



MULTIBOARD SYNC CABLE INSTALLATION

This 10-pin IDC ribbon cable allows multiple STUDI/O boards to be sample-locked together for fully synchronous operation. The basic idea is that one board is the clock 'master' and the other boards slave to it. The clock 'master' can then either run from it's internal oscillators or lock to any of the normal sources. The clock 'master' can also have a Sync Backplate connected to it, providing ADAT sync for the system.

Windows installation instructions:

1. Determine which board is the master. Usually you will pick board #1. You can find out which board is board #1 by clicking the 'Identify This Board...' button in the Formats tab of the STUDI/O Control Panel (see the STUDI/O user's manual for more information). The LEDs on the board (as well as the optical outputs) will flash so you can easily tell which board is which.
2. Select this board as master (in the Setups tab of the Control Panel)
3. Set the clock source of *all the slave boards* (not the master) to 'Lock to External Word Clock'.
4. Now, remembering which board is master, power down your computer.
5. Making *sure* to connect pin-1 to pin-1, connect a sync ribbon cable from the 'SYNC OUT' of the master board to the 'SYNC IN' of the first slave. Then another sync cable from the 'SYNC OUT' of that slave to the 'SYNC IN' of the next slave, daisy-chain style, just like MIDI.
6. Double check the pin-1 orientation and all connections, then power up your computer.
7. Select the appropriate clock source for your master board.
8. In the status/errors panel, check the 'measured sample rate' of each board, to make sure they match within 0.02KHz. If they're way off, retrace your steps, because someone isn't locked.
9. That's it! Now you have a lot more channels to play with! Enjoy!

Macintosh installation instructions:

1. There's no way to specify the master board in the mac, the ASIO driver always uses the first board. So installation is a little 'trial and error'.
2. Put sync ribbon cable(s) (obtained from Sonorus, Inc.) from Sync In of one board to Sync Out of the next. Since it's impossible initially to tell which is the master, simply guess! Start at one end and string the boards together.
3. Connect an ADAT input to input A of the master board (which has Sync Out connected to a ribbon cable and no Sync In connected), and run Cubase. Select 'optical A' as the clock source. (or you can use the ADAT+SPDIF mode and use an SPDIF source and optical B.) If the clock rate changes to the correct value, you guessed right. If not, you have them backwards. In which case, power down your system, and change the ribbon cable(s) in to out, etc. and the other end is actually your master. The boards are numbered consecutively with the slots, so there's only two possibilities.
4. The slave board(s) follows the master (via the ribbon cable) so is sample-locked regardless of the master's clock source. The channels are numbered starting at the master board.
5. You're done! Now you have a ton of channels to play with! Enjoy!