



User Guide

Version 2.0

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Patent No. - AU2020 - 050867

Trademark No. - 1998805

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If you have issues, comments, or questions about specific information or procedures, please include the title and, if available, the part number, the revision, the page numbers, and any other details that will help us locate the subject that you are addressing.

Table of Contents

1.	Introduction	4
1.1	Purpose of this document	4
1.2	Scope	4
1.3	Warranty	5
2.	Describing the System	6
2.1	Key Features	6
2.2	Environment	7
2.3	Installation	7
3.	Starting and Stopping the System	7
3.1	First-time Users	7
3.2	Controller / Push button ON and OFF indication	8
3.3	LCD Touch Screen Interface operation	9
3.4	Starting the system	10
3.5	Stopping and Suspending the system	10
3.6	Fault Detection	10
4.	Step by Step Instructions	13
4.1	Turning on the Controller and Entering the Home Page	13
4.2.	HOME page functionality	13
4.3.	Fault and Error Detection	15
5.	Using the JackaJay Jumper Lead	16
6.	Appendix A: Acronyms, Abbreviations & Definitions	18
7.	Appendix B: Related Documentation	19
8.	Troubleshooting	20

1. Introduction

1.1 Purpose of this document

This document serves as a user guide manual for the JackaJay, JackaHD and ERS Lift System. It aims to acquaint users with the necessary information that would help in the operations and installation of the product as delivered by Jacka Industries.

It summarizes the history of its development, operation, and maintenance through the following:

- To identify the project owner, client, users, and developers where necessary.
- To identify current and planned operating sites / client implementations.
- List relevant documents. Cross references to an appendix, if necessary.

1.2 Scope

The scope of this guide revolves around providing users with information as regards purchase requirements and commitments, outline of product function / operations and associated troubleshooting and help guides.

1.3 Warranty

Warranty information is as follows:

- Recreational warranty commences 5 years from purchase date. See Appendix A for definition.
- While, Commercial warranty commences 1 year from purchase date. See Appendix A for definition.

Jacka Industry Pty Ltd goods come with guarantees that cannot be excluded under the Australian Consumers Law (ACL). You are entitled to a replacement or refund for a major failure and for compensation of any other reasonable and foreseeable loss or damage. You are also entitled to have the goods repaired or replaced if the goods fail to be of acceptable quality and the failure does not amount to a major failure.

Any operation of the JackaJay lift system, other than as directed, will void all warranty claims.

Any unintended use, regarding extreme conditions including but not limited to, the submerging of any components of the camper trailer, not including wheels, in water will void all warranty claims.

Any major water leaks or insurance claims must be registered with Jacka Industries Pty Ltd to maintain current Warranty offer.

Any warranty claims will need to be inspected by authorized personnel and deemed claimable within Jacka Industries Pty Ltd procedures.

2 Describing the System

The JackaJay lift system is specifically designed for the raising and lowering of wind-up camper trailer roofs.

2.1 Key Features

The JackaJay lift system provides a user-friendly process to raise and lower the roof of their camper trailer, thereby reducing risk and possible substantial damages. The key aspects of the JackaJay lift system are:

- Fault detection system to assist the user to locate and correct faults in operation and / or mechanical wear and damage.
- 4.3-inch touch screen control
- Under Voltage protection due to discharged power supply.
- Low Power and low noise function.
- No- Drop roof locking safety feature.

2.2 Environment

The JackaJay lift system has been designed for installation and use in only wind-up model camper trailers. Any other installation or application of use must be approved and documented by Jacka Industries Pty Ltd. Environment of use is as directed by manufacturer user manuals and / or any exposure of the camper trailer to adverse weather or situational conditions. Any occurrence as outlined that requires the removal of JackaJay system and serviced, will void all warranty. Adverse weather and situational conditions include, severe water leaks that cause pooling on the camper floor, submerging of any part of the camper trailer floor in water causing damage to electrical components of the JackaJay system etc.

2.3 Installation

For all installation directions and procedures, please refer to the JackaJay Installation Guide outlined in the Appendix at the end of this document.

3 Starting and Stopping the System

3.1 First-time Users

All operations of the JackaJay lift system are controlled via the touchscreen of the controller, often found in the front boot section, passenger side, of the camper trailer.

The Lift and Lower function can be operated in either one of the following options:

Manual Mode: This is a JOG function that can be operated from the HOME page. This is done by touching either the Lift or Lower Buttons for less then 2 seconds.

You can operate in a JOG function as many times as you want. Additionally, all Fault functionalities are present and the Lift and Lower stop points still function. Hence you are not able to overdrive the lift system.

Automatic Mode: This is a fully automatic mode that can be operated from the HOME page, by touching either the Lift or Lower button for longer then 2 seconds, while moving through the automatic operation prompts.

3.1.1 Turning the System ON and OFF

The JackaJay controller is turned ON and OFF via a small button found to the left side of the controller's touch screen.

The user must confirm that correct supply voltage of (12V DC) is available with correct polarity, before powering ON the controller.



-  **DO NOT turn ON the controller if the battery connection has not been completed.**
-  **If the JACKAJAY power supply cable is required to be disconnected from the battery, you must ensure that the JackaJay controller is turned OFF.**

3.2 Controller / Push button ON and OFF indication

When the controller is OFF, the button will be flushed with the front of the control box and the Blue backlit LED will be OFF.

When ON, the button will be slightly pressed in from the front of the control box and the Blue backlit LED will be ON.

Take note that the LCD touchscreen has a time out function and will go blank after 5 minutes. This IS NOT an indication that the controller has been turned OFF.

If the LED touchscreen has Timed Out and goes blank, touch the touchscreen; if the controller is ON the screen will come back ON. If the screen does not turn ON, check the Push button indicators, as explained above. If the controller is not being used, ensure that the controller has been turned OFF.

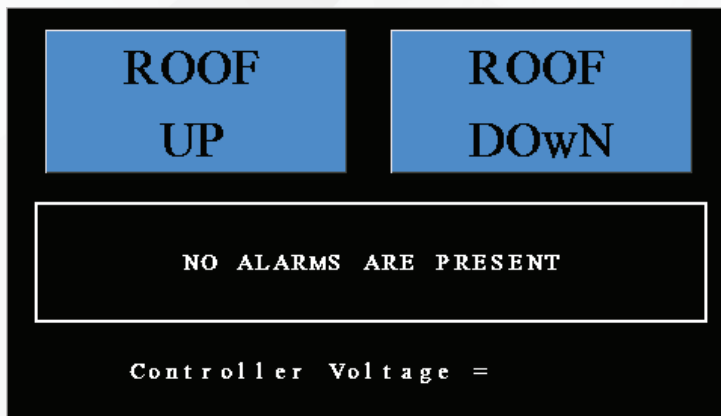
3.3 LCD Touch Screen Interface operation

The LCD user interface has been designed to provide clear and easy operation of the lift system as well as direct feedback on the ongoing operation and current status.

The User interface is divided into 2 Main pages –

HOME Page:

- 2 large BLUE buttons at the top for Lift and Lower operations.
- Live supply battery voltage indication.
- Controller status feedback text box.



Automatic Operations Page:

- Displays all 4 corners of the camper trailer.
- Once each corner reaches it's Lift or Lower point, a text will prompt the user of the status
- If a FAULT occurs, a text will prompt you what has occurred and the required actions.
- BACK button: This will return you to the HOME page for further operations and / or directions.

3.4 Starting the system

When turning the JackaJay controller ON. The first page that is displayed outlines the following:

- The rights and responsibilities of the user, and clear safety precautions that must be adhered too and ACCEPTED.
- Software version details.



3.5 Stopping and Suspending the system

At all times during any of the system functions, the process can be halted either by removing your finger from the Lift or Lower buttons, if in a JOG function, or pressing the STOP button, if you are in the automatic operation page.

3.6 Fault Detection

The JackaJay controller is programmed with 2 smart detection systems to prevent damage to the camper. These are set to detect abnormalities during operation and ultimately to STOP any function that can damage the lift system or camper trailer. If a Fault is detected the cause must be investigated.

3.6.1 Lift Fault or Overload

The first fault detection is the Lift Fault or Overload. This is designed to halt the lift function of the system if resistance or an obstruction is discovered on any individual corner. Common faults that have the potential to trip a Lift Fault or Overload are:

- Roof latch left on.
- Roof lifting obstruction, such as a low tree branch, car port, tight guy ropes for annex, etc.
- Bent, damaged, or jammed telescopic mast.
- Overloaded roof. (Settings are set to within manufacturer roof TARE weight of 79kgs)

PLEASE NOTE: If you are getting a Lift Fault or overload, it is because the JackaJay system is detecting an issue, and is notifying you that something is wrong and halting all operation before it becomes a major Fault or damage occurs. Please attempt to locate the issue before trying to conduct another operation of the JackaJay system.

3.6.2 Under Voltage Detected

The JackaJay controller is fitted with a 2 stage undervoltage protection system. It is designed to continually monitor the Battery supply voltage and ensure that it is adequate and safe to operate. If the battery charger is not available, please use the supplied JackaJay jumper lead to connect an external power supply (car battery) to your controller. See section 4.4 for details.

3.6.2.1 Undervoltage 1

The battery supply voltage drops below 10V. However, it stays above 9V.

You will be notified on the HOME page what undervoltage has been tripped and what function is available.

If an undervolt 1 trip occurs, all lift functions will be inhibited while all lower functions will be available. This outcome is designed to cater for you in case you have exhausted your battery or dropped one cell. It enables you to get the roof down and get your camper home. Please note, It is not recommended to operate your JackaJay system in this current state for more than one operation.

The camper trailer battery must be charged.

3.6.2.2 Undervoltage 2

In the case whereby the battery is completely exhausted, or the batteries supply voltage has dropped below 9V, all operations at this stage are inhibited, and the controller will not provide any power to the motors that may cause harm to the system.

The Screen and controller will continue to function though, for diagnostic purposes until the supply voltage drops below 5V. The camper trailer battery must be charged.

IMPORTANT NOTE: On the HOME page, a battery may display a voltage of 10V or higher if it has no load on it. However, if a battery is exhausted, the battery voltage will drop when placed under a load (JACKAJAY operation). You may get an Undervoltage Trip and return to the HOME page to discover that the Battery Voltage is above 10V. This means that during the Automatic operation the battery voltage dropped below the set point and activated the trip. Therefore, you must charge your battery.

4 Step by Step Instructions

Please refer to the following directions for operation of the JackaJay controller. All following directives assume that you have read and understood all the previous outlined specifics and functionality.

4.1 Turning on the Controller and Entering the Home Page

Press the Power button on the front of the controller.

When at the opening page, please read and understand all rights and responsibilities, and then press the ACCEPT button. Afterwards, you will proceed to the HOME page.

4.2 HOME page functionality

From the HOME page you can operate the controller in a JOG function then proceed to the Automatic function if required.

You will also be able to see the Live voltage of your Battery and the controller's status.

4.2.1 JOG Function

If you require slight movements, you can operate the controller in a JOG style function by pressing the Lift or Lower button for less than 2 seconds.

4.2.2 Automatic Function

Fully automatic function is achieved by pressing and holding either the Lift or Lower buttons for more than 2 seconds.

The controller will progress to an Automatic Operation check page. Please confirm that the camper is ready for automatic

function and all checks have been completed. When the user is satisfied, press the blue ACCEPT button.

The controller will then enter the Automatic function mode and will continue until it completes the requested operation or detects a Fault, (see 4.3 Fault detection)

 ***During the Automatic function phase, please ensure that all operations are unhindered, canvas is loose and not caught on any obstructions and the middle telescopic mast section is loose and centred.***
Damage may occur if monitoring / precautions are not undertaken.

During the Automatic operation, the user will be notified when each corner reaches it's Lift or Lower points. Once all 4 corners provide feedback, that operation is complete.

Please be aware that each corner may experience heavier loads due to roof design or roof additions. This may cause different corners to lift or lower at different rates. However, it is not an issue if the controller is still operating and each corner is moving. In the event that a Fault or issue is detected, all operations will halt.

4.2.2.1 Stopping the Automatic Operation

If during the Automatic operation you would like to halt all movement, press the red STOP button.

To make any further operations, press the blue BACK button to take you back to the HOME page and select your desired operation.

4.3 Fault and Error Detection

The JackaJay lift system is fitted with 2 smart Fault detection systems. They are as follows:

Lift Fault Detection or Overload –

- If activated, all lift movements are halted. The system will then reverse / lower the roof away from obstruction.
- The user will be notified that there is a Fault in the corresponding corner on the LCD touchscreen automatic operation page.
- You will have to conduct an investigation to find out the cause.
- If the cause can be removed. The user can press the CLEAR button on the screen and then the BACK button to return to the HOME page. The next operation can then be selected.
- For common causes please see section 3.6.1

Undervoltage Detection –

- If an Undervoltage is detected please follow the prompts and refer the section 3.6.2
- If you are unable to charge the battery and recover full operation of the JackaJay controller, please proceed to use the provided JackaJay jumper lead to provide an auxiliary power source (E.g. car battery) to operate the controller. See section 4.4. for details.

5 Using the JackaJay Jumper Lead



In a situation whereby you have a discharged battery and can't fully operate the JackaJay controller, you are advised to charge your battery or obtain an external power supply.

If you are unable to charge your battery you will need to use the provided jumper lead. Use as follows:

- Confirm that the battery source you are using is 12V DC. Commonly your car battery.
- Turn the JackaJay controller OFF using the push button on the front of the controller. Refer to section 3.2 for details.

⚠ The controller must be turned OFF prior to disconnecting or reconnecting any power supply to the JACKAJAY controller.

- Unplug the POWER lead (the smaller left plug under the ON /OFF button) from the bottom of the controller. Do this by gently sliding the dust cover down, and then push in the clip and pull the plug downward. The lead / plug should come away.

Do not pull too hard, if the retaining clip is in the correct position the plug will pull out easily.

- Connect the battery clamps on the jumper lead to the battery.



You must connect the clamps onto the correct terminal on the battery. Incorrect connection may cause irreversible damage to the controller.

RED clamp - Clamp onto Positive (RED) terminal on the battery.

BLACK clamp - Clamp onto the Negative (BLACK) terminal on the battery.

- Insert the plug end of the jumper lead into the bottom of the controller. You should hear a small click when the retaining clip locks into place. If necessary, slide the dust cover back gently, and insert the plug, then slide the dust cover back up into place.
- Turn the JackaJay controller ON and conduct the required operation.
- Turn OFF the JackaJay controller.
- Thereafter, carry out the above steps in reverse to reinstate the permanent lead. Also ensure that the controller is turned OFF and all dust covers are reinstated.

6 **Appendix A: Acronyms, Abbreviations & Definitions**

Terms	Meaning
Recreational Use	Defined as personal use of camper for holidays by registered owner and not for permanent residences.
Commercial Use	Defined as any use of the camper trailer that warrants payment/s under a lease agreement, including but not limited to, hiring of camper via online or App based platforms.

7 Appendix B: Related Documentation

#	7.1 Document Title Documentation Feedback	Version #	Author
1	Installation Guide	V5.0	Mal Badman

7.2 Documentation Feedback

If you are reading Jacka Industries product documentation and have any queries or questions, you can submit your comments through email to enquiries@jackaindustries.com

We appreciate your comments and feedback.

8 Troubleshooting

Ensure that you have attempted to return to the associated installation section and attempted to locate the reason / cause of the fault that you are experiencing.

Furthermore, please refer to the list below for some troubleshooting checks, if you are unable to solve the issue and for any major troubleshooting issues or queries, kindly contact your local provider or Jack Industries for additional direction.

Issue Experience	Cause	Remedy
Controller will not turn ON.	Extremely exhausted battery, under 5 Volts.	Replace the battery. Use the emergency jumper lead to connect the JackaJay controller to an external 12V power source (car battery or jumper pack).
	Battery has been replaced and the JackaJay controller has been reconnected or touch with reverse polarity.	Reverse polarity error may cause a fuse to blow inside the controller and may cause irreversible damage to the JackaJay controller. Contact Jacka Industries for advice.

Issue Experience	Cause	Remedy
Camper roof lifts and the controller trips out on Low Battery under-voltage protection.	The campers battery is discharged and / or aged and / or faulty.	Replace the battery. Provide external 240V supply to BMS system for charge. Use the supplied emergency jumper lead to connect the JackaJay controller to an external 12V power source (car battery or jumper pack).
Controller keeps on Tripping out on a Fault / Obstruction during Automatic Lift sequence.	Controller is sensing additional strain on the system and is stopping the operation. A side clip has been left engaged. There is an obstruction that is limiting the roofs ability to fully lift. Roof accessories are too heavy. Bent/damaged/ jammed telescopic masts.	Attempt to find the cause of the additional strain on the system. Contact Jacka Industries to discuss if required.

Issue Experience	Cause	Remedy
Motor is not driving / corner is not lifting.	Motor cable connection has come loose.	Check all harness connections at the controller, motor and limit switch. If confirmed okay and still no operation, contact Jacka Industries for advice.
Motor is driving but not lifting. I can hear or see it spinning.	Loose connection on the drive coupler.	Ensure the drive coupler between the motor and drive tube actuator is sufficiently tight.
Uneven roof heights when lifting.	Motors will drive at the same speed if each corner has similar weights. Hence heavier corners will drive slightly slower. This is okay if the system is still operating, and the roof height will level out at the top.	Ensure that the roof weight is evenly distributed across all 4 corners where possible.

Issue Experience	Cause	Remedy
When attempting to conduct a lift sequence, one corner indicates “Lift Complete” when it is not at the top.	Loose electrical connection at the associated corners limit switch.	Check connection and ensure that it is tight and secure.
	Faulty limit switch.	Test limit switch operation or inspect for damage (bent switch leg).



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