

## INSTALLATION GUIDE

# Discs of Tron

FREE PLAY + HIGH SCORE SAVE KIT | ORIGINAL BALLY MIDWAY SUPER CPU PCB



## DISCS OF TRON INSTALLATION GUIDE

Super CPU PCB identification | CNC 1 EPROM installation | Z80 installation | Pin 1 alignment | Settings and Wi-Fi

## INSTALLATION GUIDE

# Safety and Preparation

Read the full guide before handling the Discs of Tron Super CPU PCB.

### POWER OFF AND UNPLUG

Turn off and unplug the cabinet before removing the board or touching the Z80 processor. Allow the hardware to cool, and take precautions against electrostatic discharge.

### VERIFY THE ORIGINAL GAME WORKS

Confirm Discs of Tron is fully working before installing the kit. The upgrade is not a repair for a faulty original PCB. Photograph the board stack and the orientation of cables and connectors.

### PREPARE YOUR WORKSPACE

Remove the Super CPU PCB carefully, labeling any connectors you disconnect. Use a well-lit work surface and arrange the components so nothing is pressed against the chips or connectors.

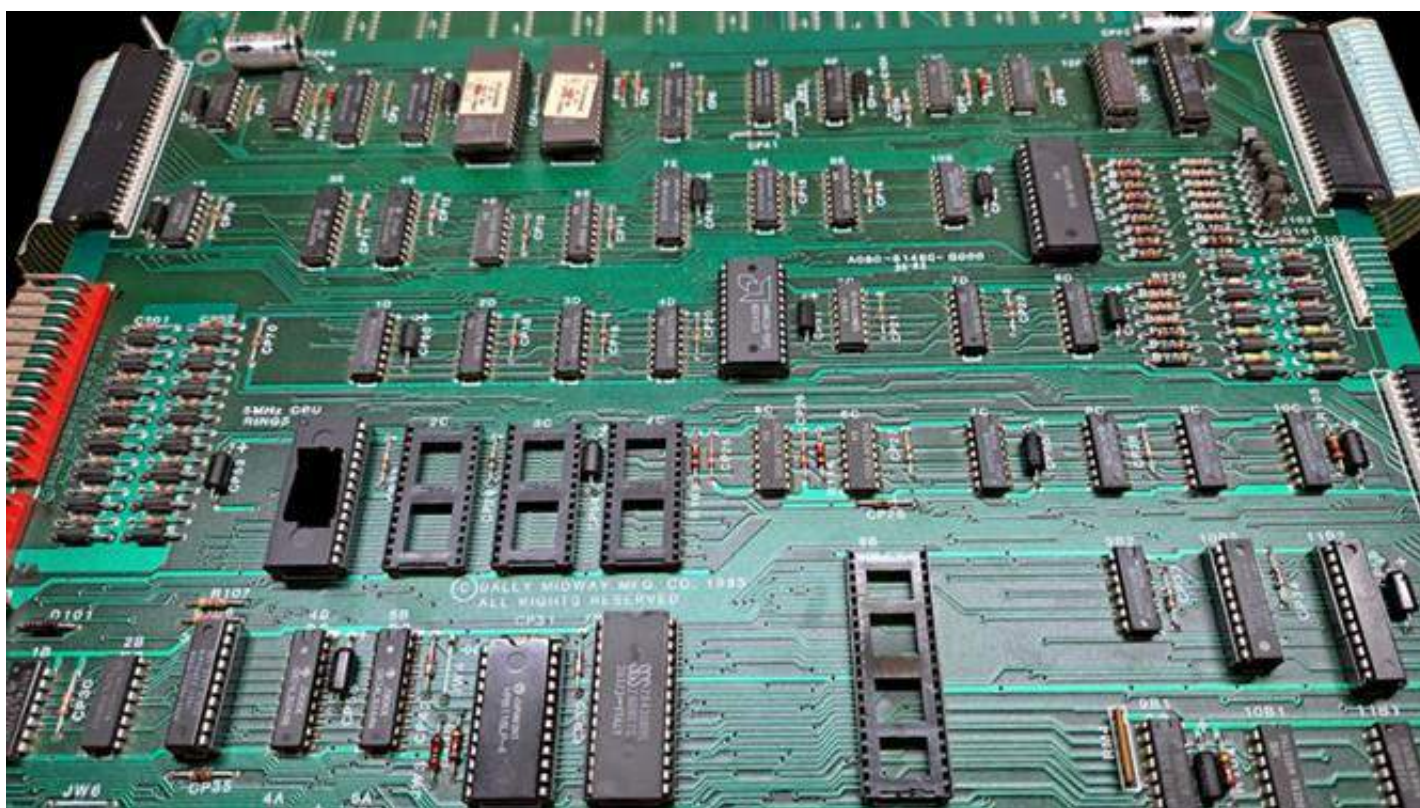
### WHAT'S INCLUDED / CPU REQUIREMENT

**Included:** 1 x HighScoreSaves Z80 daughtercard and **1 x CNC 1 replacement EPROM**. The CNC 1 EPROM is required for this kit. A compatible Z80 processor is also required; transfer the original socketed Z80 or use a compatible Z80 selected with your order. **Shipping note:** The CNC 1 EPROM is usually held temporarily in the daughtercard Z80 socket; remove it carefully before transferring the Z80.

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# Identify the Super CPU PCB

Locate the Super CPU board within the original Discs of Tron board stack.



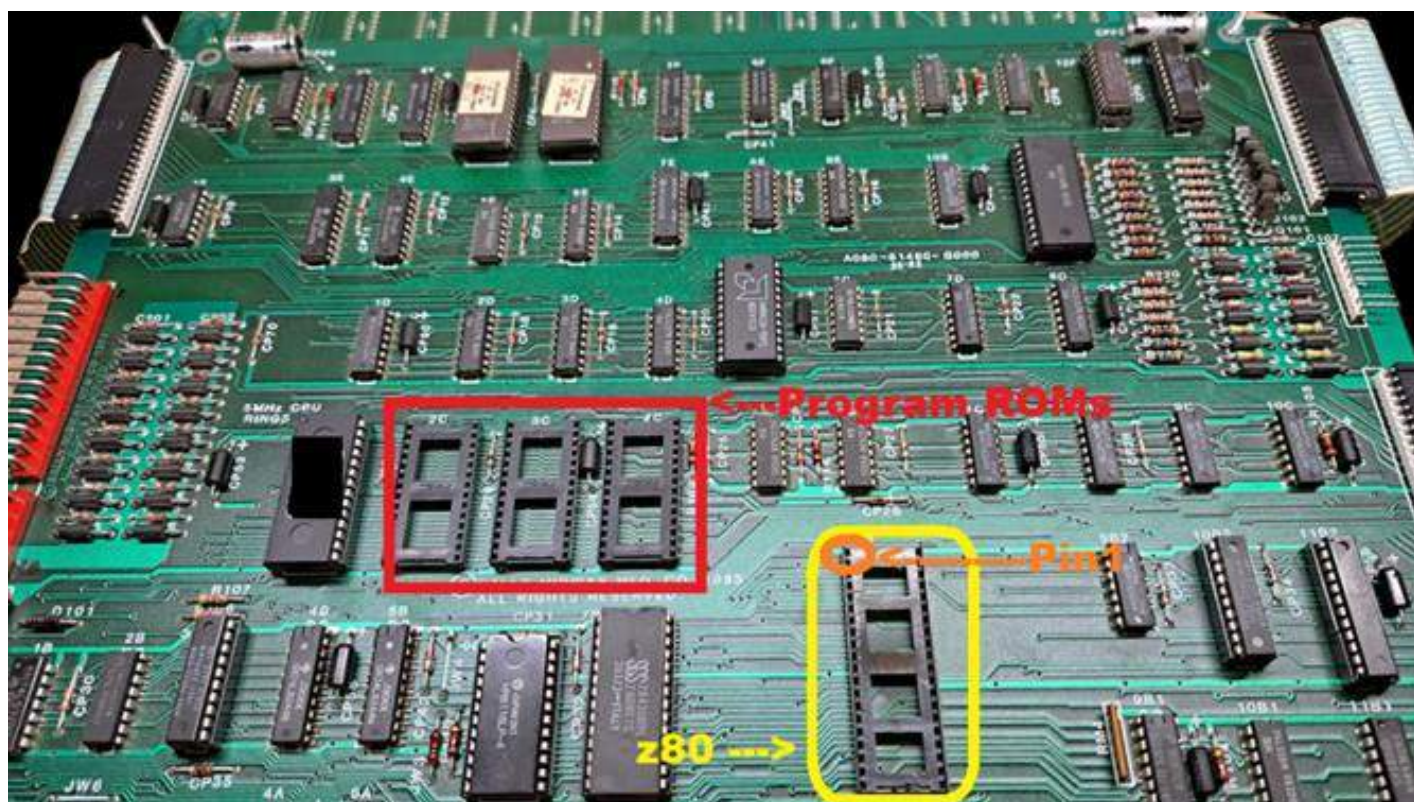
### USE THE CORRECT PCB

This is the Discs of Tron **Super CPU PCB**. Identify this board within the original arcade board stack. Perform the installation steps on this board only; the other boards in the stack do not need modification for this procedure.

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# Locate and Remove the Z80

The photograph identifies the Z80 socket and processor Pin 1 on the Super CPU PCB.



### STEP 1 - REMOVE THE ORIGINAL Z80

With the cabinet unplugged, find the Z80 at the yellow-outlined socket. Note Pin 1 orientation, then carefully lift the processor evenly to avoid bending pins.

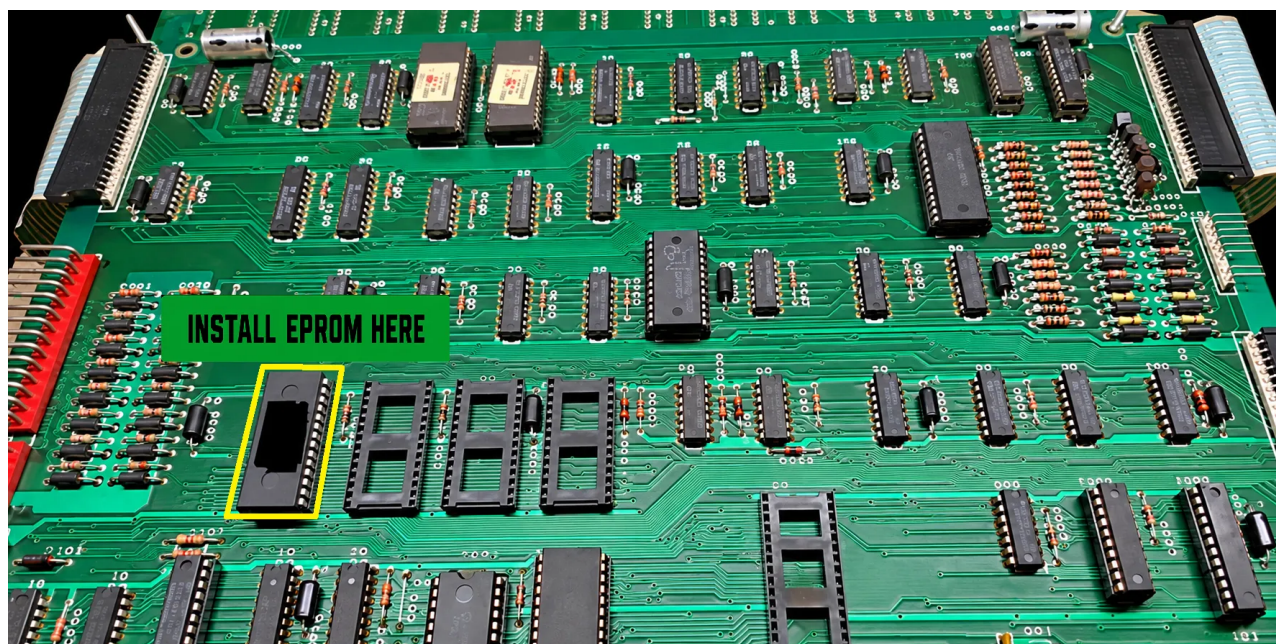
### STEP 2 - REMOVE THE PROGRAM ROMS

Carefully remove the original program ROMs in the **red-outlined box** shown above. Record each ROM position and Pin 1 orientation before removal. Store the removed ROMs safely; leave chips outside the red box in place.

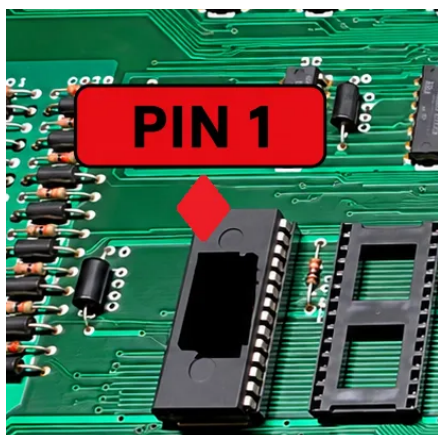
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# Install Provided CNC 1 Replacement

Install the required CNC 1 EPROM in the location shown, with Pin 1 correctly oriented.



The yellow box marks the CNC 1 EPROM installation position on the Super CPU PCB.



### STEP 3 - INSTALL THE INCLUDED CNC 1 EPROM

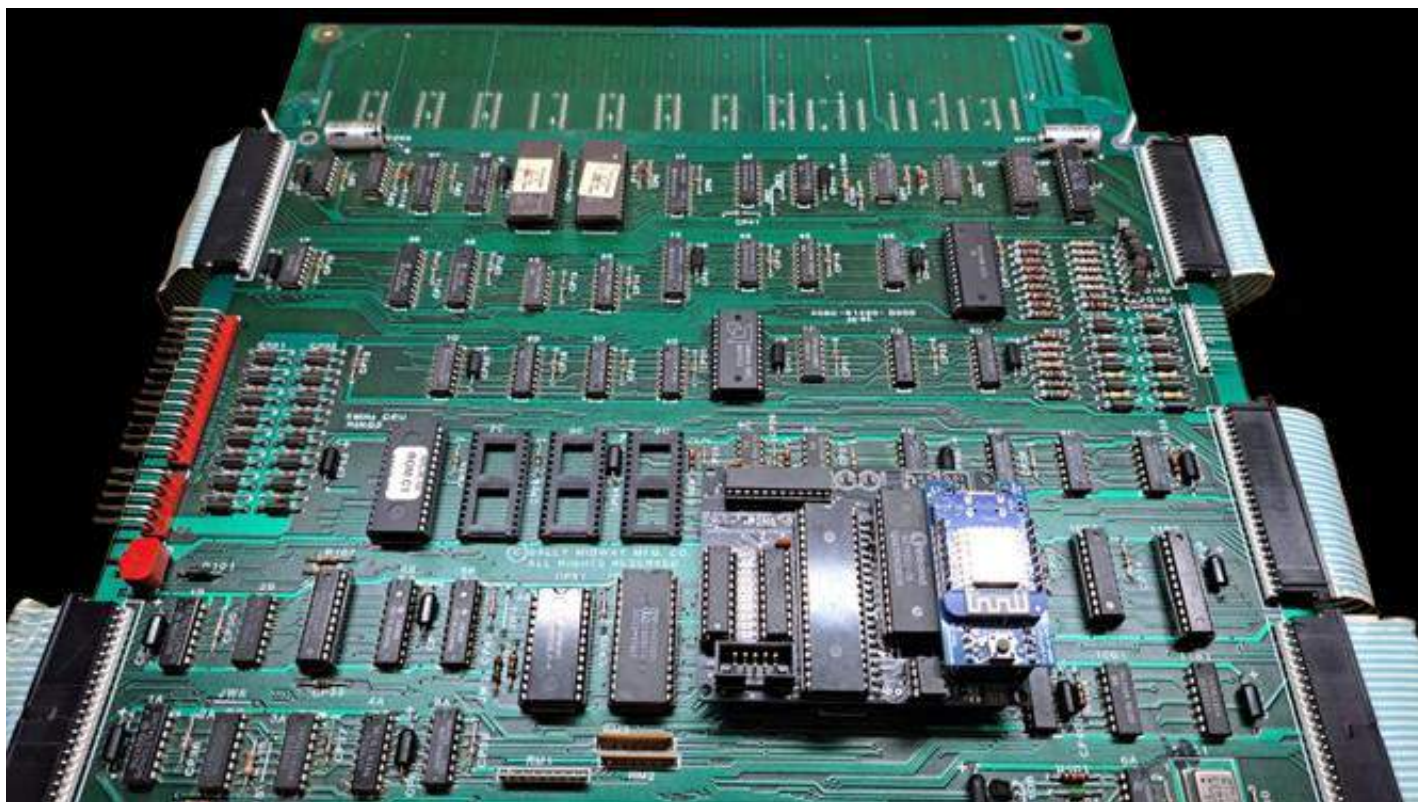
The **CNC 1 replacement EPROM** is included with your kit and is **required** for the Discs of Tron Free Play and High Score Save Kit.

For shipping, this EPROM is usually temporarily seated where the **Z80** would fit on the daughtercard. Gently remove it from that temporary position. Install it in the highlighted Super CPU PCB location shown, aligning Pin 1 with the red reference. Do not put the CNC 1 EPROM into the Z80 position on the game PCB.

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# Install the Z80 Daughtercard

Use the installed-kit photograph to confirm the daughtercard position on the Super CPU PCB.



### STEP 4 - FIT THE Z80 PROCESSOR AND INSTALL THE KIT

Insert the compatible Z80 into the HighScoreSaves daughtercard, matching the processor Pin 1 orientation to the kit socket marking. Verify that every processor pin enters its socket correctly. Then seat the assembled daughtercard in the original Z80 CPU socket on the Super CPU PCB, as shown.

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# Confirm Z80 Pin 1 Orientation

Check the Z80 processor notch and the daughtercard socket before restoring power.



This small reference photo shows the Z80 processor and daughtercard. Check the physical Pin 1 markings on your hardware.

### CHECK THE Z80 AND SOCKET

Confirm the notch or Pin 1 mark on the Z80 matches the daughtercard socket orientation. Inspect all pins for bending or folding underneath. Never force a chip into its socket or power on with uncertain orientation.

### CHECK THE INSTALLED DAUGHTERCARD

Make sure the HighScoreSaves daughtercard is fully seated in the Super CPU Z80 socket and has adequate clearance from adjacent components.

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# Final Installation Checks

Review the CNC 1 EPROM and Z80 installation before reinstalling the game board.

### **SUPER CPU PCB ONLY**

Confirm the installation was performed on the Discs of Tron Super CPU PCB. Keep other original boards and connectors in their original configuration.

### **CNC 1 EPROM AND PIN 1**

Confirm the included CNC 1 replacement EPROM is seated in the highlighted program-ROM location, not the Z80 CPU socket. Verify Pin 1 orientation and inspect for bent pins.

### **Z80 DAUGHTERCARD AND CLEARANCE**

Confirm the Z80 is fully seated in the HighScoreSaves daughtercard with Pin 1 aligned. Check that the daughtercard is fully inserted into the original Z80 socket and clears nearby components.

### **REINSTALL THE GAME BOARD**

Reconnect the Super CPU PCB using the connector labels and photographs made before removal. Confirm all connectors are in their original locations and orientations before powering on.

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# Power-On and Settings Menu

Complete installation, confirm normal operation, and access the settings menu.

### FIRST POWER-ON

With the Super CPU PCB reinstalled and the connectors checked, power on the cabinet. Confirm Discs of Tron starts normally and the original controls respond.

### OPEN THE KIT SETTINGS MENU

With the power **off**, press and hold Player 1 Start while switching the cabinet on. Release Player 1 Start when the on-screen prompt appears. If configured, the optional startup setting provides approximately five seconds to enter the menu.

### IF THE GAME DOES NOT BOOT

Turn the cabinet off before inspecting anything. Recheck CNC 1 EPROM orientation and seating, Z80/daughtercard seating, and original connections. Avoid repeated power-cycling while the fault is present.

### AFTER INSTALLATION

Review the available kit settings and confirm the game operates normally. Retain the board identification photos for future troubleshooting.

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# Wi-Fi Setup

Applicable only if you purchased a Wi-Fi Enabled Discs of Tron kit.

### CHECK YOUR KIT VERSION

Standard HighScoreSaves kits operate without wireless networking. Wi-Fi Enabled kits can offer online high score features where supported by their hardware and configuration.

### CONFIRM GAME OPERATION FIRST

Complete the Super CPU PCB installation, including the CNC 1 EPROM, and verify that Discs of Tron starts and runs correctly before configuring optional Wi-Fi.

### CONNECT THE WI-FI ENABLED VERSION

Follow the setup instructions for the exact Wi-Fi hardware provided with your kit. Where supported, use a compatible 2.4 GHz Wi-Fi network. Keep kit credentials private.

### LOCAL OPERATION

Normal arcade gameplay does not require a Wi-Fi connection. Local score saving and settings continue to operate according to the features of your kit.

[Standard vs. Wi-Fi Kits](#)

[Global High Scores](#)

## INSTALLATION GUIDE

# Helpful Resources

HighScoreSaves product, installation, and technical support links.

### Discs of Tron Kit

Matching product page and Z80 processor purchase options.

### Discs of Tron Compatibility & Comparison

Check PCB identification, socket requirements, and kit compatibility.

### Installation Guides

Browse the HighScoreSaves installation guide library.

### Arcade PCB Identification

Learn how to identify original arcade hardware before an upgrade.

### Tips and Tricks

General kit settings, operating notes, and technical tips.

### Standard vs. Wi-Fi Enabled Kits

Understand offline kit features and optional online connectivity.

### Global High Scores

View qualifying scores submitted from connected arcade kits.

### Contact HighScoreSaves

Get technical support; include clear photos of the installation.