# 616-146AV3 FAQs

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Power Requirements

✓ This Projection Alarm Clock is powered by a 5 volt a/c power adapter
✓ Alternatively, optional 2-AAA alkaline batteries may be used.
✓ Half of all warranty issues can be resolved by ensuring a good power source.

A/C Power:
✓ Insert the a/c cord into the Projection Alarm properly. Line it up and push it in.
✓ Check that the outlet or power strip is working.
Note: Some outlets (living room, bedroom) turn off with the light switch.

Batteries:
✓ We suggest name brand alkaline batteries. Overpowered or underpowered batteries may cause loss of indoor readings, missing segments, dim display etc.
✓ Use batteries dated at least six years in advance of the current year. Batteries dated earlier than six years from now may still work, but may be unstable in performance.
✓ Alkaline batteries manufactured this year will have an expiration date 10 years in the future. Battery technology has improved and batteries will maintain voltage longer in storage. However, the environment the batteries reside in for the 10 years can deplete the power.
✓ Good name brand batteries make less noise, which reduces the chance of RF (radio frequency) interference from the battery compartment. A minimum voltage of 1.48V for each battery is necessary for proper performance.

Projection Alarm Clock Factory Restart

✓ REMOVE POWER: Remove batteries and a/c cord from Projection Alarm Clock and transmitter.
✓ DISCHARGE ELECTRICITY: Press one of the buttons on the Projection Alarm Clock at least 20 times to clear all memory. Verify that the Projection Alarm Clock is blank before proceeding.
✓ UNPOWERED 10 MINUTES: Let the Projection Alarm Clock sit with power removed for at least 10 minutes.
✓ POWER UP: Insert 5-volt A/C power cord or install fresh alkaline batteries in the Projection Alarm Clock.
✓ If the Projection Alarm does not display the indoor temperature after 30 seconds remove the a/c power adapter and start the setup process again.

Accuracy

Indoor Temperature

✓ Operating temperature range = 32 F to 122 F (0C to 50C)
✓ Accuracy ± 2 degrees Fahrenheit 32 F to 122 F (0C to 50C)
✓ Resolution = 0.1 degree F

Projection Alarm Clock

How tall are the Time Numbers?

✓ The time numbers are 1.18 inches tall.

12-Hour or 24-Hour Time Format

✓ Display the time in 12-hour or 24-hour format
Default is 12-hour time.
Use the Program Menu to switch time formats.

### Supported Time Zones

This Projection Alarm Clock offers seven time zones:

- **AST**=Atlantic
- **EST**= Eastern
- **CST**= Central
- **MST**= Mountain
- **PST**= Pacific
- **AKT**= Alaska
- **HAT**=Hawaiian

The Projection Alarm Clock works in North America. Outside of North America, the projection alarm clock will not receive a WWVB signal, but will keep time like a quartz clock.

### Fahrenheit/Celsius

**Projection Alarm Clock**: Press and release the SET/°F/°C button on the back of the Projection Alarm Clock to switch the temperature display from Fahrenheit to Celsius.

### Inaccurate Indoor Temperature Reading

**Side-by-side test**: Place the Projection Alarm Clock next to your thermostat for 2 hours.

- Compare temperatures. The temperature should be within 4 degrees to be within tolerance. See the section on **accuracy** for details.
- Look for heat sources such as sunlight, door or window frames, or reflected heat of cold.

### Dashes, OFL or Stuck Indoor Temperature

- This is generally a power related issue.
- Batteries may be overpowered or underpowered. Remove batteries from Projection Alarm Clock.
- Press any button 20 times. Leave the Projection Alarm Clock unpowered for 1-2 hours.
- Insert fresh alkaline batteries with correct polarity.
- If the indoor Temperature is still dashes or OFL, the Projection Alarm Clock may need replacement.

### Does the clock have a backlight?

Yes, this projection alarm clock has a backlight.

**A/C adapter**: The backlight can show continuously when operating the Projection Alarm Clock with the 5-volt a/c adapter.

- **HIGH**: The backlight is defaulted to HI (brightness) when the a/c adapter is in use.
- **LOW**: Press and release the SNOOZE/LIGHT HI-LO-OFF button to dim the brightness of the backlight.
- **OFF**: Press and release the SNOOZE/LIGHT HI-LO-OFF button to turn the backlight off to sleep.

**Note**: When the Adapter is NOT in use, the High-Low-OFF backlight feature is not available.
Note: When the backlight is off, press any button to activate the backlight for 10 seconds, and then it will turn off again.

Battery power:
Press and release the SNOOZE/LIGHT HI-LO-OFF button and the backlight will show for 10 seconds, when operating on batteries only.

IMPORTANT: When operating on a/c power, the backlight, projection and USB charging port will turn off while the Projection Alarm Clock searches for the WWVB signal, to avoid interference. The backlight and projection will return after the 2-10 minute search (which occurs during the late night or early morning hours). Then the USB charging port will resume working.

Time is off by hours
✓ Check to see if the WWVB Tower icon appears on the Projection Alarm Clock. If not, the Projection Alarm Clock has not received a WWVB time signal in the past 24-hours.
✓ Reposition the Projection Alarm Clock with the front or back facing Colorado.
✓ Check that the Time Zone selected correctly reflects your location. Adjust the time zone in the Program Menu.
✓ Check that the DST indicator is correct for your location (most areas observe DST so this should be ON). Adjust the DST indicator in the Program Menu.
✓ Large buildings, metal roofed buildings and buildings or rooms full of electrical and/or radio equipment make it difficult to receive the WWVB time signal.

Projection Adjustments
✓ Battery Power: Press and release the SNOOZE/LIGHT button to show the projection for 10 seconds.
  Note: Projection will not display constantly when operating on battery power.
✓ A/C Power: Projection is displayed constantly unless turned off.
✓ OFF: Hold the +/-PROJ ON/OFF button to turn the projection OFF while operating on a/c power.
✓ ON: Hold the +/-PROJ ON/OFF button to turn the projection ON while operating on a/c power.
✓ Rotate Projection: Press and release the PROJECTION button to rotate projection image 90 degrees. Press and release the PROJECTION button again to rotate another 90 degrees.
✓ Change Projection Mode: Hold, then release the PROJECTION button to switch projection modes. Watch the projection image to view the changes.
  • Time and Indoor Temperature: alternate every 5 seconds (default)
  • Time: Hold and release PROJECTION button
  • Indoor Temperature: Hold and release PROJECTION button again

Projection not working
When operating on a/c power and no constant projection shows, yet it works when you press the SNOOZE button please check:
ON/OFF: Place your hand about 2" from the projection lens. You should see a red dot. If not, hold and release +/-PROJ ON/OFF button once to check that projection was not accidently turned off.

A/C CORD: The projection will continuously display if the a/c cord is attached correctly and the projection is turned on.
- Check that the a/c cord attached properly. Line up the cord and push it in the clock.
- Once you are sure it is in correctly, remove the batteries. If the display goes blank, the a/c cord needs adjustment.
- Check that the outlet or power strip has power.

IMPORTANT: When operating on a/c power, the backlight, projection and USB charging port will turn off while the Projection Alarm Clock searches for the WWVB signal, to avoid interference. The backlight and projection will return after the 2-10 minute search (which occurs during the late night or early morning hours). Then the USB charging port will resume working.

Daylight Saving Time

- Dependent on your location, position of the clock in your home, and atmospheric interference, it may take up to 5 nights for the change from Daylight Savings Time to Standard Time and vice-versa to occur.
- Check for a WWV Tower Icon showing on your Clock. The tower icon indicates you have received the WWVB signal from Ft Collins CO in the past 24-hours.
- Check that the clock is in the correct Time Zone.
- Check whether the DST indicator is ON or OFF. If the indicator is OFF the clock will not change.
- Check for fresh batteries. Without proper batteries, the antenna will have a harder time picking up the signal.
- Position the Projection Alarm Clock in a window (with the front or back) facing Ft. Collins, Colorado and leave for up to five nights. If you do not have a window facing this direction, locate the Clock near an outside wall and point the unit in this general direction.

Manually Set Time/Date: Program Menu

The SET/°F/°C button will move through the program menu. The +/-PROJ ON/OFF or +/-TIME SEARCH buttons will change a value.

- WWVB ON/OFF: Hold the SET/°F/°C button 5 seconds and WWVB and the word ON will flash. Press and release the +/-PROJ ON/OFF or +/-TIME SEARCH button to turn this to OFF if you do not wish WWVB reception. Confirm with the SET/°F/°C button and move to the next item.

- TIME ZONE: EST will flash. Press and release the +/-PROJ ON/OFF or +/-TIME SEARCH button to select a different Time Zone: AST=Atlantic, EST= Eastern, CST= Central, MST= Mountain, PST= Pacific, AKT= Alaska, HAT=Hawaiian time zone. Confirm with the SET/°F/°C button and move to the next item.

- DAYLIGHT SAVING TIME: DST will flash and the word ON. Press and release the +/-PROJ ON/OFF or +/-TIME SEARCH button to turn this to OFF if you do not observe DST. Confirm with the SET/°F/°C button and move to the next item.

- 12/24 HOUR TIME: 12Hr will flash. Press and release the +/-PROJ ON/OFF or +/-TIME SEARCH button to select 24Hr. Confirm with the SET/°F/°C button and move to the next item.

- HOUR: The hour will flash. Press and release the +/-PROJ ON/OFF or +/-TIME SEARCH button to select the correct hour. Confirm with the SET/°F/°C button and move to the next item.
**MINUTES:** The minutes will flash. Press and release the +/-PROJ ON/OFF or -/TIME SEARCH button to select the correct minutes. Confirm with the SET/°F/°C button and move to the next item.

**YEAR:** The year will flash. Press and release the +/-PROJ ON/OFF or -/TIME SEARCH button to select the correct year. Confirm with the SET/°F/°C button and move to the next item.

**MONTH:** The month will flash. Press and release the +/-PROJ ON/OFF or -/TIME SEARCH button to select the correct month. Confirm with the SET/°F/°C button and move to the next item.

**DATE:** The date will flash. Press and release the +/-PROJ ON/OFF or -/TIME SEARCH button to select the correct date. Confirm with the SET/°F/°C button and exit the program menu.

**Note:** The Day of the Week will set automatically after the year, month and date are set.

**FAHRENHEIT/CELSIUS:** Press and release the SET/°F/°C button to select temperature readings in Fahrenheit or Celsius.

### Set Time Alarm

**ALARM HOUR:** Hold the ALARM button to enter alarm time setting mode. The Alarm Hour will flash. Use the +/-PROJ ON/OFF or -/TIME SEARCH button to Set the Hour. Press and release the ALARM button.

**ALARM MINUTE:** The Alarm Minutes will flash. Use the +/-PROJ ON/OFF or -/TIME SEARCH button to Set the Minutes. Press and release the ALARM button to exit.

### Activate/Deactivate Time Alarm

**ACTIVATE:**
- Press and release the ALARM button once to show Alarm Time.
- With the Alarm time showing, press and release the ALARM button to activate the alarm. The alarm icon (bell) appears when alarm is active.

**DEACTIVATE:**
- With the Alarm time showing, press and release the ALARM button to deactivate the alarm. The alarm icon will disappear when alarm is inactive.
- **Note:** When the alarm sounds, it will continue for two minutes then shut off.

### Snooze Alarm

- When the alarm sounds, press the SNOOZE button to trigger snooze alarm for 9 minutes.
- The snooze icon Zz will flash when the snooze feature is active.
- To stop alarm for one day, press AL button, while in snooze mode.
- The alarm icon (bell) will remain solid.

### No WWVB Tower Icon

- The Projection Alarm Clock has not received a WWVB time signal in the past 24-hours.
- Position the Projection Alarm Clock for better reception.
- Hold the -/TIME button to send the Projection Alarm Clock on a signal search at night.
- Allow up to 5 nights to receive the time signal.

**IMPORTANT:** When operating on a/c power, the backlight, projection and USB charging port will turn off while the Projection Alarm Clock searches for the WWVB signal, to avoid
interference. The backlight and projection will return after the 2-10 minute search (which occurs during the late night or early morning hours). Then the USB charging port will resume working.

**USB Charge Port**

The integrated USB charging port (on back) will charge your smart phone, camera or other devices when the Projection Alarm is plugged into a power outlet.

**Note:** This is a power output (charging) port only. This port will not supply power to the Projection Alarm Clock.

- ✓ You cannot use a USB cord from the Projection Alarm Clock to your computer and operate the Projection Alarm Clock.
- ✓ **Note:** There is not a USB cord included with the Projection Alarm Clock.

Connect *your existing USB charging cord for your external device* to the USB charging port on the back of the Projection Alarm Clock to begin to charge. Charging times will vary.

- ✓ **Output:** USB Power Output: 1A maximum current. Charge 1A devices or devices that are self-regulating.
- ✓ **Note:** Charging times will vary based on battery depletion and the individual device.
- ✓ **Note:** Many devices may require more power to charge than provided by this Projection Alarm Clock.

**IMPORTANT:** When operating on a/c power, *the backlight, projection and USB charging port* will turn off while the Projection Alarm Clock searches for the WWVB signal, to avoid interference. The backlight and projection will return after the 2-10 minute search (which occurs during the late night or early morning hours). Then the USB charging port will resume working.

**Projection Alarm Clock Has Distorted Display**

- ✓ On a brand new Projection Alarm Clock check for thin plastic films of printed scratch guard that may be on the upper and lower screen of the Projection Alarm Clock. This thin piece of plastic has printed numbers for store displays.
- ✓ With all power removed the Projection Alarm Clock should be blank.
- ✓ If numbers still appear, please check for scratch guard.
- ✓ Check that the batteries and a/c cord are correctly installed.
- ✓ This is generally a power related issue.
- ✓ Batteries may be overpowered or underpowered. Remove batteries and a/c cord from Projection Alarm Clock.
- ✓ Press any button 20 times. Leave the batteries and a/c cord out of the display for 2 hours.
- ✓ Insert a/c power cord into a good outlet first, then into the Projection Alarm Clock.

**Projection Alarm Clock Has Missing Segments**

- ✓ This is generally a power related issue.
- ✓ All or parts of numbers and letters will not show on the LCD.
- ✓ Batteries may be overpowered or underpowered. Remove batteries and a/c cord from Projection Alarm Clock.
- ✓ Press any button 20 times. Leave the Projection Alarm Clock unpowered for 1-2 hours.
- ✓ Insert the a/c cord into the outlet first then into the Projection Alarm Clock.
- ✓ Alternatively, install fresh alkaline batteries with correct polarity.

**Projection Alarm Clock Is Dim**

**A/C Power Operation:**

- ✓ Check that the a/c cord is correctly attached to the Projection Alarm Clock and outlet.
If using batteries in the Projection Alarm Clock as well, remove them and see if the Projection Alarm Clock goes blank, indicating a faulty a/c cord.

Check the backlight HI/LO and ON/OFF settings. The backlight can be on high, low or off.

**Projection Alarm Clock is Blank: No Letters, Numbers or Dashed Lines**

- Check that the a/c cord and/or batteries are installed correctly.
- Batteries may be overpowered or underpowered. Remove batteries and a/c cord from Projection Alarm Clock.
- Press any button 20 times. Leave the batteries and a/c cord out of the display for 2 hours.
- Insert a/c power cord into a good outlet first, then into the Projection Alarm Clock.

**Projection Alarm Clock Display is frozen**

- On a brand new Projection Alarm Clock, check for thin plastic film of printed scratch guard that may be on the screen of the Projection Alarm Clock. This thin piece of plastic has printed numbers for store displays. This can make the Projection Alarm Clock display appear “frozen”.
- The scratch guard will remove easily.
- With all power removed the Projection Alarm Clock should be blank.
- If numbers still appear, please check for scratch guard.
- Check that the batteries and a/c cord are correctly installed.
- This is generally a power related issue.
- Batteries may be overpowered or underpowered. Remove batteries and a/c cord from Projection Alarm Clock.
- Press any button 20 times. Leave the batteries and a/c cord out of the display for 2 hours.
- Insert a/c power cord into a good outlet first, then into the Projection Alarm Clock.

**Projection Alarm Clock Drains Batteries Quickly**

- Test a new set of alkaline batteries. Write down the date of installation and the voltage of the batteries.
- When the batteries fail, please note the date and voltage again. This is helpful in determining the problem.
- Check for leaking batteries, which may damage the Projection Alarm Clock.
- Battery life is over 24 months when using reputable battery brands.
- Try a/c power cord instead of batteries to power Projection Alarm Clock.