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› SAMSUNG 65-Inch Class Neo QLED 4K QN90C Series User Manual

SAMSUNG QN65QN90C

SAMSUNG 65-Inch Class Neo QLED 4K QN90C Series User Manual

Model: QN65QN90C (2023 Model)

1. INTRODUCTION AND OVERVIEW

This manual provides essential information for setting up, operating, and maintaining your SAMSUNG 65-Inch Class Neo QLED 4K QN90C Series Smart TV. Please read this manual thoroughly before using your TV to ensure safe and optimal performance.

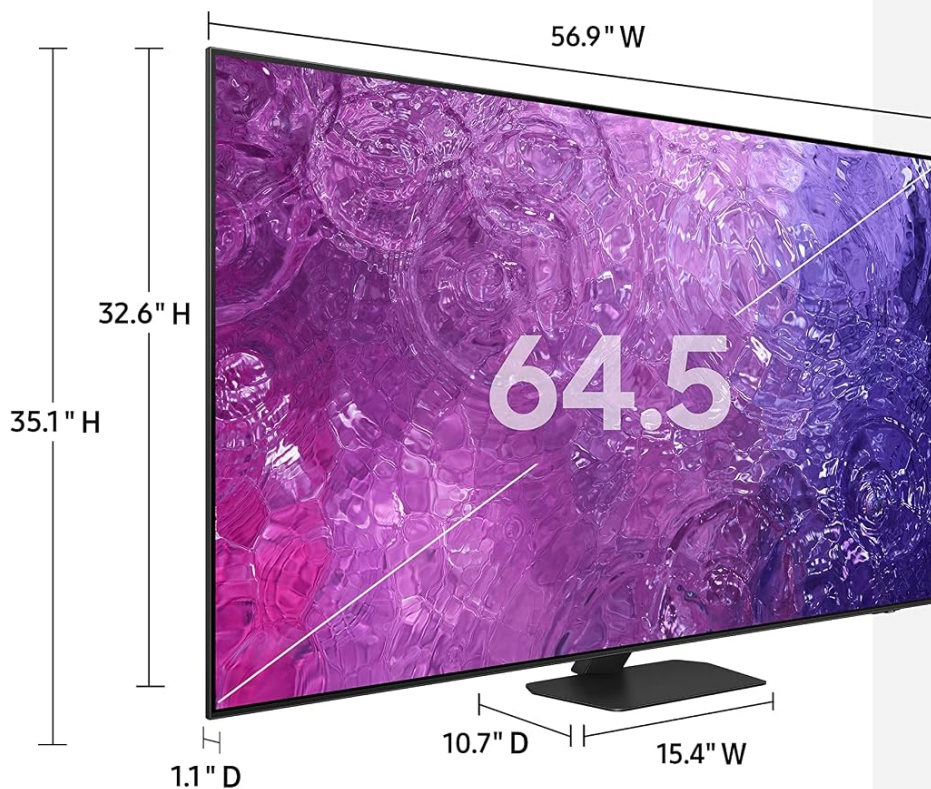
The Samsung Neo QLED 4K QN90C Series offers a brilliant picture with Quantum Mini LEDs, dynamic audio with Dolby Atmos and Object Tracking Sound+, and a sleek NeoSlim design. It features advanced technologies like Neo Quantum HDR+, Neural Quantum Processor with 4K Upscaling, and Anti-Glare with Ultra Viewing Angle for an immersive viewing experience. Integrated Smart TV capabilities with Alexa Built-in and Samsung Gaming Hub provide comprehensive entertainment options.

2. PACKAGE CONTENTS

Before proceeding with the setup, please verify that all items listed below are included in your package:

- SAMSUNG 65-Inch Class Neo QLED 4K QN90C Series TV
- Power Cable
- User Manual (this document)
- E-Manual (digital version)
- SolarCell Remote™ TM2360E

Model: 65" QN90C Neo QLED 4K



Dimensions:

(INCHES W x H x D):

- TV Without Stand: to 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 (pictured below)



Features and specifications subject to change.

Figure 2.1: Front view of the Samsung QN90C Series TV.

What a bright idea

You'll appreciate every freckle on your favorite actor's face, in both the darkest and brightest scenes, thanks to the huge grid of Samsung's ultra-precise Quantum Mini LEDs that take control of the individual zones of light in your picture for next-level color and contrast. You won't just be watching TV — you'll be living it.



Figure 2.2: Side view of the Samsung QN90C Series TV, showcasing its NeoSlim design.



Figure 2.3: Rear view of the Samsung QN90C Series TV with connectivity ports.

3. SETUP

3.1. TV Placement

- Place the TV on a stable, level surface or mount it securely to a wall using a compatible VESA mount (sold separately).
- Ensure adequate ventilation around the TV. Do not block ventilation openings.
- Avoid placing the TV in direct sunlight or near heat sources.

3.2. Connecting Power

- Connect the power cable to the TV's power input and then to a wall outlet.
- Ensure the power cable is securely connected.

3.3. Connecting External Devices

Your TV is equipped with multiple ports for connecting various devices:

- **HDMI Ports (x4):** For connecting Blu-ray players, game consoles, soundbars, and other HDMI-enabled devices.
- **USB Ports (x2):** For connecting USB storage devices to view photos, videos, or listen to music.
- **LAN Port:** For wired internet connection.
- **Antenna/Cable Input:** For connecting an antenna or cable TV.

Refer to the rear view image in Section 2 for port locations.

3.4. Initial Setup

- Power on the TV using the remote control.
- Follow the on-screen instructions to complete the initial setup, including language selection, network connection (Wi-Fi or Ethernet), and channel scanning.
- Sign in to your Samsung account or create a new one to access Smart TV features.

4. OPERATING YOUR TV

4.1. Using the SolarCell Remote™

The included SolarCell Remote™ TM2360E is designed for intuitive control. It can be charged via solar energy or USB-C.

- **Power Button:** Turns the TV on/off.
- **Directional Pad:** Navigate menus and select items.
- **Home Button:** Access the Smart Hub.
- **Volume/Channel Buttons:** Adjust volume and change channels.
- **Voice Assistant Button:** Activate Alexa or Bixby for voice commands.

4.2. Smart Hub and Apps

The Smart Hub provides access to a wide range of apps, streaming services, and connected devices.

- Press the **Home** button on your remote to open the Smart Hub.
- Navigate through the app tiles to select your desired application (e.g., Netflix, Hulu, YouTube).
- Customize your Smart Hub by adding or rearranging apps.

4.3. Input Selection

To switch between connected devices:

- Press the **Source** button (usually an icon resembling a rectangle with an arrow) on your remote.
- Select the desired input (e.g., HDMI 1, USB, TV).

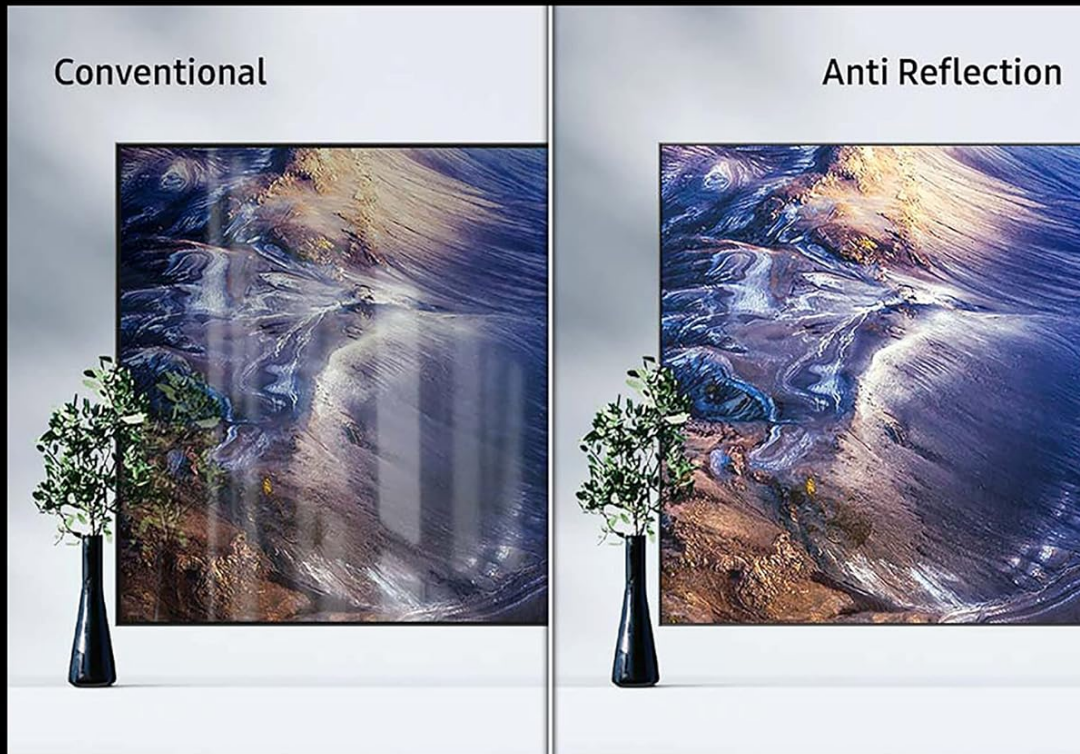
5. KEY FEATURES AND TECHNOLOGIES

5.1. Quantum Matrix with Mini LEDs

Experience sensational color and contrast thanks to a huge grid of Samsung's ultra-precise Quantum Mini LEDs. These LEDs take control of individual zones of light, allowing for incredible detail in both the darkest and brightest scenes.

Dis those distractions

There isn't a bad seat in the house thanks to Anti-Glare with Ultra Viewing Angle technology. And you won't need to draw the shades or turn off every lamp to see the picture clearly. You'll get a consistent and detailed 8K picture — at any angle, in any light — with pristine color across the entire screen. Fewer reflections, fewer distractions.



* 50" and 43" have Anti-Glare with Wide Viewing Angle.

Figure 5.1: Quantum Matrix Technology for precise light control.

5.2. Neo Quantum HDR+

See sensational contrast, stellar brightness, and vivid color just as the director intended. Neo Quantum HDR+ brings content to life with a wide range of colors and incredible depth, making on-screen visuals appear true enough to touch.

HDMI

Manufactured under license from Dolby
Laboratories. Dolby, Dolby Audio, and the double-D
symbol are trademarks of Dolby Laboratories.

USB +
(5V 0.5A)

USB +
(HDD 5V 1A)



HDMI
4

4

3
(eARC)

2

1

LAN

EX-LINK

ANT

* Images are simulated and for illustration purposes only.

5.3. Neural Quantum Processor with 4K Upscaling

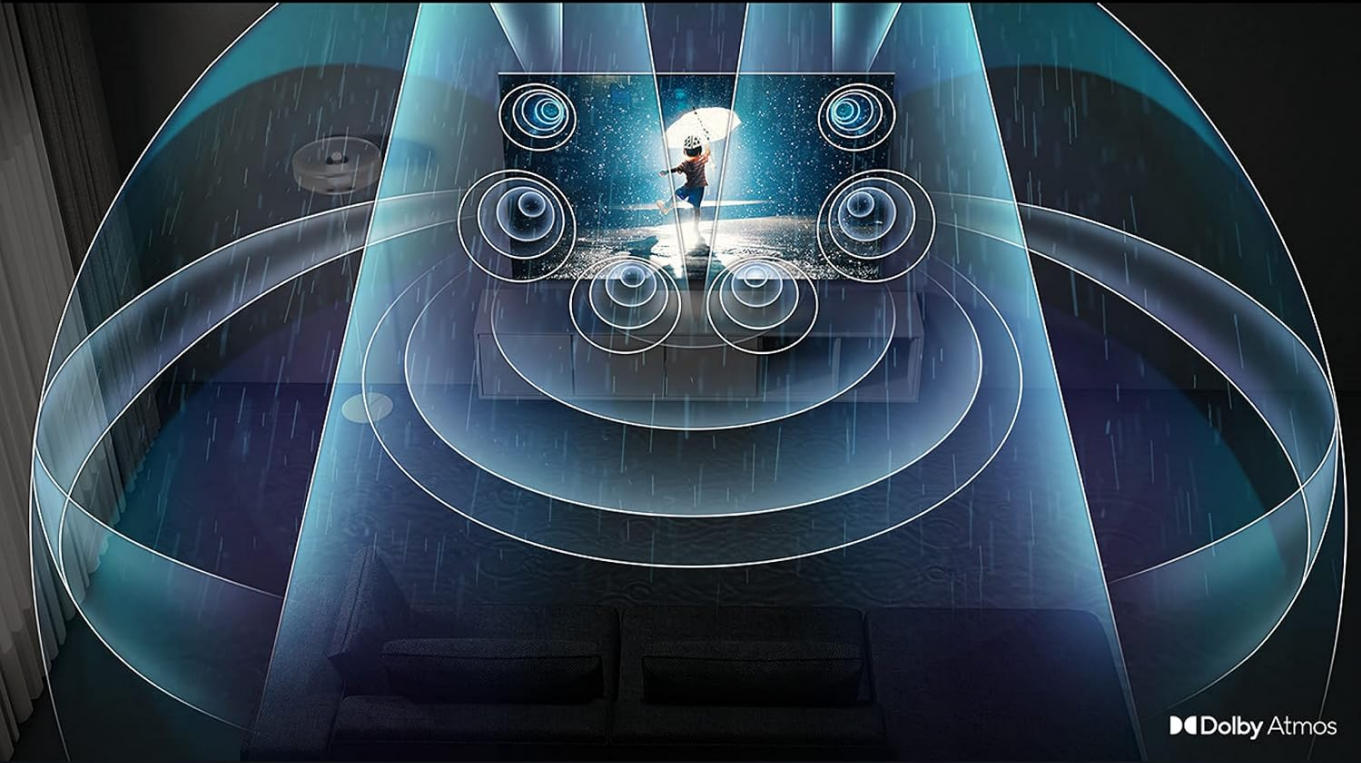
Whether streaming an HD movie, watching sports, or viewing home videos, experience content transformed into sharp 4K resolution. The high-performance, AI-powered processor upgrades content scene by scene, optimizing picture quality.

5.4. Anti-Glare with Ultra Viewing Angle

Enjoy a consistent and detailed picture from any angle, in any light. Anti-Glare with Ultra Viewing Angle technology minimizes reflections and maintains pristine color across the entire screen, ensuring there isn't a bad seat in the house.

Don't just listen. Get lost in sound.

Hear the spinning whirr of helicopter blades and streams of sirens speeding by with Dolby Atmos® and Object Tracking Sound+. You'll feel like you're right in the middle of the action as AI Sound tracks the action on screen and sound is projected to follow the movement with pinpoint accuracy.*



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

Dolby Atmos

Figure 5.3: Anti-Glare technology reducing reflections.

5.5. Dolby Atmos & Object Tracking Sound+

Immerse yourself in dynamic audio with Dolby Atmos and Object Tracking Sound+. Sound tracks the action on screen from all corners with pinpoint accuracy, making you feel like you're right there in the scene.



Figure 5.4: Object Tracking Sound+ for immersive audio.

5.6. Samsung Gaming Hub

The Samsung Gaming Hub brings together the best of console games, streaming games, and more in one place. Get easier access to games, standalone apps, and accessories, receive game recommendations, and adjust settings for an optimized gaming experience.





Figure 5.5: Samsung Gaming Hub interface.

5.7. Pantone Validated Color

Enjoy color validated by industry-leading experts at Pantone. From every fantastic detail on your favorite runway competition to each course of cooking shows, experience it in a whole new way only on Samsung TV screens.

5.8. Q-Symphony 3.0

With Q-Symphony, your TV speakers paired with a compatible Q-Series or S-Series soundbar (sold separately) operate as one. Together, they optimize all channels to bring you a masterfully orchestrated sound experience.



Figure 5.6: Q-Symphony in action with a soundbar.

5.9. NeoSlim Design

The TV's ultra-slim silhouette and hexagonal plate stand provide a sleek and modern aesthetic, ensuring it makes a strong first impression in any living space.

5.10. Motion Xcelerator Turbo+ (4K @120Hz)

Get smooth performance during the fastest games and action scenes. Enjoy seamless action and 4K visuals at speeds up to 120Hz, minimizing lag or motion blur.

5.11. Smart TV with Multiple Voice Assistants

Enjoy Bixby and Alexa built right into your Samsung QLED 4K Smart TV, allowing for convenient voice control of your TV and smart home devices.

6. MAINTENANCE

6.1. Cleaning the Screen

- Gently wipe the screen with a soft, lint-free cloth.
- For stubborn marks, lightly dampen the cloth with water or a specialized screen cleaner. Do not spray liquid directly onto the screen.
- Avoid using abrasive cleaners, waxes, or solvents.

6.2. General Care

- Unplug the TV from the power outlet before cleaning or when not in use for extended periods.
- Keep the TV away from direct heat, humidity, and dust.
- Do not place heavy objects on top of the TV.

7. TROUBLESHOOTING

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

Problem	Possible Solution
No Power	Check if the power cable is securely connected to the TV and the wall outlet. Try a different outlet.
No Picture/Sound	Verify the correct input source is selected. Check all cable connections (HDMI, antenna). Restart connected devices.
Remote Not Working	Ensure the remote is charged (SolarCell Remote). Point the remote directly at the TV. Remove any obstructions.
Poor Picture Quality	Adjust picture settings (brightness, contrast, sharpness). Check the resolution of the input source. Ensure Anti-Glare feature is active if needed.
No Internet Connection	Check Wi-Fi password. Restart your router/modem. Try a wired Ethernet connection.

For more detailed troubleshooting, refer to the E-Manual accessible through your TV's Smart Hub or visit the Samsung support website.

8. SPECIFICATIONS

Feature	Detail
Brand	SAMSUNG
Model Number	QN65QN90C (E1SAMQN65QN90CARB)
Screen Size	64.5 Inches (Diagonal)

Feature	Detail
Display Technology	Mini LED (Neo QLED)
Resolution	4K (3840 x 2160)
Refresh Rate	120 Hz
HDR Support	Neo Quantum HDR+
Audio Technology	Dolby Atmos, Object Tracking Sound+ (OTS+)
Speaker Output	60 Watts
Processor	Neural Quantum Processor 4K
Connectivity	4 x HDMI, 2 x USB, Ethernet (LAN), Wi-Fi, Bluetooth
Voice Assistants	Alexa Built-in, Bixby
Dimensions (with stand)	11.2"D x 56.9"W x 35.1"H
Item Weight	60.6 Pounds
Color	Titan Black
Power Consumption	200 Watts (Estimated Yearly Energy Cost: \$19)



Figure 8.1: Energy Guide for QN65QN90C.

9. WARRANTY AND SUPPORT

9.1. Product Warranty

Your SAMSUNG 65-Inch Class Neo QLED 4K QN90C Series TV comes with a limited manufacturer's warranty. Please refer to the warranty card included in your package or visit the official Samsung website for detailed terms and conditions.

9.2. Customer Support

For technical assistance, troubleshooting, or service inquiries, please contact Samsung Customer Support. You can find contact information on the Samsung website or in your E-Manual.

- **Online Support:** Visit the official Samsung support website for FAQs, downloads, and live chat.
- **Phone Support:** Contact the dedicated support line for your region.

Note: Protection plans may be available for extended coverage. Please check with your retailer for options.

ASK A QUESTION ABOUT THIS MANUAL

Ask about setup, troubleshooting, compatibility, parts, safety, or missing instructions. Manuals+ will review the question

and use this page's manual context to help answer it.

Name

Anonymous

Email

you@example.com

After a successful submission, we securely hash the supplied account or form email before sending it to Microsoft Advertising for conversion attribution. [Privacy details](#).

Question

Example: How do I reset this device or fix this error?

Details

Model number, symptoms, what you tried, or the section of the manual you are using.

Submit question