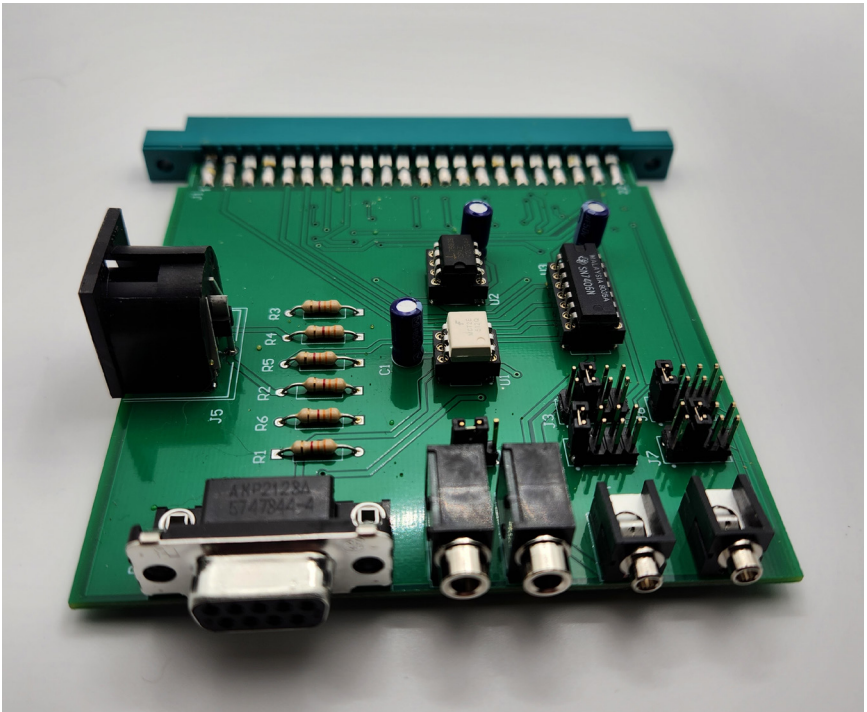




**RetroSpy**  
Technologies

# AIM 65 I/O Board



Last Updated: 12/16/2022

# The AIM 65 I/O Board

This AIM 65 I/O board connects to the Application connector in the back of the AIM 65.

## **Features**

- TTY over RS-232 communication via a DB-9 connector
- Cassette audio out (jumper configurable HI or LOW) a mono 3.5mm jack
- Cassette audio in via a mono 3.5mm jack
- Cassette remote control via two mono 2.5mm jacks
- Commodore floppy disk drive, or an SD2IEC, access via the AH5050 software on an EPROM residing at D000 (normal AIM-65 assembler socket)

The TTY over RS-232 communication only works on AIM 65s that have a 3.3K resistor at R24. Earlier AIM 65 units have a 1K resistor at this location. Since the AH5050 EPROM resides in the AIM 65's D000 PROM slot, that is typically reserved for the AIM 65 Assembler, a relocated Assembler for the B000 PROM slot is available.

# Connecting the I/O Board

The I/O board connects to the J1/Application connector, which is the one in the back of the AIM 65 directly behind the printer. Never plug or unplug the I/O board while the AIM 65 is powered on.

## Using the I/O Board

### 1. TTY to RS-232 over the DB-9 Connector

Connect the DB-9 serial connector to your PC with the appropriate cable. Power on your AIM 65 and connect to the AIM 65 at 1200 bps, 8 data bits, no parity, 1 stop bit and no flow control. You will also likely need to add a transmit delay of at least 25 ms/char and 50 ms/line depending on how you are loading data from your terminal. In your terminal press either the "Delete" or "Enter" key and you should be presented with a monitor prompt. Theoretically you can use other baud rates and the AIM will auto detect them, but I have never had it work correctly above 1200 bps.

## **2. Cassette Audio In**

Connect a 3.5mm mono cable between the audio out (EAR) of your cassette player to the jack labeled P3 on the I/O board. A stereo cable can be used but cassette audio will only be used from one channel.

## **3. Cassette Audio Out**

First, we need to set the HI/LO jumper labelled J2 on the I/O board. Most of the time LOW is sufficient for proper operation. To put the audio out into LO mode jumper pins 1-2 on J2. Pins 1 is closest to the J2 label. If needed, you can put the audio out in HI mode by jumpering pins 2-3 of J2. Once properly jumpered connect a 3.5mm mono cable between the audio in (MIC) of your cassette player to the jack labeled P1 on the I/O board. Again, a stereo cable can be used but the audio will only be outputted on one channel.

## **4. Cassette Remote Control 1**

First, we need to set the proper jumpers for your cassette deck #1. Section 9-1 of the AIM 65 user manual describes how to determine which pins the remote-control jack of your cassette deck need to be used for proper operation. The following table describes the jumpers (pins 1-2 are marked by a white dot to the right of the jumper pins):

<b>Jumper Label</b>	<b>Description</b>
J3	Determines to which AIM 64 pin the remote-control sleeve of recorder 1 is connected. Pins 1-2 = J1-W, 3-4 = J1-1, 5-6 = J1-F and 7-8 = J1-E
J4	Determines to which AIM 64 pin the remote-control tip of recorder 1 is connected. Pins 1-2 = J1-W, 3-4 = J1-1, 5-6 = J1-F and 7-8 = J1-E

## 5. Cassette Remote Control 2

First, we need to set the proper jumpers for your cassette deck #2. Section 9-1 of the AIM 65 user manual describes how to determine which pins the remote-control jack of your cassette deck need to be used for proper operation. The following table describes the jumpers (pins 1-2 are marked by a white dot to the right of the jumper pins):

<b>Jumper Label</b>	<b>Description</b>
J6	Determines to which AIM 64 pin the remote-control sleeve of recorder 2 is connected. Pins 1-2 = J1-V, 3-4 = J1-1, 5-6 = J1-J and 7-8 = J1-H
J7	Determines to which AIM 64 pin the remote-control tip of recorder 2 is connected. Pins 1-2 = J1-V, 3-4 = J1-1, 5-6 = J1-J and 7-8 = J1-H

## **6. AIM-65 Floppy Disk Subsystem**

### **AH5050**

Detailed usage of the AH5050 software can be found in the AH5050 manual which we have included on the USB stick. Some things to note about usage. After loading the software with "N" it is normal to get a File Not Found error unless you have a STARTUP file on the root of the inserted disk. I have included an empty STARTUP file on the USB stick for convenience. F1 brings up the AH5050 disk menu when using the AIM 65 keyboard, but in a serial terminal it's most likely the "[ " key.

To use the BASIC with the AH5050 subsystem a special startup procedure is required. I have included INIBAS on the USB stick which automates these steps. Place INIBAS on your disk and logon to your AIM. Press "N" to initialize the AH5050 software. Then "F1" or "[ " to bring up the disk menu. "R")UN, DEV=D1 FILE=INIBAS. BASIC will then start. In some terminals the terminal will get weird after starting BASIC. Most of the time all you need to do to fix this is to "ESC" out of BASIC and then warm start it by pressing "6" at the Monitor prompt.

# Contact Us

If you have any problems do not hesitate to contact us for help.

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