Android TV Control Solutions

Types of verticals for Android TV

Streaming / Gaming | Pay TV / MSO | Television

OEM

After dominating the Smart Phone market, Google expanded its focus to entering the home via three distinct hardware platforms.

Types of verticals for Android TV

Streaming / Gaming | Pay TV Providers / MSO | Television

UEI focus

OEM

36 OEMs | 109 devices
Xiaomi, Nvidea, Anker, ASUS Humax, Kaon, Technicolor SEI, Geniatech, ZTE, Askey, Foxcon, SDMC, ..

14% of streamer market

On streaming devices Google already converted most of the STB manufacturers and Chinese guys on adopting a cost-effective streamer, meanly to make non smart TV smart and launch Google TV.

Types of verticals for Android TV

Streaming / Gaming | Pay TV Providers / MSO | Television

UEI focus

OEM

Google has been making great advances in the Television space with Sony, Philips TV and most of all the Chinese TV guys have adopted ATV.

17 OEMs | 272 devices
Skyworth, Sony, TCL, Hisense, Philips/TPV, Haier, Funai, Changhong, Arcelik, TongFang, Xiaomi, ..

15% of smart TV market

Types of verticals for android TV

Streaming / Gaming | Pay TV Providers / MSO | Television

SBR - UEI focus

OEM

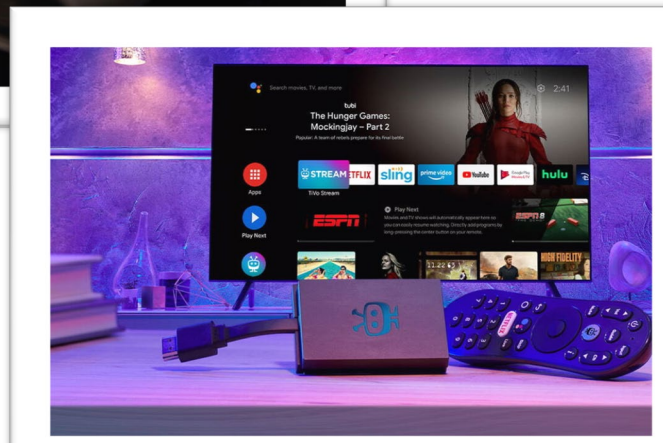
36 OEMs
202 providers| 298 devices
Technicolor, Arris, Sagemcom, Kaon, SEI, Arkadyan, Sumitomo Foxcon, Askey, SDMC, ..

+15% share and growing

Google has tried to change the broadcasting world for many years – this time they seem to succeed.

3

SOME EXAMPLES OF OUR ANDROID TV REMOTES



UEI built 25 million Android TV remotes

androidtv
by Universal Electronics

Features

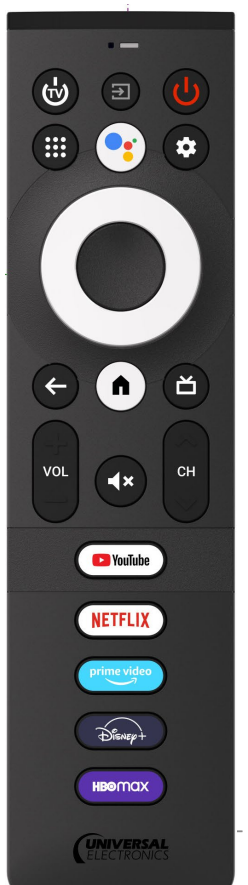
- **UEI market footprint**
  - Scalability for volume/support
  - Off-the-shelf platforms
  - Pioneer on Android TV (Sony, Sling)
- **Technology leadership**
  - Custom UE878 silicon + flexible firmware
  - QuickSet: auto-discovery and setup
- **User experience improvement** (raise-to-talk, adaptive control)
- **Designovation**, Premiumization

Benefits

Low-Risk
Minimum investment
Time to market

Differentiation
Time to market
Lower service cost

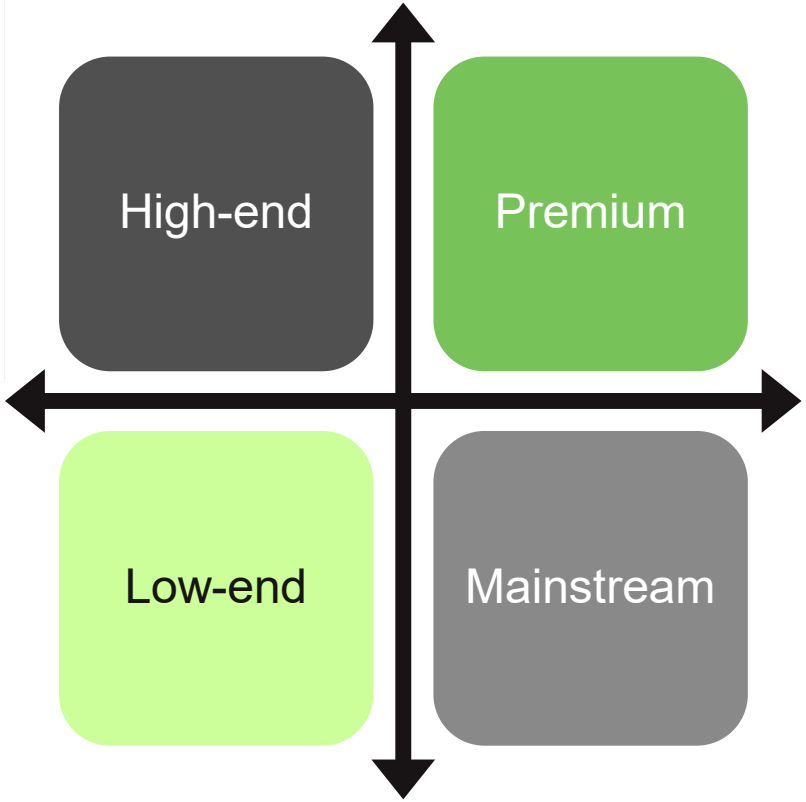
ARPU increase
Higher stickiness
Brand identity



ANDROID TV PLATFORM OVERVIEW

Logan

Tatlow



Kita

Copa

Cervino

Matterhorn

Nordend

Android TV platforms solutions

Android TV **COPA**

Copa Platform

Copa is an accessible, affordable Android TV remote control.

It offers all functionality you expect from an Android TV voice remote in a compact, sturdy and contemporary design.

Design

Approachable and eco-friendly
Highly customizable
Cost effective

Recycled plastic back case
Natural stone texture
Sliding battery door
High-contrast dual-tone colors
Prominent navigation island
App Customization area
YouTube
NETFLIX
tv
peacock
prime video
STARZ

Android compliant in dark
or light color themes

Copa Android TV Remote Control

NETFLIX
prime video
STARZ
peacock
UNIVERSAL ELECTRONICS

Designed for customization
from 0 – 6 Full Size App Keys

Copa Features

Look and Feel

- ABS top case
- IR-translucent black bottom case and battery door
- 18-22 keys
- Flexibility for 0-6 dedicated streaming app keys
- Powered by 2x AAA batteries
- Dimensions 145 x 40 x 17 (mm)

Connectivity

- Based on UEI's UE878 Bluetooth LE SoC
- Powered by UAPI™ for Google Android TV
- High-power IR LEDs for excellent range and angle
- Over-The-Air firmware update
- Configurable via RTC Run-Time Configuration tool

Interactivity

- Microphone for voice control
- Compliant with Google voice spec

Setup and Control

- Powered by QuickSet
- Controls TVs and soundbars
- Low voltage warning
- Supports RTC Run-Time Configuration tool

COPA Android TV Remote Control

Android TV **CERVINO**

Cervino Platform

Cervino is an ergonomic and pure Android TV remote control.

The well-balanced keypad creates the simple look that matches the seamless experience of Android TV.

VOL

Design

Detailed design of the D-pad gives the user perfect navigation, even without looking at the remote.

Ergonomics

Perfect fit for all users, zappers, channel hoppers or app lovers

Up to three customizable app keys

NETFLIX
prime video
VOL
CH
UNIVERSAL ELECTRONICS

Cervino Features

Look and Feel

- ABS top case and battery door
- Torrey black bottom case
- 34 keys full metal domes – max potential
- Three dedicated app/service keys
- Powered by 2x AAA batteries
- Dimensions 163 x 42 x 22.5 (mm)

Connectivity

- Based on UEI's UE878 Bluetooth Smart (BLE)
- Powered by UAPI™ for Google Android TV
- High-power IR LEDs for excellent range and angle
- Over-The-Air firmware update
- Configurable via RTC Run-Time Configuration tool

Interactivity

- Microphone for voice control
- Compliant with Google voice spec

Setup and Control

- Powered by QuickSet
- Controls TVs and soundbars
- Dynamic key mapping
- Low voltage warning

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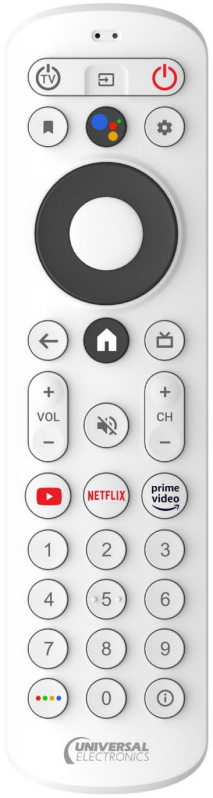
CERVINO Android TV Remote Control



Android TV **MATTERHORN**

Matterhorn Platform

Matterhorn is a clean, distinguished remote for an excellent control experience.

Improving engagement by creating a strong center sweet spot which guides the user.

LESS BROWSING, MORE WATCHING

Matterhorn App

The clean and balanced design of Matterhorn creates a clear and distinguished look.

Your attention is drawn to the smooth and compact form factor and detailed design of the navigation area.

VOL
CH
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Design

The pronounced design of the D-pad is the center grip position for the enjoyment of entertainment

App or Hybrid

Five app keys or hybrid with three app keys

MATTERHORN Android TV Remote Control

Matterhorn Features

Look and Feel

- ABS top case, bottom case and battery door
- 34 keys full metal domes – max platform potential
- Three dedicated app/service keys
- Powered by 2x AAA batteries
- Dimensions 163 x 42 x 22.5 (mm)

Connectivity

- Based on UEI's UE878 Bluetooth Smart (BLE)
- Powered by UAPI™ for Google Android TV
- High-power IR LEDs for excellent range and angle
- Over-The-Air firmware update
- Configurable via RTC Run-Time Configuration tool

Interactivity

- Microphone for voice control, compliant with Google voice spec

Setup and Control

- Powered by QuickSet
- Control TVs and soundbars
- Dynamic key mapping
- Low voltage warning

Matterhorn Features

Look and Feel

- Black ABS top case, bottom case and battery door
- 24 keys full metal domes – platform potential up to 34 keys
- 5 dedicated app/service shortcut keys
- Powered by 2x AAA batteries
- Dimensions 163 x 42 x 22.5 (mm)

Connectivity

- Based on UEI's UE878 Bluetooth Smart (BLE)
- Powered by UAPI™ for Google Android TV
- High-power IR LEDs for excellent range and angle
- Over-The-Air firmware update
- Configurable via RTC Run-Time Configuration tool

Interactivity

- Microphone for voice control, compliant with Google voice spec

Setup and Control

- Powered by QuickSet
- Control TVs and soundbars
- Dynamic key mapping
- Low voltage warning

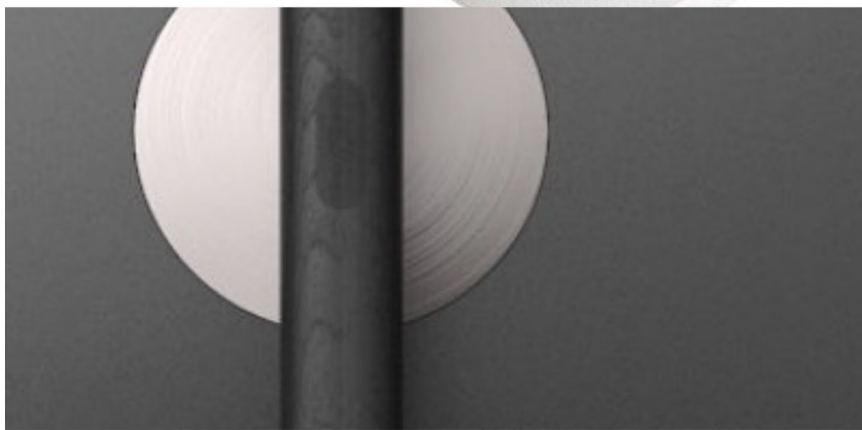
Android TV **NORDEND**

Nordend Platform

Nordend is an elegant remote control that pairs a balanced form with a pleasant combination of straight lines and round shapes.

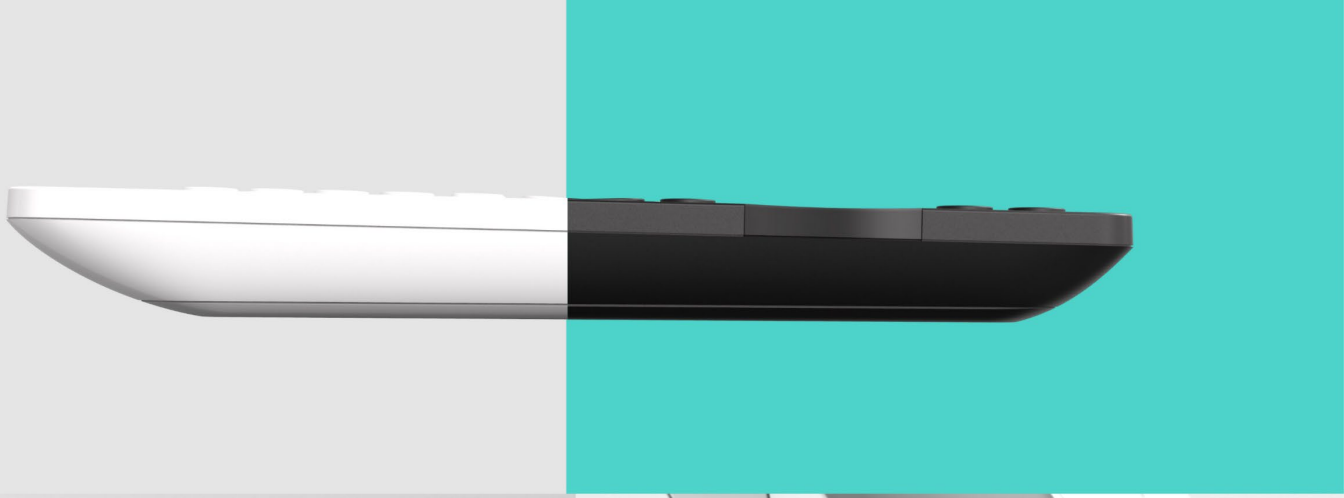
It offers a rich verity of options for colors, finishes and textures.

NORDEND ANDROID TV REMOTE CONTROL



Nordend Android TV Remote Control

Nordend Android TV Remote Control



Nordend Android TV Remote Control

Nordend Android TV Remote Control

Nordend Android TV Remote Control

Nordend Android TV Remote Control

Nordend Android TV Remote Control

Nordend Features

Look and Feel

- Choice of round or convex silicone keys
- Various finishings possible for D-pad and surrounding ring including metallic options
- Optional hard caps for home and voice keys including clear ASA and metallic look
- 34 keys full metal domes – max potential
- Three dedicated rectangular streaming service app keys
- Powered by 2x AAA batteries
- Dimensions 173.5 x 41.6 x 22.5 (mm)

Connectivity

- Based on UEI's UE878 Bluetooth Smart (BLE)
- Powered by UAPI™ for Google Android TV
- High-power IR LEDs for excellent range and angle
- Over-The-Air firmware update
- Configurable via RTC Run-Time Configuration tool

Interactivity

- Compliant with Google voice spec

Setup and Control

- Powered by QuickSet
- Control TVs and audio peripherals

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Android TV **LOGAN**

LOGAN ANDROID TV REMOTE CONTROL

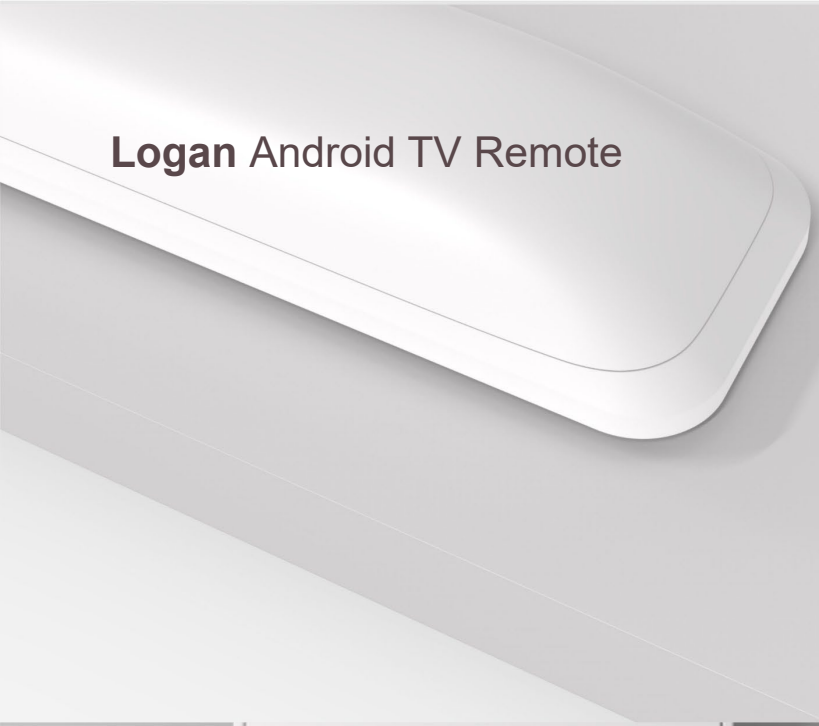
Logan Platform

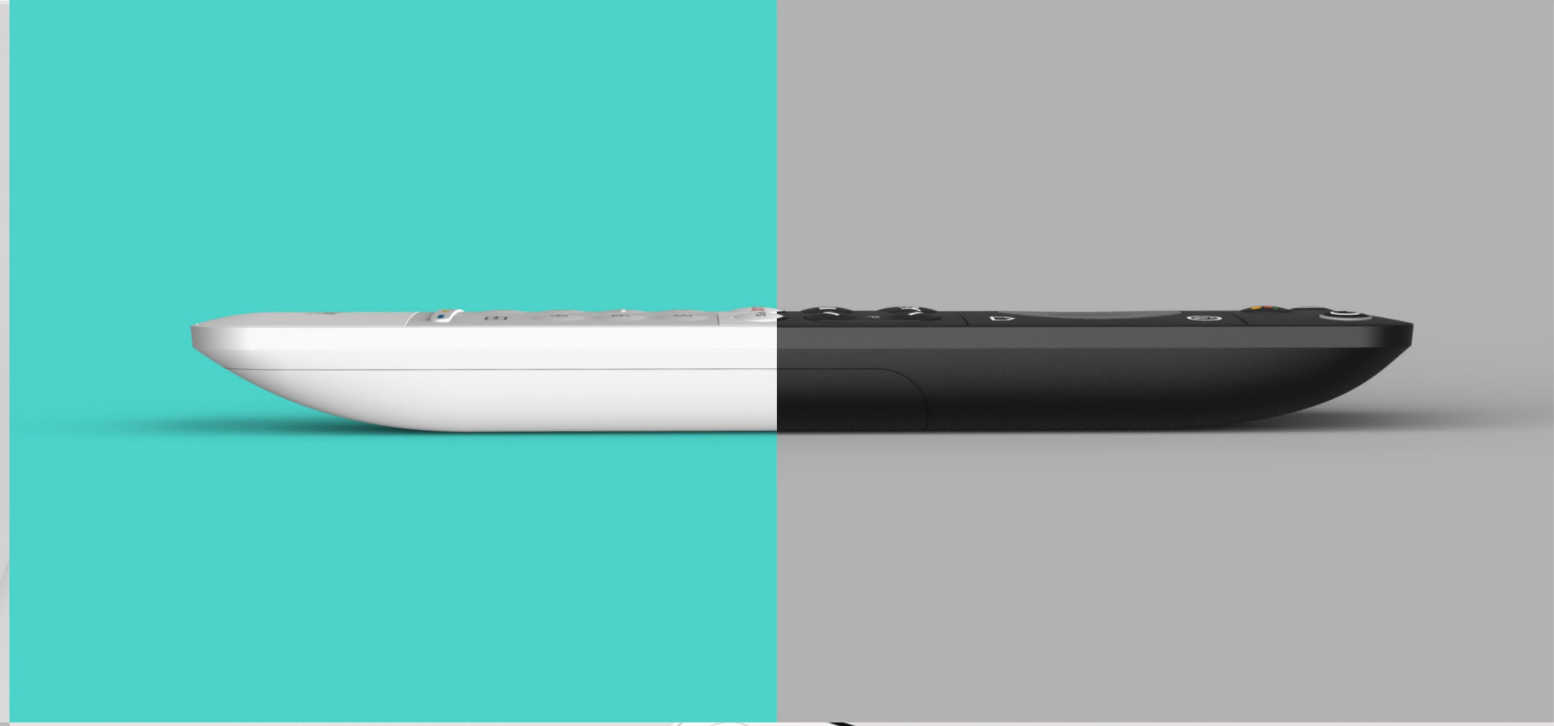
Logan is a high-end remote control with an ergonomic design.

Thanks to its modular design it offers a variety of look and feel options including discrete keys or a soft-touch rubberized keypad that’s easy to keep clean.

Logan Android TV Remote

Logan Android TV Remote

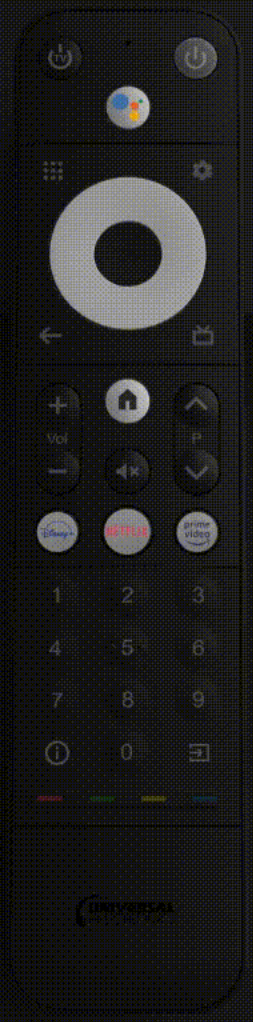




Logan Android TV Remote

Logan Android TV Remote

Logan Backlighting



Logan Features

Look and Feel

- Choice of silicone digit keys or rubberized key mat
- Up to 37 keys full metal domes
- Four color keys are optional
- Three dedicated streaming service app keys
- Optional backlighting, ambient light sensor and proximity sensor
- Powered by 2x AAA batteries
- Dimensions 184 x 42.5 x 18.5 (mm)

Connectivity

- Based on UEI's UE878 Bluetooth Smart (BLE)
- Powered by UAPI™ for Google Android TV
- High-power IR LEDs for excellent range and angle
- Over-The-Air firmware update
- Configurable via RTC Run-Time Configuration tool

Interactivity

- Compliant with Google voice spec

Setup and Control

- Powered by QuickSet
- Control TVs and audio peripherals

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Android TV **TATLOW**

Tatlow Android TV Remote

Tatlow Platform

Tatlow is a full-size, fully functional voice remote.

It can be equipped with backlighting and high-end features including proximity and light sensors.

Tatlow Android TV Remote

Tatlow Backlighting

Tatlow Android TV Remote

Tatlow Android TV Remote

Tatlow Features

Look and Feel

- Optional logo print on high-gloss battery door
- Up to 36 keys full metal domes
- Four optional color keys
- Three dedicated streaming service app keys
- Optional backlighting, ambient light sensors and proximity sensor
- Powered by 2x AAA batteries
- Dimensions 189.5 x 47 x 20.8 (mm)

Connectivity

- Based on UEI's UE878 Bluetooth Smart (BLE)
- Powered by UAPI™ for Google Android TV
- High-power IR LEDs for excellent range and angle
- Over-The-Air firmware update
- Configurable via RTC Run-Time Configuration tool

Interactivity

- Compliant with Google voice spec

Setup and Control

- Powered by QuickSet
- Control TVs and audio peripherals

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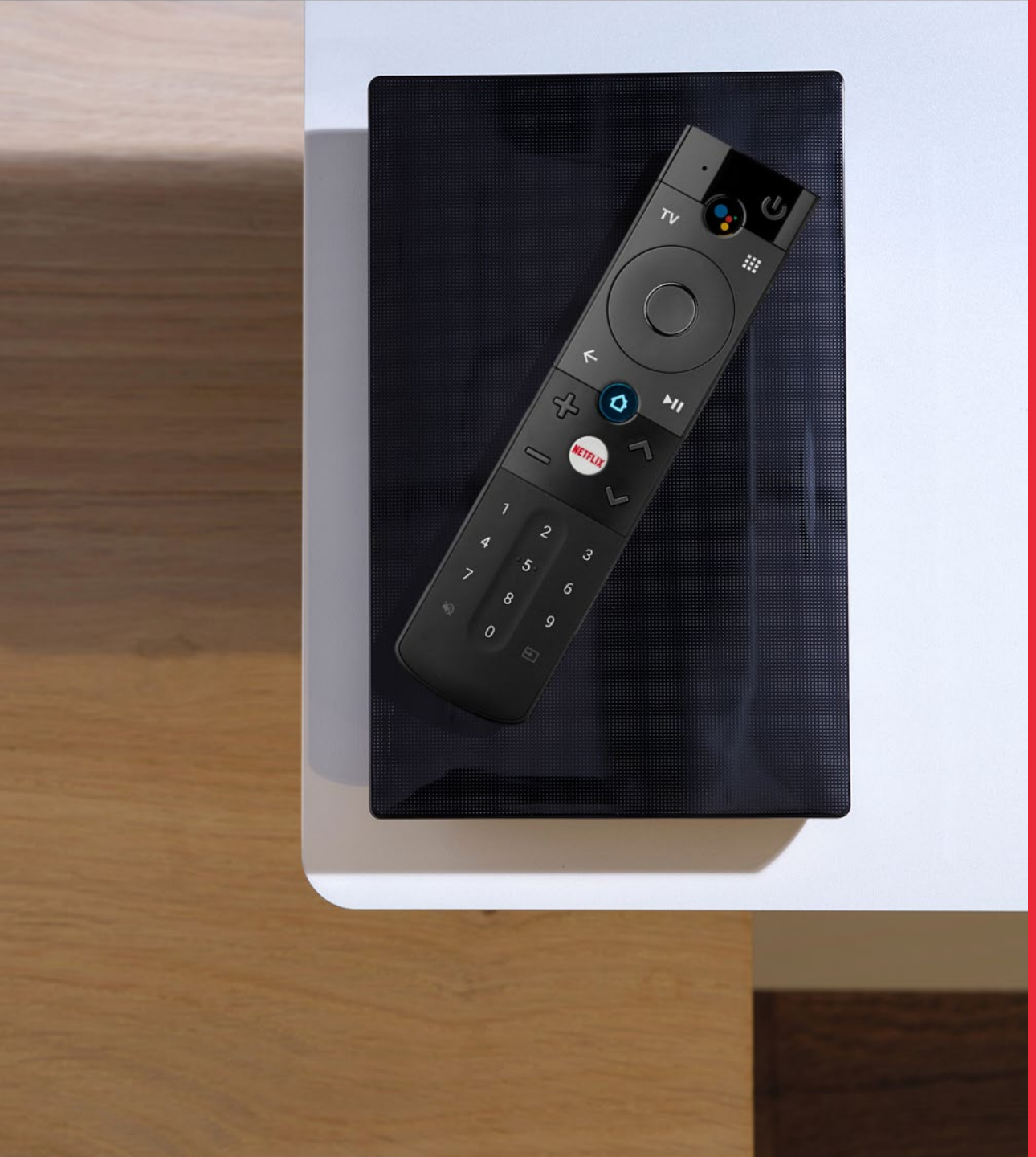
Android TV **KITA**



Kita Platform

Kita is a combination of style and simplicity that improves engagement for seamless user experiences.

An award-winning ultra-slim remote that only shows the keys you need with UEI's unique adaptive backlight for ultimate user experience.

reddot design award

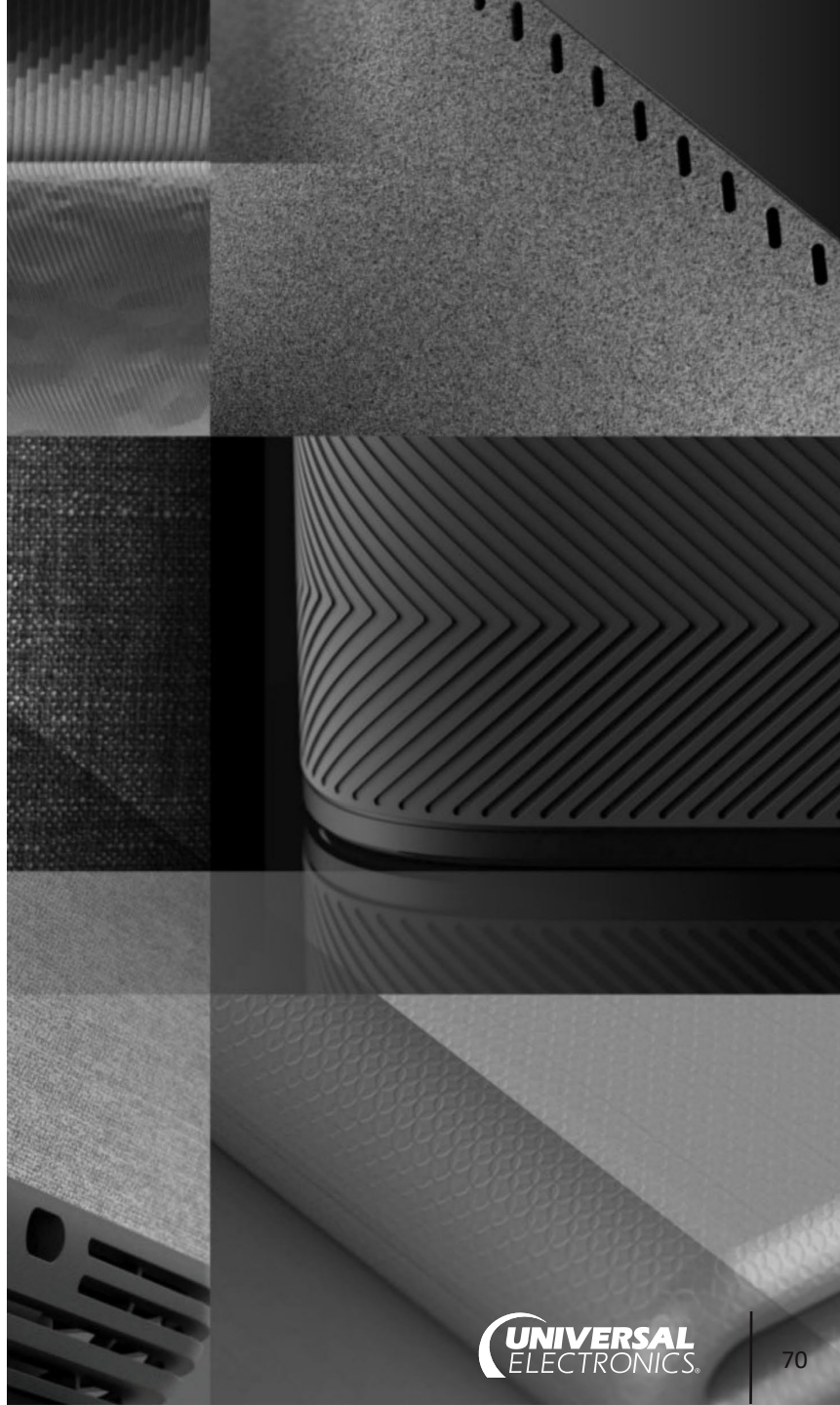
Kita Platform

- Award-winning ultra-slim remote that only shows the keys you need
- Fully backlit voice RF remote control with rechargeable battery, optimized for Android
- Flexible design with max 29 keys including max three app keys + RBG backlit home/operator key
- Key UEI technology
  - Unique adaptive backlight for ultimate UX
  - Low power UE878 Bluetooth Smart (BLE) silicon
  - Real Time Configurator for easy intergration
  - Powered by QuickSet (control TVs, soundbars and AV receivers)
  - Supports dynamic key mapping

STYLE MEETS SIMPLICITY

Kita

- True Android TV experience combined with high class design and materials
- Improves engagement with seamless user experience
- Creates the perfect interaction between software, hardware and the user
- Visually appealing and simplifies usage by hide and reveal functionality (adaptive backlighting) without losing the design intent that makes people want to pick up the remote from the table and start consuming content



LONG LASTING AND ENVIRONMENT-FRIENDLY

Rechargeable battery

Part of the feature-rich product proposition is a rechargeable battery to allow maximum use without having to replace the batteries.

The USB-C plug can be inserted into the port in both orientations. Charging takes up to four hours maximum.

USB Type-C

A perfect match for today’s smart homes in the new circular sustainable economy.

CUSTOMIZABLE DESIGN

Human Touch

Blending technology for the homes we love to live in by designing an elegant and well-balanced remote.

The bottom inlay is designed to add a warm and unique touch through a modular process allowing multiple customizations.

Soft touch materials create a warm and unique touch.

TV
NETFLIX

Adaptive backlight

No more key clutter,
showing you only the keys you need

Adaptive Backlighting - Easy Start One Touch View

Adaptive Backlighting - on Normal State

Adaptive Backlighting - on live TV Watching Live TV

USER SCENARIO TV OFF

Universal Electronics - Confidential

UEI Kita / Adaptive Backlighting

USER SCENARIO EASY START

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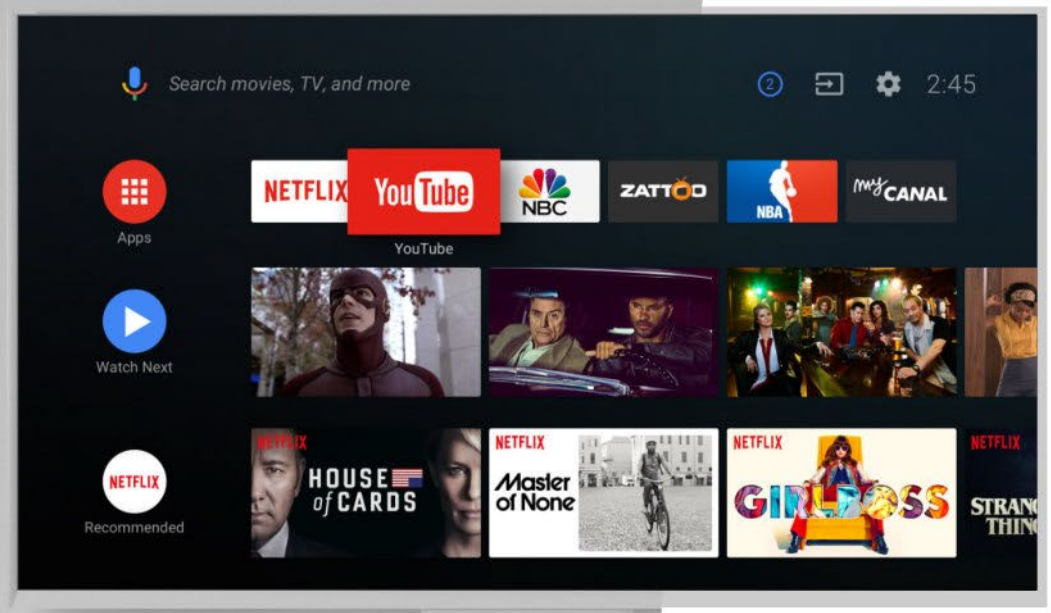
USER SCENARIO OTT ANDROID TV



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UEI Kita / Adaptive Backlighting

USER SCENARIO LIVE TV

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NETFLIX

UNIVERSAL ELECTRONICS
Made in China
5V ⎓ 500mAh
CC ID: MG3-R324854
IC: 2575A-R324854
MN: R324854
1 2 3
6
4
7 8 9
0

Design

- Strong, defined shape with smooth soft-touch finish
- Hard-cap keys with premium materials and laser-etched full dynamic white backlight

Brand in the hand

Customization options in colors and materials combined with an RGB color LED for the home key provide unique branding opportunities

App or Hybrid

Three app keys or
hybrid with an app key

Benefits for operators

- Wireless BLE remote control with Universal TV/amp control.
- Premium and compact remote control designed in Europe with branding opportunities
- Simple setup and enhanced Android TV usage (QuickSet and adaptive backlighting)
- Customizable home key graphic
- STB software-controlled LED color
- Dedicated app key for operator selected One Touch function (e.g. Netflix)
- Low investment when requesting simple remote customizations and when using the software flexibility of RTC for different host STB configurations
- Built with re-manufacturing in mind

Benefits for end users

- Google Assistant voice input
- Nice to use and premium tactile feel of the keys - metal domes
- Adaptive backlighting to help navigation, even in the dark
- App key for operator selected One Touch use (e.g. Netflix)
- Rechargeability, never have to replace batteries even for heavy users
- Premium and slim design that looks great

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Features

Look and Feel

- Advanced adaptive backlit keypad for the ultimate user experience
- Laser etched icons with white backlight (home is an RGB LED)
- Premium materialization through multiple tones of black
- Three main access keys (Including Google Assistant)
- Rechargeable battery (500mAh) by USB-C connector
- 29 keys with metal domes

Connectivity

- Bluetooth Smart (BLE) based on UEI's UE878
- Powered by UAPIã for Google Android TV
- High-power IR LEDs for excellent range and angle
- Over-The-Air (OTA) firmware updateable
- Configurable via RTC Run-Time Configuration tool

Interactivity

- Digital microphone for voice capturing
- Compliant with the latest Google voice spec
- Adaptive backlight (white LEDs)
- RGB LED feedback (though the home key)

Setup and Control

- Powered by QuickSet for auto discovery and setup of TV, AVR and soubdbar
- Control TVs, soundbars and audio receivers
- Battery status and low voltage warning

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prime video

ANDROID TV FLEXIBILITY

Integration Tools - RTC

What is RTC?

Run-Time Configuration tool

- A software tool (PC or mobile/Android) enabling a single configurable firmware in the RCU
- Configuration is provided by a set of parameters that can be modified easily, without a full new cycle of firmware development
- Can be updated quickly during development. Pre-loaded in Flash for Mass Production

Programming:

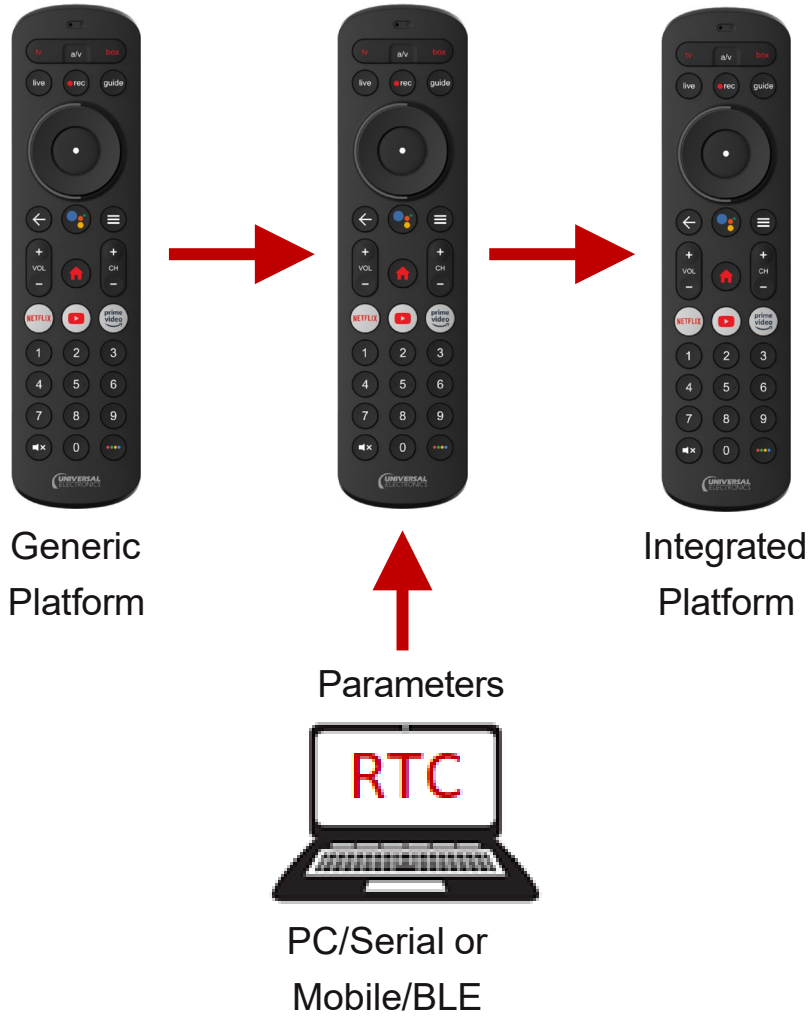
- Per Unit parameters (Serial, MAC)
- Per Product parameters (UEI, PN, Name, version, Keymap, BLE, audio etc.)
- Done by (1) AE in development or (2) factory in MP

Key benefits:

- Software development cost and management cost reduction (only a FAE is needed for simple cases)
- Time to market

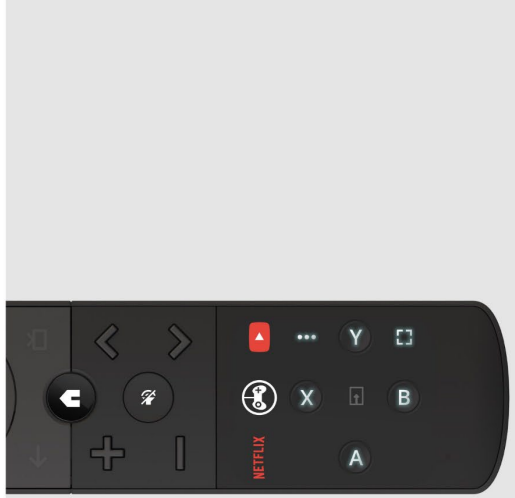
Platforms:

- All Android TV platform remotes including Cervino, Matterhorn, Kita, Nordend, Logan, Tatlow, Copa



digits
or
apps

Build a better gaming experience



Adaptive control™

only shows you the game pad when playing games

STRANGER THINGS
When a young boy vanishes, a small town uncovers a mystery involving secret experiments, terrifying supernatural forces and a strange little girl.
Play
More Info
Trending Now
MURDER MYSTERY
GROWING
NETFLIX

STRANGER THINGS
When a young boy vanishes, a small town uncovers a mystery involving secret experiments, terrifying supernatural forces and a strange little girl.
Play
More Info
Trending Now
MURDER MYSTERY
GROWING
NETFLIX

GAMING

virtual agent

Self support service for

- Guided Device Onboarding
- Feature Discovery
- Troubleshooting

When combined with QuickSet it is enhanced with the knowledge of existing devices at the home including real-time access to secure remote troubleshooting features.

An integrated tier 0 support service for Entertainment and Smart Home devices.

POWERED BY QUICKSET®

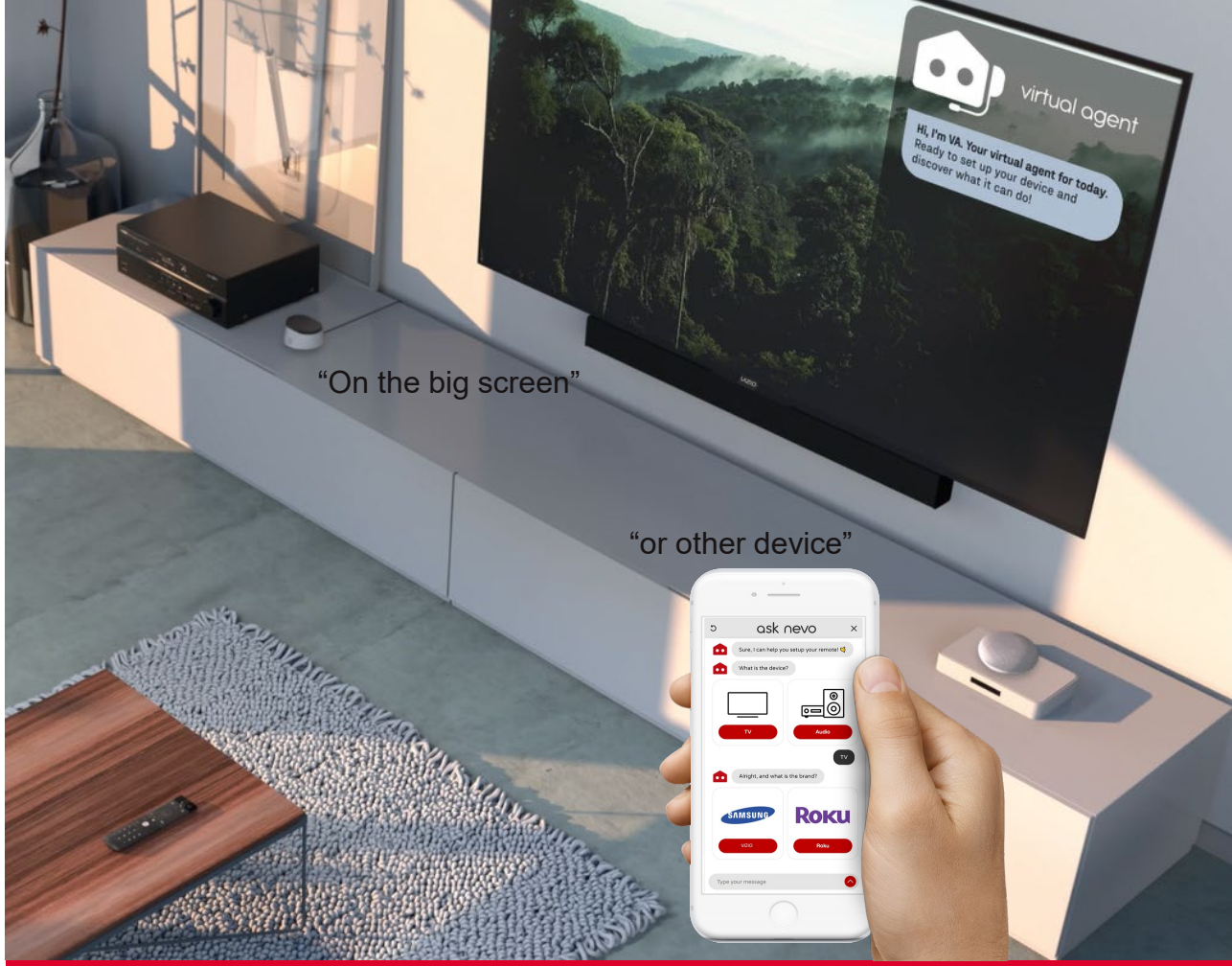
UNIVERSAL ELECTRONICS

virtual agent

Video Service Providers

- Helps the user with Self Install Kits
- Set Top Box and Remote-Control Onboarding
- Troubleshooting for TV and Audio Devices
- Integration on Customers Support Site
- Hand Off to Live Human Agents
- Customer Branded Experience

POWERED BY QUICKSET®



An integrated tier 0 support service for Entertainment and Smart Home devices.

UNIVERSAL ELECTRONICS

Thank you!

UNIVERSAL ELECTRONICS®