



LOW VOLTAGE PRESENTATION

Kendall Nicholas

INTRODUCTION

CGI SYSTEMS GROUP IS A SMALL LOW VOLTAGE COMPANY FORMERLY KNOWN AS C&G INTEGRATIONS. WE HAVE BEEN IN BUSINESS FOR 2 YEARS AS CGI AND 10 YEARS AS C&G. MYSELF AND FORMER BUSINESS PARTNER JAMES STARTED CGI THE FORMER WHICH IS NOW RETIRED AND WE CONTINUE TO GROW AND EXPAND IN ALL AREAS OF LOW VOLTAGE AND TECHNOLOGY SECTORS.

OUR SERVICES

Fire Alarm Systems & Monitoring



Structured Wiring



Fiber installation & Terminations



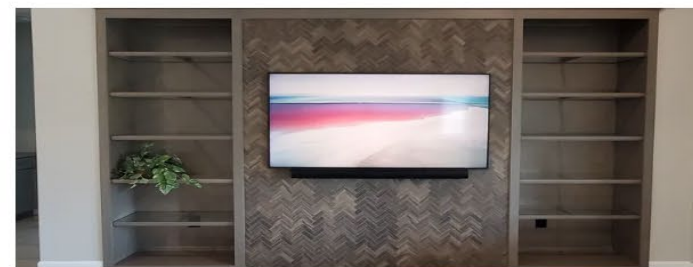
Security Guard Services



Surveillance Cameras



Audio / Video



Access Control



Telephone Entry



Smart Home Installation





OUR TEAM

Kendall Nicholas

Owner

Mischa Deroche

Office Manager

Preston Petty

Lead Technician
Robson Ranch

Chris Deroche

Project Manager
Robson Ranch

TODAYS AGENDA

- SMART HOME
- NETWORK & STREAMING
- MULTI-ZONE MUSIC OPTIONS
- AUDIO & SURROUND SOUND
- HOME SECURITY & SURVEILLANCE
- FUTURE PROOF AND PLANNING



BRILLIANT SMART HOME

Brilliant Smart Home System

Brilliant is the first smart home control, lighting and home automation system that's affordable enough to be installed in every home and by every home builder.



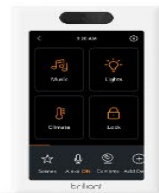
HOME CONTROL

Touchscreen Control Panels

Transform every house and apartment into fully-integrated smart homes that make it easy to control lighting, climate, access, cameras, locks, music, intercom, scenes and more.

- **Controls popular smart home products**
- **Built-in Alexa voice, motion sensor, camera, and intercom**
- **Installs in the place of a standard light switch panel**

[Technical Specifications →](#)



1-Switch Panel



2-Switch Panel



3-Switch Panel



4-Switch Panel



Products



Voice Control



Lighting



Thermostats



Video Doorbells



Cameras



Locks



Garage Openers



Sound Systems



Window Shades



Leak Detectors



Hubs



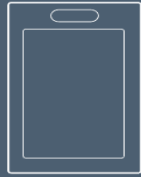
Intercom Systems



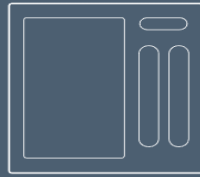
Security Systems



Technical Specifications



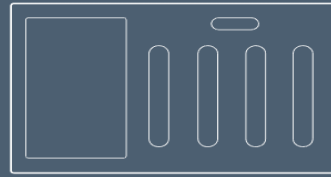
**1-Switch
Panel**



**2-Switch
Panel**



**3-Switch
Panel**



**4-Switch
Panel**

Brilliant Smart Home Controls

Electrical & Lighting

120V AC

Requires neutral and ground wires.

Supports up to 300W incandescent and halogen and up to 150W LED and CFL (load ratings are per switch).

Supports dimming and multiway lighting.

Magnetic low voltage (MLV) lighting systems not supported.

Size

1-Switch 5.6 x 3.3 inches, 2-Switch 5.3 x 4.75 inches,

3-Switch 5.3 x 6.4 inches, 4-Switch 5.3 x 8.2 inches

Colors

White, Ivory, Light Almond, Silver, Gray, and Black

Display

5-inch (diagonal) LCD touchscreen with 720x1280 resolution

Camera

Up to 720p, includes physical privacy shutter

Sensors

Microphone, speaker, motion sensor, capacitive touch sensor, temperature sensor, and ambient light sensor

Connectivity

WiFi 802.11 b/g/n @ 2.4 GHz and Bluetooth

Mobile App

Brilliant app for iOS and Android

TP-LINK 610 WIFI 6 ACCESS POINT

Easily Upgrade to Business WiFi 6 Network

AX1800 Ceiling Mount WiFi 6 Access Point

Omada EAP610

Wi-Fi 6



AX1800 WiFi 6 Speed
574 Mbps on 2.4 GHz + 1201 Mbps on 5 GHz[†]



High-Efficiency WiFi 6
More connected devices can enjoy faster speeds[†]



Centralized Cloud Management
Manage the whole network locally or from the cloud[§]



Seamless Roaming
Uninterrupted streaming when moving between APs[§]



Omada Mesh Technology
More flexible and convenient wireless deployment[§]



PoE+ Powered
Supports DC (adapter included), 802.3at PoE+, and Passive PoE for flexible installations



Ultra-Slim Design
Φ160 mm × 33.6 mm elegant design brings more agility



Gigabit Wired Performance
Boosts overall throughput with a Gigabit Ethernet port



Optimized WiFi Performance
With Portal Authentication, MU-MIMO, Band Steering, Airtime Fairness, and Load Balance

Ultra-Slim Design Brings More Agility

Exceptional performance with compact design ensures simple WiFi installation while saving space. The elegant appearance makes EAP610 perfectly blend into any modern office, hotel, classroom, or café.



Easy to Mount with Refined Industrial Design

- 1 Push up
- 2 Rotate to lock
Ceiling / Wall / Junction Box Mounting (Kits included)



Boosted Network Security and Efficiency

Security



Secure Guest Network with Up to 16 SSIDs

Guest network access provides enhanced security to guests. Different SSIDs also enable flexible access management.



Guest Network with Facebook Wi-Fi and SMS Login

Captive portal (including SMS, Facebook Wi-Fi, Voucher) and 802.1x authentication help maintain authorized guests to use the network. Boost your business with a customized marketing page.¹

[Learn More about WiFi Marketing >>](#)



WPA3 for Worry-Free Open Public Networks

With advanced enterprise security, WPA3 provides more data security for previously unsecured and open WiFi hotspots.

[Learn More about WPA3 >>](#)

Efficiency



Band Steering

Automatically moves dual band devices onto the wider 5GHz band for faster connections.



Load Balance

Ensures large numbers of users have smooth network experiences in high-density business networks



Airtime Fairness

Increases average network throughput in heavily congested environments

Auto Channel Selection and Power Adjustment to Optimize Overall Performance*

Provides powerful wireless performance while significantly reducing WiFi interference by automatically adjusting the channel settings and transmission power levels of neighboring APs in the same network.



Easy Deployment & Higher Performance by Omada Mesh[§]

Easy Pairing, Less Wiring

With Mesh technology, Omada EAPs save you from extra wires by wirelessly extending your WiFi signal further and more flexibly to hard-to-wire areas.



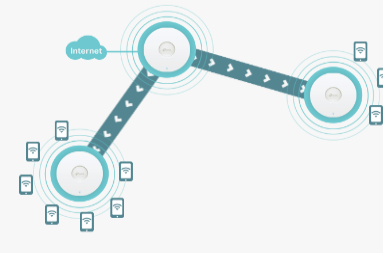
Traditional Wired Networking



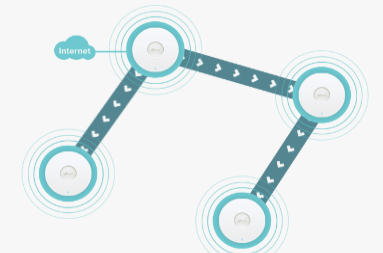
Mesh Wireless Networking

Optimized Network Performance

Intelligent self-organization optimizes the best path between EAPs while self-healing ensures you stay online even when one AP is disrupted.



Intelligent Self-Organization



Self-Healing



NVIDIA SHIELD STREAMING DEVICE



SHIELD TV Pro

Processor



NVIDIA® Tegra® X1+ processor with a 256-core GPU and 3 GB RAM

Video Features



4K HDR Ready
Dolby Vision HDR and HDR10

AI-enhanced upscaling for up to 4K 60 FPS
Up to 4K HDR playback at 60 FPS (H.265/HEVC)
Up to 4K playback at 60 FPS (VP8, VP9, H.264, MPEG1/2)
Up to 1080p playback at 60 FPS (H.263, MJPEG, MPEG4, WMV9/VC1)
Format/Container support: Xvid/ DivX/ASF/AVI/MKV/MOV/M2TS/MPEG-TS/MP4/WEB-M

Audio



Dolby Audio (Dolby Digital, Dolby Digital Plus, Dolby Atmos)
DTS-X surround sound (pass-through) over HDMI
High-resolution audio playback up to 24-bit/192 kHz over HDMI and USB
High-resolution audio up-sample to 24-bit/192 kHz over USB
Audio support: AAC, AAC+, eAAC+, MP3, WAVE, AMR, OGG Vorbis, FLAC, PCM, WMA, WMA-Pro, WMA-Lossless, Dolby Digital Plus, Dolby Atmos, Dolby TrueHD (pass-through), DTS-X (pass-through), and DTS-HD (pass-through)

Weight & Size

Weight: 8.8 oz / 250 g
Height: 3.858 in / 9.800 cm
Width: 6.26 in / 15.900 cm
Depth: 1.02 in / 2.593 cm

Storage

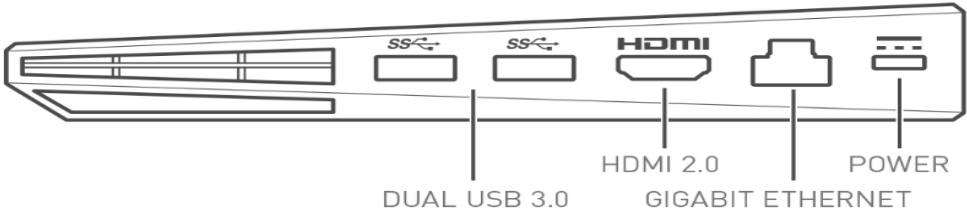
16 GB*
*Portion of storage occupied by system software
Expandable using USB flash or hard drives.

Wireless

802.11ac 2x2 MIMO 2.4 GHz and 5 GHz Wi-Fi
Bluetooth 5.0 + LE
Captive Portal support

Interfaces

Gigabit Ethernet
HDMI 2.0b with HDCP 2.2 and CEC support
Two USB 3.0 Ports (Type A)



Operating System

Android 11.0 powered by Android TV™ with Chromecast 4K built-in

Software Updates

SHIELD Experience upgrades directly from NVIDIA

Voice Assistants

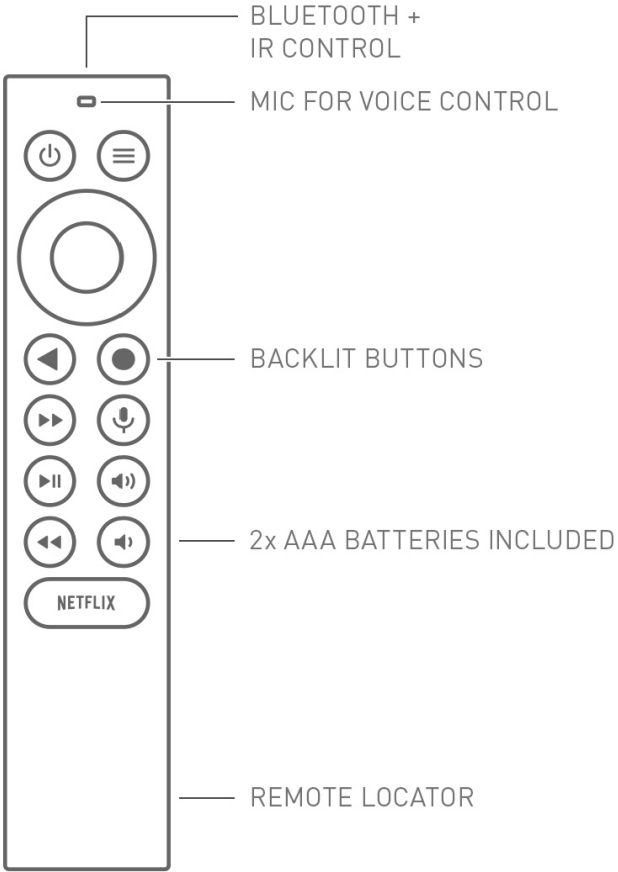


Built in Voice Control
The Google Assistant

Hands-free Voice Control†
Google Home compatible (Google Assistant)*
Amazon Echo compatible (Works with Alexa)*

Remote

- SHIELD Remote
- > Microphone for voice search and commands
- > Motion-activated backlit buttons
- > 3-way programmable remote
- > Bluetooth connectivity
- > IR blaster for control of volume and power on TVs, soundbars, or receivers
- > Remote locator for finding a lost remote
- > 2x AAA batteries included

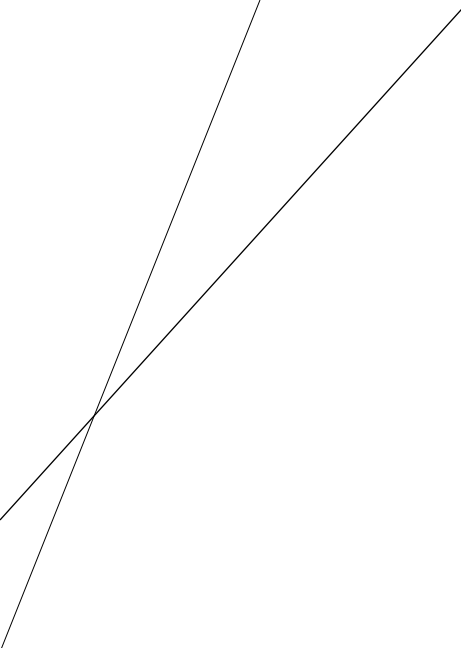


Power

40 W power adapter (5-10 W typical consumption)

Gaming Features

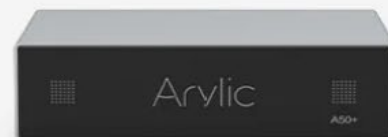


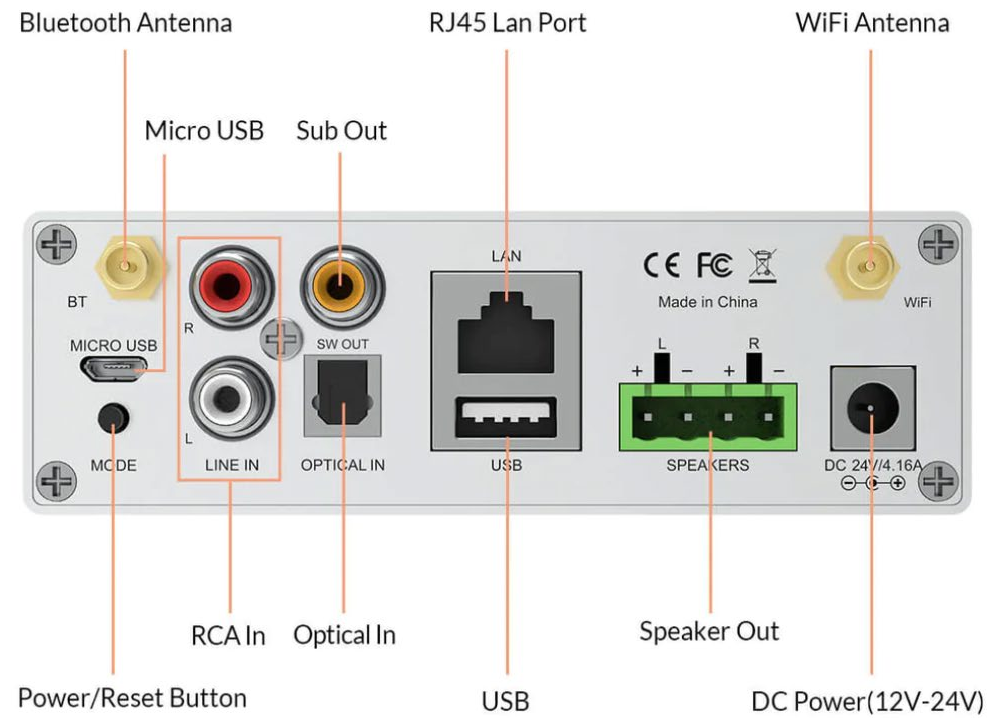


	2019 Fire TV Cube 2	2022 Fire TV Cube 3	2019 Shield TV (Cylinder)	2019 Shield TV Pro	2022 Apple TV 64GB	2022 Apple TV 128GB
Original Release	Oct 10, 2019	Oct 25, 2022	Oct 28, 2019	Oct 28, 2019	Nov 4, 2022	Nov 4, 2022
CPU Model	Amlogic S922Z-2	Amlogic POP1-G (A311D2?)	Nvidia Tegra X1+	Nvidia Tegra X1+	Apple A15 Bionic	Apple A15 Bionic
CPU Cores	6-Core	8-core	4-core	4-core	6-Core	6-Core
CPU Speed	2.2GHz (4x) & 1.9GHz (2x)	2.2GHz (4x) & 2.0GHz (4x)	2.1GHz (4x)	2.1GHz (4x)	3.2GHz (2x) & 2.0GHz (4x)	3.2GHz (2x) & 2.0GHz (4x)
GPU	Mali G52 MP2	Mali G52 MP8	Maxwell GM20x	Maxwell GM20x	A15 Bionic	A15 Bionic
GPU Cores	2-Core	8-core	256-core	256-core	4/5-Core	4/5-Core
GPU Speed	800 MHz	800 MHz	1267 MHz	1267 MHz	1200 MHz	1200 MHz
RAM	2 GB	2 GB	2 GB	3 GB	Unknown	Unknown
Wi-Fi	Wi-Fi 5 802.11ac	Wi-Fi 6E 802.11ax	Wi-Fi 5 802.11ac	Wi-Fi 5 802.11ac	Wi-Fi 6 802.11ax	Wi-Fi 6 802.11ax
Ethernet	10/100 External	10/100 Internal	Gigabit Internal	Gigabit Internal	None	Gigabit Internal
Internal Storage	16GB	16GB	8GB	16GB	64GB	128GB
Operating System	Fire OS 7 (Android 9)	Fire OS 7 (Android 9)	Android 11	Android 11	tvOS 16	tvOS 16
Architecture	32-bit	32-bit	32-bit	64-bit	64-bit	64-bit
Video Resolution	4K @ 60fps	4K @ 60fps	4K @ 60fps	4K @ 60fps	4K @ 60fps	4K @ 60fps
HDR Types	HDR10, HLG, Dolby Vision, HDR10+	HDR10, HLG, Dolby Vision, HDR10+	HDR10, HLG, Dolby Vision	HDR10, HLG, Dolby Vision	HDR10, HLG, Dolby Vision, HDR10+	HDR10, HLG, Dolby Vision, HDR10+
Video Decoding	H.264 (AVC), H.265 (HEVC)	H.264 (AVC), H.265 (HEVC), AV1	H.264 (AVC), H.265 (HEVC)	H.264 (AVC), H.265 (HEVC)	H.264 (AVC), H.265 (HEVC)	H.264 (AVC), H.265 (HEVC)
Audio Decoding	Dolby Atmos	Dolby Atmos	Dolby Atmos	Dolby Atmos	Dolby Atmos	Dolby Atmos
Voice Control	Remote Mic, Hands-Free	Remote Mic, Hands-Free	Remote Mic	Remote Mic	Remote Mic	Remote Mic
USB Port	USB 2.0 (Micro)	USB 2.0 (Full)	None	USB 3.0 (Full)	None	None
Card Port	None	None	Micro SD	None	None	None
Video Upscaling	Standard	Advanced	Advanced	Advanced	Standard	Standard
Other Extras	App Sideloading, IR Blaster	App Sideloading, IR Blaster, HDMI-IN	App Sideloading	App Sideloading	None	Thread Radio



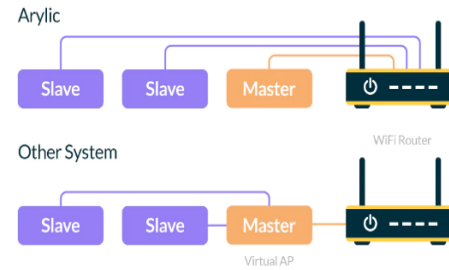
MULTIROOM AUDIO





How Arylic Works

Why Arylic System?



More Stable, More Enjoyments

Different to other wireless streaming system use the virtual access point to build the communication between devices, we use the router mode which lets devices pass through the signal via your router directly. Make your listening experience more stable and more smoothly.



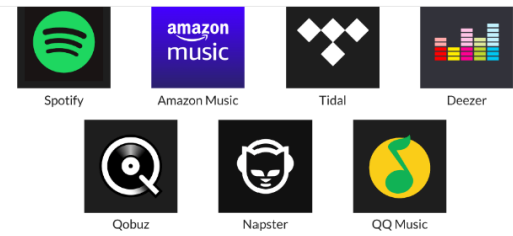
More Flexible

You can easily switch between WiFi, Airplay and Bluetooth modes in one system for different scenario. Wired Lan connection for super easy and stable direct connection. For professional players, we offer DLNA/UPnP protocols and API for you to discover and develop your smart system.



More Streaming Options

We accept multiple audio sources in one system, like online music, online radio, local music, NAS, USB Stick, Vinyl, CD Player, Radio, AV Receiver, Audio Amplifier and more correspond audio input sources.



Online Radio Services



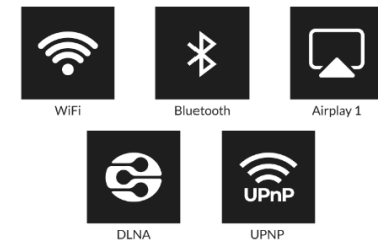
Local Music Services



Compatible PC Software



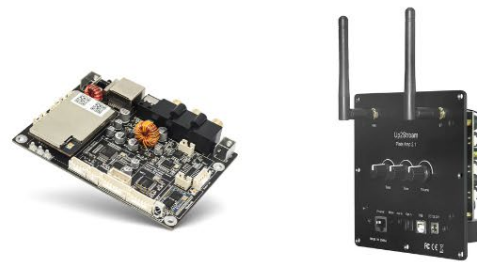
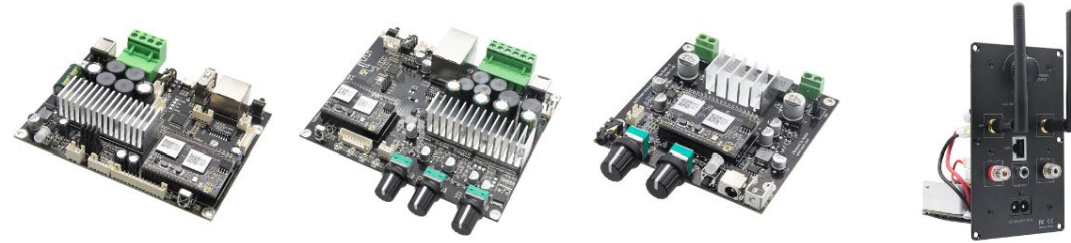
Wireless Connectivity



Compatible Device



DIY Audio



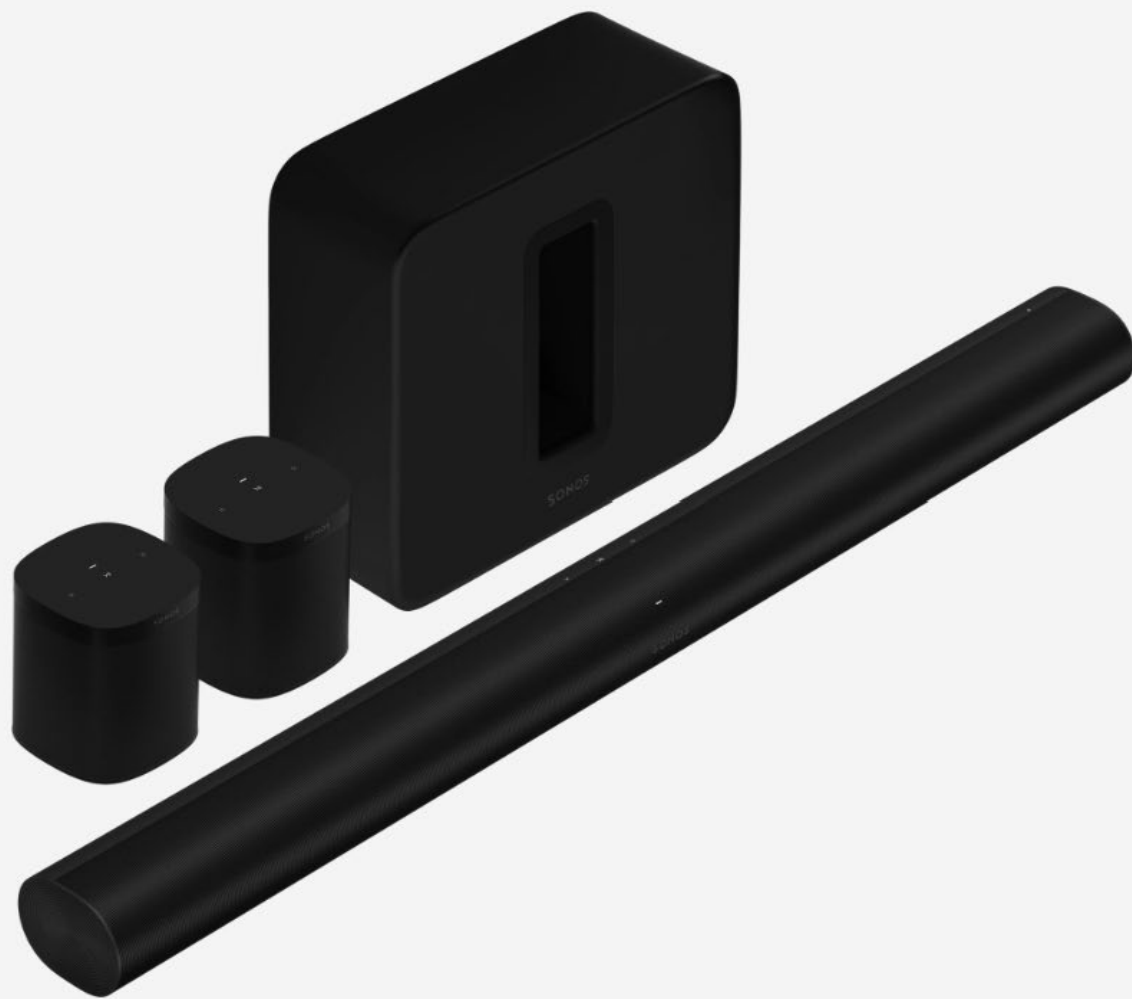


AUDIO & SURROUND SOUND

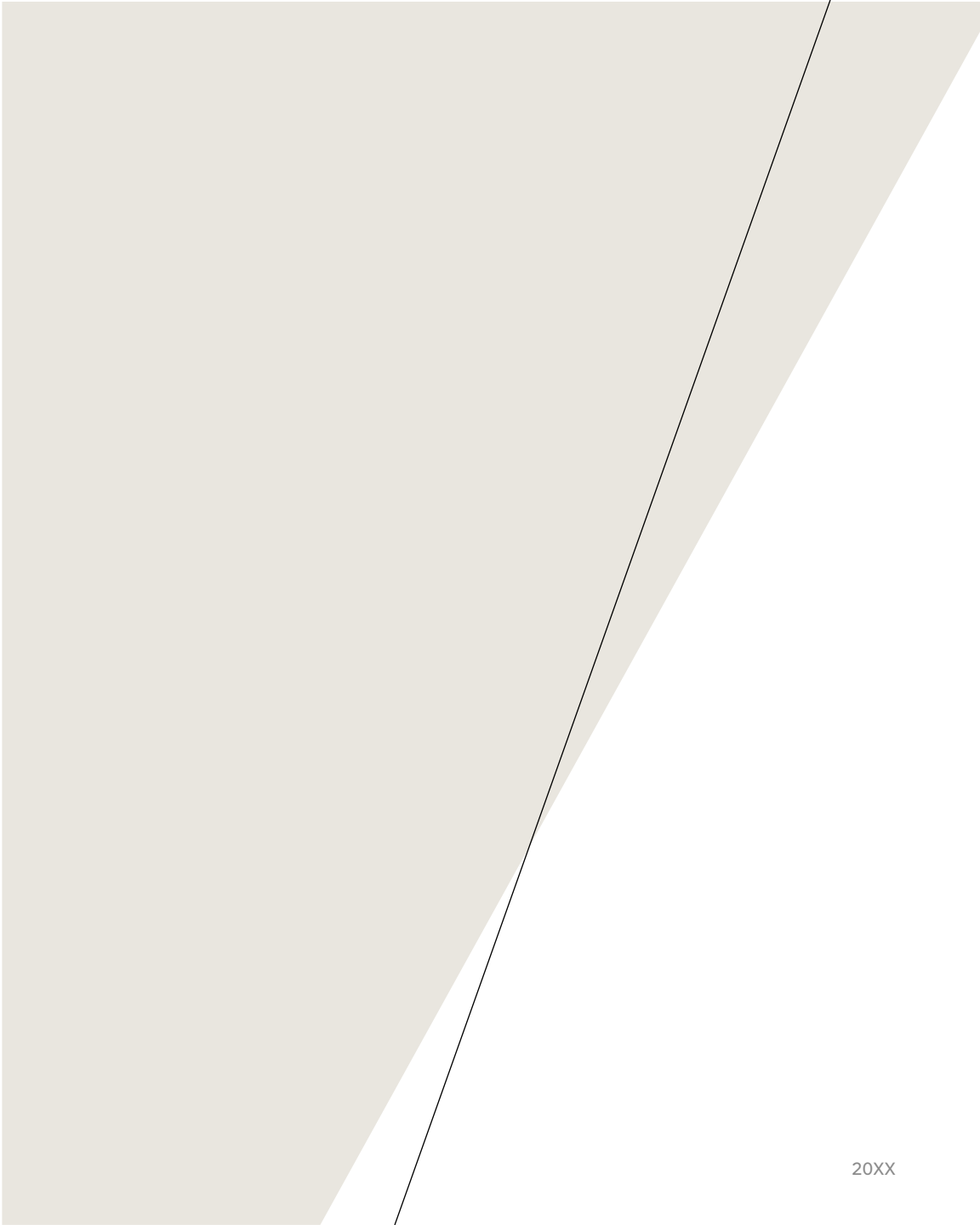
Move the music

Send sound all around your Sonos system without lifting a finger. Just ask to group and ungroup rooms, take the music with you, and play everywhere.





Specifications	
Feature	Description
AUDIO	
Amplifier	Eleven Class-D digital amplifiers perfectly tuned to the soundbar's unique acoustic architecture.
Elliptical Woofer	Eight full-range woofers ensure you'll hear the faithful playback of mid-range vocal frequencies plus deep, rich bass.
Tweeter	Three silk dome tweeters create a crisp and clear high-frequency response.
System Requirements	TV with HDMI Arc SL or optical digital audio output, broadband internet, and the Sonos S2 app.
NETWORKING*	
Wireless connectivity	Connects to WiFi network with any 802.11b/g/n, 2.4GHz broadcast- capable router.
Ethernet Port	One 10/100Mbps Ethernet port. You can wire directly to your router if your WiFi is unstable.
SOFTWARE	
Trueplay	Dynamically tunes the speaker to the unique acoustics of the room or area (iOS device required).
Speech Enhancement	Turn on this home theater setting in the Sonos app to make TV dialogue even clearer.
Night Sound	Turn on this home theater setting to reduce the intensity of loud TV sound effects.



HOME SECURITY & SURVEILLANCE

Amazing Features

Its more than security,
its your smart home solution.



- | Bluetooth Disarming
- | Built-in Glass Break Detector
- | Photo Frame
- | Live View and Live Answer
- | Disarm Photos and Videos



IQ PANEL 4
PowerG + 315.5 MHz
PowerG + 345 MHz
PowerG + 433 MHz



IQ 4 HUB
PowerG
315.5 MHz
345 MHz
433 MHz



IQ HUB
PowerG ONLY
QS9301-Q208-840 (Verizon)
QS9302-Q208-840 (AT&T)



IQ PowerG Kit
IQP401P-KIT-PG (Verizon LTE)
IQP401B-KIT-PG (AT&T LTE)
IQP401D-KIT-PG (T-Mobile LTE)



IQ DW MINI-S
QS1135-840 (white)
QS1136-840 (brown)



IQ DOOR WINDOW-S
QS1133-840



IQ DW RECESSED-S
QS1134-840



IQ MINI DW EXTENDED
QS1137-840



IQ MOTION-S
QS1231-840



IQ GLASS-S
QS1431-840



IQ SHOCK-S
QS1138-840



IQ TILT-S
QS1131-840



IQ FOB-S
QS1331-840



IQ PowerG HARDWARE
PG9WLSHW8































IQ 16-F HARDWARE
QS7133-840
(Small Enclosure)






















IQ 16-F HARDWARE
QS7134-840
(Large Enclosure)

PowerG Devices

 <p>Door-Window Contact PG9303</p>	 <p>Recessed Contact PG9307</p>	 <p>Door-Window w/AUX PG9945</p>	 <p>DW w/Commercial Magnet PG9309</p>	 <p>Shock Detector PG9935</p>
 <p>Pet-immune PIR Motion PG9994</p>	 <p>Duel Tech PIR & MW Motion PG9984P</p>	 <p>Curtain PIR Motion PG9924</p>	 <p>360° Ceiling Mount PIR PG9862</p>	 <p>360° Long Range PIR PG9872</p>
 <p>Mirror Optic PIR Motion PG9974P</p>	 <p>PIR Motion w/Camera PG9934P</p>	 <p>Photoelectric Beams PG9906AX PG99350SL</p>	 <p>Glass Break Detector PG9922</p>	 <p>Indoor Siren PG9901 BATT</p>
 <p>Smoke-Heat Detector PG9936</p>	 <p>CO Detector PG9933</p>	 <p>Flood Detector PG9985</p>	 <p>Temperature Detector PG9905</p>	 <p>2-Button Key PG9949</p>
 <p>Panic Key PG9938</p>	 <p>4-Button Key PG9929</p>	 <p>Outdoor Door-Window PG9912</p>	 <p>Outdoor PIR Motion w/Camera PG9944</p>	 <p>Outdoor PIR Motion PG9994</p>
 <p>Outdoor Curtain Motion PG9902</p>	 <p>Outdoor Siren PG9991 BATT</p>	 <p>IQ Hardwire PowerG PG99HDV8</p>		

S-Line Encrypted 319.5

 <p>IQ DW MICRO-S QS132-840 (white) QS130-840 (brown)</p>	 <p>IQ DW MINI-S QS135-840 (white) QS136-840 (brown)</p>	 <p>IQ DOOR WINDOW-S QS133-840</p>	 <p>IQ DW RECESSED-S QS134-840</p>	 <p>IQ MINI DW EXTENDED-S QS137-840</p>
 <p>IQ MOTION-S QS1231-840</p>	 <p>IQ FOB-S QS1331-840</p>	 <p>IQ GLASS-S QS1431-840</p>	 <p>IQ TILT-S QS131-840</p>	 <p>IQ FLOOD-S QS5536-840</p>
 <p>IQ SHOCK-S QS138-840</p>	 <p>IQ PENDANT-S QS1332-840</p>	 <p>IQ FALL PENDANT-S QS1314-840</p>	 <p>IQ TEMP-S QS5535-840</p>	 <p>IQ DOORBELL QS1119-840</p>
 <p>IQ IMAGE SENSOR QZ8103-840</p>	 <p>IQ SMOKE QS5110-840</p>	 <p>IQ CARBON QS5210-840</p>	 <p>IQ CARD-IS QC0003-840 (Image Sensor)</p>	

Z-Wave Devices

 <p>IQ LOCKDOWN HLI-CNT-001-LDZ</p>	 <p>IQ WATER VALVE IQWV908-KIT-SL (S-Line) IQWV908-KIT-PG (PowerG IQ)</p>	 <p>IQ SIREN QZ300-840</p>	 <p>IQ SMART PLUG QZ301-840</p>	 <p>IQ DIMMER QZ140-840</p>
 <p>IQ DIMMER QZ141-840</p>	 <p>IQ DIMMER QZ142-840</p>	 <p>IQ OUTLET QZ130-840</p>		

Service Parts

 <p>REPLACEMENT MAGNETS QR0030-840</p>	 <p>REPLACEMENT STICKERS QR0023-840</p>	 <p>IQ PANEL Backplate QR0040-840</p>	 <p>IQ STAND QR0020-840</p>	 <p>IQ STAND QR0048-840</p>
 <p>IQ POWER SUPPLY QR0029-840 (5.5V) QR0051-840 (7V)</p>	 <p>IQ POWER SUPPLY QR0017-840 (IQ Panel Gen II)</p>	 <p>IQ BATTERY QR0083-840 IQ Panel 4</p>	 <p>IQ BATTERY QR0041-840 IQ Panel 2/2+</p>	 <p>IQ BATTERY QR0018-840 IQ Panel Gen 1</p>




IQ FALL PENDANT

The IQ Fall Pendant is designed for a user to push the button for help at any time. It can also automatically* activate an emergency alarm if it detects a fall in the event that the user is unable to trigger an alarm by pressing the button.

QS1314-840

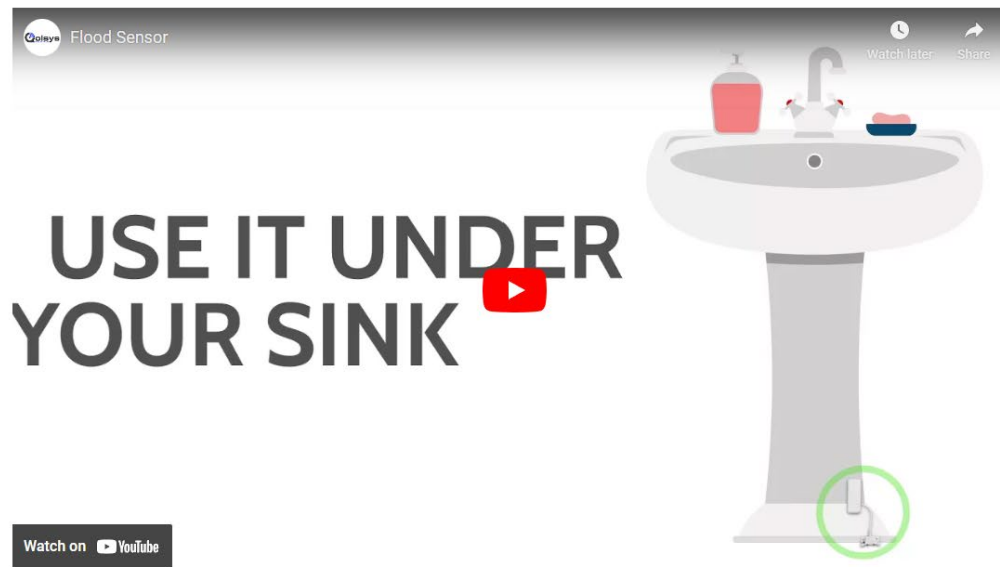
* Note: fall sensors do not detect 100% of falls. If you are able to do so, you should always press the button if you need help. Do not activate the fall sensor twice within a 10-second interval.



Watch on  YouTube

DOWNLOADS

[Quick Guide](#)

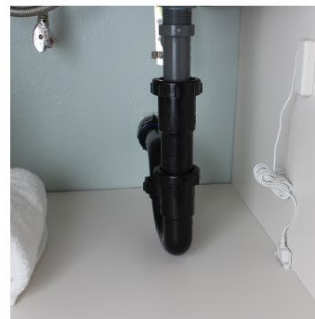
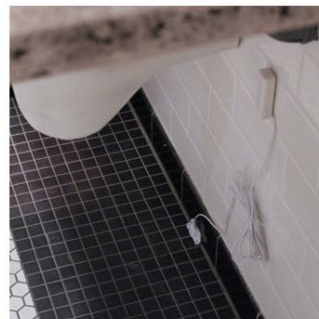


FEATURES

- Encrypted S-Line sensor technology protects signals sent to the IQ Panel while still providing support for legacy 319.5 systems- 6' cord
- Water "bug" can be fastened to the floor to the wall
- Reports water presence to IQ Panel
- Get e-mail or text alerts if there is water detected

SPECIFICATIONS

- Sensor: 2.5"H x 1"W x .5"D
- Wireless signal range: 600ft (200M), open air. Code outputs: tamper, tamper restore, alarm, alarm restore, low battery.
- Transmitter frequency: 319.5 MHz
- Unique code ID
- Supervisory keep-alive interval: 70 minutes.
- RF Peak field strength: typical 36000 uV/m at 3m
- Operating Temperature: -10C-50C Relative Humidity: 5-95% Non-Condensing Storage Temperature: -40-80C
- Replace battery with exact replacement every 5 years with 3V Lithium (x2).
- (2) -Panasonic CR2032 -Energizer CR2032 -Duracell DL2032





IQ Water Valve

The IQ Water Valve is a retro fit servo that can operate 1/4 turn ball valves with pipes from 1/2" to 1 1/4" and installs easily **WITHOUT THE NEED FOR A PLUMBER**. It uses powerful Z-Wave 700 for maximum range and reliability. Compatible with the IQ Platform and Powerseries Pro.

IQWV908-KIT-SL (S-Line)
IQWV908-KIT-PG (PowerG)



FEATURES

- Easy to install, **NO PLUMBER NEEDED**
- Retrofit existing ball valves
- Works with IQ Panel
- Peace of mind from water leak damage
- Can be used indoor or outdoor (Avoid direct sunlight)
- Z-Wave Plus 700 series communication
- Adaptive torque output

SPECIFICATIONS

- Fits quarter turn ball valves with pipes from 1/2 inch to 1 1/4 inch
- Max adaptive torque max of 8n.m
- Dimensions of 5.81 x 2.5(@/knobs 3.375) x 5.44 inches
- Waterproof and Dustproof IP 66
- Weighs 603g
- Operating Temperature is 14°F to 112°F
- Water Valve PN: QZ2160-840
- S-Line Flood Kit: Valve QZ2160-840 (1) Flood QS5536-840(3)
- PowerG Flood Kit: Valve QZ2160-840(1) Flood PG9985(2)



