

Chapter 1

Installation of MainTop RIP

1.1 Composition of MainTop RIP

MainTop RIP consists of two parts which are MainTop DTP and MainTop RIP Management System. DTP RIP is within MainTop DTP.

■ MainTop Desktop Publishing System

This manual is abbreviated as DTR RIP hereafter. MainTop DTP provides functions of editing, producing and printing out various files. Files are prepared by using DTP and are directly printed out by its built-in RIP.

DTP RIP is used to print out picture files of JPG, TIF, PCX formats with various functions, such as tiling printing, imposition printing, character overlapping and vector picture drawing. Most printing operations can be carried out by DTP RIP.

■ RIP Management System

MainTop RIP Management System is a management program for controlling printing services without any support need from Windows. This system provides overall management of printer and printing jobs which include distribution and manipulation of current running as well as current finished printing jobs. The system keeps a diary for monitoring the overall printing status.

The system can print out files in formats of JPG, TIFF, EPS, PS, PDF. It also provides functions of plate makeup, screening, object rotation, color separating, grayish adjusting. Providing that it has been converted into one of the above five formats, files produced by any software can be printed out by using this system.

1.2 Requirement of MainTop RIP Installation

■ RIP Management System

Operation System: Windows 98/2000/XP

RAM: 128MB above

Hard Disk Space: 500MB, but 1G is suggested (being used to print the temporal file of PS file).

The free space of C disk is larger than 500MB (being used to print temporal files).

Note *The above system requirements are required by the paper size of A0, 600DPI, and for resolution of 300DPI, a space quarter of the 600DPI's is satisfactory.*

■ DTP RIP

Operation System: Windows98/2000/XP

RAM: 32MB above

Hard Disk: 150MB (being used to install the system and Fonts), the free space of C disk is larger than 500MB (being used to process temporal files).

Note *The above system requirements are required by the paper size of A0, 600DPI, and in the practical installing, it is required by saler's suggestion according to printer's type or ask our company.*

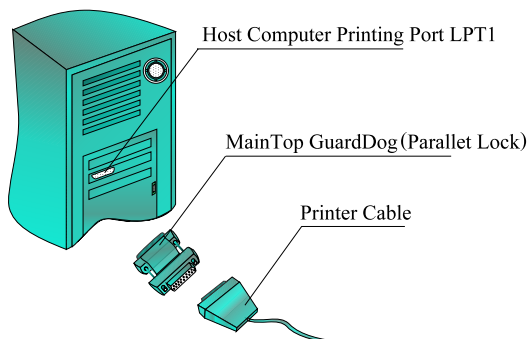
1.3 Installation of MainTop RIP

Note *For convenient explanation, an assumption that MainTop RIP has already installed into the directory of C:\maintop is made here.*

■ Installation of GuardDog

□ Installation of Parallel GuardDog

Before installing the System, insert the GuardDog into the parallel port of printer according to the illustration below.



1. Pull out the printer connector from the parallel port of computer.
2. Insert the MainTop GuardDog into the parallel port of computer.
3. Connect the printer connector with the GuardDog.

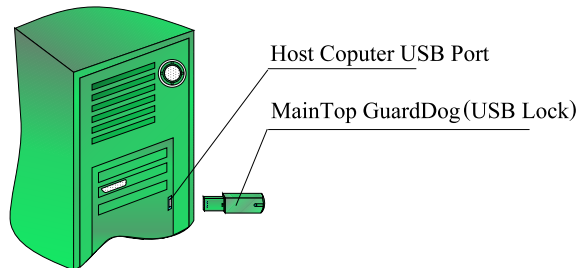
Note *Both host computer and printer must be perfectly grounded, otherwise the normal operation*

of the printer would be interfered. It is better that the two equipment use the separated power-sockets.

Hint *Parallel dog must not to be inserted or pulled out with electric, otherwise it is damaged easliy.*

☐ Installation of USB GuardDog

Before installing the USB GuardDog, confirm that the USB interface supporting function inside BIOS is turned on and the USB device driving program is installed into the system correctly. All Windows98/Me/NT4.0/2000 can support USB equipment perfectly.



1. *Install MainTop Before Connecting the GuardDog.*
2. *Insert the USB GuardDog into one free USB socket . Windows will install the related driver automatically.*

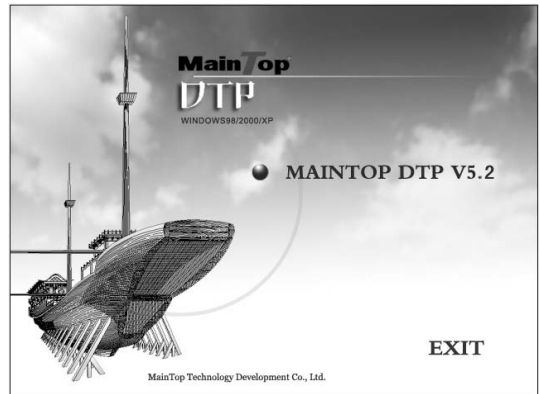
Note *For the operation systems its version lower than Windows 2000 , the computer needs to be restarted after finishing the above operations in order to operate the USB correctly.*

Note *If USB GuardDog is successfully installed, the following information will be displayed on screen after entering MainTop System: (Pro Version) or (Standard Version), otherwise (Trail Version) will be displayed on the system title column.*

Hint *The compatibility of USB GuardDog is better than the parallel GaurdDog since it does not occupy printer port and has the features of high speed and freely connecting and disconnecting under operating conditions. So the USB GuardDog is prompted. If because of some software or hardware reasons the USB GuardDog can not be used, please contact us and a parallel GuardDog can be exchanged. If GuardDog is inserted before the installation of MainTop, a message requiring to install the dog driver will be prompted on screen.*

☒ Install System

Under Windows 98/2000/XP, after inserting MainTop disk,the following picture appears.




- ☐ Install DTP RIP and MainTop RIP Management System
Select "MainTop DTP V5.2", the following picture appears. Input the installing directory, then click OK.



If disk is in disk driver, you can install DTP by hand according to following steps.

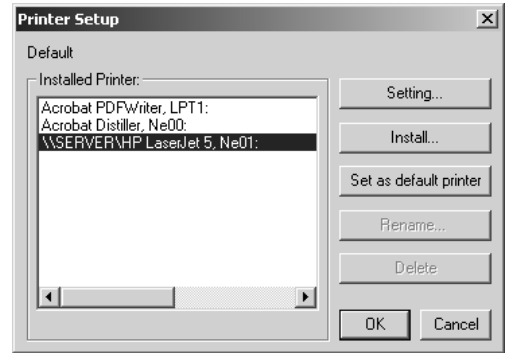
1. Click **Start** button on left bottom of the screen.
2. Click **Run** command.
3. Key in <E:\SETUP>, click **Open** button, then the main installation dialogue box will appear on screen.

Hint Double-click  after installing, **MainTop RIP Management System** will be displayed in title bar. If **MainTop Printing Management System** appears, it has no function of RIP, and it is only used as printing management system.

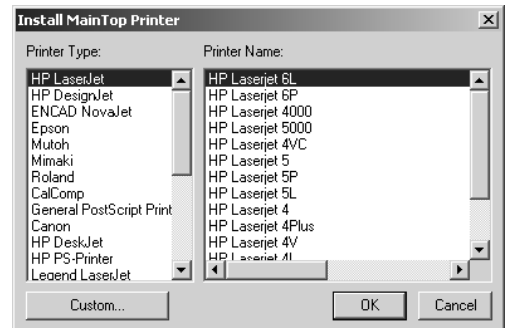
- ☐ Installation of Printer
 - ※ Install MainTop Printer

You can use Windows printer, and can also use MainTop printer. In DTP RIP, the method of installing MainTop printer is as follows:

1. Enter MainTop, select **Printer Setup** from **File**.



2. Select **Install** and the following dialogue box appears.



3. Select the printer which will be installed.

Hint Printers with mark # are MainTop printers, and those without # are Windows printers.

Hint If select **Set As Default Printer**, it will set MainTop printer as default printer and will auto-use it to print out.

4. Select **Close** and back to **Printer Setup** dialogue box.
5. Select **Setting** and set parameters such as paper, port etc, then click **OK**.

Hint In order to increase printing speed, LPT1 should be set at ECP mode if printer support it, or close ECP if printer does not support it. ECP mode can be selected in BIOS of the computer. If LPT1 has been set at ECP, it is better to select MainTop printing port (printing ports without "Queue..." indication are all MainTop printing port) when setting printing port at MainTop. Because the MainTop Printing Management System will be used more effectively if it is used in this way.

※ Installation of USB Interface Printer

Install the USB driver in directory of USB98 of MainTop Color Electric Publishing System before installing the printer driver, when USB printer is to be installed under Win98 or Me. operation system.

Note 1. Before installing this driver, the printer's USB driver must be removed first. Taking USB HP DeskJet as an example, the installed software of Desk Jet series should be deleted first.

Note 2. The installation of USB driver is needed only under Win98 operation system. While

Win2000 is used, USB driver will be installed automatically and printer driver can be installed directly.

※ Installation of 1394 Interface Printer

At present, MainTop Printing Management System can only support Epson and Minaki printer under Win2000 operation system.

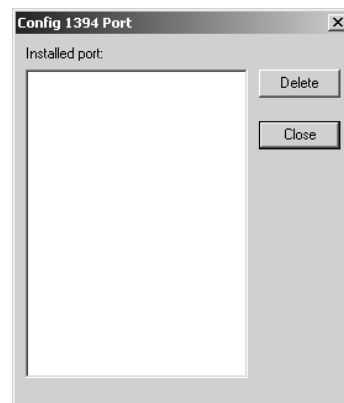
1.Epson1394 Interface Printer:

Please install the 1394 driver and printer driver according to the printer manual. If installation is successful, ports of EP1394_001, EP1394_002...will be created and their names will be displayed in RIP management system. Then it can be used at anytime.

2.Mimaki 1394 Interface Printer :

When 1394 interface printer of Minaki is connected with computer, system will give out prompting of adding new hardware. Please install printer's own Minaki 1394 driver (or Minaki 1394 driver in directory of M1394 of Printing Management System), before installing printer driver.

When Minaki 1394 is successfully installed, open MainTop RIP Management System, an indication of finding Minaki 1394 port will appear. After entering of the self- defined port name, the printer is ready for use. Minaki 1394 port can be configured by setting parameters at Manage\Set Port in MainTop RIP Management System menu.



1.4 Installation and Arrangement of Network Printer

The data procession method adopted by MainTop is the type of the sectional calculation scheme which can provide a very high transmission rate. So it is impossible to implement the high speed printing, which can be provided by MainTop, through the parallel printer port of computer, especially for the broad width jet plotter. Therefore, in order to implement the high speed printing, the high rate transmission ability of network must be used.

Hint

Currently, printers of HP DesignJet 5000, HP DesignJet3500CP, HP DesignJet2500CP are the network printers having internal network cards. The high speed printing operation can be implemented by the high rate trasmission performance of network. Printers of HP DesignJet 3000CP, HP DesignJet 2000CP etc have no internal network card but they also can be used

as network printers by adding an external network card. For those neither have internal network card nor external network card can be added, an external printing server can be connected with its parallel port to implement the network printing.

■ System Requirement of Large Format Network Printer

Normally, all network large format printers are multi-colour printers, so the output data produced by software are in great quantity. In addition to the 100BASE-T network environment, the heavy loading of printing will also require the integrated high performances and high calculation speed of the computer. Here a computer configuration of medium level is suggested.

□ HP Design Jet 5000

- ◇ CPU: P4, 1.4G HZ or higher
 - ◇ RAM: DDR 256M or larger
 - ◇ Main Board: P4 specialized
 - ◇ Hard Disk: above 20G, 7200T/S
 - ◇ Video Card: Stable performance and perfect colour recovery ability.
 - ◇ Monitor: Perfect colour recovery ability.
 - ◇ Other: Others : Method 1: HUB of 100 Base-T (SITHC is better) and two high quality network cables of 100M super Cat 5 are used; Method 2: Parallel port transmission cable of standard IEEE 1284 is used (Method 1 is recommended).
- Operation System: WINDOWS 98/2000, WINDOWS 2000 is recommended.

□ ENCAD 850/880 or KODAK 4860

- ◇ CPU: P4 1.4GHZ Minimum
 - ◇ HD: 7200 T/S high speed hard disc driver
 - ◇ RAM: DDR 256M minimum (INTEL P4 specific RAM is recommended)
 - ◇ Main Board: Support high performance P4 specific mother board with ECP mode (INTEL product is recommended)
 - ◇ Monitor: Perfect color reproducing ability
 - ◇ Video Card: Stable performance, perfect color reproducing ability
 - ◇ Others: Method 1: HUB of 100 Base-T (SITHC is better) and two high quality network cables of 100M super Cat 5 are used; Method 2: Parallel port transmission cable of standard IEEE 1284 is used (Method 1 is recommended).
- Operation System: WIN98/2000 (WIN98 is recommended.)

□ MIMAKI JV4

Hardware Configuration for MIMAKI JV4:

- ◇ CPU: P4 1.4GHZ Minimum
- ◇ RAM: DDR 256M Minimum (INTEL P4 specific RAM is recommended)
- ◇ Main Board: Support high performance P4 specific mother board with ECP mode (INTEL product is recommended)
- ◇ HD: 7200 T/S high speed hard disk driver minimum
- ◇ Video Card: Stable Performance, perfect color reproducing ability

- ◇ Monitor: Perfect color reproducing ability
 - ◇ Others: Method 1: One high quantity live wire of standard IEEE 1394 and one high quality computer live wire card are used; Method 2: Parallel port transmission cable of standard IEEE 1284 is used (Method 1 is recommended)
- Operation System: WINDOWS 2000

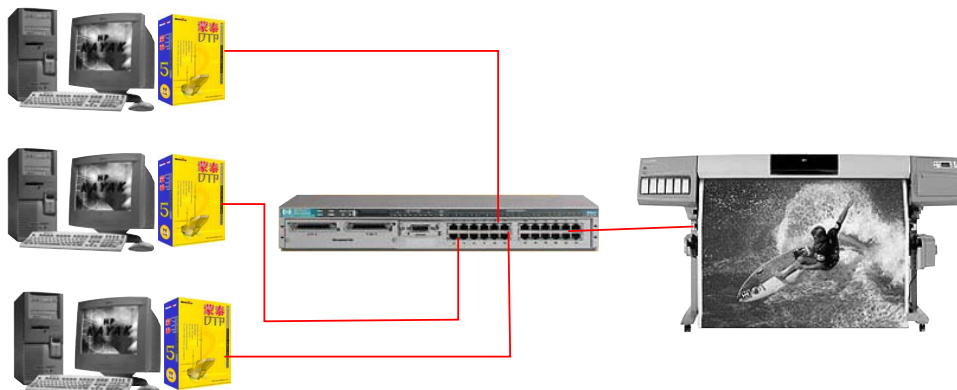
❑ MUTOH RJ8000

- ◇ CPU: P4 1.8GHZ Minimum
 - ◇ HD: 7200 T/S high speed hard disk driver minimum
 - ◇ RAM: DDR 512M minimum (INTEL P4 specific RAM is recommended)
 - ◇ Main Board: Support high performance P4 specific mother board with ECP mode (INTEL product is recommended)
 - ◇ Monitor: Perfect color reproducing ability
 - ◇ Video Card: Stable performance, perfect color reproducing ability
 - ◇ Others: Method 1: One HUB of 100 Base-T (SITHC is better) and two high quality network cables of 100M super Cat 5 are used; Method 2: Parallel port transmission cable of standard IEEE 1284 is used (Method 1 is recommended).
- Operation System :WIN98/2000 (WIN98 is recommended)

❑ ROLAND FJ-600/500/400

- ◇ CPU: P4 1.4GHZ Minimum
 - ◇ HD: 7200 T/S high speed hard disc driver minimum
 - ◇ RAM: DDR 256M minimum (INTEL P4 specific RAM is recommended)
 - ◇ Main Board: Support high performance P4 specific mother board with ECP mode (INTEL product is recommended)
 - ◇ Monitor: Perfect color reproducing ability
 - ◇ Video Card: Stable performance, perfect color reproducing ability
 - ◇ Others: Method 1: One HUB of 100 Base-T (SITHC is better) and two high quality network cables of 100M super Cat 5 are recommended; Method 2: Parallel port transmission cable of standard IEEE 1284 is used (Method 1 is recommended).
- Operation System: WIN98/2000 (WIN98 is recommended)

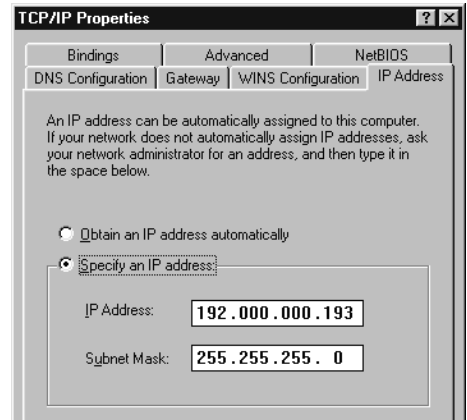
An Illustration of Connecting MainTop and Network Printer



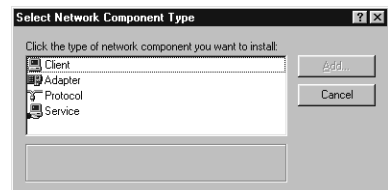
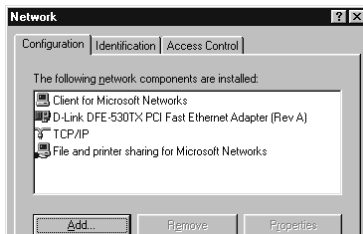
■ Configuration Procedure of MainTop RIP Network Environment

□ Add TCP/IP protocol into Windows

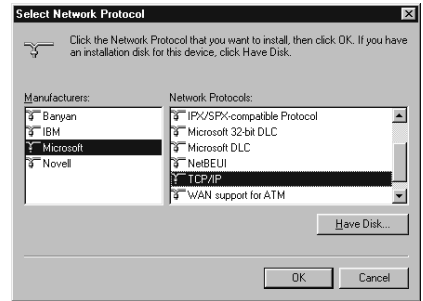
1. *First define the required IP address and mask code of the network. For example, the IP addresses are from "192.0.0.1 to 192.0.0.10" and sub-network mask code is "255.255.255.0", which means that inside the sub-network with the mask code of "255.255.255.0", there are 10 sets of network equipment with addresses from "192.0.0.1" to "192.0.0.10" respectively.*



2. *Place the cursor on **Network Neighbours** button, click the right button on Mouse. Select **Configuration** from **Network**, select **Add...** from the display, then **Protocol**. Click **Add...**, then select **Microsoft** and then **TCP/IP**, at last click **OK** button.*

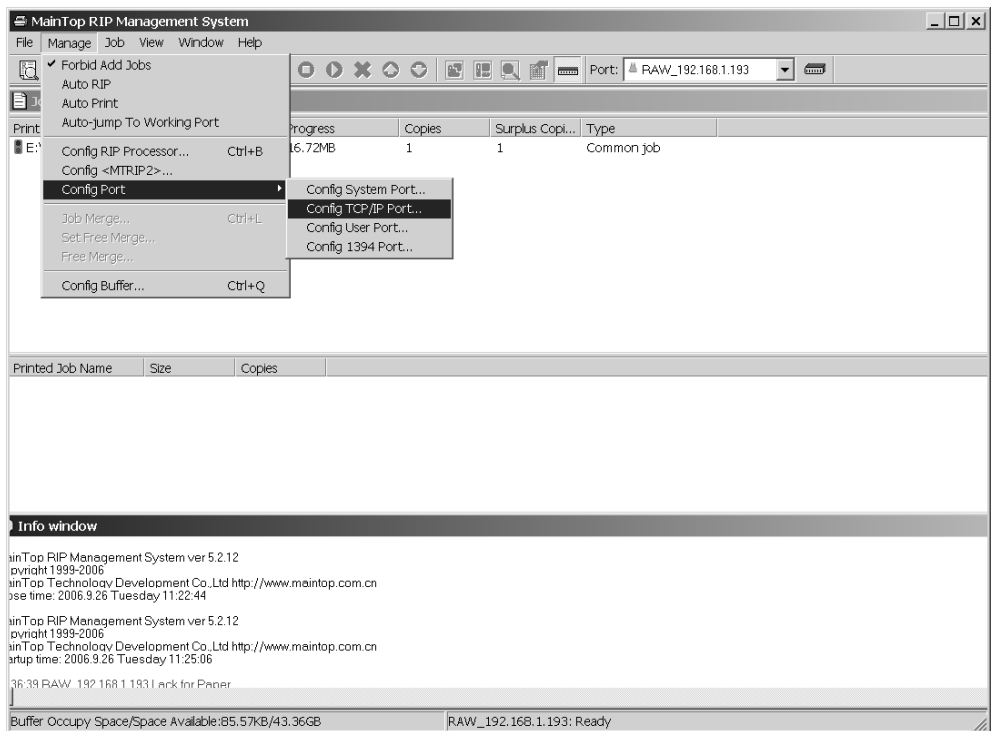


3. *When the last step is finished, a **TCP/IP** protocol will be added into the system automatically by computer. One of them is the network card protocol. Select this protocol, then click **Attribute**, then select **IP address** column from the displayed dialogue box and key in the data described on step 1. At last click **OK**, a restart requirement will be prompted on screen.*

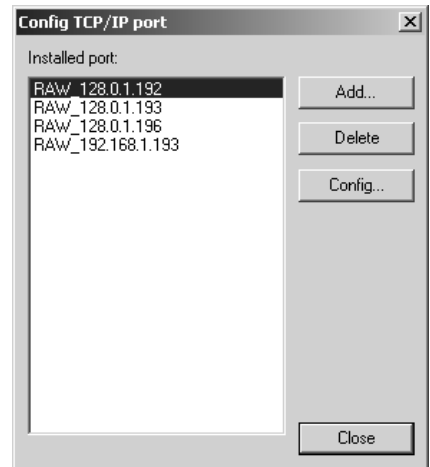


❑ Add TCP/IP Port into MainTop RIP Management System

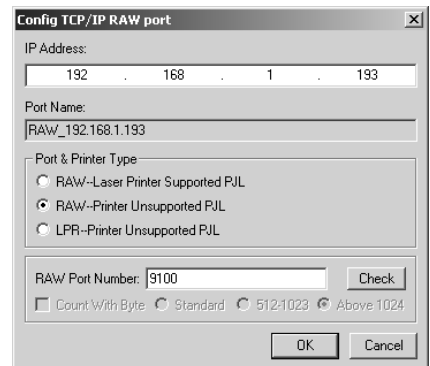
1. *First, select **Config Port** command from **Manage** menu of **MainTop RIP Management System**.*



2. *Select **Config TCP/IP port** from **Config Port**.*



3. *Input the IP Address, Port Name, Port&Printer Type in the following dialogue box.*



IP Address ... One network printer relates to one unique IP address. IP address can be found from test page and can be set at printer panel. For detailed explanation please read relevant document of the printer.

Port Name ... No special requirement for port name.

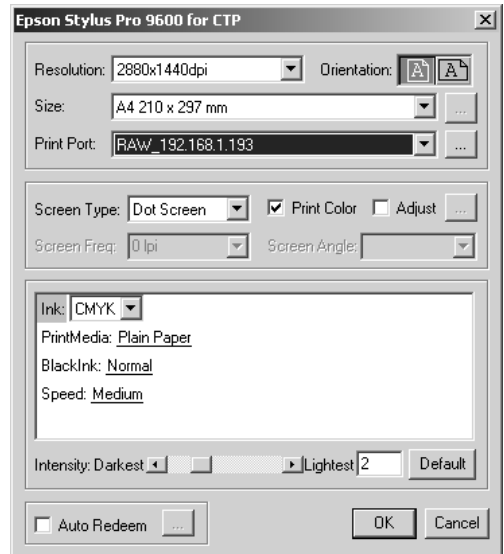
Port&Printer Type ... Difference between RAW port and LPR port is in their protocols. RAW port is the primary port. For the server of printing which needs to communicate with host computer (for example UNIX or VAX computer), it is better to select LPR port.

RAW Port Number ... The default port number of TCP/IP is 9100.

Check ... Check Equipment.

☐ Select Pinter Port

1. *After Entering MainTop, select **Printer Setup** from **File**, then select **Install MainTop Printer**. Select the installation of network printer and Set as Default Printer.*
2. *Select **Close**, then set Printing Port as **TCP/IP port name** given in **MainTop RIP Management System**.*



■ How to Print Multiple Jobs

Printer can start operation, when all parameters for computer and printer are entered. However, MainTop can support printer to carry out one or more printing jobs. After one file is finished, the second, third and more files can be edited and printed.

■ How to View Printing Queue

When MainTop port is printing file, a printer icon appears on the right-bottom corner of the screen. Double click it, "MainTop RIP Management System" window will be displayed on screen. Operation status of all printing jobs can be monitored and managed through this window.

■ How to Support HP5000, ENCAD NovaJet 850, MIMAKI by Multiple-MainTop Systems

If the capability of one printer supported by one computer can not be fully used, two or more computers can be connected with this printer under the support of MainTop systems. However, MainTop system should be installed into all computers first, and select the same TCP/IP port at "MainTop RIP Management System" in each computer. When all these have been done, multiple printing jobs can be carried out simultaneously.