



Vectrex Controller

Lunar Lander is a single-player arcade game developed by Atari and released in 1979. The player controls a lunar landing module and attempts to land safely on the Moon.

The player can rotate the module and fire a thruster, burning fuel in the process, attempting to gently land on marked areas with varying score multipliers based on difficulty. The scenario resets after every successful landing or crash, with new terrain, until no fuel remains.

It's really a simulation that, on the surface, looks simplistic. It's attraction (to me anyway) is to see how many landings you can successfully make before exhausting your meagre fuel allowance.

It was the first fully electronic arcade game that I played. Prior to this all the arcade machines I'd played on were electro-mechanical, so this was a whole new experience.

Roll forward to now, where I found that you could play Lunar Lander on the Vectrex in all its vector glory! I yearned for a controller like the one I loved from the arcades and decided to make it a reality!

I hope you enjoy it as much as I do!

Sean

The Vectrex Lunar Lander controller aims to recreate some of the feeling of playing Lunar Lander in the arcades. It replicates the throttle of the original as well as the button layout. The games that this controller has been tested with all require it to be plugged into port 1 of the Vectrex unit.

It has been tested with Lunar Lander on both PiTrex and VecFever (for those fortunate enough to own one) as well as with the 3rd party game Moon Lander. There may be other games with a similar control scheme that I'm not aware of at the time of writing this.

These games are supported through switchable control mapping using the RCS and YAW switches located on the top of the controller.



RCS - Reaction Control System

In **NORM** mode, the throttle lever is used to control ship thrust. It replicates the Vectrex analog joystick centre to fully “up”.

In **AUX** mode, there are two buttons on the back face of the controller for up and down. This mode is used for navigating game menus etc.



YAW

In **ANALOG** mode the left and right buttons replicate joystick left and right.

In **DIGITAL** mode the left and right buttons replicate button 1 and 2.

Button 4 is to the right of the throttle. In the VecFever version of Lunar Lander this triggers the abort feature, just like in the original arcade version.



Finally, if needed, Button 3 can be found on the back of the controller:



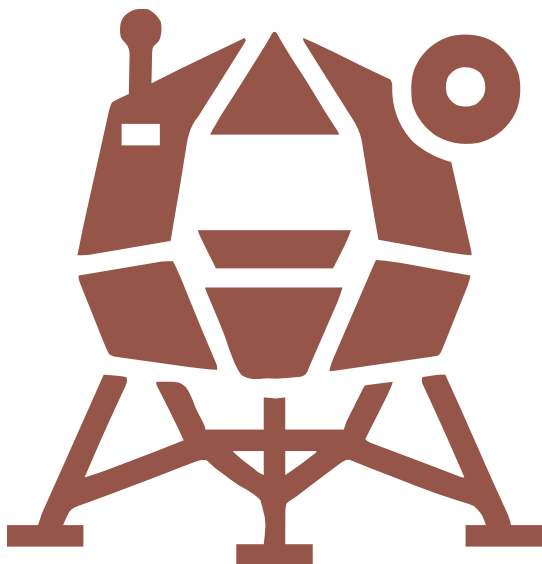
Important Note

This controller is hobbyist designed and hand assembled. Therefore, consider it a prototype with no warranty and likely some design flaws. Whilst effort has been made to ensure that it will provide enjoyment over a long period of time there are no guarantees!

Lastly, if you have any ideas for improvements to this controller or other controller designs I'd love to hear from you. Just drop me an email – vectrex@ferigan.com

Control Switch Configurations Table

RCS	YAW	Controls
Norm	Analog	Throttle Lever – Thrust (Joystick centre to full up) Left/Right buttons – Joystick left/right
Norm	Digital	Throttle Lever – Thrust (Joystick centre to full up) Left/Right buttons – Buttons 1/2
Aux	Analog	Up/down buttons on rear of controller Left/Right buttons – Joystick left/right
Aux	Digital	Up/down buttons on rear of controller Left/Right buttons – Buttons 1/2



Happy Landings!