TWIN TIGER SHARK

Operator Manual

Manual v0.7

Twin Tiger Shark — not the *SAME!*

New Game Package

Table of Contents

# Before you get started! Stop!

1. Does your package contain all listed parts? Is it complete?
2. Do the power supply in your arcade cabinet support all of the required voltages? 5V?
3. Is the arcade cabinet JAMMA compatible?
4. Is the monitor in a vertical orientation? And does it support 15KHz? And is it color?
5. Do you have the necessary tools? And skills?

Caution!

Don't crack child boards!
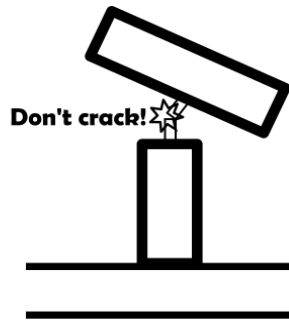
Must have caution! Use caution! Caution is good for product. And your earnings!

Power and Monitor Requirements

Power requirements

+5 VDC, ~2 amp.

Monitor requirements

Vertical Mount Raster Scan, 15KHz capable monitor.

Control Panel requirements

Eight-way joystick, two action buttons and a one-player start button.

New Game Package Contents

Pieces	Item
1	Motherboard PCB
1	Configuration PCB
1	Game PCB
1	Amplifier PCB
5	PCB feet with screws
1	Operator Manual (this)
1*	Control Instruction card
1*	Promotional Flyer
1*	Cardboard Box

(*= only included in very rare, special and expensive packages)

Note: Replacement accessories available through your exclusive Twin Tiger Shark distributor

DIP Switch Tables

Optimize your profits!

Thorough research shows that two and a half minute games both satisfy players and also keep the monies flowing.

Item	1	2	3	4	5	6	7	8
Free Play	off *							
	on							
Attract Sound		off						
		on *						
Auto Fire			off					
			on *					
Control Rotation				off *				
				on				
Continue					off			
					on *			
Difficulty								
Hard						off *		
Easy**						on		
Coin Settings								
Coin1 : 1 credit, Coin2 : 2 credits							off *	off *
Coin1 : 1 credit, Coin2 : 3 credits							off	on
Coin1 : 1/2 credit, Coin2 :1 credits							on	off
Coin1 : 1/3 credit, Coin2 : 2 credits							on	on

***= Changed from **Insane** to **Easy** From ROM upgrade 2023-01-28.*

Boot Up Sequence

During the boot up sequence a black and white chequered pattern screen is shown for nine seconds. Holding button 1 down will speed through this.

After the pattern is shown a notice screen will be shown. This screen can also be skipped by holding button 1 down for a while.

Game Play

General

Destroy enemies by using guns and bombs. Three different types of guns are available; regular, wide and laser.

Each Red Noble ship has three bombs to start with. Extra bombs can be picked up in the game.

Controls

Use the 8-way joystick to steer your Red Noble ship, use Button 1 to fire your gun and use Button 2 to fire your bomb.

Story

The evil forces of the Indigent People Army has decided to wage war upon the innocent and unexpected land of the Patricians. It is up to you, a revered pilot of the Royal Infantry Combat Heroes to single-handedly stop the invasion, using your Red Noble ship.

Power Up System

Some enemies drop pickup items. These items will help you in your mission to stop the invading army.

Power Up

Increases the fire power of your gun.

Bomb

Adds an additional bomb to your arsenal.

1 UP

Gives you an extra life.

What is that?!

Only way to find out is to pick it up or don't..!

Weapon System

Some ground targets contains a new gun for your trusted Red Noble ship. When shot, they release a Alternating Gun Pod item that shows the weapon that can be picked up at the time. Pick this item up when the gun type that you want, and need, is shown. Only one gun type can be mounted at a time.

Regular Shot

This is the gun type you start off with.

Fires straight and gets a bit wider with

each power up.

Wide Shot

This gun types shots is covering a larger

area of the battlefield.

Laser

By the 1920s the laser technology was

advanced enough to be weaponized. This

shot is super narrow and super powerful.

Extra!

When the weapon is powered up to its maximum, the shots takes on a totally different form and gets supported by the elemental gods.

Helper System

Some other ground targets contain radio equipment, for you to call for reinforcements. When shot these targets release the radio equipment. Pick it up to make the call that will save your life.

Scoring System

Ground based enemies drop point award items. Different colors and different items scores a different amount of points. Larger variants of the items awards double the points of the smaller variants.
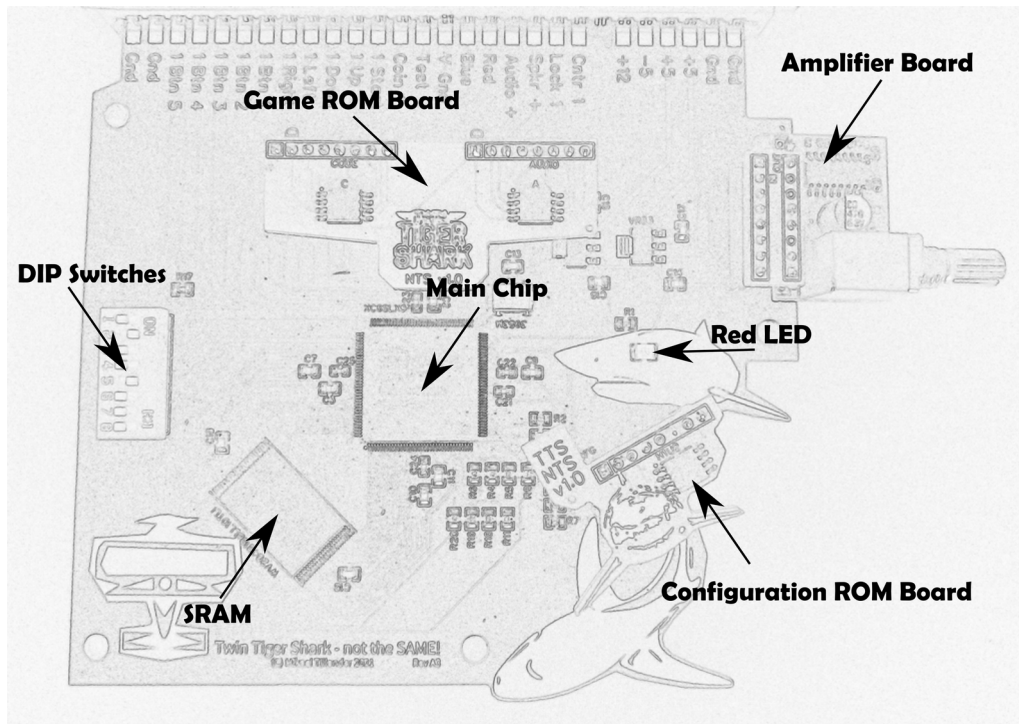
What is that too!?

Truly good things and high scores comes to those who persevere!

Installation Procedures

Game PCB

The game PCB consist of 4 circuit boards, Main Board, Game ROM Board, Configuration ROM Board and Amplifier Board.

PCB Installation

Use the PCB feet that came in the package to fasten the Main PCB into your cabinet.

Then gently insert the Main PCB into the JAMMA connector of your arcade cabinet. Remember to use caution so that to not damage any of the boards or parts of the arcade cabinet.

Instruction Strip installation

If you have ordered the extra rare game package, you have gotten an instruction strip with it. This instruction strip has been made to fit in both the Taito Egret II and SEGA New Astro City arcade cabinet.

Test Mode

If the test switch/button is active (ground) during boot up of the game, the game will go into test mode. Here you can test sounds, music and controllers as well as view a grid pattern.


Test Mode

Game Upgrade

In order to have your earnings on top, you will need to update the game with the latest version every now and then. The newest version will contain more content for the player to experience as well as to help keep the game making optimal earnings at your location.

With New ROM Child Boards

Upgrading the game is as easy as changing out one or more of the child boards.

Gently remove the boards to be changed out, and gently put the new boards back. Remember to use caution so the child board don't get cracked.

And when reinserting the ROM boards, be careful to put them in in the proper direction.
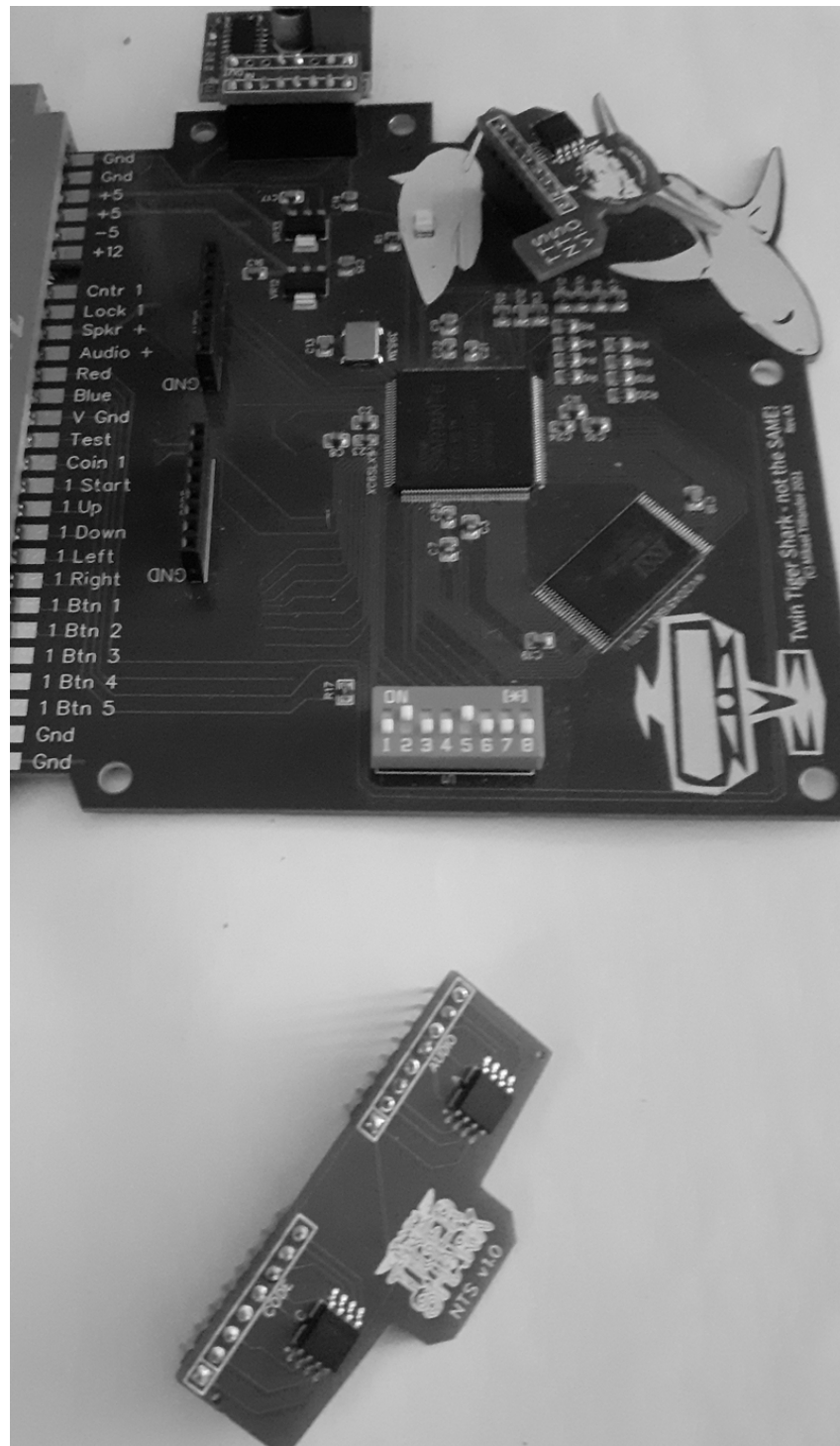
Game ROM Board removed

Flashing new ROMs

If you have the JAG Game Flasher Board and a Raspberry Pi, you can yourself flash new game and configuration ROMs easily.

Just remove the game and configuration boards from the main PCB and insert it into the dedicated slots on the JAG Game Flasher Board. Either insert the JAG Game Flasher Board on top of the Raspberry Pi or use a ribbon cable to connect the two, depending on version of the JAG Game Flasher Board.
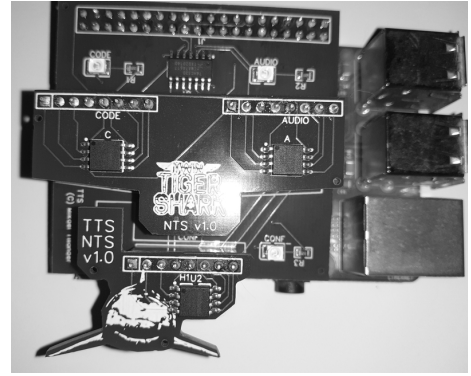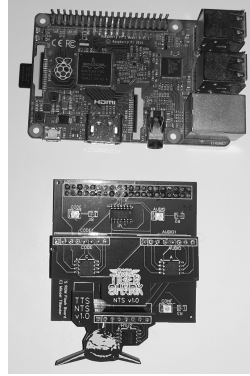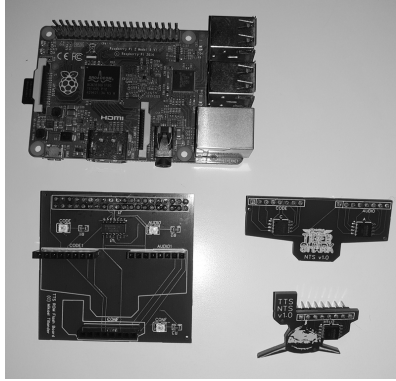
Then follow the provided instructions for how to copy the new ROM files to the Raspberry Pi and run the bash script provided with the JAG Game Flasher Board.

Trouble Shooting

This is the boot up procedure for the game:

1. The main chip will read from the configuration ROM, the child board with the shark on it.
2. When step one is successful, a red LED will be turned on in the eye of one of the sharks on the main circuit board.
3. The main chip will start to show a cyan colored (full blue and green) screen.
4. The main chip will load the RAM with the first four megabytes from the Game ROM Board.
5. If the test-pin is grounded in your JAMMA cabinet, the game will start up in test mode. This will show the test menu. See the chapter about Test Mode for more information.
6. The main chip will start the embedded CPU, running off the loaded RAM.
7. A black and white grid pattern is shown for a few seconds.
8. A Notice Screen is shown for a few seconds.
9. The attract mode of the game is started.

Here is a small table to help you trouble shoot any issues that might arise.

Issue	Possible Cause	Suggestion
The **red LED** in the sharks eye on the circuit board is not turned on.	No power is coming to the board. Need 5V at ~2 ampere.	Make sure that the game board is getting the power needed.
	Configuration ROM Board might be faulty.	Get another Configuration ROM Board to test with.
The **red LED** is turned on, but there is no cyan colored screen showing.	Monitor or cable issues.	Test with a different game PCB to make sure that you have fully working monitor and cables.
The game starts up in Test Mode.	The test-pin is grounded in your arcade cabinet.	Make sure any switches in the cabinets is in the proper positioning.
The game does not show the grid pattern after the cyan colored screen. (garbled, black or other artifacts are shown instead)	Faulty Game ROM Board.	Get another Game ROM Board to test with.
	Faulty SRAM and/or main chip.	Test the child boards on another Main Board.