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› Samsung 65-Inch Class Neo QLED 4K QN90D Series Smart TV User Manual

Samsung QN65QN90DAFXZA

Samsung 65-Inch Class Neo QLED 4K QN90D Series Smart TV User Manual

Model: QN65QN90DAFXZA | Brand: Samsung

INTRODUCTION

This manual provides comprehensive instructions for setting up, operating, and maintaining your Samsung 65-Inch Class Neo QLED 4K QN90D Series Smart TV. Designed for optimal performance and user experience, this television features crisp resolution, clear motion, and high contrast, delivering a brilliant and smooth picture through ultra-fine lighting and brightness technology. Please read this manual thoroughly before using your TV to ensure safe and correct operation.



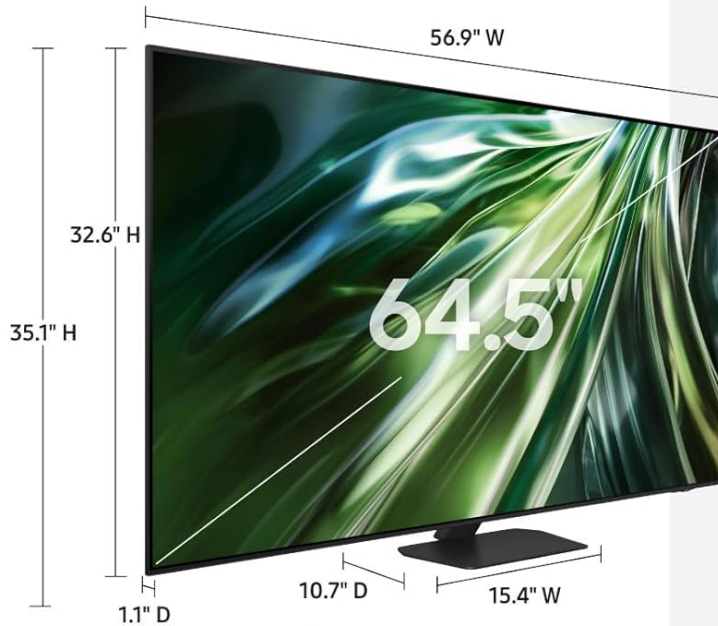
Figure 1: Samsung QN90D Series 65-Inch Neo QLED 4K Smart TV.

WHAT'S IN THE BOX

Upon unpacking your Samsung QN90D Series TV, please verify that all components listed below are present and in good condition.

- Samsung 65-Inch Class Neo QLED 4K QN90D Series Smart TV
- Power Cable
- User Manual (this document)
- SolarCell Remote™ TM2360E

Model: 65" QN90D Neo QLED 4K



Dimensions:

(INCHES W x H x D):

- TV Without Stand: 56.9 x 32.6 x 1.1
- TV With Stand: 56.9 x 35.1 x 10.7
- Stand Footprint: 15.4 x 9.3 x 10.7

Stand height not shown in visual

What's in the box:

- TV
- Power Cable
- User Manual
- SolarCell Remote™ TM2360E



Features and specifications subject to change.

Figure 2: Package Contents and TV Dimensions. The image displays the TV's dimensions (56.9" W x 32.6" H x 1.1" D without stand, 56.9" W x 35.1" H x 10.7" D with stand) and lists the included items: TV, Power Cable, User Manual, and SolarCell Remote™ TM2360E.

SETUP

Physical Placement

Choose a stable, flat surface for your TV or a compatible wall mount. Ensure adequate ventilation around the TV. The TV's dimensions are approximately 56.9 inches wide, 32.6 inches high (without stand), and 1.1 inches deep. With the stand, it measures 35.1 inches high and 10.7 inches deep. The stand footprint is 15.4 inches wide by 10.7 inches deep.



Figure 3: Side profile of the Samsung QN90D TV, highlighting its slim design and the attached stand.

Connecting Devices

Connect your external devices such as Blu-ray players, game consoles, or sound systems to the appropriate ports on the back of the TV. Ensure all cables are securely connected.

- **HDMI (eARC):** For high-definition audio and video, supporting Audio Return Channel.
- **HDMI 1, 2, 3:** Standard HDMI inputs for various devices.

- **USB:** For connecting USB storage devices.
- **LAN:** For wired network connection.
- **Cable/Ant:** For connecting an antenna or cable TV.



Figure 4: Rear panel connections of the Samsung QN90D TV, detailing the placement of USB, HDMI (including eARC), LAN, and Cable/Antenna ports.

Initial Power On

After connecting all necessary cables, plug the power cable into an electrical outlet. The TV will guide you through the initial setup process, including network connection and channel scanning.

OPERATING YOUR TV

Samsung Tizen OS and Smart Features

Your Samsung QN90D TV runs on the intuitive Samsung Tizen OS, providing instant access to streaming apps and content. A Samsung Account is required for network-based smart services. Voice Assistants are built-in for easy navigation.

Your browser does not support the video tag.

Video 1: Demonstration of Alexa Built-In SmartHome features on a Samsung TV. This video showcases how to navigate the smart TV interface and utilize voice commands for various functions.

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Video 2: Product Overview of the Samsung QN90D Series. This video provides a general introduction to the TV's key features and design.

Picture Quality Enhancements

The QN90D Series incorporates advanced technologies for superior visual performance:

- **Quantum Matrix with Mini LEDs:** Provides precise lighting and boosted brightness for detailed scenes.
- **Neo Quantum HDR+:** Delivers sensational contrast, stellar brightness, and vivid color.
- **Real Depth Enhancer Pro:** Creates depth and dimension by adjusting the focal point in each frame.
- **4K AI Upscaling:** Transforms content into sharp 4K resolution using an AI-powered processor.
- **Auto HDR Remastering:** Elevates viewing with enhanced 4K color and contrast, creating brighter highlights.
- **HDR Brightness Optimizer:** Improves visibility in dark scenes by adjusting image tone in real-time.

High 4K Resolution

See content come to life with remarkable picture quality and brightness. No exaggeration: the things on screen look true enough to touch. You'll get to absorb all the nuances of the latest Hollywood movies and the shows you love made for High Dynamic Range.*



* QN90D 50" and 43" have Neo Quantum HDR.

Figure 5: High 4K Resolution display, illustrating the remarkable picture quality and brightness of the TV.

Brilliant Details

Catch every detail in dark to bright scenes. Precise lighting from Mini LEDs boost brightness so you don't miss a thing.



Figure 6: Brilliant Details, showcasing how Mini LEDs boost brightness for every detail in dark to bright scenes.

A new level of depth in every image

Experience depth and dimension on screen just like you do in real life. Real Depth Enhancer Pro finds the focal point in each frame and adjusts for a fully dimensional picture.



Figure 7: A New Level of Depth in Every Image, illustrating the Real Depth Enhancer Pro's ability to create a fully dimensional picture.

Sound Quality

Experience immersive audio with:

- **Dolby Atmos:** Built-in technology for a captivating audio experience.
- **Object Tracking Sound+:** Delivers realistic, 3D audio where sound moves with the action on screen.

Sound that moves you

Put yourself in the middle of the action with built-in Dolby Atmos®. When cars are speeding across the screen, sound moves right along with them to deliver realistic, 3D audio thanks to Object Tracking Sound.*



* QN90D 50" and 43" have Object Tracking Sound Lite.

Figure 8: Sound that Moves You, demonstrating the 3D audio experience provided by Object Tracking Sound+ and Dolby Atmos.

Gaming Features

For gamers, the TV offers:

- **Motion Xcelerator 144Hz:** Ensures ultra-smooth motion with virtually no lag or blur, providing crisp visuals at top speeds.

Peak motion enhancements 144Hz

Play games and content with ultra-smooth motion and virtually no lag or blur. Get uninterrupted action with crisp visuals rendered at top speeds, so you always have a seamless, non-stop picture.*



Figure 9: Peak Motion Enhancements 144Hz, demonstrating the TV's capability for ultra-smooth gaming and content playback.

MAINTENANCE

To ensure the longevity and optimal performance of your Samsung TV, follow these maintenance guidelines:

- **Cleaning the Screen:** Gently wipe the screen with a soft, lint-free cloth. For stubborn marks, slightly dampen the cloth with water or a specialized screen cleaner. Avoid harsh chemicals or abrasive materials.
- **Cleaning the Frame:** Use a soft, dry cloth to clean the TV frame and stand.
- **Ventilation:** Ensure that the ventilation openings on the TV are not blocked. Do not place the TV in an enclosed space without proper airflow.
- **Power Cable:** Regularly check the power cable for any damage. Do not use a damaged power cable.
- **Remote Control:** The SolarCell Remote™ is designed to charge via indoor lighting or USB-C. Keep the solar panel exposed to light for charging.

TROUBLESHOOTING

If you encounter issues with your TV, refer to the following common troubleshooting tips:

Problem	Possible Solution
No Power	Check if the power cable is securely plugged into both the TV and the wall outlet. Test the outlet with another device.
No Picture/Sound	Verify that the correct input source is selected. Check all cable connections (HDMI, antenna). Restart connected devices.
Remote Control Not Working	Ensure the SolarCell Remote™ is charged. Point the remote directly at the TV. Try re-pairing the remote if necessary (refer to the full user manual for pairing instructions).
Poor Picture Quality	Adjust picture settings (brightness, contrast, sharpness). Check the signal strength for antenna/cable. Ensure content source is high quality.
No Internet Connection	Check your Wi-Fi network or LAN cable connection. Restart your router/modem. Reconnect the TV to the network in the settings menu.

For more detailed troubleshooting, please refer to the full User Manual available for download or contact Samsung customer support.

SPECIFICATIONS

Key technical specifications for the Samsung 65-Inch Class Neo QLED 4K QN90D Series Smart TV:

Feature	Detail
Brand	Samsung
Model Number	QN65QN90DAFXZA
Screen Size	65 Inches (166 cm diagonal)
Display Technology	Neo QLED (Mini LED)
Resolution	4K (3840 x 2160)
Refresh Rate	120 Hz (Motion Xcelerator 144Hz for compatible content)
HDR Support	Neo Quantum HDR+
Audio Technology	Dolby Atmos, Object Tracking Sound+ (4.2.2CH Speaker Type)
Operating System	Samsung Tizen OS
Connectivity	Bluetooth, Wi-Fi, HDMI (eARC), USB, LAN
Dimensions (W x H x D)	Without Stand: 56.9" x 32.6" x 1.1" With Stand: 56.9" x 35.1" x 10.7"
Item Weight	59.9 pounds
Power Consumption (Annual)	160.0 kWh (based on 4 hours/day)

WARRANTY AND SUPPORT

Your Samsung QN90D Series TV comes with a manufacturer's warranty. For specific warranty terms and conditions, please refer to the warranty card included with your product or visit the official Samsung support website.

Additional support resources:

- **Online User Manual:** For a complete and detailed guide, you can download the full User Manual (PDF) from the Samsung support website or via the following links:
 - [User Guide \(PDF\)](#)
 - [User Manual \(PDF\)](#)
- **Customer Support:** For technical assistance, service requests, or further inquiries, please contact Samsung customer support. Contact information can be found on the Samsung website or in your product documentation.