



For 5th Wheel Travel Trailers

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Model WAZ-30AX1 for single motor landing gear systems



Notes:

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ZAXIS Overview

Westhaver Associates, Inc. developed the ZAXIS Landing Gear Remote Control to simplify hitching and unhitching your 5th wheel trailer. Aligning your trailer's kingpin to your truck's 5th wheel hitch can be a difficult, time consuming trial-and-error process that often requires several attempts before achieving the correct kingpin height.

With the ZAXIS Landing Gear Remote Control, you can raise or lower your 5th wheel trailer's landing gear to the perfect height for hitching up without ever leaving your tow vehicle. Simply use the key chain transmitter to control your 5th wheel trailer's landing gear height for a quick easy hitch up. You can even use the ZAXIS Landing Gear Remote Control system to raise or lower the landing gear from inside the 5th wheel making fore/aft leveling of your RV easy.

The ZAXIS Landing Gear Remote Control consists of a receiver unit and one keychain transmitter. Additional transmitters may be purchased separately.

ZAXIS employs a sophisticated security system to insure that only your keychain transmitter(s) can operate your ZAXIS receiver. ZAXIS will operate only when it receives commands from a keychain transmitter it has "learned." This effectively prevents anyone else from operating your landing gear even in a crowded RV park with several other ZAXIS owners nearby.

Warranty

Westhaver Associates, Inc. Limited Warranty

The ZAXIS Landing Gear Remote Control, Model WAZ-30AX1 is warranted against manufacturing defects in materials and workmanship for one (1) year from the date of purchase. Within this period Westhaver Associates, Inc. will repair or replace at our option the WAZ-30AX1 without charge for parts and labor. Simply send the WAZ-30AX1 (postpaid) and a copy of your sales slip as proof of purchase to: Westhaver Associates, Inc., 5485 Bright Hawk Ct., Columbia, MD 21045.

ZAXIS Specifications

Receiver

Frequency: 433MHz
Case Dimensions: 5" h x 8.625" w x 3.75" d
Antenna Height: 6.75"
Overall Height with Antenna: 11.75"
Weight: 2lbs
Power consumption idle: 40mA
Power consumption active: 400mA (excluding landing gear motor)
Power handling: 30 Amps Max

Transmitter

Frequency: 433MHz
Battery: GP23A Alkaline 12V or equivalent

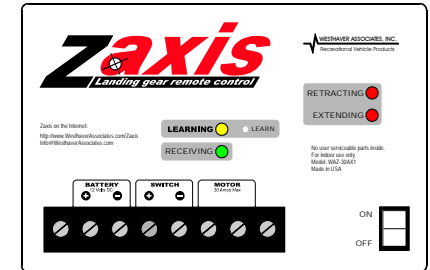
Range

180 Feet under optimal conditions. Environmental factors, such as electrical noise from appliances, signal deflection from nearby objects, etc. may reduce the usable range.

ZAXIS Components

Receiver

The ZAXIS receiver is typically mounted in the basement storage area of your 5th wheel and is wired into the existing landing gear circuit. It has four LED indicator lights, one recessed pushbutton, a 6-position terminal strip and an ON/OFF switch on the face plate. It can learn to recognize up to 15 keychain transmitters.



- Learning LED** Glows yellow whenever the receiver is in learn mode.
- Learn Button** Used to activate Learning mode.
- Receiving LED** Glows green whenever a transmitter command is recognized.
- Retracting LED** Glows red whenever the large keychain transmitter button is pressed.
- Extending LED** Glows red whenever the small keychain transmitter button is pressed.
- Terminal Strip** Where electrical connections are made to power, rocker switch and landing gear motor.
- ON/OFF Switch** Turns the ZAXIS receiver ON or OFF.

Transmitter

The ZAXIS keychain transmitter has two pushbuttons and one LED indicator light. The large black pushbutton retracts the 5th wheel landing gear and the small green pushbutton extends the landing gear. The red LED indicator will light whenever either pushbutton is pressed. The keychain transmitter is powered by a single GP23A Alkaline 12V battery.



ZAXIS Installation

Westhaver Associates recommends that you have the ZAXIS Landing Gear Remote Control installed by a competent RV technician.

Find a suitable location for the ZAXIS receiver and mount it using the mounting flange slots provided. Use mounting screws appropriate to your situation.

The ZAXIS receiver should be mounted as close to the front of the trailer as possible to reduce the distance and signal obstructions between the receiver and the operator in the tow vehicle.

Be certain that the ZAXIS receiver is mounted in a space that is dry and protected from road spray and water.

A typical OEM landing gear circuit is shown in Figure 1. Wire the ZAXIS receiver into the existing OEM landing gear circuit as shown in Figure 2 using 10 or 12 gauge stranded automotive wire.

Yellow spade or loop crimp terminals should be used to make connections to the ZAXIS terminal strip. Do not attach bare wire directly to the terminal strip.

The ZAXIS receiver is not internally fused. You should re-use the in-line fuse provided by the manufacturer of your RV or if an in-line fuse was not provided, you should add one to the circuit. Add the in-line fuse as close to the power source as possible. The fuse should be rated no higher than 30 amps.

To install the ZAXIS receiver you must:

1. Cut the existing power feed lines (Figure 1: A and B) between the battery and the rocker switch and connect the four resulting wires (Figure 2: A1, A2 and B1, B2) to the ZAXIS terminals labeled "Battery" and "Switch." Connect the wires from the battery to the terminals labeled "Battery" and connect the wires from the rocker switch to the terminals labeled "Switch." Be sure to maintain the polarity of these connections or the rocker switch operation will be reversed.

ZAXIS Operation

You may find it easiest to use the ZAXIS by unclipping the keychain transmitter from your key ring, steering your tow vehicle with your left hand, holding the keychain transmitter in your right hand, and looking over your right shoulder to watch as you align the trailer's kingpin with the tow vehicle's kingpin receiver. While backing your tow vehicle into hitching position, press the "Extend" (small green) or "Retract" (large black) buttons of your ZAXIS keychain transmitter as needed to vertically align the trailers kingpin with the tow vehicle's kingpin receiver.

As a safety precaution, ZAXIS will operate your landing gear for no more than approximately 25 seconds per button press. This insures that if the ZAXIS keychain transmitter is accidentally triggered (for example, while in your pocket) it will not run your landing gear motor continuously. If you need to operate your landing gear for more than 25 seconds simply press the "extend" or "retract" button again.

The OEM landing gear rocker switches will continue to function normally after the ZAXIS receiver is installed. However, when the ZAXIS receiver is operating the landing gear it will temporarily disable the OEM rocker switch to avoid possible conflicts.

The ZAXIS receiver uses very little power when idle. It would take over 10 months for ZAXIS to discharge a typical fully charged 300 Amp Hour RV battery. However, when dry camping, you may wish to turn the ZAXIS receiver OFF to further conserve your house battery power.

Safety Warning

Always turn the ZAXIS receiver OFF while transporting your 5th wheel trailer.

3. Release the "Learn" button. (The yellow "Learning" LED will turn OFF.)
4. Test each keychain transmitter to insure that they are not recognized by the ZAXIS receiver.

2. Run two new wires (Figure 2: C1 and C2) from the terminals labeled "Motor" and splice them into the landing gear motor wires using a crimp on splice.

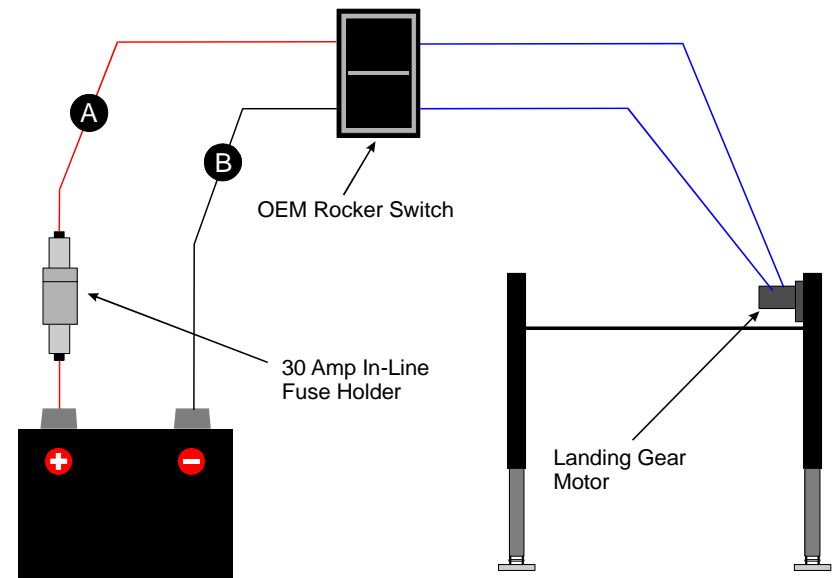
Once steps 1 and 2 are completed, check the operation of the rocker switch and the keychain transmitter.

If the rocker switch causes the landing gear to operate in the wrong direction, check the polarity of wires A2 and B2 on the terminals labeled "Switch." Reverse them if needed.

If the keychain transmitter causes the landing gear to operate in the wrong direction, check the polarity of wires C1 and C2 on the terminals labeled "Motor." Reverse them if needed.

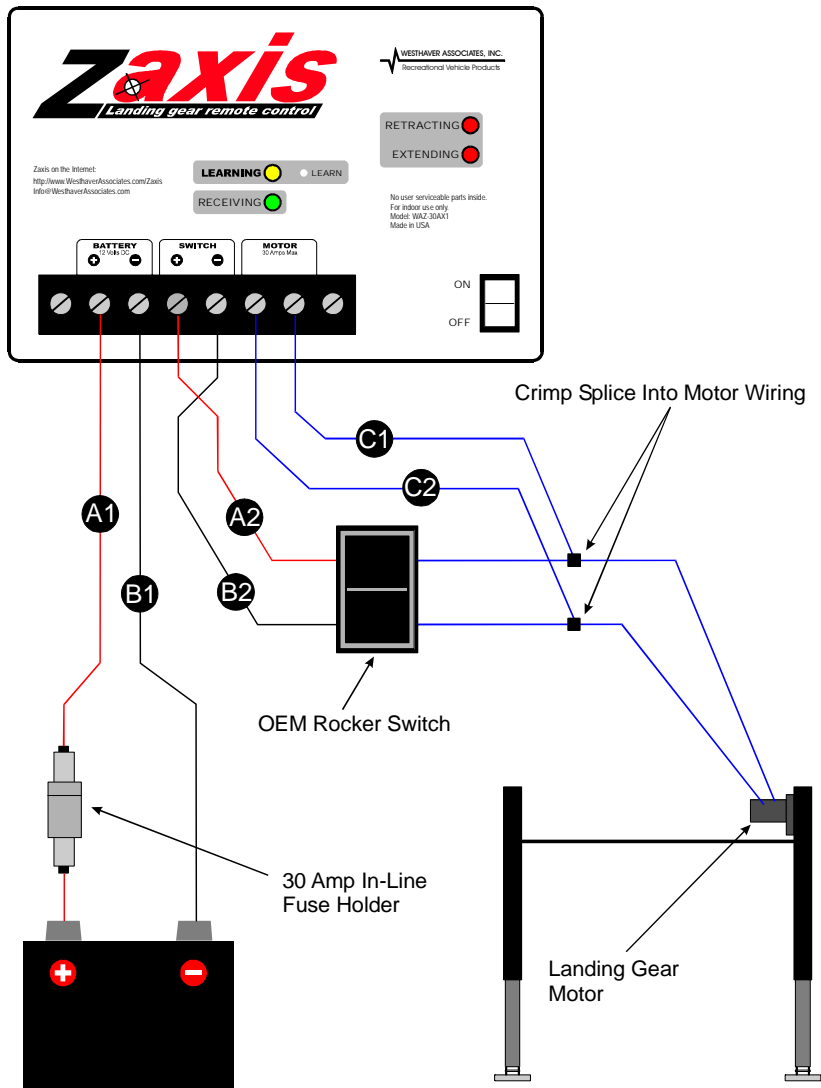
Typical OEM wiring

Figure 1:



ZAXIS wiring

Figure 2:



ZAXIS Setup

Learning

Before a new keychain transmitter is recognized by the ZAXIS receiver, it must be learned. Your ZAXIS receiver has already learned to recognize the keychain transmitter that was included in your purchase. It does not have to be learned again. If you have purchased one or more additional keychain transmitters they will have to be learned. Follow these steps to learn a new keychain transmitter:

1. Use a toothpick, ball-point pen or other small pointed object to **press and release** the "Learn" button located in the hole marked "Learn" on the ZAXIS receiver front panel. (The yellow "Learning" LED will turn ON and will remain ON for approximately 15 seconds.)
2. Press any button on the keychain transmitter. (The green "Receiving" LED will turn ON while the keychain transmitter button is pressed.)
3. Repeat step 2 for any additional keychain transmitters.
4. Wait for the "Learning" LED to turn OFF.
5. Test each keychain transmitter to insure that they are recognized by the ZAXIS receiver.

Un-Learning

You can also un-learn all of the currently recognized keychain transmitters. This is typically done when a keychain transmitter is lost so that it will no longer be recognized by the ZAXIS receiver. This is similar to changing the locks on your home when you lose a door key. Un-learning causes the ZAXIS receiver to forget all of its currently recognized keychain transmitters. Follow these steps to un-learn all currently recognized keychain transmitters:

1. Use a toothpick, ball-point pen or other small pointed object to **press and hold** the "Learn" button located in the hole marked "Learn" on the ZAXIS receiver front panel. (The yellow "Learning" LED and the green "Receiving" LED will turn ON.)
2. Continue holding the "Learn" button until the green "Receiving" LED turns OFF. (This will take approximately 8 seconds.)