

## Operation of DS1 with SGI

**This info is a rough draft regarding use of the MultiBuffer DS-1 on an Ethernet network with an SGI workstation.**

### SGI & DS-1 setup

#### 1. Set up a new host on your SGI workstation for the DS-1

Check your workstation to see what IP addresses are available and set the DS-1's address as needed from the DS-1 front panel. Or just use the DS-1 address that is already in there.

To set the DS-1 IP address, go to the Network Menu and arrow through to the IP address. Press the down arrow to get to the menu for setting a new address. It's in hexadecimal rite now, so you may need to make few tries and "zero in" on what you want the address to be. Press enter when done.

#### 2. rlogin- remote login

In a shell, you should be able to rlogin now. This is where you control the DS-1 functions, such as timing and routing press the ? to see your command choices. You can't send or grab pictures from here though, logout (or exit or command D) and use the rcp command for sending and grabbing.

#### 3. rcp - remote copy

To send a YUV picture from the SGI to buffer 1 in the DS-1, type this command in the shell:

```
rcp filename ds1:001
```

To grab a picture in the DS-1 and copy it to the workstation in YUV format:

```
rcp ds1:001 filename
```

#### 4. RGB file format

**fromyuv and toyuv are utilities that are on many workstations already and are also used with disc recorder; these utilities are also used with the DS-1/SGI too. They are often found in /user/sbin.**

To change a picture you grabbed from YUV (the DS-1's format) to RGB (the SGI's format and the one you can easily view on the SGI screen):

```
fromyuv existing.filename new.file.name
```

To change an RGB file to YUV:

```
toyuv existing.filename new.file.name
```

## 4. Shell scripts

You can make scripts and iconize them to simplify your usage. Here are some examples:

For sending YUV files to the DS-1:

```
jot ds1buf1
```

In the jot window type:

```
rcp $1 ds1:001      where $1 is the temporary name for the  
picture
```

Then close the window. You may need to check the permissions for this script:

```
ls -l ds1buf1
```

If you need to change the permissions to allow reading and writing, to make it executable:

```
chmod +x ds1buf1      where chmod is change mode
```

Now you can drag the icon on the desktop for use. Drag and drop a YUV file onto the icon and the picture should auto send to the DS-1.

For a script that lets you drag and drop RGB files:

```
toyuv $1 temp  
rcp temp ds1:001
```

**Change permissions if needed and drag the icon where you like for usage.**

**For a script that lets you grab RGB files:**

```
rcp ds1:001 temp  
fromyuv temp $1
```

**For further information, contact Ensemble Designs.**

**ckz**