



## Backing-up to a SCSI Tape Device With the DR8/DR16

SCSI tape drives offer a fast, reliable back-up option for the DR8 and DR16 digital recorders. The main advantage being the VERIFY option that allows the user to verify that the back-ups have been made correctly. This can certainly help studio owners sleep better knowing that their projects are safe.

Backing up to a tape drive is not that different than using any other SCSI drive, however is one limitation that you should be aware of. **One back up file can exist on a single tape.** This means that a tape can hold either an ENTIRE back up (copies the entire contents of the disk), or a single PROJECT (only a single project is copied). In other words, *multiple projects can not be archived independently to a single tape.*

### **CONNECTING THE TAPE DRIVE**

Connecting a SCSI tape device is no different than any other SCSI device. You must:

1. Make sure all machines in the SCSI chain are powered down.
2. Set the SCSI ID of the device. You'll probably need to check the documentation that came with the drive. Make sure no other device in the SCSI chain is using the same ID.
3. Make sure the drive is terminated properly. If this is the last device in the SCSI chain, the tape drive should be terminated.
4. Connect the drive to the 50-pin Centronics SCSI-A connector on the DR8/DR16. Not all SCSI devices use the same style of connector found on the DR8/DR16 so an adapter may be required.
5. Power up all external SCSI devices. Once the tape drive is powered up, insert a tape into the drive. (Before the DR will recognize any removable media drive, media must be inserted into the drive.)
6. Power up the DR8/DR16.

When the DR8/DR16 is turned on it will scan the SCSI bus to locate any attached SCSI devices. The SCSI tape drive should be recognized at power-up. If the DR8/DR16 sees the tape drive it will display a "F" in the disk list at that device ID position. The "F" indicates a non-Akai formatted device has been detected. The DR16 Pro will display a "T" to indicate a tape drive has been found.

### **FORMATTING THE TAPE**

Before you can make a back up, you must format the tape. All new tapes will require formatting before use. To format the tape:

1. Press Sub-Menu then Disk (number 3 on the numeric keypad).
2. Use the Jog wheel to select BACKUP and press the STORE/ENT key on the front panel of the DR8/DR16.

3. Use the jog wheel to select TYPE – SCSI and press STORE/ENT.
4. When display shows TRANSMIT, use the Jog wheel to select FORMAT TAPE and press STORE/ENT to begin the format process. When formatting is complete the DR's display should show DONE.

### **BACKING UP**

Now that your tape is formatted you should be ready to back up your data. However, before you begin you will need to decide if you are backing up your entire disk (ENTIRE) or a single project (PROJECT). Remember, only one back up can reside on a tape.

1. Press Sub-Menu then Disk (number 3 on the numeric keypad).
2. Use the Jog wheel to select BACKUP and press the STORE/ENT key on the front panel of the DR8/DR16/DR16 pro.
3. Use the jog wheel to select TYPE – SCSI and press STORE/ENT.
4. The display should show TRANSMIT. Press STORE/ENT to transmit the back up.
5. Next you will need to select the TAPE ID. Set this to the SCSI ID of the tape drive you are backing up to. Once selected press STORE/ENT.
6. Before initiating the back up you need to use the shuttle wheel to move the cursor so you can select the ENTIRE drive or a PROJECT to back up. Once this is selected you need to set the SCSI ID of the source device (the one you're backing up).
7. If you select PROJECT, you will need to use the jog wheel to select the desired project. Otherwise just press STORE/ENT to initiate the back up.

When the back up is complete the DR should display DONE. If, for some reason, the DR is unable to complete the back up it will report "FAIL" on the display. If you receive a FAIL message you should check your SCSI cables and termination. These are the most common reasons for failure. You may also have a bad tape, so trying a new tape or two may help.

### **VERIFYING THE BACK UP**

After a successful back up you can verify the results, but you should do this immediately after the back up. This will compare the data on the tape to the data that exists on the hard disk. However, since the DR's have an "Auto Save" feature (transparent to the user), if any operations are performed after the back up it may cause to VERIFY to FAIL.

1. Press Sub-Menu then Disk (number 3 on the numeric keypad).
2. Use the Jog wheel to select BACKUP and press the STORE/ENT key on the front panel of the DR8/DR16/DR16 pro.
3. Use the jog wheel to select TYPE – SCSI and press STORE/ENT.
4. The display should show TRANSMIT, but you should use the jog wheel to select VERIFY and Press STORE/ENT.
5. Next you will need to select the TAPE ID of the tape drive you are verifying. Once selected press STORE/ENT and the verification will begin.

If the VERIFY operation is successful the DR will display "DONE". If the verification is not successful the DR will display FAIL and you should try the back up again.