

TANGLES' PIN PARTS

TPP-1010

Replace the 5101 memory chip in Stern and Bally MPU boards with this Non-Volatile memory adaptor.

Description

The TPP-1010 is a non volatile RAM adapter (NVRAM) than plugs in as a replacement for the 5101 memory chip used on Stern MPU-100 and Bally AS-2518-35 CPU board.

This module is a worthwhile upgrade for your Stern or Bally pinball machine, enabling the complete removal of batteries. Remove the risk of battery corrosion by removing batteries completely.

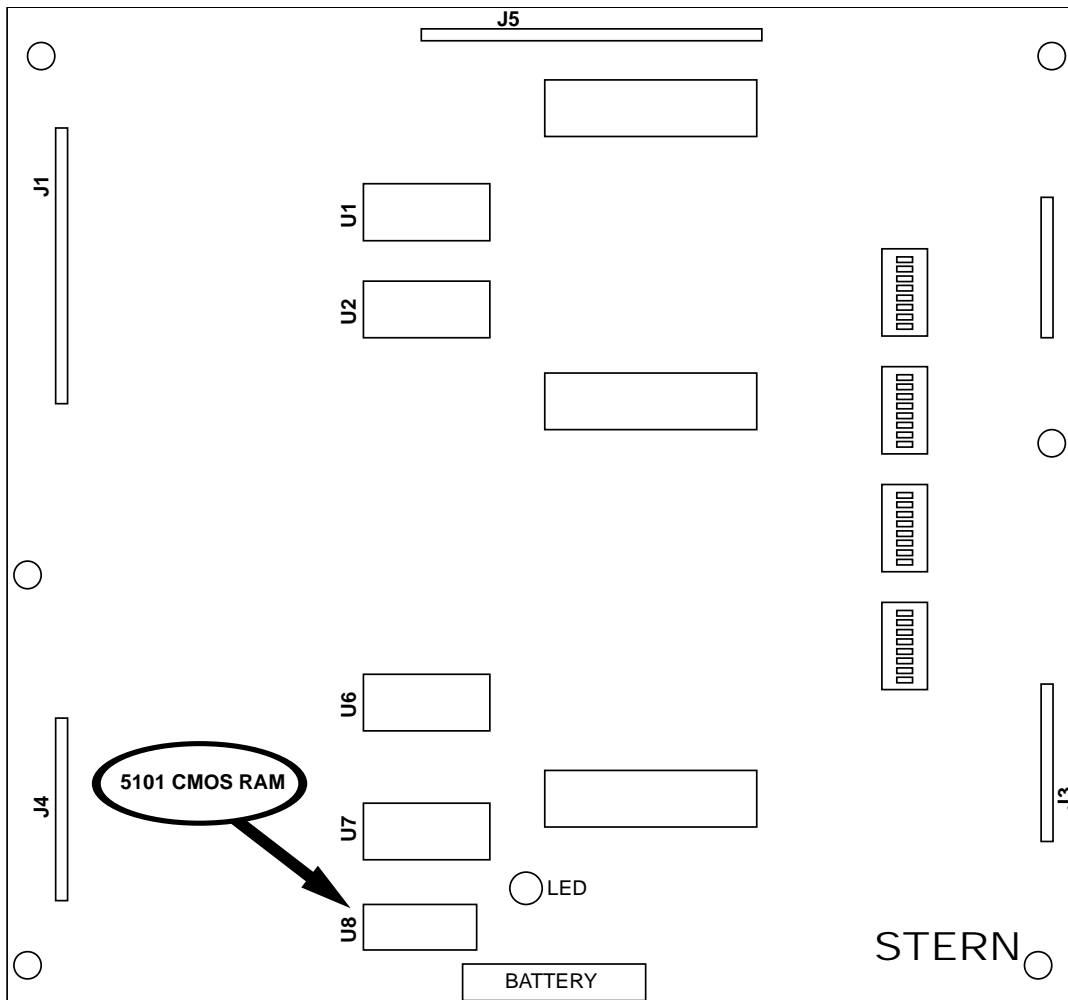
The TPP-1010 comes assembled. Typically no soldering is required to install this component as the original memory chip is socketed.

Installation

Warning: High voltages are present inside the pinball machine. Ensure the power is off and the mains cable is disconnected before you commence work.

1. Ensure power is off to the machine.
2. Locate 5101 IC at position U8.
3. Remove the 5101 CMOS RAM chip from sock using a chip extractor or by delicately levering the IC out of its socket with a small screwdriver.
4. Remove the battery from the CPU board. This can be achieved with side cutters or a set of fine tipped tin snips. If the CPU board has been modified to locate the batteries off the main board, then the wires to this battery holder may be removed.
5. Install the TPP-1010 into the socket. Use the photos provided below to ensure the correct orientation.
6. Inspect the installation carefully to ensure all pins are seated in the socket and that the plug-in module is not misaligned.
7. Power the machine up and monitor the CPU LED. If the NVRAM is installed correctly, the LED should complete its usual 7 flash sequence. A missing or mis-installed NVRAM module will stop after the 4th flash.

MPU Board Layout



Compatibility

Stern:

Cosmic Princess, Dracula, Hot Hand, Lectronamo, Magic, Memory Lane, Nugent, Pinball, Stars, Stingray, Tour De France, Trident, Wild Fyre

Bally:

Black Pyramid, BMX, Centaur, Centaur II, Cosmic Flash, Cybernaut, Dark Rider, Dolly Parton, Eight Ball Deluxe, Eight Ball Deluxe Limited Edition, Elektra, Embryon, Fantasy, Fathom, Fireball Classic, Fireball II, Fireball II, Flash Gordon, Fly High, Frontier, Future Spa, Genesis, Grand Slam, Harlem Globetrotters On Tour, Hotdoggin', Kings of Steel, Kiss, Lost World, Medusa, Miss World, Movie Masters, Mr. & Mrs. Pac-Man Pinball, Mystic, Mystic Star, New Wave, Nitro Ground Shaker, Paragon, Pin Ball Pool, Pinball, Playboy, Rapid Fire, Rolling Stones, Saturn 2, Sexy Girl, Silverball Mania, Skateball, Space Hawks, Space Invaders, Space Rider, Speakeasy, Speakeasy 4, Spectrum, Spy Hunter, Star Trek, Super Bowl, Supersonic, The Six Million Dollar Man, Tiger Rag, Vector, Viking, Voltan Escapes Cosmic Doom, World Defender, X's & O's, Xenon

