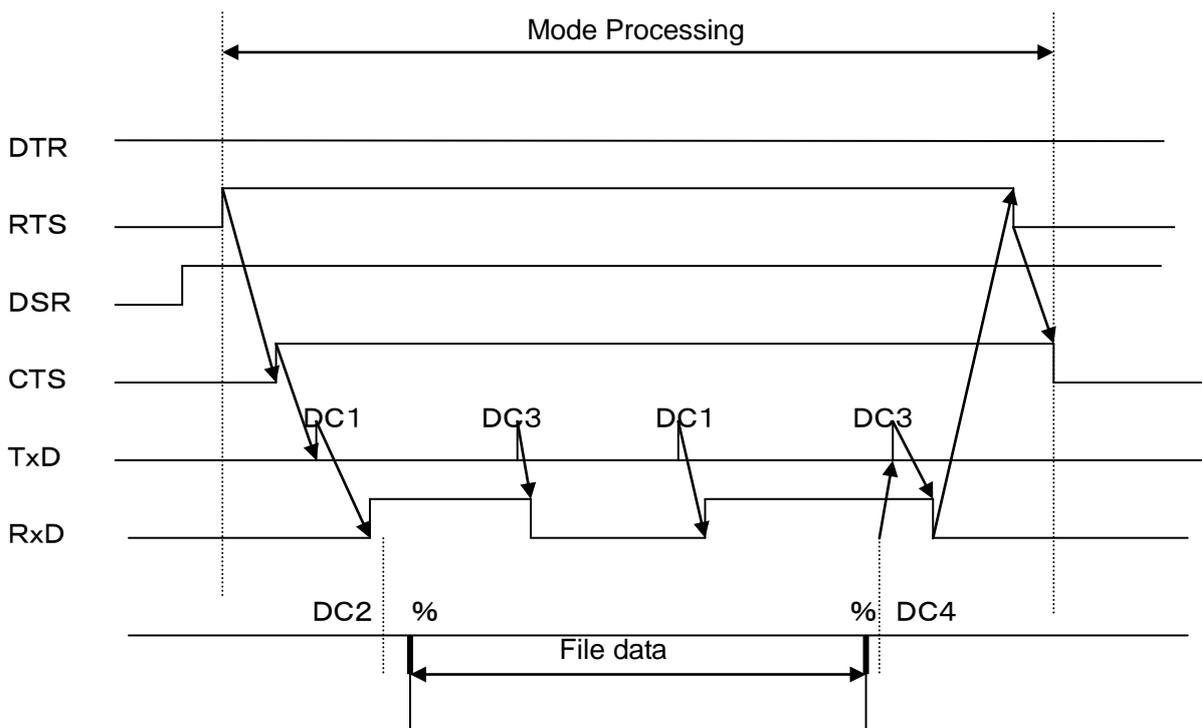
5-2. Input (Data in) : NC → D-VII

- ① Makes RTS signal, "H".
- ② Check if DSR signal is "H".
- ③ When CTS signal becomes "H", send code DC1.
- ④ Wait for code DC2.
(It is possible not to wait DC2 by a parameter setting.)
- ⑤ If the buffer does not have enough capacity, send DC3.
- ⑥ When the buffer receives enough capacity, send DC1 again.
- ⑦ Stop the operation upon receiving DC4.
- ⑧ After finishing operation, send DC3 and make RTS signal "L".



5-3. Input (Data in) %Set: NC → D-VII

- ① Makes RTS signal, "H".
- ② Check if DSR signal is "H".
- ③ Wait for code DC2.
(It is possible not to wait DC2 by a parameter setting.)
- ④ Wait for the first % code.
- ⑤ If the buffer does not have enough capacity, send DC3.
- ⑥ When the buffer receives enough capacity, send DC1 again.
- ⑦ When receiving the second % code, finish getting the data for the file.
(continue receiving)
- ⑧ Upon receiving DC4 or pressing the RESET key, finish the operation.
- ⑨ After finishing operation, send DC3 and make RTS signal "L".



6. Special Function

6-1. Sub-Program

If there is a Sub-Program Name formatted properly, D—VII will send the Sub-Program. Also the Sub-Program's Nest may be called. The Sub-Program has to be in the same directory that the processing program is in.

<Format>

<Keyword for Subprogram Execution> <File name of the Sub-Program>

Keyword for Subprogram Execution :

Description Key Word of Sub-Program. (Max: 13 characters)

Set at Parameter number #22.

Default Setting: "M98P/O"

File name of the Sub-Program: Should be in the same Directory.

*Subprogram name has to be written properly including extension in the main program.

<Ex> Subprogram name: O3001.DAT

Keyword for Subprogram Execution: M98P/O

→ **M98P3001.DAT**

*When parameter number #22 is set "M98P/Prefix", a Sub-Program is able to be called repeatedly by specifying "Separator" character and number of times.

<Ex> Subprogram name: O3001

Keyword for Subprogram Execution: M98P/O Separator character: L

Number to times: 5

→ **M98P3001L5**

- Key word needs to be at the beginning of the block.
- If there is any character, such as " / ", before the key word, subprogram execution will not work.
- Code M02, M30 and % in the called Sub-Program will be ignored.
(The block includes M02, M30 and % will not be sent.)

6-2. Automatic Rewind

If this function is ON, after sending data, the NC data file will be rewound and prepared to be sent again, instead of finishing the process.

- After sending data, wait for the next code DC1 to be set.
- After receiving code DC1 from NC, start sending data from beginning.

7. Parameter

7-1. Parameter File

Parameters are stored in a parameter file: “ * * * * * .PRM”
(There can be more than one parameter file.)

The extension of parameter files should be “.PRM” in capital letters.

7-2. Parameter Details

- (0) Parameter name to be displayed: Nickname of parameter for display on D—VII.
- (1) COM Port: COM1/COM2 for communication I/F with NC.
- (2) Baud Rate: 2400-38400BPS
- (3) Stop Bit: 1bit/2bit
- (4) Character Length: 7bit/8bit
- (5) Parity: NONE / EVEN / ODD
- (6) Character Code: ISO / EIA / ASCII
(In protocol B mode, ISO/EIA is automatic distinction)
- (7) DC1 Character Code: DC1 Code (Usually HEX11)
- (8) DC2 Character Code: DC2 Code (Usually HEX12)
- (9) DC3 Character Code: DC3 Code (Usually HEX93)
- (10) DC4 Character Code: DC4 Code (Usually HEX14)
- (11) Insert NULL: Insert NULL to the beginning of data
- (12) During output, wait for DC1: During output, wait for DC1 from NC before starting
- (13) ACK Character Code: Set when using any codes except DC1 during output
- (14) Output start interval: Interval between receiving DC1 and starting data output
(mm sec)
- (15) During input, wait for DC2: After DC2 code, create a file with the data during input
(DC2 is NOT included)
- (16) Auto rewind: Rewind the operation during data output.
- (17) CTS Control during output: Flow control during data output (DC1/DC3 or CTS)
- (18) RTS Control during output: Flow control during data input (DC1/DC3 or RTS)
- (19) Input file punctuation format: File punctuation of the created file during data input.
(DC2/DC4/%)
- (20) Percentage of Communication Delay: Invalid
- (21) File Extension: Extension of data file
- (22) Keyword for Subprogram Execution: Keyword for calling a file from the main program
(M98P/Prefix-keyword / *- / free-word)
- (23) Ignore DSR: Ignore DSR from the NC machine during data
input/output.
- (24) Wait for DC3 to finish output: Finish outputting data after receiving DC3 code.
- (25) Output pattern of '%': How to operate “%” in program data during output.
- (26) Begin/End mark of remote command: Set the marks by character code.
- (27) Spare:
- (28) Monitoring: For monitoring IO when optional DI/DO is used.
- (29) Startup operation mode: Operation mode when the system starts up.
- (30) Startup drive: Drive when the system starts up.

- (31) Directory Name [DIR1]: Nickname of drive #1 to find with DIR key.
(Actual name of drive/directory is set at parameter #41.)
- (32) Directory Name [DIR2]: Nickname of drive #2 to find with DIR key.
(Actual name of drive/directory is set at parameter #42.)
- (33) Directory Name [DIR3]: Nickname of drive #3 to find with DIR key.
(Actual name of drive/directory is set at parameter #43.)
- (34) Directory Name [DIR4]: Nickname of drive #4 to find with DIR key.
(Actual name of drive/directory is set at parameter #44.)
- (35) Directory Name [DIR5]: Nickname of drive #5 to find with DIR key.
(Actual name of drive/directory is set at parameter #45.)
- (36) Directory Name [DIR6]: Nickname of drive #6 to find with DIR key.
(Actual name of drive/directory is set at parameter #46.)
- (37) Directory Name [DIR7]: Nickname of drive #7 to find with DIR key.
(Actual name of drive/directory is set at parameter #47.)
- (38) Directory Name [DIR8]: Nickname of drive #8 to find with DIR key.
(Actual name of drive/directory is set at parameter #48.)
- (39) Directory Name [DIR9]: Nickname of drive #9 to find with DIR key.
(Actual name of drive/directory is set at parameter #49.)
- (40) Spare:
- (41) Directory pass Name [DIR1]: Actual name of Drive #1.
- (42) Directory pass Name [DIR2]: Actual name of Drive #2.
- (43) Directory pass Name [DIR3]: Actual name of Drive #3.
- (44) Directory pass Name [DIR4]: Actual name of Drive #4.
- (45) Directory pass Name [DIR5]: Actual name of Drive #5.
- (46) Directory pass Name [DIR6]: Actual name of Drive #6.
- (47) Directory pass Name [DIR7]: Actual name of Drive #7.
- (48) Directory pass Name [DIR8]: Actual name of Drive #8.
- (49) Directory pass Name [DIR9]: Actual name of Drive #9.
- (50) Spare:
- (51) Communication Protocol: Protocol B / MAZATROL
- (52) **[MZ]** command response mode:
- (53) **[MZ]** parity:
- (54) **[MZ]** command response delay:
- (55) **[MZ]** command response time out:
- *When parameter #51 is [Protocol B], #52-55 are invalid. Please refer "7-3" to setup #52-55
- (56) Display network settings: Display parameter #56-61, or not display
- (57) Method to set IP Address: Set IP Address of D—VII via DHCP / Manual setting
- (58) IP Address: IP Address of D—VII
- (59) Subnet mask: Subnet Mask of Network
- (60) Gateway: IP Address of Gateway Server
- (61) Name Server: IP Address of Name Server

7-3. Parameter Details

- (0) Parameter name to be displayed
: Nickname of parameter for display on D—VII.
<Parameter type> Character line
<Maximum character amount> 8 Characters
<Range> Option
<Default> DEFAULT
- (1) COM Port
: For communication I/F with NC
<Parameter type> Numerical Value
<Maximum character amount> 13 Characters
<Range> 1 / 2
1 = COM1
2 = COM2
<Default> 1
- (2) Baud Rate
: For communication baud rate with NC
<Parameter type> Numerical Value
<Maximum character amount> 13 Characters
<Range> 1200 / 1800 / 2400 / 4800 / 9600 / 19200 / 38400
<Default> 4800
- (3) Stop Bit
: Select Stop Bit (1bit / 2bit)
<Parameter type> Numerical Value
<Maximum character amount> 13 Characters
<Range> 1 / 2
1 = 1bit
2 = 2bit
<Default> 2
- (4) Character Length
: Select Character Length (7bit / 8bit)
<Parameter type> Numerical Value
<Maximum character amount> 13 Characters
<Range> 7 / 8
1 = 7bit
2 = 8bit
<Default> 2

- (5) Parity
: Select Parity (NONE/EVEN/ODD)
<Parameter type> Numerical Value
<Maximum character amount> 13 Characters
<Range> 0 / 1 / 2
0 = NONE
1 = ODD
2 = EVEN
<Default> 0
- (6) Character Code
: Select Character Code (ISO/EIA/ASCII)
<Parameter type> Numerical Value
<Maximum character amount> 13 Characters
<Range> 1 / 2 / 3
1 = ISO
2 = EIA
3 = ASCII
<Default> 1
- (7) DC1 Character Code
DC1 Code
: Set by hexadecimal number (Usually 11H)
<Parameter type> Numerical Value (hexadecimal number)
<Maximum character amount> 13 Characters
<Range> 00 - FF
<Default> 11
- (8) DC2 Character Code
DC2 Code
: Set by hexadecimal number (Usually 12H)
<Parameter type> Numerical Value (hexadecimal number)
<Maximum character amount> 13 Characters
<Range> 00 - FF
<Default> 12
- (9) DC3 Character Code
DC3 Code
: Set by hexadecimal number (Usually 93H)
<Parameter type> Numerical Value (hexadecimal number)
<Maximum character amount> 13 Characters
<Range> 00 - FF
<Default> 93

- (10) DC4 Character Code
 DC4 Code
 : Set by hexadecimal number (Usually 14H)
 <Parameter type> Numerical Value (hexadecimal number)
 <Maximum character amount> 13 Characters
 <Range> 00 - FF
 <Default> 14
- (11) Insert NULL
 : Insert NULL to the beginning of data
 <Parameter type> Numerical Value
 <Maximum character amount> 13 Characters
 <Range> 0 / 1 / 2
 0 = NOT Insert NULL
 1 = Insert NULL
 2 = Insert NULL 10 characters both beginning and end of
 the data
 <Default> 0
- (12) During output, wait for DC1
 : During output, wait for DC1 from NC before starting
 <Parameter type> Numerical Value
 <Maximum character amount> 13 Characters
 <Range> 0 / 1
 0 = Wait DC1
 1 = NOT Wait DC1
 <Default> 0
- (13) ACK Character Code
 : Set when using codes other than DC1 to start output
 : Set by hexadecimal number
 : Available with the codes other than [0]. (0 = DC1)
 <Parameter type> Numerical Value (hexadecimal number)
 <Maximum character amount> 13 Characters
 <Range> 00 - FF
 <Default> 0
- (14) Output start interval
 : Interval between receiving DC1 and start outputting data (mm sec)
 <Parameter type> Numerical Value
 <Maximum character amount> 13 Characters
 <Range> 0 / 2-
 <Default> 0

- (15) During input, wait for DC2
: After DC2, create a file with the data code during data input. (DC2 is not included)
<Parameter type> Numerical Value
<Maximum character amount> 13 Characters
<Range> 0 / 1
0 = Wait for DC2
1 = Not Wait for DC2
<Default> 0
- (16) Auto rewind
: Rewind the operation during data output.
<Parameter type> Numerical Value
<Maximum character amount> 13 Characters
<Range> 0 / 1
0 = Do NOT Auto rewind
1 = Do Auto rewind
<Default> 0
- (17) CTS Control during output
: Flow control during data output
<Parameter type> Numerical Value
<Maximum character amount> 13 Characters
<Range> 0 / 1
0 = Control by DC1 / DC3
1 = Control by CTS
<Default> 0
- (18) RTS Control during output
: Flow control during data input
<Parameter type> Numerical Value
<Maximum character amount> 13 Characters
<Range> 0 / 1
0 = Control by DC1 / DC3
1 = Control by RTS
<Default> 0
- (19) Input file punctuation format
: File punctuation of the created file during data input (DC2/DC4/%)
<Parameter type> Numerical Value
<Maximum character amount> 13 Characters
<Range> 0 / 1
0 = Punctuated by DC2/DC4
1 = Punctuated by [%]
2 = Create file without punctuation code
<Default> 0

- (20) Percentage of Communication Delay: **Invalid**
 * **D—VII will ignore if this parameter regardless if it is changed.**

<Parameter type> Numerical Value
 <Maximum character amount> 13 Characters
 <Range> Random
 <Default> 50

- (21) File Extension

: Extension of data file

* **D—VII distinguishes between capital and small letters.**

<Parameter type> Character line
 <Maximum character amount> 3 Characters
 <Range> Random
 <Default> DAT(*capital letter)

- (22) Keyword for Subprogram Execution

: Keyword for calling a file from the main program

Choose, M98P/Prefix-keyword(ex: O, :), * —, or free-word.

<Parameter type> Character line
 <Maximum character amount> 13 Characters
 <Range> Random
 <Default> M98P/O (O: as prefix-keyword)

*When parameter number #22 is set “M98P/Prefix”, a Sub-Program is able to be called repeatedly by specifying “Separator” character and number of times.
 (ex: M98P/O/L)

*Push

3
YZ\

 once and

ALP

 6times to put “*”, and Push

1
STU

 once and

ALP

 twice to put “-”.

- (23) Ignore DSR

: Ignore DSR from the NC machine during data input/output.

<Parameter type> Numerical Value
 <Maximum character amount> 13 Characters
 <Range> 0 / 1
 0 = Error with DSR=”L”
 1 = Ignore DSR
 <Default> 1

- (24) Wait for DC3 to finish output

: Finish outputting data after receiving DC3 code.

<Parameter type> Numerical Value
 <Maximum character amount> 13 Characters
 <Range> 0 / 1
 0 = Wait for DC3
 1 = NOT wait for DC3
 <Default> 1

- (25) Output pattern of '%'
: How to operate “%” in program data during output.
- | | |
|----------------------------|--|
| <Parameter type> | Numerical Value |
| <Maximum character amount> | 13 Characters |
| <Range> | 0 / 1 / 2 / 3 / 4 / 5 / 6 / 7 |
| | 0 = No Operation |
| | 1 = Add % to the beginning of data |
| | 2 = Add % to the end of data |
| | 3 = Add % to the both beginning and end of data |
| | 4 = No Operation |
| | 5 = Add %+CRLF to the beginning of data |
| | 6 = Add %+CRLF to the end of data |
| | 7 = Add %+CRLF to the both beginning and end of data |
| <Default> | 0 |
- (26) Begin/End mark of remote command
: Set Begin/End marks by ISO or ASCII character code.
- | | |
|----------------------------|----------------|
| <Parameter type> | Character line |
| <Maximum character amount> | 5 Characters |
| <Range> | Random |
| <Default> | 28/A9 |
- (27) Spare
- (28) Monitoring
: For monitoring IO when optional DI/DO is used.
- | | |
|----------------------------|--------------------------|
| <Parameter type> | Numerical Value |
| <Maximum character amount> | 13 Characters |
| <Range> | 0 / 1 |
| | 0 = Don't use monitoring |
| | 1 = Use monitoring |
| <Default> | 0 |
- (29) Startup operation mode
: Operation mode when the system starts up.
- | | |
|----------------------------|----------------------------------|
| <Parameter type> | Numerical Value |
| <Maximum character amount> | 13 Characters |
| <Range> | 0 / 1 |
| | 0 = Normal (Normal Mode) |
| | 1 = Remote (Remote Command Mode) |
| <Default> | 0 |
- (30) Startup drive
: Setting the drive when the system starts up.
- | | |
|----------------------------|-----------------|
| <Parameter type> | Numerical Value |
| <Maximum character amount> | 13 Characters |
| <Range> | 0 - 9 |
| <Default> | 1 |

- (31) Directory Name [DIR1]
: Nickname of drive #1 to find with DIR key.
Actual name of drive/directory is set at parameter #41.
<Parameter type> Character line
<Maximum character amount> 10 Characters
<Range> Random
<Default> DATA-1
- (32) Directory Name [DIR2]
: Nickname of drive #2 to find with DIR key.
Actual name of drive/directory is set at parameter #42.
<Parameter type> Character line
<Maximum character amount> 10 Characters
<Range> Random
<Default> DATA-2
- (33) Directory Name [DIR3]
: Nickname of drive #3 to find with DIR key.
Actual name of drive/directory is set at parameter #43.
<Parameter type> Character line
<Maximum character amount> 10 Characters
<Range> Random
<Default> DATA-3
- (34) Directory Name [DIR4]
: Nickname of drive #4 to find with DIR key.
Actual name of drive/directory is set at parameter #44.
<Parameter type> Character line
<Maximum character amount> 10 Characters
<Range> Random
<Default> DATA-4
- (35) Directory Name [DIR5]
: Nickname of drive #5 to find with DIR key.
Actual name of drive/directory is set at parameter #45.
<Parameter type> Character line
<Maximum character amount> 10 Characters
<Range> Random
<Default> DATA-5
- (36) Directory Name [DIR6]
: Nickname of drive #6 to find with DIR key.
Actual name of drive/directory is set at parameter #46.
<Parameter type> Character line
<Maximum character amount> 10 Characters
<Range> Random
<Default> DATA-6

- (37) Directory Name [DIR7]
 : Nickname of drive #7 to find with DIR key.
 Actual name of drive/directory is set at parameter #47.
 <Parameter type> Character line
 <Maximum character amount> 10 Characters
 <Range> Random
 <Default> DATA-7
- (38) Directory Name [DIR8]
 : Nickname of drive #8 to find with DIR key.
 Actual name of drive/directory is set at parameter #48.
 <Parameter type> Character line
 <Maximum character amount> 10 Characters
 <Range> Random
 <Default> DATA-8
- (39) Directory Name [DIR9]
 : Nickname of drive #9 to find with DIR key.
 Actual name of drive/directory is set at parameter #49.
 <Parameter type> Character line
 <Maximum character amount> 10 Characters
 <Range> Random
 <Default> DATA-9
- (40) Spare
- (41) Directory Path Name of [DIR1]
 : Actual path name of Drive #1 to find with DIR key.
 * Please refer to [7-5. Directory Pass Name Settings] to set the format.
 <Parameter type> Character line
 <Maximum character amount> 59 Characters
 <Range> Random
 <Default> DAT:DATA1
- (42) Directory Path Name of [DIR2]
 : Actual path name of Drive #2 to find with DIR key.
 * Please refer to [7-5. Directory Pass Name Settings] to set the format.
 <Parameter type> Character line
 <Maximum character amount> 59 Characters
 <Range> Random
 <Default> DAT:DATA2
- (43) Directory Path Name of [DIR3]
 : Actual path name of Drive #3 to find with DIR key.
 * Please refer to [7-5. Directory Pass Name Settings] to set the format.
 <Parameter type> Character line
 <Maximum character amount> 59 Characters
 <Range> Random
 <Default> DAT:DATA3

- (44) Directory Path Name of [DIR4]
 : Actual path name of Drive #4 to find with DIR key.
 * Please refer to [7-5. Directory Pass Name Settings] to set the format.
 <Parameter type> Character line
 <Maximum character amount> 59 Characters
 <Range> Random
 <Default> DAT:DATA4
- (45) Directory Path Name of [DIR5]
 : Actual path name of Drive #5 to find with DIR key.
 * Please refer to [7-5. Directory Pass Name Settings] to set the format.
 <Parameter type> Character line
 <Maximum character amount> 59 Characters
 <Range> Random
 <Default> DAT:DATA5
- (46) Directory Path Name of [DIR6]
 : Actual path name of Drive #6 to find with DIR key.
 * Please refer to [7-5. Directory Pass Name Settings] to set the format.
 <Parameter type> Character line
 <Maximum character amount> 59 Characters
 <Range> Random
 <Default> DAT:DATA6
- (47) Directory Path Name of [DIR7]
 : Actual path name of Drive #7 to find with DIR key.
 * Please refer to [7-5. Directory Pass Name Settings] to set the format.
 <Parameter type> Character line
 <Maximum character amount> 59 Characters
 <Range> Random
 <Default> DAT:DATA7
- (48) Directory Path Name of [DIR8]
 : Actual path name of Drive #8 to find with DIR key.
 * Please refer to [7-5. Directory Pass Name Settings] to set the format.
 <Parameter type> Character line
 <Maximum character amount> 59 Characters
 <Range> Random
 <Default> DAT:DATA8
- (49) Directory Path Name [DIR9]
 : Actual path name of Drive #9 to find with DIR key.
 * Please refer to [7-5. Directory Pass Name Settings] to set the format.
 <Parameter type> Character line
 <Maximum character amount> 59 Characters
 <Range> Random
 <Default> DAT: DATA9

(50) Spare

(51) Communication Protocol

:Select Protocol B or MAZATROL

<Parameter type> Character line

<Maximum character amount> 13 Characters

<Range> B / M / T

B = Protocol B

M = MZ-M Protocol

(For MAZATROL M2/T2/M32/T32/M-plus/T-plus)

T = MZ-T1 Protocol

(For MAZATROL M1/T1)

<Default> B

*"MBS protocol" which is displayed on Web setting display is not available.

*Parameter #52-55 are only available when #51 is set to M or T.

(52) **[MZ]** Command response Mode

<Parameter type> Numerical Value

<Setting> 00

(53) **[MZ]** parity

<Parameter type> Numerical Value

<Range> 0 / 1

0 = Not insert

1 = Insert

<Setting> 1

(54) **[MZ]** command response delay

<Parameter type> Numerical Value

<Setting> 0

(55) **[MZ]** command response time out

<Parameter type> Numerical Value

<Setting> 5

(56) Display Network Settings

: Display parameter #56-60 or not display

<Parameter type> Numerical Value

<Maximum character amount> 13 Characters

<Range> 0 / 1

0 = Display

1 = Not Display

<Default> 1

- (57) Method to Set IP Address
 : Set IP Address of D—VII via DHCP / Manual setting.
 <Parameter type> Numerical Value
 <Maximum character amount> 13 Characters
 <Range> 1 / 2
 1 = DHCP
 2 = Manual Setting
 <Default> 1
- (58) IP Address
 : IP Address of D—VII
 <Parameter type> Numerical Value
 <Maximum character amount> 13 Characters
 <Range> 0-9
 <Default> 192.168.0.100
- (59) Subnet mask
 : Subnet Mask of the Network
 <Parameter type> Numerical Value
 <Maximum character amount> 13 Characters
 <Range> 0-9
 <Default> 255.255.255.0
- (60) Gateway
 : IP Address of Gateway Server
 <Parameter type> Numerical Value
 <Maximum character amount> 13 Characters
 <Range> 0-9
 <Default>
- (61) Name Server
 : IP Address of Name Server
 <Parameter type> Numerical Value
 <Maximum character amount> 13 Characters
 <Range> 0-9
 <Default>

 In this manual, “Directory” is the same as “Folder” in Windows.

7-4. Default Parameter Files

*Default parameter is set "DEFAULT".

No.	Parameter File Name	DEFAULT.PRM	USER096.PRM	USER192.PRM	USER384.PRM	MZTRL.PRM
0	Parameter name to be displayed	DEFAULT	USER096	USER192	USER192	MZTRL.
1	COM Port	1	1	1	1	1
2	Baud Rate	4800	9600	19200	38400	4800
3	Stop Bit	2	2	2	2	2
4	Character Length	8	8	8	8	8
5	Parity	0	0	0	0	0
6	Character Code	1	1	1	1	1
7	DC1 Character Code	11	11	11	11	11
8	DC2 Character Code	12	12	12	12	12
9	DC3 Character Code	93	93	93	93	93
10	DC4 Character Code	14	14	14	14	14
11	Insert NULL	0	0	0	0	0
12	During output, wait for DC1	0	0	0	0	0
13	ACK Character Code	0	0	0	0	0
14	Output start interval	0	0	0	0	0
15	During input, wait for DC2	0	0	0	0	0
16	Auto rewind	0	0	0	0	1
17	CTS Control during output	0	0	0	0	0
18	RTS Control during output	0	0	0	0	0
19	Input file punctuation format	0	0	0	0	0
20	Percentage of Communication delay	50	50	50	50	50
21	File Extension	DAT	DAT	DAT	DAT	DAT
22	Keyword for Subprogram Execution	M98P/O	M98P/O	M98P/O	M98P/O	M98P/O
23	Ignore DSR	1	1	1	1	1
24	Wait for DC3 to finish output	1	1	1	1	1
25	Output pattern of '%'	0	0	0	0	0
26	Begin/Eng mark of remote command	28/A9	28/A9	28/A9	28/A9	28/A9
27	Spare					
28	Monitoring	0	0	0	0	0
29	Startup operation mode	0	0	0	0	0
30	Startup drive	1	1	1	1	1
31	Directory Name [DIR1]	DATA-1	DATA-1	DATA-1	DATA-1	DATA-1
32	Directory Name [DIR2]	DATA-2	DATA-2	DATA-2	DATA-2	DATA-2
33	Directory Name [DIR3]	DATA-3	DATA-3	DATA-3	DATA-3	DATA-3
34	Directory Name [DIR4]	DATA-4	DATA-4	DATA-4	DATA-4	DATA-4
35	Directory Name [DIR5]	DATA-5	DATA-5	DATA-5	DATA-5	DATA-5
36	Directory Name [DIR6]	DATA-6	DATA-6	DATA-6	DATA-6	DATA-6
37	Directory Name [DIR7]	DATA-7	DATA-7	DATA-7	DATA-7	DATA-7
38	Directory Name [DIR8]	DATA-8	DATA-8	DATA-8	DATA-8	DATA-8
39	Directory Name [DIR9]	DATA-9	DATA-9	DATA-9	DATA-9	DATA-9
40	Spare					
41	Directory pass Name [DIR1]	DAT:DATA1	DAT:DATA1	DAT:DATA1	DAT:DATA1	DAT:DATA1
42	Directory pass Name [DIR2]	DAT:DATA2	DAT:DATA2	DAT:DATA2	DAT:DATA2	DAT:DATA2
43	Directory pass Name [DIR3]	DAT:DATA3	DAT:DATA3	DAT:DATA3	DAT:DATA3	DAT:DATA3
44	Directory pass Name [DIR4]	DAT:DATA4	DAT:DATA4	DAT:DATA4	DAT:DATA4	DAT:DATA4
45	Directory pass Name [DIR5]	DAT:DATA5	DAT:DATA5	DAT:DATA5	DAT:DATA5	DAT:DATA5
46	Directory pass Name [DIR6]	DAT:DATA6	DAT:DATA6	DAT:DATA6	DAT:DATA6	DAT:DATA6
47	Directory pass Name [DIR7]	DAT:DATA7	DAT:DATA7	DAT:DATA7	DAT:DATA7	DAT:DATA7
48	Directory pass Name [DIR8]	DAT:DATA8	DAT:DATA8	DAT:DATA8	DAT:DATA8	DAT:DATA8
49	Directory pass Name [DIR9]	DAT:DATA9	DAT:DATA9	DAT:DATA9	DAT:DATA9	DAT:DATA9
50	Spare					
51	Communication Protocol	B	B	B	B	M
52	[MZ]command response mode	00	00	00	00	00
53	[MZ]Parity	1	1	1	1	1
54	[MZ]command response delay	0	0	0	0	0
55	[MZ]command response time out	5	5	5	5	5
56	Display network settings	1	1	1	1	1
57	Method to set IP Address	1:DHCP	1:DHCP	1:DHCP	1:DHCP	1:DHCP
58	IP Address	192.168.0.100	192.168.0.100	192.168.0.100	192.168.0.100	192.168.0.100
59	Subnet mask	255.255.255.0	255.255.255.0	255.255.255.0	255.255.255.0	255.255.255.0
60	Gateway					
61	Name Server					

7-5. Setting/Editing Parameters

(1) How to set

There are the following three methods to edit parameters.

- Function on D—VII
- Web (Web browser) **【Recommended】**
- Direct editing of parameter files

(2) Function on D—VII

Parameters may be set without a network connection with this method.

Please refer to [3-5. **Editing Parameters**] for more details.

* It is easier to edit parameters via the following method (Web) if D—VII is connected to a network because using a function on D—VII may have difficulties, such as: the display only showing the parameter number and its value, and the operation is only via a numeric keypad.

(3) Web (Web browser)

D—VII has a Web server function for the setting system and parameter settings.

If D—VII can be connected to a network, this method is the most effective way to edit parameters.

Here are some merits:

- Not only parameter number but also the parameter details are visible.
- Easy to understand with the detail next to the parameter value and simply selecting the desired parameter without entering a numerical value.

Please refer [10. **Web Settings**] for more details.

(4) Direct editing of parameter files

D—VII's parameter file is in text format so the file in the shared folder may be edited via notepad or some other text based editor.

However, this method might cause a system error if there is a mistake after editing. Therefore, this method is not recommended.

7-6. Directory Path Settings

<Setting Format>

DAT:[/]<Directory Name>[/<Directory Name>/...]

USB:[/]<Directory Name>[/<Directory Name>/...]

SMB://<Computer Name>/<Share Folder Name>[/<Directory Name>/...]

- The item in [] can be omitted.
- Identifier: 「DAT:」 means the stored drive in D – VII, 「USB:」 means USB memory and 「SMB:」 means network drive.

<Directory of stored drive>

DAT:[/]<Directory Name>[/<Directory Name>/...]

- Punctuation between directories is 「/」 (Slash).
- First 「/」 can be omitted.

(Example)

DAT:DATA1

DAT:DATA1/TEST

DAT:/DATA1

<Directory of USB memory>

USB:[/]<Directory Name>[/<Directory Name>/...]

- Punctuation between directories is 「/」 (Slash).
- First 「/」 can be omitted.

(Example)

USB:DATA

USB:DATA/TEST

USB:/DATA

<Directory of Network Drive>

SMB://<Computer Name>/<Share Name>[/<Directory Name>/...]

- Punctuation is 「/」 (Slash).
- The first mark is 「//」 which can NOT be omitted.
- <Computer Name> and <Share Name> can NOT be omitted.

(Example)

SMB://PC1/DNC

SMB://PC1/DNC/DATA

7-7. Backup and Restoration of Parameters

Backup

The parameter file can be downloaded to a PC from the share folder with a file sharing function or FTP.

Backed up parameter files can be shared with or moved to another D—VII, and used for system restoration in case D—VII needs to be replaced.

Please periodically backup your parameter file.

Restoration

The parameter file backups downloaded to a PC can be restored to the D—VII in cases where the D—VII parameter file becomes corrupt.

Please upload the parameter file to the share folder from a PC with file sharing function or FTP.

Parameter file will be available in D—VII by uploading to the share folder.

- ☞ Please refer [11. FTP Function] for FTP function, and [9-3. Share Folder] for sharing folder of parameter file.

8. USB Memory

Use of a portable USB memory stick makes it possible to directly transfer large amounts of data created on a PC to the NC machine, and directly store the data taken from the NC machine.

For facilities which do not have a network system, D—VII can still be used with USB memory for long continuous operation.

(1) Select root directory of USB memory.

There are no special settings for reading/writing to the root directory of USB memory.

Just press during file selecting mode to go to Directory Selecting mode. Then press [0] to access the root directory of your USB memory.

(2) Select sub directory on USB memory.

To read/write to a sub directory on your USB memory because the NC data is saved on there, it is necessary to set the sub directory on the parameter #41-#49 (Directory Pass Name) first.

(Example)

USB:DATA

USB:DATA/TEST

☞ Please refer to [7-5. Directory Pass Settings] for more information on settings.

After setting these parameters, please go to Directory Selecting mode. Then, choose the DIR number which was set to the sub directory of USB memory.

※ If your USB memory is switched to the another one, D—VII may need to be reset before processing may continue. It depends on the type of USB memory.

9. Remote Command Mode

While following the commands from an NC machine, the output file is prepared and the data is sent when the D—VII receives the command to start sending data.

9-1. Command Detail

(1) CF450 emulation command

<Description of Code>

SPACE Space code (Any 1 byte code)

? '+', '/', ':', '&' or '?' (The character that is not used in NC data)

Input folder name instead of 'FOLDER1' and 'FOLDER2'.

Input File name instead of 'FILENAME'.

①F01: Output data from D—VII to NC with subprogram if subprogram execution command is in the program

Process

- 1) Punch-out remote command program from NC:
(Create command program with a program number)

```
%  
Oxxxx  
(F01SPACEFOLDER1?FOLDER2?FILENAME)  
%
```

- 2) Request command to D—VII from NC: (NC has to be Program Read function)
Data will be started sending out when D—VII receives DC1 (set by parameter #7) from NC.

②F11: Output data from D—VII to NC without subprogram if subprogram execution command is in the program

Process

- 1) Punch-out remote command program from NC:
(Create command program with a program number)

```
%  
Oxxxx  
(F01SPACEFOLDER1?FOLDER2?FILENAME)  
%
```

- 2) Request command to D—VII from NC: (NC has to be Program Read function)
Data will be started sending out when D—VII receives DC1 (set by parameter #7) from NC.

③F02: Input and save data to D—Ⅶ from NC. It corresponds to each program punch-out from NC.

Process

- 1) Punch-out remote command program from NC:
(Create command program with a program number)

```
%  
Oxxxx  
(F02[SPACE]FOLDER1[FOLDER2]FILENAME)  
%
```

- 2) Output data from NC

④F20: Input and save data to D—Ⅶ from NC. It corresponds to punch-out of all programs (punch-all) which is punctuated O/L number from NC. Input programs to D—Ⅶ will automatically be saved with using O number as file name.

Process

- 1) Punch-out remote command program from NC:
(Create command program with a program number)

```
%  
Oxxxx  
(F20) ←You can not specify folder name and file name.  
%
```

- 2) Output data from NC

Note:

- Any remote program requires CRLF right before begin mark and right after end mark.
(Begin/end marks can be set by parameter #25)
- When the parameter #29 is set to "0" (Normal mode), remote command will be available to the directory which is displayed right before switching to Remote command mode.
- When the parameter #29 is set to "1" (Remote command mode), remote command will be available to the directory which is set by parameter #30.
- The files have an extension which is set by parameter #21 is available to be output/input. Do not write extension after the file name in remote command begin/end marks because the extension set by parameter #21 will be automatically add.
If output/input the files have more than one kind of extension, please keep the parameter #21 blank and write file name including extension in remote command begin/end marks.
- When you use Remote command 'F01', 'F11' or 'F02', you can specify only sub folders that are set by parameter #41~#49.
- You do not have to input the folder names that have been set by parameter #41~#49 in Remote command.

(2) FC cassette protocol emulation command

Note: When the parameters between NC and D—VII are matched and input/output device is set as F Floppy Cassette or F Handy File, remote command will be automatically sent.

9-2. Cancel output

<Cancel, before sending data>

For both above commands ① and ②, press  on D—VII's operation panel. D—VII will then wait for a command, and will return to Normal Mode when  is pressed.

<Cancel, after data is sent>

For both above commands ① and ②, press  on D—VII's operation panel. D—VII will then wait for a command, and will return to Normal Mode when  is pressed.

Some NC machines send “SYN”, “NAK” and “CAN” codes through RS232C interface when their reset switches are pressed. When D—VII received these codes, it will stop output and display waiting for a command.

9-3. Display of Remote command

①When D—VII is waiting for command:

Remote Command:

②During D—VII is receiving command:

FA01

1st line: The received designated remote command

(ex)FA01, 1234

2nd line: (Directory Name)and(the designated output file name)

3rd line: (Current output data amount by 2KB) and (File byte size)

4th line: The indicator “>>>” during output or error details if D—VII has any error

10. Network Drive and Share Folder

D—VII has a file sharing function via Windows network so that the uploading and storage of large amounts of NC program data created on systems such as CAD/CAM can be made easily and speedily through out the network.

Also, it is possible to directly send NC data stored on network drive to NC machine.

10-1. Network Settings

To access a network drive and a share folder, it is necessary that the network settings of D—VII are set properly. Please use a PC which is on the same network to check if D—VII accesses on the network properly

☞ Please refer to [10-4. Network Settings] for more information on network settings.

10-2. Network Drive

A directory which can connect to an external PC via the file sharing function is called a “Network Drive”.

(1) Setting a Network Drive

To set a Network Drive, describe a path name for the share folder on a PC that you want D—VII to connect to, in parameters #41-#49 (Directory Path Name).

(Example)

SMB://PC1/DNC

SMB://PC1/DNC/DATA

☞ Please refer to [7-5. Directory Path Settings] on how to format these settings.

After setting up these parameters, please go to Directory Selecting mode. Then, choose the DIR number of the USB memory sub directory for Read/Write.

(2) Settings for PCs which D—VII connects to.

D—VII uses Guest Connections to connect to a Network Drive.

D—VII needs to be set to Guest Connection on any system which can supply Network Drives, such as: CAD/CAM systems or PCs. D—VII does not have an authorization function because of its limitations.

We strongly recommend that you select the folders you want to share to prevent issues with security.

If you have any question about guest connections and sharing folders, please refer a manual for your system or ask your system vendor.

(3) In case D—VII can NOT connect to a network drive.

D—VII tries to connect to the network drive when the DIR number which was set to the network drive in the Directory Selection mode is selected.

On selection, a timeout error will occur if there is a parameter description error, wiring error or a problem with the communication channel. D—VII will display “Not Found”. In this case it is not an alarm.

Timeout is about 1minute, however, it depends on your network environment.

10-3. Share Folder

D—VII shares the store directory for NC data file on an internal flash disk as well as the parameter file. This parameter which is shared with the network is called “Share Folder” on D—VII.

This manual assumes that the user uses Microsoft Windows XP. If you use a different Operating System, you may still use sharing functions with your network. Please refer the manual for your system.

(1) Sharing Folder Name

D—VII shares a store directory for NC data file as well as parameter file. Please go to “My Network” on Windows, and use this share name.

NC data file : KRS-DATA
Parameter file : KRS-PARAM

These files and folders can be created, edited and erased. So please carefully take care of these files and folders.

(2) Limitation of file and folder name

Please do NOT use Japanese for file and folder names for a sharing folder because the D—VII can NOT display Japanese and it might cause an unexpected error.

(3) Change parameters #41-#49

To change the folder name or use a newly created folder, it is necessary to change parameters #41-#49 to make the DIR number selection available.

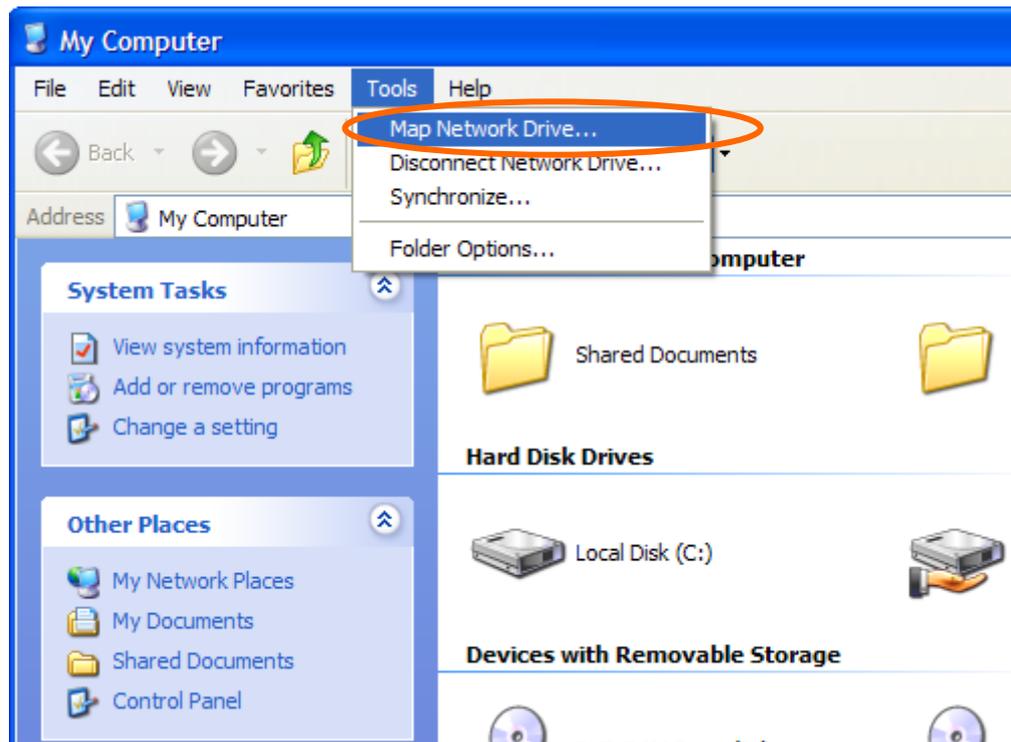
☞ Please refer to [7-5. Directory Path name Settings] for setting.

☐ In case the shared folder does not show up on “My Network”.

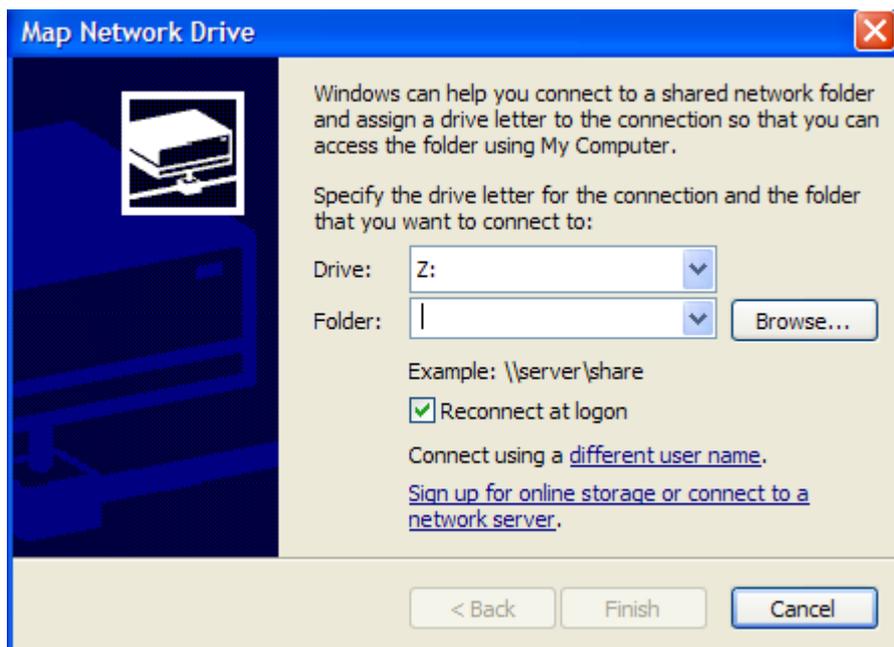
With regard to the specifications of Windows network system, it may take awhile to display the shared folder of D—VII or sometimes it may not show up at all. If so, please connect to the shared folder with the following steps.

- 1 [Tool(T)]-[Map Network Drive ...] to assign the drive name to the shared folder.
- 2 Use [Add a network place] of [My Network] and connect manually.

1. Assign Drive name to the shared folder
[Tool(T)]-[Map Network Drive ...]

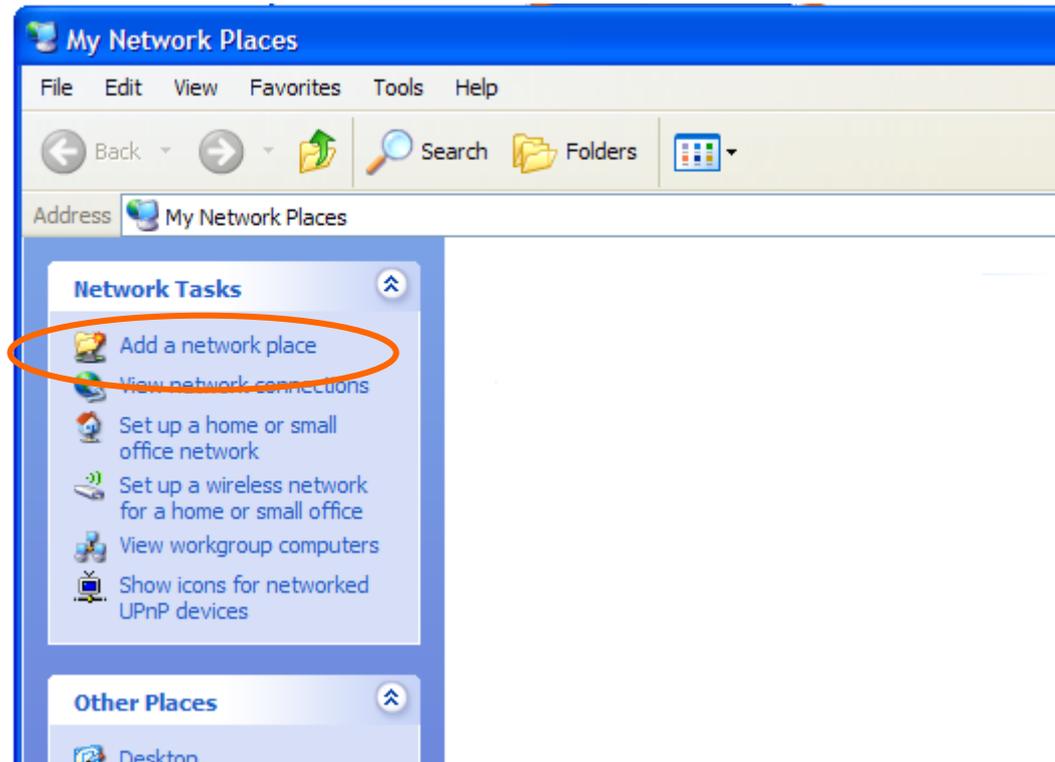


Please follow the wizard of [Map Network Drive ...]



2. Add a network place

Click [Add a network place] to connect to the shared folder manually.



Please follow the wizard of [Add a network Place].



□ Note

The method we introduced at [In case the sharing folder does not show up on “My Network”] is the function of Microsoft Windows not D—VII. Please refer the manual of Microsoft Windows or ask Microsoft if you have any questions

11. Web Settings (by Web Browser)

D—VII's network settings may be configured via a Web browser.

Parameter settings may also be set in this way. It is easier to set because an explanation of each parameter is shown next to each parameter number.

(1) Valid Browser

There are no specific browsers for use with D—VII because the Web Setup does not use JavaScript, Java Applet or Adobe FLASH. Text based browsers, such as: Lynx and w3m may also be used. However, it may be possible that the layout will be out of order.

(2) Valid Items to set

These following items may be set on via Web Setup

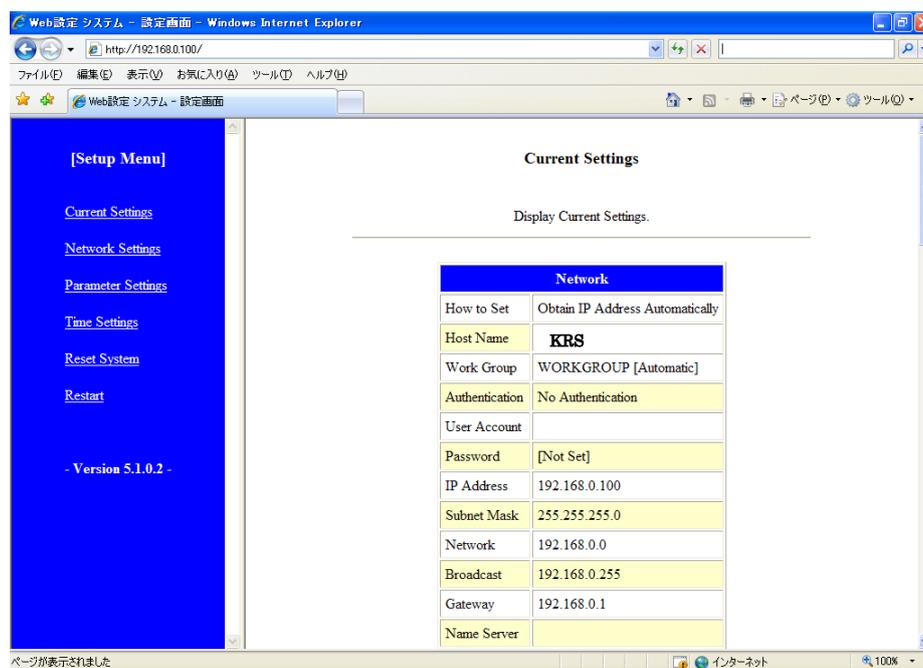
- Network Settings (for D—VII)
- Parameter Settings
- Time Settings
- Restart

(3) IP address of D—VII

If the IP address of D—VII is unknown, please check parameter #51. To display parameter #51, parameter #50 should be “1”.

(4) Connect to Web server

Please open a browser on your PC which is connected to your network, and input the IP address of D—VII. The Setup Menu and Current Settings of D—VII will be shown in the browser window.

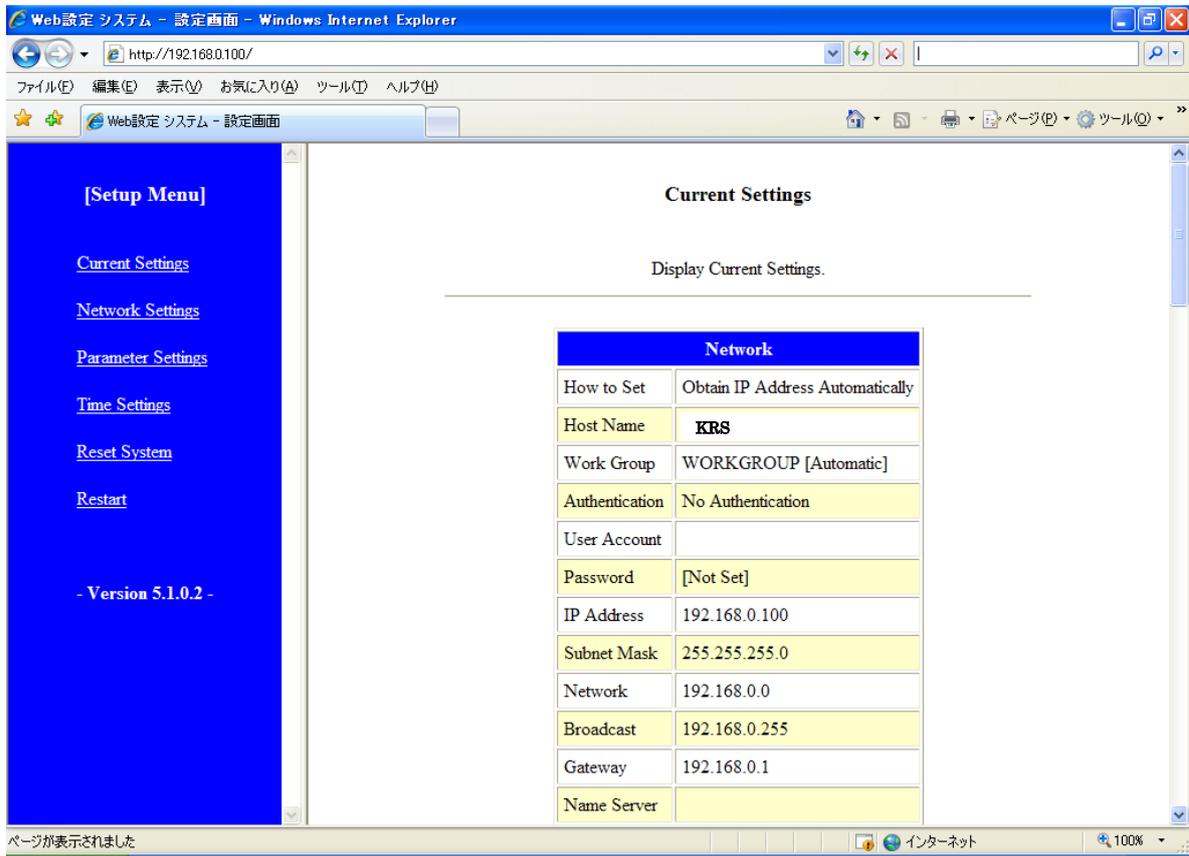


The screenshot shows a web browser window titled "Web設定 システム - 設定画面 - Windows Internet Explorer". The address bar shows "http://192.168.0.100/". The main content area displays "Current Settings" with a sub-header "Display Current Settings." Below this is a table titled "Network" with the following data:

Network	
How to Set	Obtain IP Address Automatically
Host Name	KRS
Work Group	WORKGROUP [Automatic]
Authentication	No Authentication
User Account	
Password	[Not Set]
IP Address	192.168.0.100
Subnet Mask	255.255.255.0
Network	192.168.0.0
Broadcast	192.168.0.255
Gateway	192.168.0.1
Name Server	

11-1. Displays

The display will show the Setup Menu and Current Settings first. To go to each setting, click each link in the Setup Menu.



□ About the pictures on this chapter

The pictures on this chapter are by Microsoft Windows XP SP2 Internet Explorer 6.0 SP2.

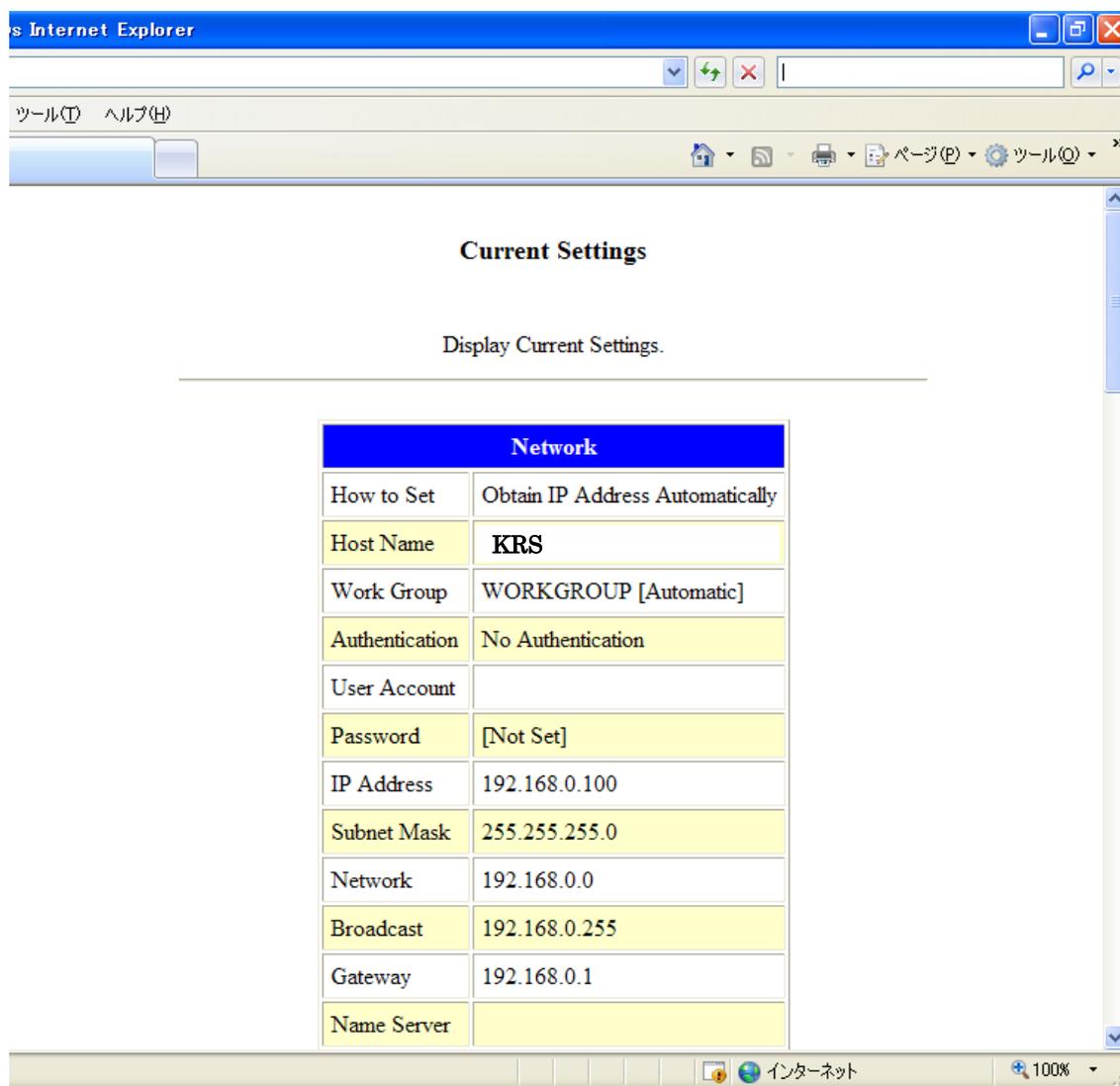
11-2. Setup Menu

The Setup Menu is always shown on the left side of the display.



11-3. Current Settings

Please verify the Current Settings of D－VII before you make changes.
You may use this page to compare between the default system settings and your new settings.



The screenshot shows an Internet Explorer browser window displaying a web page titled "Current Settings". Below the title, there is a link that says "Display Current Settings.". A table with a blue header "Network" is displayed, containing various network configuration parameters and their current values.

Network	
How to Set	Obtain IP Address Automatically
Host Name	KRS
Work Group	WORKGROUP [Automatic]
Authentication	No Authentication
User Account	
Password	[Not Set]
IP Address	192.168.0.100
Subnet Mask	255.255.255.0
Network	192.168.0.0
Broadcast	192.168.0.255
Gateway	192.168.0.1
Name Server	

11-4. Network Settings

(1) Display

Please click “Network Settings” on the Setup Menu, and press “Confirm” after making your changes.

The screenshot shows a 'Network Settings' dialog box. At the top, it says 'Network Configuration' and 'Please click [Confirm] to save your changes.' Below this is a table with the following fields and options:

Network Settings	
Host Name	<input type="text" value="KRS"/>
How to Set	<input checked="" type="radio"/> Obtain IP Address Automatically (DHCP)
	<input type="radio"/> Manual Configuration
Work Group	<input type="text"/>
Authentication	<input type="radio"/> User Authentication
	<input checked="" type="radio"/> No Authentication
User Account	<input type="text"/>
Password	<input type="text"/>

At the bottom of the dialog are two buttons: 'Confirm' and 'Cancel'.

Display of Network Settings
(Default Setting)

- ❑ Host Name: The name of D—VII on the network.
It will automatically be named [KRS[192.168.0.100](krs-100)] if no name is set.

- ❑ How to set: Parameter settings, such as IP address.
[Obtain IP Address Automatically (DHCP)]: D—VII will receive an IP address from your DHCP server upon start up.
[Manual Configuration]: Set the address manually on the setup display.

*Note: When D—VII is set to [Obtain IP Address Automatically (DHCP)], it will only try to obtain an IP Address automatically via DHCP when it's powered on. If an IP Address is not obtained for some reason, such as when the network cable is not connected properly, D—VII will never try to obtain IP address via DHCP during operation.

For this case, please restart D—VII after making sure the network cable is connected to D—VII properly in order to get an IP Address.

- Work Group: for Windows network.
Automatically set to 「WORKGROUP」 if no name is set.

- Authentication : Authentication settings, such as the User Account and Password of the PCs which D-Ⅶ will connect to for file sharing are set in “User Authentication” to the share folders.

➤ **Manual Configuration**

When [Manual Configuration] is selected, an extra page will appear. Please click [Confirm] after making changes.

Network Settings

Network Configuration

Please click [Confirm] to save your changes.

Network Settings	
Host Name	<input type="text" value="KRS"/>
How to Set	<input type="radio"/> Obtain IP Address Automatically (DHCP)
	<input checked="" type="radio"/> Manual Configuration
Work Group	<input type="text"/>
Authentication	<input type="radio"/> User Authentication
	<input checked="" type="radio"/> No Authentication
User Account	<input type="text"/>
Password	<input type="text"/>

Manual Configuration

Please set an appropriate IP Address and click [Change] to confirm your changes.

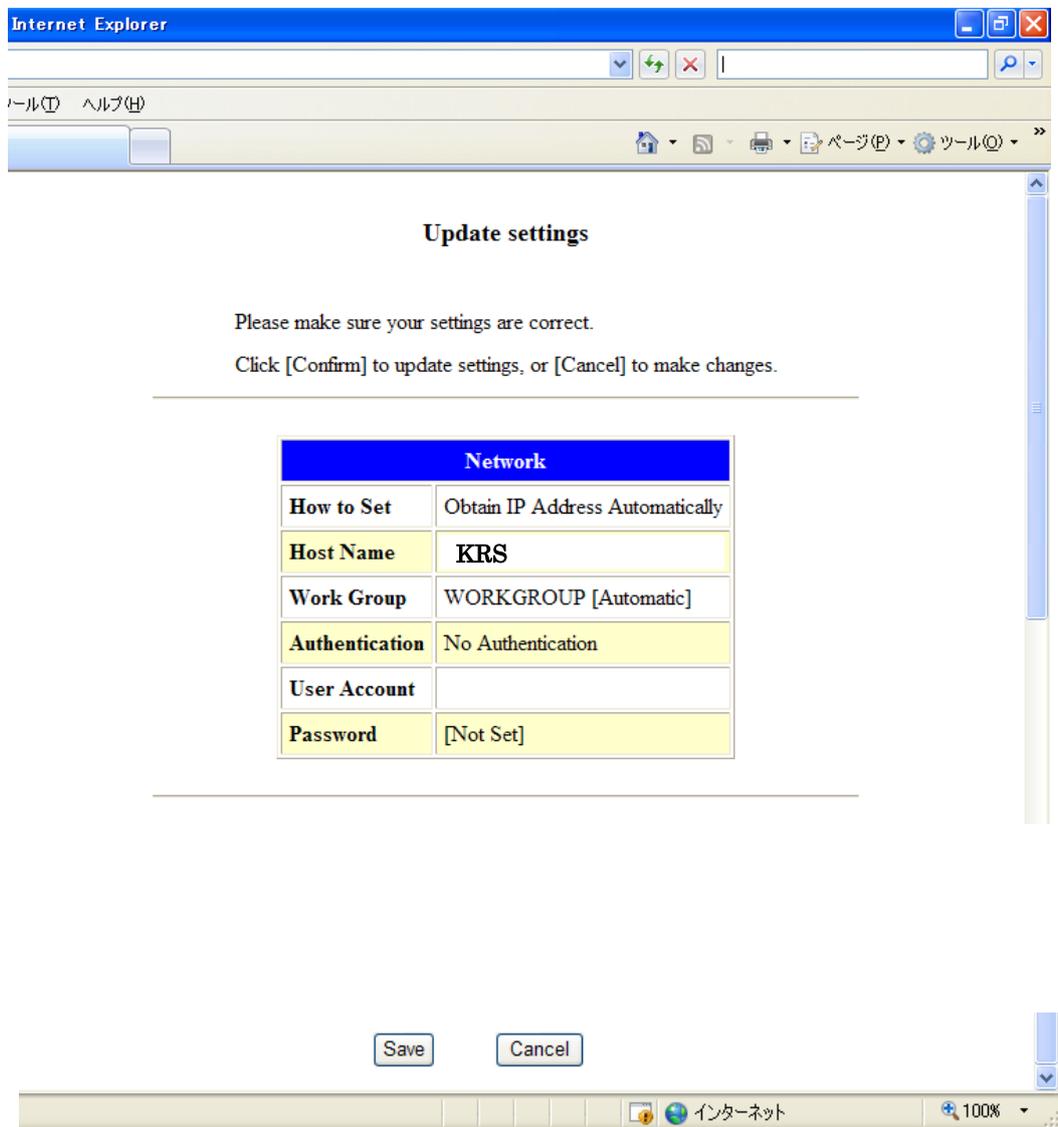
IP Address	<input type="text"/>
Subnet Mask	<input type="text"/>
Network	<input type="text"/>
Broadcast	<input type="text"/>
Gateway	<input type="text"/>
Name Server	<input type="text"/>
Domain Name	<input type="text"/>

➤ **Attention**

The value should be set depending on your network configuration. Please be sure of your network configuration before saving these settings.

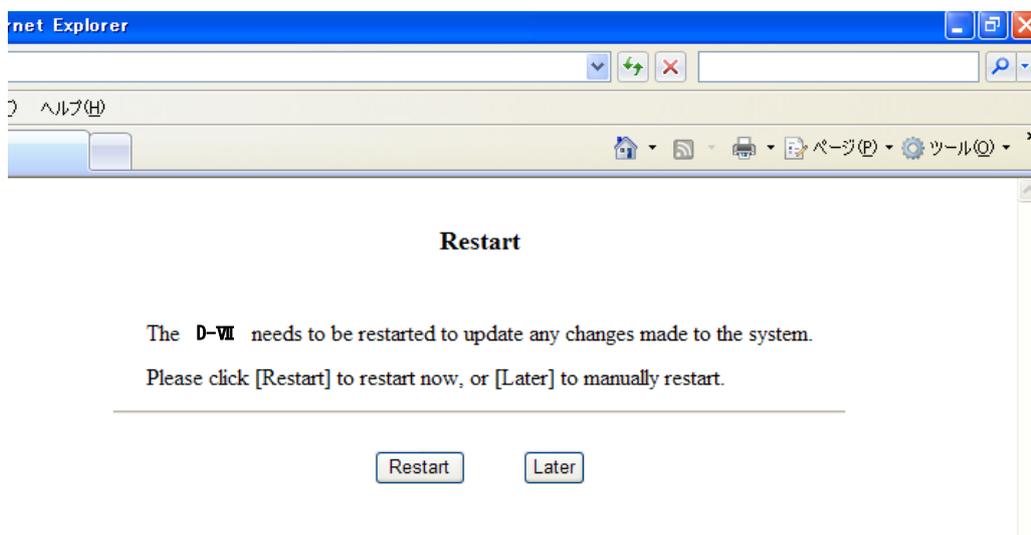
(2) Confirm and Save

After clicking [Confirm], the page of [Updated settings] will appear. Please click [Confirm] to update settings, or [Cancel] to make changes after making sure your settings are correct.

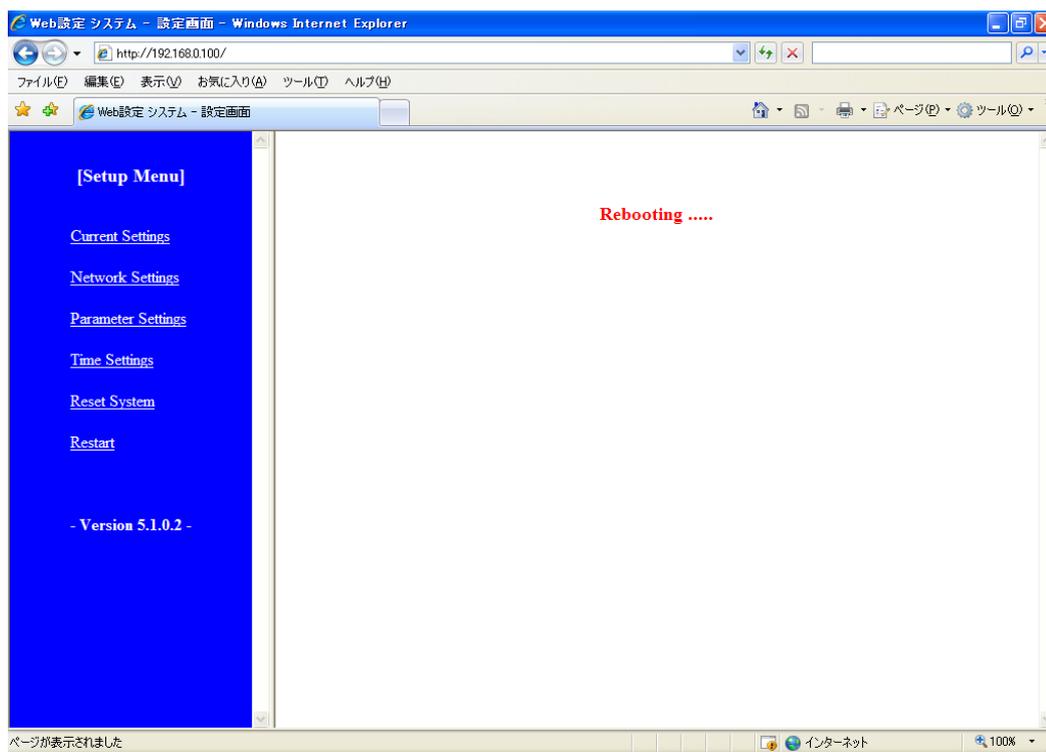


(3) Restart

The D-VII needs to be restarted to update any changes made to the system. After saving the settings, the following page will appear. Please click [Restart] to restart now, or [Later] to manually restart.



When [Restart] is clicked, D-VII's LCD will display 「Rebooting」 and the browser will display [■ Restart ■■]



11-5. Setting Parameter

In the [Parameter Settings] menu, you can create and edit parameters.

(1) Select Parameter file

When [Parameter Settings] is clicked, the [Select Parameter File] page will be displayed. Please select a parameter file to edit and click [Confirm]. To create a new parameter file, please click [Create New File].

Select Parameter File

Select a parameter file to set.

To create a new parameter file, please click ---> [Create New File](#)

File List		
<input type="radio"/>	DEFAULT	DEFAULT
<input type="radio"/>	USER096	USER096
<input type="radio"/>	USER192	USER192
<input type="radio"/>	USER384	USER384

□ File List

[File List] shows the parameter files which have been saved on the system. The item on the left side is the parameter file name. On the right side is the parameter display name. (Parameter #0)

(2) Parameter Settings

The details of the parameter file which is selected on the [Select Parameter File] screen will be displayed.

Please refer to 「7-3. Parameter Details」 to set your parameters, and click [Confirm] to save changes.

Parameter Settings

Set up the parameter

File Name:

Set up Parameter		
0	Parameter Name to be Displayed	<input type="text" value="DEFAULT"/>
1	COM Port	COM1 <input type="button" value="v"/>
2	Baud Rate	4800 <input type="button" value="v"/> bps
3	Stop Bit	<input type="radio"/> 1 bit <input checked="" type="radio"/> 2 bit
4	Character Length	<input type="radio"/> 7 bit <input checked="" type="radio"/> 8 bit
5	Parity	NONE <input type="button" value="v"/>
6	Character Code	ISO <input type="button" value="v"/>
7	DC1 Character Code	<input type="text" value="11"/>
8	DC2 Character Code	<input type="text" value="12"/>

55	[MZ] Command response timeout	<input type="text" value="5"/> sec
56	Display Network Settings	<input type="radio"/> Do not display <input checked="" type="radio"/> Display Network Settings

Confirm or Cancel

❑ **Save parameter under a new name**

To save a parameter file with a new name, type a new file name in the box and click [Confirm] to save.

Attention

If the typed name already exists, it will be overwrite the previous file without any advance notice. Please be careful when choosing file names.

Parameter Settings

Set up the parameter

Type a new name

File Name:

Set up Parameter

Parameter Name to be Displayed	<input type="text" value="DEFAULT"/>
--------------------------------	--------------------------------------

❑ **Switch parameter**

A Web browser is only used for editing parameter files. Changes will not be reflected in the parameters currently in use, because the parameter settings are always available even if D—VII is communicating with an NC machine via RS232C.

To change the parameter settings, please follow the steps bellow.

- 1 Press PRM on the keypad of D—VII to go to Parameter Setting Mode.
- 2 Display the details of the parameter file you want to use.
- 3 Confirm by pressing the START key. The parameter which is set by this step will remain even after D—VII is reset.

(3) Create a new parameter

When [Create New File] is selected on the [Select Parameter File], the [Parameter settings] page will be displayed. The parameter will be default setting..

Please refer 「7-3. Detail of Parameter」 to write a parameter file name, and [Confirm] which places at very bottom of the page.

Parameter Settings

Set up the parameter

File Name:

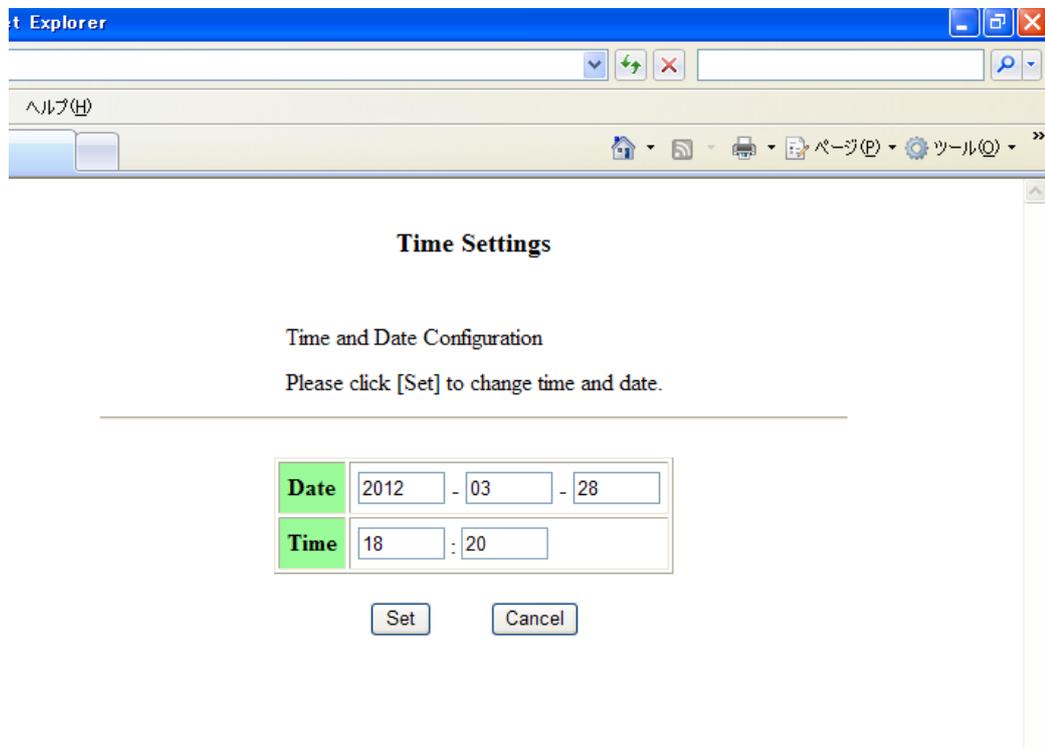
Set up Parameter		
0	Parameter Name to be Displayed	<input type="text"/>
1	COM Port	COM1 <input type="button" value="v"/>
2	Baud Rate	4800 <input type="button" value="v"/> bps
3	Stop Bit	<input type="radio"/> 1 bit <input checked="" type="radio"/> 2 bit
4	Character Length	<input type="radio"/> 7 bit <input checked="" type="radio"/> 8 bit
5	Parity	NONE <input type="button" value="v"/>
6	Character Code	ISO <input type="button" value="v"/>
7	DC1 Character Code	<input type="text" value="11"/>
8	DC2 Character Code	<input type="text" value="12"/>
		<input type="text"/>

55	[MZ] Command response timeout	<input type="text" value="5"/> sec
56	Display Network Settings	<input type="radio"/> Do not display <input checked="" type="radio"/> Display Network Settings

11-6. Time Settings (Maintenance Menu)

When [Time Setting] is selected on the setting menu. The time setting page will be displayed.

After editing the settings, please press [Confirm] which places at very bottom of the page to confirm the settings.



□ Time settings by machine side

- ① Press **PRM**
- ② Find and press [DATE] which locates very bottom of the parameter file selection mode and press **SET** to select.

<Display>

```

1          10          20characters
1 PRM   SEL   DEFAULT
2
3          PARAM001
3          [NW]
4 Ver 5. 3. 0. 2 > [DATE] ← most bottom of the page

```

- ③ The current network settings will be displayed.

<Display>

```

1          10          20characters
1 DATE   <2011>/12/16
2 TIME   14:37:00
3
4

```

- ④ Use   keys to move <> until getting to the value to change.
- ⑤ Enter the value at this mark ■ is blinking in the bottom.

```

<Display>
  1          10          20characters
1 DATE      <2011>/12/16
2 TIME      14:37:00
3
4 YEAR      : ■

```

- ⑥ Press  to enter. (※The settings are NOT confirmed yet at this moment)

- ⑦ To confirm the settings, press . The new settings will be saved and available.

To cancel the settings, press  key, instead of press  key.

```

<Display>
  1          10          20Characters
1 DATE      <2011>/12/16
2 TIME      14:37:00
3
4 ***** END *****

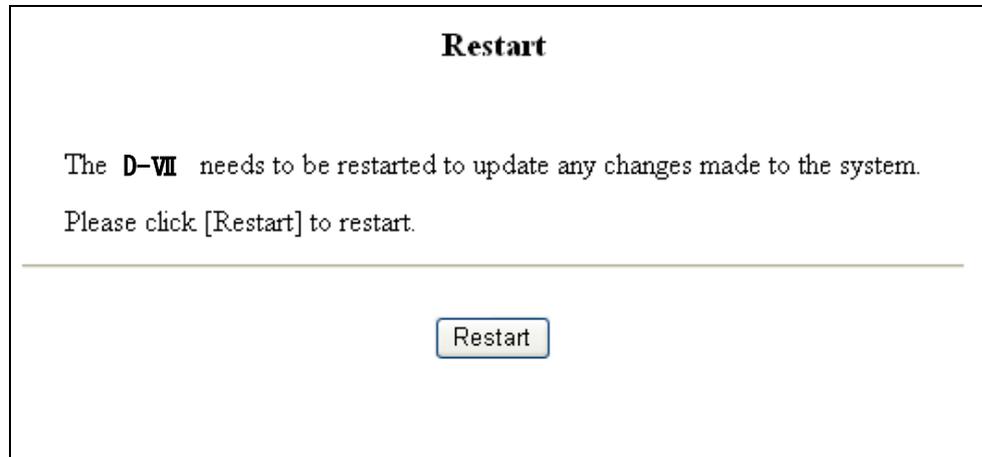
```

11-7. Restart

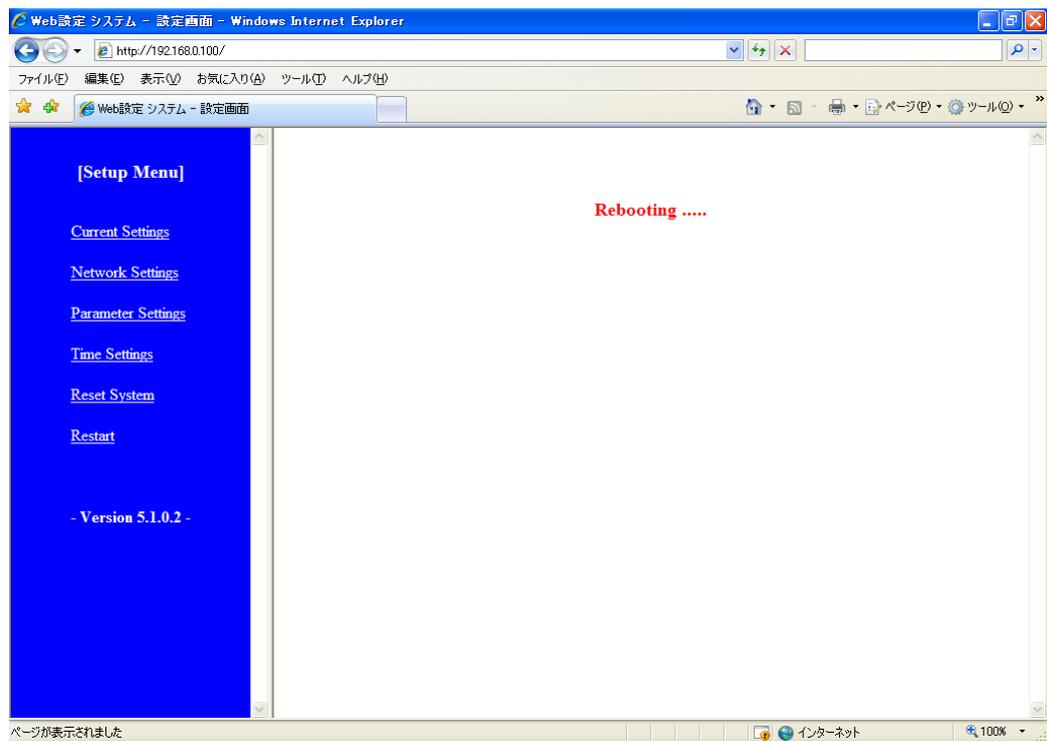
Restart D—VII

When [Restart] is chosen from the Setup Menu, the following page will be displayed.

If it is ok to restart D—VII, please click [Restart].



After [Restart] is clicked, the LCD will display [Rebooting] and 「■■■■ Restart ■■■■」 on the web browser.



12. FTP

D-Ⅶ also has an FTP server function.

With the ftp command or applications, such as: FFFTP, you can login to the shared folder where NC data files and parameter files are stored.

This function may be useful for situations in which file sharing via Windows network is not available. You must have some kind of connection to a network however.

(1) IP address of D-Ⅶ

Use IP address to connect by FTP.

To check the IP address of D-Ⅶ, please refer **[10. Web Settings (3) IP address of D-Ⅶ]**.

(2) Limitation for connecting simultaneously

FTP server of D-Ⅶ is not available for connections from more than one client. If there is a client which has already connected to the FTP server, other clients will be refused.

(3) Login

Please use the ftp command or applications, such as: FFFTP for Windows to login to the FTP server, depending on your system.

(4) Username and Password

The following are the usernames/passwords for accessing NC data and Parameter data files.

Username	Password	Detail
D7-DATA	Nothing	For access to NC data file
D7-PARAM	Nothing	For access to Parameter data file

Note: The usernames for NC data and Parameter data are different.

Password is not necessary for command and applications.

(5) Root Directory

When the login is successful, the root directory will display as follows.

User Name	Root Directory
KRS-DATA	Share folder stored NC data file
KRS-PARAM	Share folder stored parameter file

Once logged into one shared folder, you can not move to another folder.

13. Alarm

When D—VII receives an error, it will display an alarm.

While an alarm status is active, D—VII will stop the current process and will wait until the RESET key is pressed. When RESET is pressed, the alarm status will be removed and the system will return to OUT mode, except in special case.

13-1. Alarm: 0

Alarm: 0 means there is a system error.

Please restart the system after solving the problem.

Alarm #	Message	Detail
1	System Error	System Error [1] Setting is not defined [2] Invalid operation mode [24] Error of optional command line [25] Fail the change for priority order [63] Unexpected error*
2	No Memory	Memory Error [3] Memory Shortage (Buffer assignment) [4] Memory Shortage (Character line assignment)
3	Incorrect	Parameter Error [23] Wrong description of parameter

*System Error [63]: This error comes from the LINUX Kernel which D—VII uses as its OS. LINUX is operates various functions simultaneously and occasional generates an error from overflow. Please restart D—VII when this error occurs.

13-2. Alarm: 1

Flash disk error or file error.

Please press RESET to reset the alarm.

If this error occurs during operation, the operation will stop.

Alarm #	Message	Detail
11	Disk Full	[5] No available space on disk
12	No Media	[7] USB memory is not set
13	SMB Error	[8] Can not connect to the network drive
14	Disk Error	[6] Can not remount [9] Disk error
15	File Error	[10] Failed to open directory [11] Directory reading error [12] Failed to change directory [14] Failed to open file [15] File mapping error [16] Failed to read file condition [17] Disable file [32] Writing error
16	Not Found	[13] Not found file
17	Copy Disable	[27] Copy without permission

13-3. Alarm: 2

RS232C Error

Please press RESET to reset the alarm.

If this error occurs during operation, the operation will stop.

Alarm #	Message	Detail
21	DSR Drop	[20] DSR is set "L"
22	NC Error	[21] No descriptive keyword for calling sub-program [22] Data block error [28] Input character error [29] Decode error [30] Invalid character in buffer memory [31] Error inside buffer memory
23	RS232 Error	[18] Can not open serial device [19] RS232 setting value error [26] Flow control setting error

14. External terminal

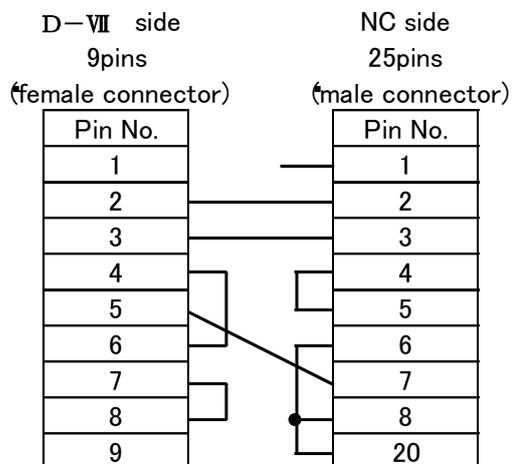
14-1. RS232-1(COM1)

Pin #	Signal Name	Detail	Direction
1	CD	Carrier Detect	IN
2	RD	Receiving Data	IN
3	SD	Sending Data	OUT
4	DTR	Data Terminal Ready	OUT
5	GND	Signal Ground	
6	DSR	Data Set Ready	IN
7	RTS	Request Signal	OUT
8	CTS	Clear to send	IN
9	RI	Ring indicator	IN

14-2. RS232-2(COM2)

Pin #	Signal Name	Detail	Direction
1	CD	Carrier Detect	IN
2	RD	Receiving Data	IN
3	SD	Sending Data	OUT
4	DTR	Data Terminal Ready	OUT
5	GND	Signal Ground	
6	DSR	Data Set Ready	IN
7	RTS	Request Signal	OUT
8	CTS	Clear to send	IN
9	RI	Ring indicator	IN

15. RS232C cable



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