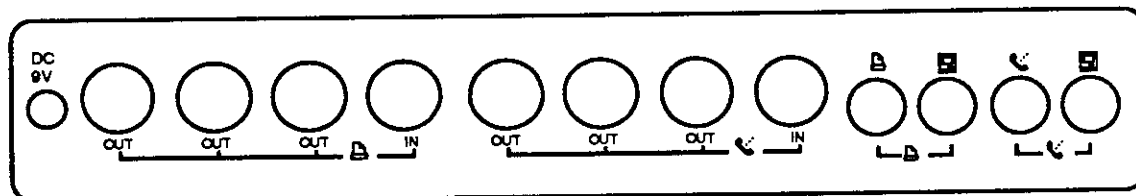# The Studio Plus *TWO* MIDI Interface
Operating Instructions

Macintosh Connections

This is a diagram of the rear panel on the Studio Plus *TWO*

From right to left the connections should be hooked-up as follows:

The first connector (with an icon of a Mac) should be hooked-up from the interface to the Macintosh's Modem port using one of the cables supplied with the interface. This allows communication between the Macintosh's Modem port and the interface.

The second connector (with an icon of a phone) is for your Modem or any other Macintosh peripheral (even connection to a Kurzweil).

The third connector (with an icon of a Mac) should be hooked-up from the interface to the Macintosh's Printer port using one of the cables supplied with the interface. This allows communication between the Macintosh's Printer port and the interface.

The fourth connector (with an icon of a printer) is for your Printer or any other Macintosh peripheral.

By having your Modem and Printer hooked-up like this with the Studio Plus TWO you can simply, at the flip of a switch, use your Modem or Printer without un-doing any cables.

MIDI Connections

The next connectors are for MIDI (Musical Instrument Digital Interface).
They are seperated into two parts: one MIDI IN and three MIDI OUTs on the
Modem port, and one MIDI IN and three MIDI OUTs on the Printer port.

These connections are unique because they are INDEPENDENT per port. The
MIDI information can be different coming in on either port as well as
different going out. Opcode's **Sequencer 2.5, Editors,** and **Librarians** allow you
to assign a specific port to each MIDI channel. This lets you choose what
MIDI information you want to send out what port.

The Studio Plus TWO does allow you to use one other configuration: one
MIDI IN on the Modem port and *SIX* MIDI OUTs on the Modem port, and
One MIDI IN on the Printer port. This is useful for programs that do not
access the Printer port for MIDI OUTs. A switch on the front panel sets this
configuration.

Common MIDI set-ups (please see also MIDI set-ups for the Studio Plus)

You can connect the MIDI out of your MIDI keyboard to the MIDI IN of the
Modem side of your interface, and one of the MIDI OUTs of the Modem port
to the MIDI IN of the MIDI Keyboard. This will allow you to send
information from the synthesizer to the Macintosh and also send
information from the computer to the synthesizer.

The other two MIDI OUTs on the Modem port can be connected to the MIDI
INs of other MIDI synthesizers, drum machines, or MIDI devices (Reverbs,
Mixing consoles, etc,) to allow the computer to send MIDI information to
them too.

The Printer port MIDI connections can be used in the same way, or for a
second keyboard input and for output to more MIDI instruments. A
commmom usage of the Printer port MIDI IN is for a MIDI clock input from a
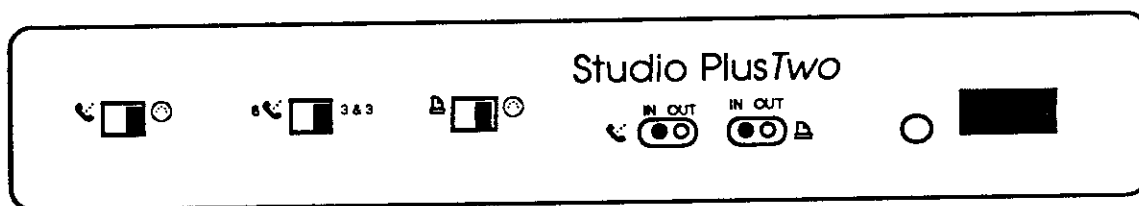tape-sync device or drum machine.

NOTE: Be sure to check "Printer port" in your MIDI set-up to allow access to
the Printer port MIDI INs and OUTs! (choose MIDI **Set-up** in the FILE menu
in Opcode Systems Products).

As stated above, the Printer port OUTs can be assigned to become Modem port OUTs by setting a switch on the Studio Plus TWO's front panel. This is useful for programs like Performer, or Deluxe Music Construction Set that do not allow access to the Printer port MIDI OUTs, the Studio Plus TWO gives you the option of *SIX* MIDI OUTs instead of just *THREE*.

Power Supply Connection

The last connection to the left on the back panel is for the power supply. Plug the power supply into the interface FIRST. Next make sure the power switch is off on the front panel - THEN plug the power supply into the AC outlet.

The Front Panel

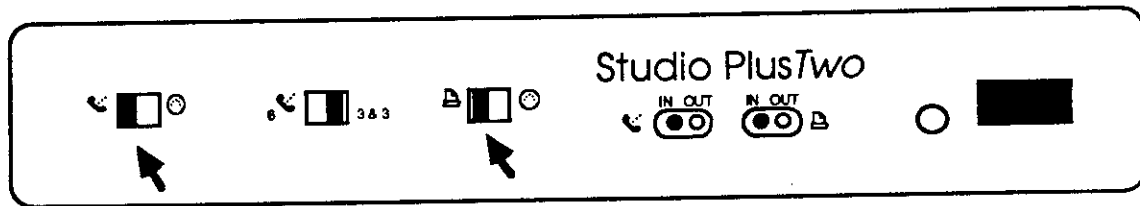**This is a diagram of the front panel of the Studio Plus *TWO***

From right to left, the switch settings and LEDs are as follows:

The power switch. When pushed to the right the power is OFF, when pushed toward the GREEN LED the power is ON - the light should be on in this position if the power supply is connected correctly and plugged in. The GREEN LED shows the power status of the interface.

The next four LEDs are MIDI status indicators, one for the Modem port (with an icon of a phone reciever) and one for the Printer (with an icon of a printer with paper in it). The RED LED shows MIDI input and the YELLOW LED shows MIDI output.

NOTE: Do not be alarmed if the red LED is constantly blinking: some MIDI instruments (Yamaha especially) are *ALWAYS* sending MIDI information - the interface just shows it.

Printer Port Thru Switch

The next switch is for the Printer port. It has the icon of a printer to the left of it.

MIDI Interface mode - *right* ->
When switched to the right (toward the icon of the MIDI connector) the interface can receive MIDI infrmation and pass it along to the Computer or send MIDI information from the computer out the Printer port - even if you have your printer hooked up when in this configuration you **cannot** print.
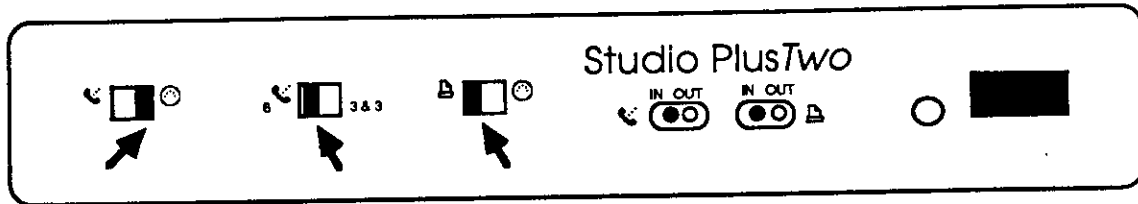
Thru mode - *left* <-
When the switch is set to the left (toward the icon of the printer) two things are possible:

1). If you have your printer hooked up to the Printer port (on the interface) you **can** PRINT! The Macintosh is connected Thru to the peripheral.

2). The MIDI information that is coming in the Printer port MIDI IN is being sent Thru to the MIDI OUTs of the Printer port! The Studio PLus TWO becomes a MIDI Thru box.

You can use this setting when using a non-MIDI software program or even if you don't have a Macintosh hooked up to it!

Six MIDI OUTs *or* Three & Three

The next switch is the Printer port MIDI OUT switch.

3&3 - *right* ->
When set to the right (toward the **3&3**) the MIDI OUTs of the Printer port are connected to the Printer port - that is three MIDI OUTs on the Modem side and three MIDI OUTs on the Printer side.

6 MIDI OUTs - *left* <-
When set to the left (toward the icon of the phone reciever with **6** next to it) the MIDI OUTs of the Printer port are connected to the MIDI OUTs of the Modem port - this creates SIX MIDI OUTs on the Modem port and NONE on the Printer port.

Modem port Thru Switch

The Modem port Thru switch works the same as the Printer port Thru switch except it changes the Modem port Macintosh and MIDI connections (see above under Printer port Thru switch).