AVM111NAVLH

INSTALLATION/OWNER’S MANUAL

Multimedia Receiver with Bluetooth and Navigation featuring a 10.1" Touch Screen Display

USB  Bluetooth  MP3

iGO primo nextgen

axxera™
Copyright Notes

This product incorporates copyright protection technology that is protected by method claims of certain U.S. patents and other intellectual property rights owned by Macrovision Corporation and other rights owners. Use of this copyright protection technology must be authorized by Macrovision Corporation, and is intended for home and other limited viewing uses only unless otherwise authorized by Macrovision Corporation. Reverse engineering or disassembly is prohibited.

Operating system updates from Apple and Android may cause your receiver not to function properly. This can usually be fixed by doing a software/firmware update to the receiver itself. To see if your receiver has the latest firmware, contact customer service at 1-888-382-5476 to see if your radio needs an update.

Other trademarks and trade names are those of their respective owners.
Safety Information

Please read all instructions carefully before attempting to install or operate.

Due to its technical nature, it is highly recommended that your Axerra AVM111NAVLH is installed by a professional installer or an authorized dealer. This product is only for use in vehicles with 12VDC negative ground only.

To prevent damage or injury:

- Make sure to ground the unit securely to the vehicle chassis ground.
- Do not remove the top or bottom covers of the unit.
- Do not install the unit in a spot exposed to direct sunlight or excessive heat or the possibility of water splashing.
- Do not subject the unit to excessive shock.
- When replacing a fuse, only use a new one with the prescribed rating. Using a fuse with the wrong rating may cause the unit to malfunction.
- To prevent short circuits when replacing a fuse, disconnect the wiring harness first.
- Use only the provided hardware and wire harness.
- You cannot view video while the vehicle is moving. Find a safe place to park and engage the parking brake.
- If you experience problems during installation, consult your nearest Axerra dealer.
- If the unit malfunctions, reset the unit as described on page 10 first. If the problem still persists, consult your nearest Axerra dealer or call tech assistance @ 1-866-382-5476.
- To clean the monitor, wipe only with a dry silicone cloth or soft cloth. Do not use a stiff cloth, or volatile solvents such as paint thinner and alcohol. They can scratch the surface of the panel and/or remove the printing.
- When the temperature of the unit falls (as in winter), the liquid crystal inside the screen will become darker than usual. Normal brightness will return after using the monitor for a while.
- When extending the ignition, battery or ground cables, make sure to use automotive-grade cables or other cables with an area of 0.75mm (AWG 18) or more to prevent voltage drops.
- Do not touch the liquid crystal fluid if the LCD is damaged or broken. The liquid crystal fluid may be hazardous to your health or fatal. If the liquid crystal fluid from the LCD contacts your body or clothing, wash it off with soap immediately.

FCC Compliance

This device complies with Part 15 of the FCC Rules. Operation is subject to the following two conditions:
1) this device may not cause harmful interference, and
2) this device must accept any interference received, including interference that may cause undesired operation.

Warning: Changes or modifications to this unit not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.

Note: This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician for help.
Preparation

Before You Start
• Disconnect negative battery terminal. Consult a qualified technician for instructions.
• Avoid installing the unit where it would be subject to high temperatures, such as from direct sunlight, or where it would be subject to dust, dirt or excessive vibration.

Getting Started
• Insert the supplied keys into the slots as shown.
• Connect wiring harness as shown on page 6. Consult a qualified technician if you are unsure.
• Certain vehicles may require an installation kit and/or wiring harness adapter (sold separately).
• Reconnect negative battery terminal, and test for correct operation.
• Snap trim ring into place (if required).

TYPICAL FRONT-LOAD DIN MOUNTING METHOD
Note:
When replacing a fuse, make sure to use the correct type and amperage. Using an incorrect fuse could cause damage. The unit uses (1) 10 amp blade-style fuse located on the power connector.

Wiring Notes:

Rear camera input
A rear view camera (not included) can be used with the Camera input.
Control Locations

1. Microphone
2. Power / Mode
3. Volume Down
4. Volume Up
5. Camera
6. Reset
7. MicroSD Card (Navigation)
8. IR Sensor

1. Power
2. Mode
3. Play / Pause
4. Mute
5. Talk
6. End Call
7. Setup
8. Go To
9. Home
10. Volume Up
11. Zoom
12. Select
13. Tune/Track Up
14. Volume Down
15. Audio
16. * Key
17. Loudness
18. Number Keys
19. Root
20. OSD (On Screen Display)
21. Local / Random
22. Tune/Track Down
23. AS/PS / Repeat
24. Stereo
25. Stop
26. Enter
27. Band
Remote Control Preparation

Remove battery insulation tape.

To insert or replace the battery, remove the battery holder.

Remove the battery from the battery holder.

Install the new battery. Make sure to keep the (+) side up.

Insert the battery holder.

Notes:
• The remote control uses one 3 volt Lithium CR2025 battery. Remove the battery if the remote will not be used for a month or longer.
• Remove and dispose of battery properly.
• Do not store battery with metallic objects or materials.
## General Operation

<table>
<thead>
<tr>
<th>Feature</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Power On/Off</strong></td>
<td>Press ✅ to turn the unit on. Press and hold ✅ to turn the unit off.</td>
</tr>
<tr>
<td><strong>Volume</strong></td>
<td>Press <strong>Volume Up</strong> or <strong>Volume Down</strong> to increase or decrease the volume level.</td>
</tr>
<tr>
<td><strong>USB Port</strong></td>
<td>Connect a USB device to the USB port on the front panel to play MP3 files or view AVI video files or JPG photos.</td>
</tr>
<tr>
<td><strong>Main Menu</strong></td>
<td>From any operational mode, press the house icon in the top left corner to access the Main Menu screen.</td>
</tr>
</tbody>
</table>

1. Adjust screen brightness or put the monitor into standby mode.
2. Access audio setting such as EQ, Surround Sound Settings and Field Settings (Balance and Fader).

**Mute**

From the Main Menu, select the desired mode of operation to immediately access that mode.

**Mode**

Press **Volume Up** or **Volume Down**, and the menu with volume level will pop up. Press the speaker icon to mute or unmute the sound.
From the Main Menu screen, press Settings in the bottom right corner to access the Setup Menu and select from the following categories: General, Audio, Video and Bluetooth.

**General:**
- **GPS Mix** - Select to turn GPS Mix settings On or Off.
- **GPS Map** - Select MovieNavigator (or other options if added).
- **Wallpaper** - Select between three available wallpaper options.
- **Panel Adjust** - Select to calibrate the touch screen.
- **Radio Area** - Select your current geographic area: Europe, USA, South America, Russia and Asia.
- **Time Setting** - Adjust the current time (hours and minutes) and choose between a 12-hour and 24-hour clock.
- **SWC** - Select to program steering wheel controls.
- **Beep** - Select to turn the audible beep On or Off.
- **Camera** - Select to turn the rear camera On or Off.
- **Version** - Select to view information about the unit.
- **Restore Default** - Select to restore the unit to default settings.

**Audio:**
- **Sound Effect** - Select to access the three sound effect sub-menus.
  - **EQ** - Select from any preset equalization curve (Classic, Rock, Pop, Jazz, Beat, Flat) or use custom settings (User).
  - **Surround Sound** - Select one of the following surround sound configurations: Concert, Church, Passiva, Wide, Live or None.
  - **Field** - Select to adjust Balance and Fader settings.

**Video:**
- **Aspect Ratio** - Select the desired aspect ratio: 4:3PS, 4:3LB or 16:9.
- **Adjust** - Select to adjust levels of Brightness, Contrast, Hue, Saturation and Sharpness.
- **Panel** - Select to choose backlight settings: 10s, 20s, 30s or Off.

**Bluetooth:**
- **Auto Connect** - Turn auto connect feature On or Off.
- **Auto Answer** - Turn auto answer feature On or Off.
AM/FM Tuner Operation

Radio Operation
- Select the Radio icon from the Main Menu screen.
- Press to return to Main Menu screen.

Current Mode Indicator
- Displays current mode of operation.

Tune Frequency Down
- Press momentarily to tune the unit down one step at a time. Press and hold to tune down by seeking the next strong station.

Preset Stations
- To store a preset station, tune unit to desired station, then press and hold the desired preset button to store the current station in that preset spot. Up to 18 FM and 12 AM stations can be stored in memory. Momentarily press any preset station to play it instantly.

Screen
- Press to adjust screen brightness or put the monitor into standby mode.

Band
- Press to select between three FM and two AM bands.

Local / Distance
- Press to toggle between LOCAL and DX (distance) tuning.

Audio
- Press to access audio setting such as EQ, Surround Sound Settings and Field Settings (Balance and Fader).

Stereo / Mono
- Press to toggle between Stereo and Mono tuning.
AM/FM Tuner Operation

Press and hold to automatically store the six strongest stations in the current band as presets. Press briefly for a preset scan, which will scan all preset stations and play 10 seconds of each. Press again to cancel the scan and continue playing the current station.

Press to access the Setting Menu.

Press momentarily to tune the unit up one step at a time. Press and hold to tune up by seeking the next strong station.
USB Operation

To play MP3 files from a USB device, insert device into the USB slot on the front of the unit and playback will begin automatically. To return to USB playback from another mode of operation, select the corresponding icon from the Main Menu.

Press to return to Main Menu screen.

Displays current mode of operation.

Displays information about the current file.

Press to adjust screen brightness or put the monitor into standby mode.

Press momentarily to tune the unit down one step at a time. Press and hold to tune down by seeking the next strong station.

Press to play or pause playback.

Press to access audio setting such as EQ, Surround Sound Settings and Field Settings (Balance and Fader).

Press momentarily to tune the unit up one step at a time. Press and hold to tune up by seeking the next strong station.
USB Operation

Press to access the directory of folders and files. Use the up/down arrows to scroll through the folder list, then press on the name of the desired folder to access it. Use the up/down arrows to scroll through the file list, then press on the name of the desired file to access it.

Folder Search 9

Press to access the Settings Menu.

Settings 10

Press to turn Repeat feature on.

Repeat 11

Press to turn Random feature on.

Random 12
Media Compatibility - USB

<table>
<thead>
<tr>
<th>File Type</th>
<th>MP3</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>File System</strong></td>
<td></td>
</tr>
<tr>
<td>FAT</td>
<td></td>
</tr>
<tr>
<td>FAT 12</td>
<td>X</td>
</tr>
<tr>
<td>FAT 16/FAT 32</td>
<td>✓</td>
</tr>
<tr>
<td><strong>File Extension</strong></td>
<td></td>
</tr>
<tr>
<td>mp3/MP3/ Mp3/MP3</td>
<td>✓</td>
</tr>
<tr>
<td>.m4a</td>
<td>X</td>
</tr>
<tr>
<td><strong>MPEG Format</strong></td>
<td></td>
</tr>
<tr>
<td>MPEG 1</td>
<td>✓</td>
</tr>
<tr>
<td>MPEG 2</td>
<td>✓</td>
</tr>
<tr>
<td>MPEG 2.5</td>
<td>✓</td>
</tr>
<tr>
<td><strong>Sampling Frequency</strong></td>
<td></td>
</tr>
<tr>
<td>MPEG 1</td>
<td>32/44.1/48kHz</td>
</tr>
<tr>
<td>MPEG 2</td>
<td>12/16/22.05/24kHz</td>
</tr>
<tr>
<td>MPEG 2.5</td>
<td>8/11.025/12kHz</td>
</tr>
<tr>
<td><strong>Bitrate</strong></td>
<td></td>
</tr>
<tr>
<td>MPEG 1</td>
<td>32 ~ 320kbps</td>
</tr>
<tr>
<td>MPEG 2</td>
<td>8 ~ 160kbps</td>
</tr>
<tr>
<td>MPEG 2.5</td>
<td>8 ~ 160kbps</td>
</tr>
<tr>
<td><strong>Other Information</strong></td>
<td></td>
</tr>
<tr>
<td>Directory Depth</td>
<td>Unlimited</td>
</tr>
<tr>
<td>File Name Length</td>
<td>32 bytes</td>
</tr>
<tr>
<td>Total File Number</td>
<td>2000 files</td>
</tr>
<tr>
<td>Total Folder Number</td>
<td>200 folders</td>
</tr>
<tr>
<td>File Number via Folder</td>
<td>2000 files</td>
</tr>
<tr>
<td><strong>MP3 ID3 TAG</strong></td>
<td></td>
</tr>
<tr>
<td>ver1.x</td>
<td>✓</td>
</tr>
<tr>
<td>ver2.x</td>
<td>✓</td>
</tr>
<tr>
<td>Title, Artist, Album</td>
<td>✓</td>
</tr>
</tbody>
</table>

**Notes:**

- For USB mode, it is not possible to view JPG files on the in-dash monitor while the vehicle is moving. This is a safety feature to prevent driver distraction.

- The JPG image viewer function will only operate when vehicle is in park and the parking brake is engaged.

- Due to ongoing technological advancement, some USB flash drives may be incompatible with this unit.
Media Compatibility

The following types of discs/files are compatible:

- AVI - Max video resolution: 720x480, Max video bit rate: 5000 kbps
- Mpeg2: Max video resolution: 720x480, Max video bit rate: 5000 kbps
- DivX/Xvid: Max video resolution: 720x480, Max video bit rate: 5000 kbps
- USB format type: FAT32/FAT

The following types of discs/files are not compatible:

- MP3 PRO format, MP3 playlists
- RMP format
- WAV format
- WMV format
- WMA format
- AAC, protected AAC, M4A format

MP3 playback sequence begins in the root folder of the USB flash drive. Any empty folders or folders that do not include MP3/JPG files are skipped.

ISO9660 standards:

- Maximum nested folder depth is 8 (including the root folder).
- Valid characters for folder/file names are letters A-Z (all caps), numbers 0-9, and "_" (underscore). Some characters may not be displayed correctly, depending on the character type.
- This device can play back files in Joliet and other standards that conform to ISO9660. MP3 written in the formats other than the above may not play and/or their file names or folder names may not be displayed properly.

Some files may not play or be displayed correctly, depending on sampling rates and bit rates.

For best results, use the following settings when ripping MP3 files:
128kbps or higher constant bit rate
44.1kHz or higher sampling frequency
Bluetooth Operation

Before you can use a Bluetooth device, it must be paired and connected. Make sure that Bluetooth is activated on your device before you begin the pairing process.

The unit broadcasts the pairing signal constantly when no devices are currently connected. Complete the pairing sequence from your Bluetooth device. Refer to the owner’s manual for your device for more details. **The device name is "Axxera AVM111NAVHL". The Bluetooth passcode "0000".** The unit can be in any mode of operation when pairing is performed.

**Note:** On certain phones, pairing may need to be done more than once if there are connectivity issues.

Most Bluetooth devices support the auto-connect feature and will connect automatically if the device is in range when the unit is powered-on. If your device was previously paired but does not connect, enter the Bluetooth setup menu and ensure that Auto Connect is On.

To access the phone, select Bluetooth Phone from the Main Menu.

Press to return to the Main Menu screen.

Displays current mode of operation.

Use the phone keypad to dial the desired phone number. Alternately, numbers can be dialed directly from the phone.

Press to display keypad and dial a number.

Press to play music using the Bluetooth connection.
Bluetooth Operation

Screen 6: Press to adjust screen brightness or put the monitor into standby mode.

Audio 7: Press to access audio setting such as EQ, Surround Sound Settings and Field Settings (Balance and Fader).

Settings 8: Press to access the Settings Menu.

End Call 9: Press to end the current call.

Make a Call 10: Press to connect or answer a call.

Bluetooth Music 11: To use your Bluetooth connection to play music from your device, press #5 or select Bluetooth Music from the Main Menu.

Previous File/Track 12: Press to go back to the previous file or track.

Play / Pause 13: Press to pause or resume playback.

Next File/Track 14: Press to advance to the next file or track.
Navigation Operation

To access navigation functions, select Navigation from the Main Menu.

For questions regarding navigation operation, refer to the Navigation manual available online at www.axxeraaudio.com/support/manuals.php.

Front 3.5mm Aux Input & Rear RCA A/V Input

**Auxiliary Input**

Connect an optional audio source into the 3.5mm (front panel) input.

Select auxiliary input from the Main Menu to listen to audio.

Adjust volume on the external audio source as needed (if connected to the headphone output of the device).

**Using AV Input**

Connect an optional audio/video source to the rear auxiliary input (Red/White/Yellow RCA connectors). Refer to page 6 for details.

Select AV Input from the Main Menu to listen to audio.

Engage parking brake to watch video.

Rear Camera Operation - (Optional)

**Using Rear Camera**

Connect an optional rear camera to the Camera Input (Black RCA connector). Refer to the wiring diagram for details.

Manual selection - Touch CAMERA icon from the Main Menu or from any operational mode (when enabled) to select camera mode. Touch the top left area on the screen to exit camera mode.

**Note:** The manual mode is for dedicated cameras that are ALWAYS on while driving, it is not meant for cameras that are connected to the vehicle’s reverse light.

**Auto Selection**

The unit will automatically select camera mode when connected to the reverse lamp circuitry.

**Note:** The external video output is not active when using the rear camera input.
Limited One Year Warranty

This warranty gives you specific legal rights. You may also have other rights which vary from state to state.

Dual Electronics Corp. warrants this product to the original purchaser to be free from defects in material and workmanship for a period of one year from the date of the original purchase.

Dual Electronics Corp. agrees, at our option, during the warranty period, to repair any defect in material or workmanship or to furnish an equal new, renewed or comparable product (whichever is deemed necessary) in exchange without charges, subject to verification of the defect or malfunction and proof of the date of purchase. Subsequent replacement products are warranted for the balance of the original warranty period.

Who is covered? This warranty is extended to the original retail purchaser for products purchased from an authorized Dual dealer and used in the U.S.A.

What is covered? This warranty covers all defects in material and workmanship in this product. The following are not covered: software, installation/removal costs, damage resulting from accident, misuse, abuse, neglect, product modification, improper installation, incorrect line voltage, unauthorized repair or failure to follow instructions supplied with the product, or damage occurring during return shipment of the product. Specific license conditions and copyright notices for the software can be found via www.dualav.com.

What to do?
1. Before you call for service, check the troubleshooting guide in your owner’s manual. A slight adjustment of any custom controls may save you a service call.
2. If you require service during the warranty period, you must carefully pack the product (preferably in the original package) and ship it by prepaid transportation with a copy of the original receipt from the retailer to an authorized service center.
3. Please describe your problem in writing and include your name, a return UPS shipping address (P.O. Box not acceptable), and a daytime phone number with your shipment.
4. For more information and for the location of the nearest authorized service center please contact us by one of the following methods:
   • Call us toll-free at 1-866-382-5476
   • E-mail us at cs@dualav.com

Exclusion of Certain Damages: This warranty is exclusive and in lieu of any and all other warranties, expressed or implied, including without limitation the implied warranties of merchantability and fitness for a particular purpose and any obligation, liability, right, claim or remedy in contract or tort, whether or not arising from the company’s negligence, actual or imputed. No person or representative is authorized to assume for the company any other liability in connection with the sale of this product. In no event shall the company be liable for indirect, incidental or consequential damages.
Specifications

**FM Tuner**
- Tuning range: 87.5MHz-107.9MHz
- Usable sensitivity: 10dBf
- 50dB quieting sensitivity: 20dBf
- Stereo separation @ 1kHz: 38dB
- Frequency response: 30Hz-13kHz

**AM Tuner**
- Tuning range: 530kHz-1710kHz
- Usable sensitivity: 24uV
- Frequency response: 30Hz-2.3kHz

**Front USB**
- Compatibility: High Speed USB 2.0
- USB Class: Mass storage class

**Monitor**
- Panel size: 10.1” diagonal measurement
- View angle (up/down/left/right): 50/70/70/70
- Resolution: 800 (H) x 480 (V)
- Brightness [cd/m²]: 250
- Contrast ratio: 450:1
- Pixels: 1,152,000

**General**
- Speaker output impedance: 4 ohms
- Line output voltage: 4 volt RMS
- Line output impedance: 200 ohms
- Chassis dimensions: 7” x 7” x 4” (W x D x H)

Design and specifications subject to change without notice.

Parts List

<table>
<thead>
<tr>
<th>Part Name</th>
<th>Part Number</th>
<th>Pieces</th>
</tr>
</thead>
<tbody>
<tr>
<td>Trim Ring</td>
<td>40-040101-0001</td>
<td>1</td>
</tr>
<tr>
<td>GPS antenna</td>
<td>33-013001-0023</td>
<td>1</td>
</tr>
<tr>
<td>Remote control</td>
<td>74-010101-1001</td>
<td>1</td>
</tr>
<tr>
<td>Removal key</td>
<td>44-042218-0100</td>
<td>1</td>
</tr>
<tr>
<td>SWI Guide</td>
<td>60-C16169-01-01</td>
<td>1</td>
</tr>
<tr>
<td>QSG</td>
<td>60-C16170-01-02</td>
<td>1</td>
</tr>
</tbody>
</table>

CEA-2006 Power Standard Specifications

[reference: 14.4VDC +/- 0.2V, 20Hz~20kHz]

Power Output: 16 Watts RMS x 4 channels at 4 ohms and \( \leq \) 1% THD+N

Signal to Noise Ratio: 80dBA [reference: 1 watt into 4 ohms]
## Troubleshooting

### General

<table>
<thead>
<tr>
<th>Problem</th>
<th>Cause</th>
<th>Action</th>
</tr>
</thead>
<tbody>
<tr>
<td>Unit will not turn on (no power)</td>
<td>Yellow wire not connected or incorrect voltage&lt;br&gt;Red wire not connected or incorrect voltage</td>
<td>Check connections for proper voltage (11 ~ 16VDC)</td>
</tr>
<tr>
<td></td>
<td>Black wire not connected</td>
<td>Check connection to ground</td>
</tr>
<tr>
<td></td>
<td>Fuse blown</td>
<td>Replace fuse(s)</td>
</tr>
<tr>
<td>Unit has power (but no sound)</td>
<td>Speaker wires not connected</td>
<td>Check connections at speakers</td>
</tr>
<tr>
<td></td>
<td>One or more speaker wires touching each other or touching chassis ground</td>
<td>Insulate all bare speaker wires from each other and chassis ground</td>
</tr>
<tr>
<td>Unit blows fuse(s)</td>
<td>Yellow or red wire touching chassis ground</td>
<td>Check for pinched wire</td>
</tr>
<tr>
<td></td>
<td>Speaker wires touching chassis ground</td>
<td>Check for pinched wire</td>
</tr>
<tr>
<td></td>
<td>Incorrect fuse rating</td>
<td>Use fuses with correct rating</td>
</tr>
<tr>
<td>Unit has audio (but no video)</td>
<td>Parking brake safety circuit not connected</td>
<td>Check connections at parking brake</td>
</tr>
<tr>
<td></td>
<td>Parking brake not applied</td>
<td>Apply parking brake as described on page 26</td>
</tr>
<tr>
<td>No video display (when in reverse)</td>
<td>Reverse circuit not connected</td>
<td>Check connections at reverse lamp</td>
</tr>
<tr>
<td></td>
<td>Vehicle is not in reverse</td>
<td>Select reverse gear</td>
</tr>
<tr>
<td>IR remote does not work</td>
<td>Dead battery</td>
<td>Replace battery</td>
</tr>
</tbody>
</table>

### For Your Records

Please keep your original sales receipt and be prepared to provide this receipt in the event you require service, as your original receipt is considered the best proof of purchase and indicates the date you purchased your Axxera product.

<table>
<thead>
<tr>
<th>Dealer Name</th>
<th>________________________________</th>
</tr>
</thead>
<tbody>
<tr>
<td>Dealer Phone</td>
<td>________________________________</td>
</tr>
<tr>
<td>Purchase Date</td>
<td>________________________________</td>
</tr>
</tbody>
</table>

### Register Your Product

Register your product online at [www.dualav.com](http://www.dualav.com).