

V1Xserver

Software Installation Guide

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1 Packing List

- 1- Boot diskette,
- 2- Installation CD-ROM,
- 3- This installation guide

In this document, the text printed by the computer is shown in *italic*, the text that the user has to type is shown in **bold**.

2 Installing for the first time

The installation works on an IDE drive with 4 primary partitions:

- Partition 1 : Linux Swap (128Mbytes)
- Partition 2 : Linux native (Linux operating system partition, 2Gbytes)
- Partition 3 : Linux native (doremi partition, 2Gbytes)
- Partition 4 : Linux native (backup partition)

The drive is partitioned by doremi at the factory. If the drive needs to be repartitioned for any reason, you can do so by using the software utility “fdisk”, which is included in the boot diskette.

Installations steps:

1. Insert the boot diskette into the floppy disk drive,
2. Start the server,
3. Insert the CD-ROM into the CD-ROM drive, **VERY IMPORTANT AT THIS STAGE**
4. Wait until the system boots completely from the diskette, (wait few minutes),
5. After the system boot is completed, you will be asked to **Select the keyboard** you are using, Press **<Enter>** if you are not sure, or choose the type of international keyboard you are using.
6. You will now get the login prompt, on which you will type **root**, then hit **<Enter>**
tty1 tomsrtbt login: root <ENTER>
7. You will now get the password prompt line, on which you will type **xxxx**, then hit **<Enter>**
Password: xxxx <ENTER>, Note that the password **xxxx** that you typed will not display on the screen.
8. You will now get the execution prompt “#”

2.1 Drive Partitioning

THIS STEP IS DONE AT THE FACTORY, YOU CAN SKIP TO THE NEXT STEP IF YOU ALREADY HAVE THE 4 PARTITIONS ALREADY SETUP

1. Type **fdisk** to engage the hard disk utility
2. Use the help menu of fdisk to create the following partitions:
 - Partition 1 : Linux Swap (128Mbytes), (cylinder 1-17)
 - Partition 2 : Linux native (Linux operating system partition, 2Gbytes), (cylinder 18-279)
 - Partition 3 : Linux native (doremi partition, 2Gbytes), (cylinder 280-541)
 - Partition 4 : Linux native (backup partition), (cylinder 542- last)
3. Change Partition 1 ID to Linux Swap (code 82)
4. Type **w** to save the changes to the disk and quit.

2.2 Installations steps:

- 1- At the prompt, type the following line to start the installation:

For a SCSI Server type:

```
# /cdrom/vinst 128M clean <ENTER>
```

For a Fiber Channel Server type:

/cdrom/vinst 256M clean <ENTER>

- 2- The operating system (OS) will now be installed. At the end of the OS installation, you will be prompted to enter the last digit of the IP address and the name you want to give to the server:

Enter the last digits of the IP address

248 <ENTER>

Enter the server name

Vlserver <ENTER> (you can enter the customer's name here, use alphabetical characters and numbers only, no spaces)

Do not be alarmed if you see some warning after executing this command.

- 3- Wait until you see the message

Copying doremi binaries done
#

- 4- The first step of the installation is now complete. Type the following command

umount /cdrom <ENTER>

- 5- Remove the boot diskette and the CDROM, then type the following command

shutdown <ENTER>

- 6- The server will now reboot with the new installation. At the end of the boot, you will be prompted to login, log in as root by typing:

Vlserver login : root <ENTER>

Password : veone <ENTER>

- 7- Go to the doremi binaries directory by typing:

[root@vlserver /root]# cd /doremi/bin <ENTER>

- 8- If Xwindows is not running you can launch it by typing:

[root@vlserver bin]# startx <ENTER>

- 9- Run the application vconfig by typing

[root@vlserver bin]# ./vconfig <ENTER>

Refer to Using vconfig. VERY IMPORTANT.

- 10- Selecting the server start up mode at power up

- a) To automatically start the server at power up, type:

[root@vlserver bin]# cinst auto <ENTER>

- b) To manually start the server at power up, type:

```
[root@v1server bin]# cinst manual <ENTER>
```

IT IS VERY IMPORTANT TO SELECT CINST AUTO OR CINST MANUAL.

Do not be alarmed if you see some warning after executing one of these commands.
Your installation is complete. You can reboot by typing:

```
[root@v1server bin]# reboot <ENTER>
```

2.3 Using vconfig

BEFORE RUNNING VCONFIG THE SERVER MUST BE STOPPED:

```
[root@v1server bin]# ./v1server stop <ENTER> (wait for about 30 seconds)
[root@v1server bin]# ./vconfig <ENTER>
```

2.3.1 File Menu

2.3.1.1 Backup

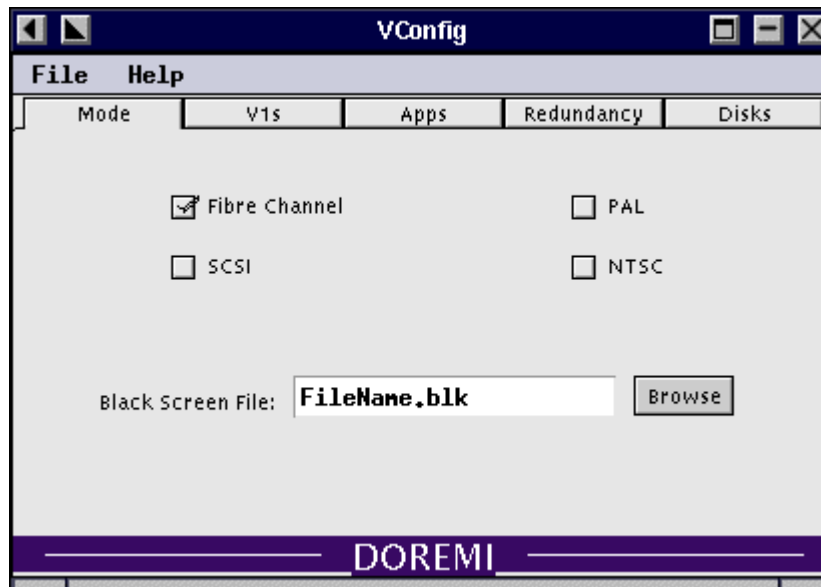
This menu command will copy the configuration files and the video file table to the backup partition.

2.3.1.2 Restore

This menu command will copy the configuration files and the video file table from the backup partition to the server.

2.3.2 Mode

The Mode tab will allow you to select SCSI or Fibre Channel storage and the default blank screen file for PAL and for NTSC. When the unit is playing an empty cue, the video monitor will show the blank screen file. This DOES NOT set the mode of operation to PAL or NTSC



Note: The black screen files (FileName.blk) are saved in the doremi/etc directory.

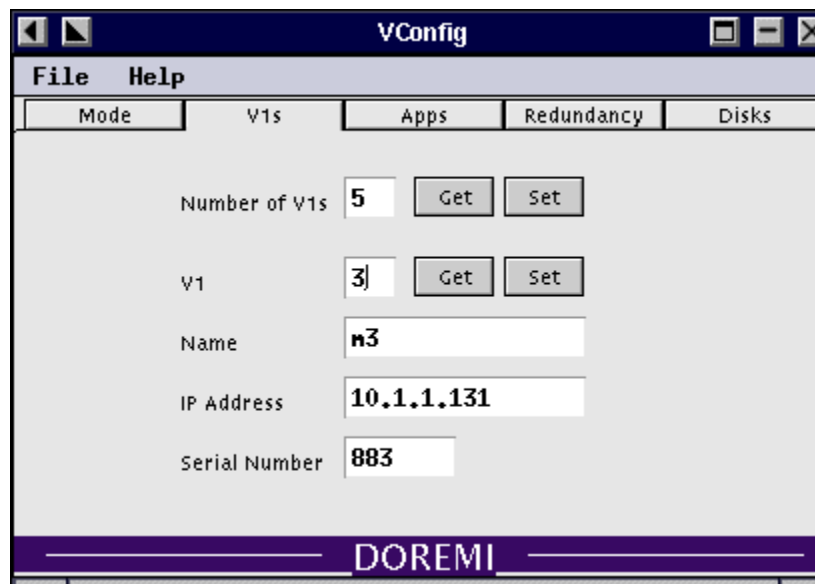
2.3.3 V1s

The V1s tab allows you to configure the V1s attached to the server.

Clicking the Get button next to Number of V1s will show you how many V1 channels are currently set on the server, to change that number you can type in a new number and click Set.

To get the parameters of each V1 on the server you would type in the number next to V1 and click on Get, to change the parameters, you would type in the new parameters for that V1 and click Set. To setup your server properly you need to make sure that all V1 channels are set properly as far as IP addresses and serial numbers. In the Name box enter the name of the V1, the name of the V1 should not include any spaces, forward slash and back slash. In the IP Address box enter the IP Address of the V1 in the form 10.1.1.xxx; do not use leading zeros like 10.01.01.xxx.

In the Serial Number box enter the Serial number of the V1, do not use leading zeros.



The screenshot shows the VConfig application window with the V1s tab selected. The window has a menu bar with 'File' and 'Help'. Below the menu bar are five tabs: 'Mode', 'V1s', 'Apps', 'Redundancy', and 'Disks'. The 'V1s' tab is active. The configuration area contains the following fields and buttons:

Number of V1s	5	Get	Set
V1	3	Get	Set
Name	n3		
IP Address	10.1.1.131		
Serial Number	883		

At the bottom of the window, there is a purple bar with the text 'DOREMI' in white.

2.3.4 Apps

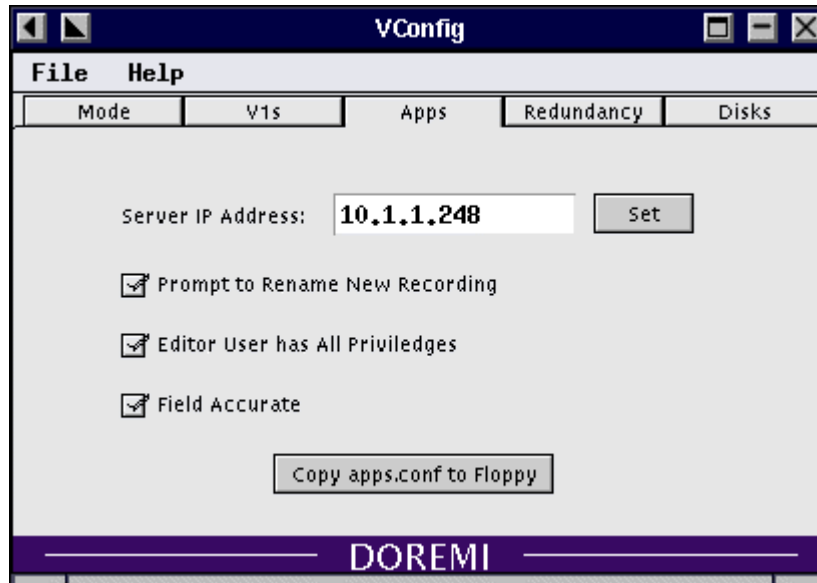
The Apps tab allows you to set the IP address of your server. The default settings is 10.1.1.248, to set the IP address type the new one and hit Set

If you select the Prompt to Rename New Recording, the Scheduler will ask you for a file name every time you record on a channel.

Editor User should have all privileges

If Field Accurate is selected the server will be field accurate, if not it will be frame accurate.

Click on Copy apps.conf to Floppy if you want to save the default file on a diskette.



THE IP ADDRESS OF THE SERVER HAS TO MATCH THE ONE SPECIFIED AT INSTALLATION.
THE IP ADDRESS OF THE SERVER CANNOT BE CHANGED FROM THIS APPLICATION.

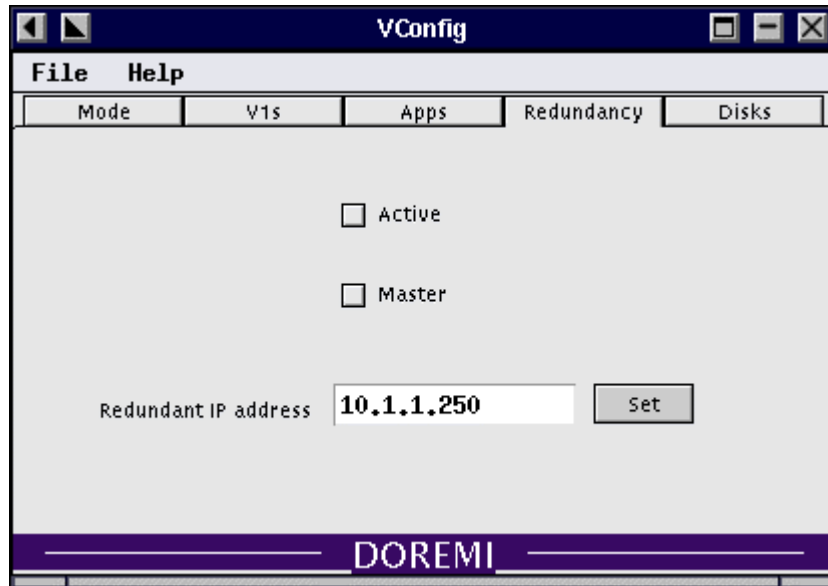
2.3.5 Redundancy

The Redundancy tab allows you to define the redundant server

The default IP address for the redundant server is 10.1.1.249, to change it, type the new IP address and click Set

If you don't have a redundant server Active and Master should not be selected.

If you have a redundant server, select Active on both servers and select Master on the main server only.



2.3.6 Disks

The Disks tab allows you to define the RAID (Redundant Array of Independent Disks)

The RAID is defined by “r” rows each containing “c” columns. When the server writes on the RAID it does it one row at a time. In case of a drive failure, only the row containing the failed drive will be affected.

For a SCSI server with 4 drives select 1 row, 4 columns, 32768 block size and first disk ID=1 (default).

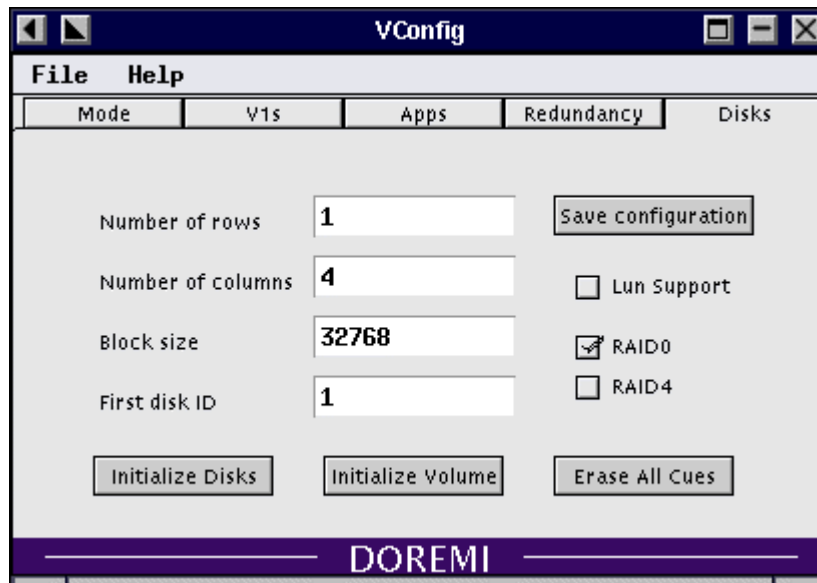
The First Disk ID is the SCSI (FC) ID number of the first disk in the RAID, all drives should have consecutive numbers starting with the First disk ID. Select RAID0 or RAID4* to define the RAID type.

To operate in raid 0 select RAID0. In raid 0 all disks are accessed during record and playback. Using raid 0 allows the use of all the disks recording space.

To operate in raid 4 select RAID4*. In raid 4 all disks are accessed during record and all disks but one are accessed during playback. Using raid 4 will limit your disks recording space.

To define your RAID

1. Select all the parameters, click on “Save configuration”
2. Click “Initialize Disks”, and READ THE PROMPT CAREFULLY BECAUSE ALL DATA ON THE RAID WILL BE ERASED and reply with the proper selection
3. Click “Initialize Volume”, and READ THE PROMPT CAREFULLY BECAUSE ALL DATA ON THE RAID WILL BE ERASED and reply with the proper selection
4. Click “Erase All Cues” will empty the Cues folder so you can start with a clean server.



You would only need to go to the Disks tab when you want to completely erase the server storage.

*Note: RAID4 is only to be used by users who have purchased the RAID4 option. Any unauthorized use of RAID4 will result in losing technical support. To purchase the RAID4 option please contact Doremi Labs Inc.

2.4 Setting up the server with new default parameters

SETTING THE SERVER WITH NEW DEFAULT PARAMETERS WILL ERASES ALL RECORDED VIDEO/AUDIO FILES.

To setup the default parameters, compression, sync source, etc... you need to

1. While the server is running and without having any Scheduler, Browser or File Browser windows open, setup the parameters you need using the front panel controller or the RCV9P-V1 controller on one of the V1 units attached to the server. These settings have to be common to all V1's therefor do you settings using the features of the least capable V1 unit.
2. Initialize that same v1 (refer to the V1 User Manual on how to Initialize)
3. Open a Scheduler window for that same unit and do Save As, select the folder "cues" and save the file as "default"
4. Quit the Scheduler and stop the server by typing: `[root@v1server bin]# ./v1server stop <ENTER>`
5. Type: `[root@v1server bin]# cp /doremi/cues/default.xcl /doremi/etc/diskInfo.xcl`
6. Run the vconfig application by typing: `[root@v1server bin]# ./vconfig`
7. Go to the Disks tab and initialize Disks, initialize Volume and Erase all Cues
8. Quit vconfig and start the server by typing: `[root@v1server bin]# ./v1server start`

LINUX IS CASE SENSITIVE PAY GOOD ATTENTION WHEN YOU TYPE COMMANDS.

3 Back up and Restore

BEFORE BACKING UP AND RESTORING THE SERVER MUST BE STOPPED

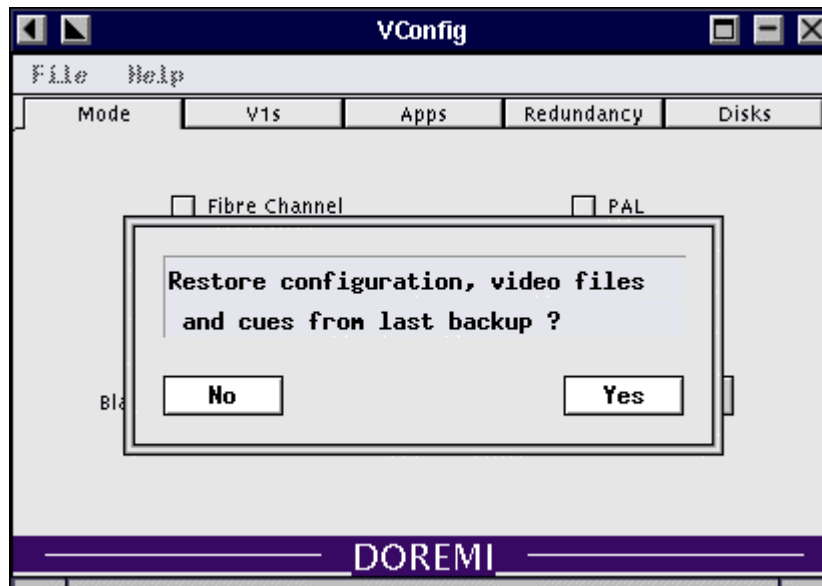
To backup, from an xterm window type:

```
[root@vlserver bin]# cd /doremi/bin <ENTER>
[root@vlserver bin]# ./vconfig <ENTER>
```

After the vconfig window opens, choose Backup from the File menu. This will copy the configuration files, the video file table and the all the contents of the /doremi/cues folder to the backup partition.

To restore, from an xterm window type:

```
[root@vlserver bin]# cd /doremi/bin <ENTER>
[root@vlserver bin]# ./vconfig <ENTER>
```



After the vconfig window opens, choose Restore from the File menu. This will restore the configuration files, the video file table and all the contents of the /doremi/cues folder from the backup partition.

4 Updating an existing installation

BEFORE YOU ATTEMPT TO REINSTALL, REFER TO CHAPTER 3 AND BACKUP YOUR SERVER CONFIGURATION, VIDEO FILE TABLE AND CUE LISTS.

BEFORE UPDATING AN EXISTING INSTALLATION THE SERVER MUST BE STOPPED

4.1 Updating From a CD-ROM

To update an existing installation from a cdrom follow these steps

- 1- From the /doremi/bin directory stop the server by typing:
`[root@v1server bin]#: ./v1server stop <Enter>`
- 2- Go to the root directory by typing `[root@v1server bin]#: cd / <Enter>`
- 3- Insert the CD-ROM into the CD-ROM drive
- 4- Type: `[root@v1server /]#: mount /mnt/cdrom <Enter>`
- 5- Type: `[root@v1server /]#: /mnt/cdrom/update <Enter>`
- 6- When you get the update successful message type the following command
`# umount /mnt/cdrom <ENTER>`
- 7- Remove the CDROM, then Switch to the /doremi/bin directory by typing:
`[root@v1server ~]#: cd /doremi/bin <Enter>`
- 8- Start the server by typing: `[root@v1server bin]#: ./v1server start <Enter>`

4.2 Updating From Doremi Labs ftp Site

To update an existing installation from Doremi labs ftp site follow these steps.

1. Go to the Doremi Labs ftp site: <ftp://www.doremilabs.com>
2. Download the file called v1srvxxx.tgz where xxx designate the version number
3. Copy the file to the server, the file is about 3 Megabytes, it is best to use “ftp” to transfer the file to the server.

To use ftp from a windows monitoring station.

- a) Open a DOS window
- b) Go to the folder that contain the file “v1srvxxx.tgz”
- c) Type **ftp 10.1.1.xxx** where xxx is the address of the server
- d) ftp will ask you for a user name, type **v1** and hit **<enter>**
- e) ftp will ask you for a password, type **veone** and hit **<enter>**
- f) Type **bin** and hit **<enter>**
- g) Type **put v1srvxxx.tgz** and hit **<enter>**
You should see few messages including “Transfer Complete”
- h) Type **bye** and hit **<enter>**

After ftp, the file transferred will be in the folder “/home/v1”

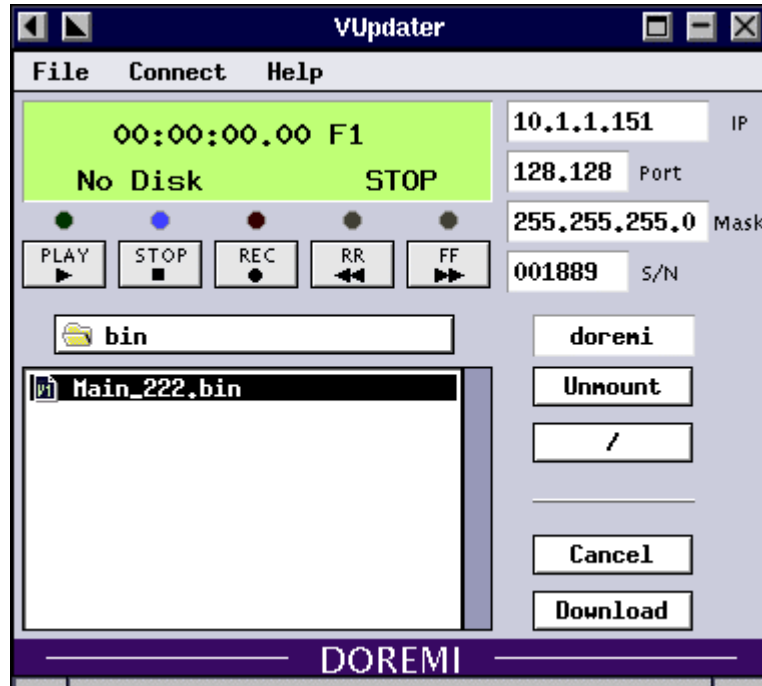
4. Go to the /home/v1 directory by typing `cd /home/v1 <enter>`
5. Decompress the update package by typing `tar zxvf v1srvxxx.tgz`
6. Type `./update` to install the update.

AFTER THE SERVER HAS RESTARTED, REFER TO CHAPTER 3 Back up and Restore and RESTORE.

5 Vupdater

The Vupdater utility should be used to update the internal software of the server ready V1s connected to the server. Vupdater is located in the /doremi/bin directory

5.1 Updating the V1 firmware using Vupdater



- 1- If the server is running stop the server by typing: `[root@v1server bin]#: ./v1server stop<Enter>`
- 2- To run the vupdater type: `[root@v1server bin]#: ./vupdater <Enter>`
- 3- From the Connect Menu, select Ethernet and type the IP address of the unit you are updating
- 4- If a communication is made, the Static Text message will disappear from the LCD display of vupdater
- 5- Enter the IP address of that unit one more time in the IP field of the main window of vupdater
- 6- Enter the serial number of that unit in the S/N field of the vupdater main window. It is very important to use the proper serial number and IP address; otherwise the server might not recognize that unit after you finish the update procedure.
- 7- Select the file that has the firmware usually named mainxxxx.bin, where xxxx designate the version number.
- 8- You will now see the messages, Uploading, Flashing, then Success. And the unit will restart with the new firmware.

5.2 Obtaining the V1 firmware updates

1. Obtain the V1 firmware from the Doremi Labs ftp site <ftp://doremilabs.com>. From a windows station download the file mainxxxx.zip. From a Mac station download the file mainxxxx.sit
2. Unzip (unstuff all the files in the mainxxxx.zip (mainxxxx.sit)
3. Copy the file mainxxxx.bin into a floppy diskette
4. Stop the server by typing: `[root@v1server bin]# ./v1server stop<Enter>`
5. Type: **mcop y a: mainxxxx.bin /doremi/bin/mainxxxx.bin**
6. After copy is done refer to 5.2 Updating the V1 firmware using Vupdater

6 Making a V1 server boot floppy diskette

THE DISKETTE MUST BE VERY GOOD QUALITY. IT IS FORMATTED AS A 1.72MB DISKETTE.

BEFORE MAKING A V1 SERVER BOOT FLOPPY DISKETTE THE SERVER MUST BE STOPPED.

To create the V1 server boot floppy diskette execute the following commands:

1. Stop the server by typing: `[root@v1server bin]# ./v1server stop`
2. Go to the boot_root directory by typing: `cd /root/boot_root`
3. From the boot_root directory type `[root@v1server ~/boot_root] # ./mkdoremiboot`
4. Follow the instructions on the screen to complete the creation of the v1server boot floppy diskette.

7 Technical Support

Before you call technical support, please make sure that:

1. You connect a modem to com1 of the server (9-pin connector closest to the keyboard connector)
2. From the /doremi/bin directory type:
`[root@vlserver bin]# ./vpppd & <ENTER>`
3. Make sure the modem is in AA mode (Auto Answer)

Call our Technical Support staff at 323 874 3411 and provide them with the telephone number of the line connected to the modem.