Canon

Service Information

Model : **Network Printer Board-F1**
Network Multi PDL Printer Board-H1
Network Printer Board-K1

Number: 99-OIPQD0-B0072
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Location : System Software

Subject : Patch File 58739.efi Release

Reason : Patch file 58739.efi will be released to enable Supernetting in Network Printer Board-F1 v2.0 and Network Multi PDL Printer Board-H1/K1 v1.0.

Details :

[What is Supernetting?]

In order to avoid exhausting Network IDs, Internet Society has contrived a new system called Supernetting. For example, if there is an organization that owns 2000 host computers, not Network ID of Class B but a certain range containing eight Class C Network ID is allocated. This Class C network ID is able to manage 254 host computers, which makes up that 2032 host IDs can be obtained in total. In this case, eight routing tables will be necessary on the router if the traditional routing technique is used. In order to prevent this situation, a new technique called CIDR (Classless Inter-Domain Routing) – eight entries used in the above example are stored in one entry that is supported by all the Class C Network IDs which the organization is using - will be employed.

Assuming that eight Class C Network IDs start with Network ID220.78.168.0 and end with Network ID220.78.175.0, the entries of the routing tables will be as follows:

Network ID	Subnet mask	Subnet mask Binary
220.78.168.0	255.255.248.0	11111111 11111111 11111000 00000000

Destinations of the packet in Supernetting are determined by using AND for destination IP addresses and Subnet mask of routing entry.

[Status quo of Network Printer Board-F1 v2.0/Network Multi PDL Board-H1/K1 v1.0]

In Network Printer Board-F1 v2.0/Network Multi PDL Board-H1/K1 v1.0, if an address of Class C was set in IP address e.g. 192.168.3.3 , the Subnet mask would operate automatically with the settings of 255.255.255. as the specifications. Accordingly, the IP address was included in Class C, as aforementioned, the Subnet mask was not able to support the network, Class B.

Solution :

AND for the IP address and the Subnet mask set in Network Printer Board-F1/H1/K1 was removed, and class of IP address was possibly ignored.

Installation Notes :

1. Select "Setup" at Boot up screen.
2. Install the Software through the parallel port.
3. Download the file 58739.efi with PDL Downloader.
4. Exit Setup and Re-boot.
5. Print the configuration page and check that "58739" is printed out in Update Information on the configuration page.

Remarks :

Network Printer Board-F1 v2.0e (Whitney Command Work Station Support) and Network Multi PDL Printer Board-H1/K1 v2.0 support Supernetting.