

In the normal method, you make an exact "clone" of the original with the copy synchronized to the ADAT's internal time code numbering. Use this method if you have a multi-ADAT setup, or if you're using a BRC, AI-2, or other ADAT time code-based product. The original and the copy will be interchangeable, with no change in the time code offset.

It is also possible to make a digital copy using the optical I/O only, without sync connections. The only thing that will be different between the copy and the original will be the ADAT time code. Such copies won't play back the same time code at the same point in the song as the original. Even so, such non-corresponding time code copies can still be synchronized to the original with sample accuracy by using the BRC and finding the proper offset.

6.1A Normal Method (Time Code Accurate)

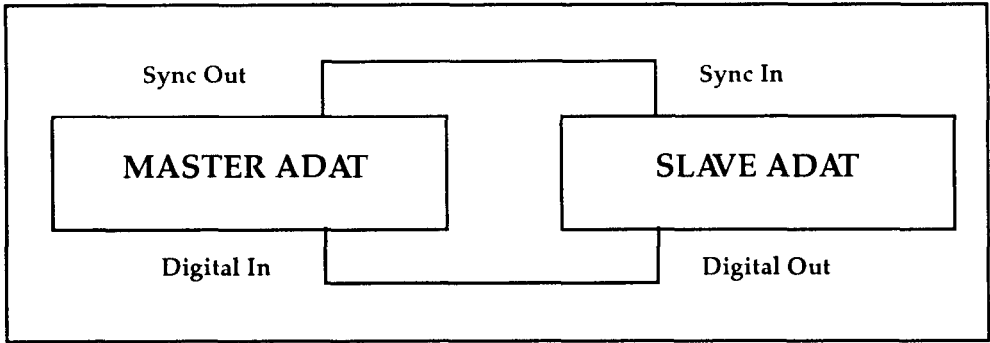
1. The two ADATs should be connected in the normal manner:
 - Connect the SYNC OUT of the master to the SYNC IN of the slave using an Alesis 9-pin sync cable.
 - Connect the DIGITAL OUT of the slave to the DIGITAL IN of the master using the fiber optic cable that came with your ADAT.
2. Put the original tape to be copied into the slave ("id 2") ADAT, which will be the source.
3. Put a blank or preformatted new tape into the master ("id 1") ADAT, which will be the target. (If the tape is blank, press Record Enable on all tracks of the master, and then press FORMAT on the master).
4. Set the master ADAT's clock source to internal by holding SET LOCATE and pressing DIGITAL IN until the display says "Int".
5. Press the DIGITAL IN switch on the master and slave machine. Both DIGITAL IN LEDs should be lit.

6. Record enable all tracks on the master (target) ADAT. **Make sure all tracks on the slave are in SAFE mode (red LEDs not on or blinking).**
7. Press PLAY and RECORD on the master ADAT.
8. Press STOP on the master after backing-up is complete.

The result is a new "clone" of the original master that will synchronize sample-accurately as if it were the original.

It is also possible to make a "clone" from the master machine to the slave machine, although this isn't the preferred method if the source tape has shown any signs of deterioration. Simply connect the DIGITAL OUT of the master to the DIGITAL IN of the slave, and press the Record Enable switches on the slave machine instead of the master. *Note:* Even though the master machine is the source and may not have anything plugged into its optical digital input, you still need to press Digital In on the master and set its clock to internal (hold Set Locate and press Digital In so the display reads "int"). The reason that the master's DIGITAL IN LED must be lit during backup is so the master "knows" that it is making a digital transfer, and uses the proper time settings for a digital transfer. This assures sample-accurate timing precision.

If some of this is hard to remember, an explanation of how Digital In affects synchronization may help. Consider a situation where you have two ADATs, and want to back up the slave ADAT's tape to the master ADAT. So, you connect the master's Sync Out to the slave's Sync In, connect the slave ADAT's digital out to the master ADAT's digital in. You now have the hookup shown below:



If you press Digital In on the master *without setting the master clock to Int*, this sets up a type of “feedback loop” where the master is trying to synchronize to the slave's digital signal, which is in turn trying to synchronize to the master, etc. This results in unstable operation; if the room is quiet you'll hear the servos of the ADATs changing pitch, and an error message may appear in the display.

To repair this situation, press and hold the Set Locate button, and press Digital In. The display will read "INT" to indicate that the master will use its internal clock instead of the clock derived from the optical in. Repeating this process will cause the display to read "dIG" to indicate that the master will follow the clock derived from its digital in, which is necessary when the master is receiving digital input from devices such as the AI-1, QuadraSynth, or QuadraVerb 2.

Note that a slave ADAT (id2 or higher) cannot switch from "dIG" to "int", because a slave machine always follows the clock from the master ADAT's Sync Out port, not the clock from the optical input or its internal clock.

6.1B Optical-Only Method

Under this method, the time code locations of the original and the copy will not match.

1. Connect one end of the fiber optic cable into the source ADAT optical output. The cable is non-polarized, so either