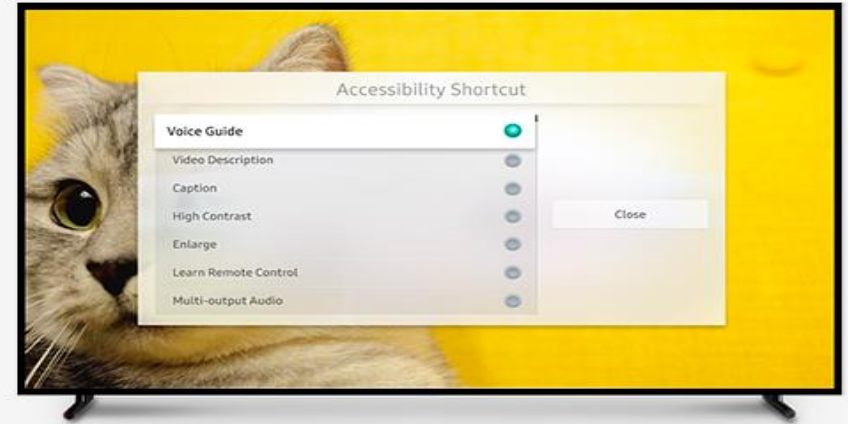




TV Accessibility



Samsung Electronics R&D UK
Richard Moreton
December 2018

Coordinated by



Hosted by



Contributing to



Co-organised by



TV Accessibility and Technology



How is Samsung using technology in its Smart TVs to improve Accessibility?

- Voice Guide (Text-to-Speech)
- High Contrast UI
- Multi Audio output
- Enlarge
- Greyscale
- Invert colours
- See Colours (for Colour blindness)
- Learn Remote control
- Accessibility shortcuts
- Voice Assistant

Coordinated by



Hosted by



Contributing to



Co-organised by

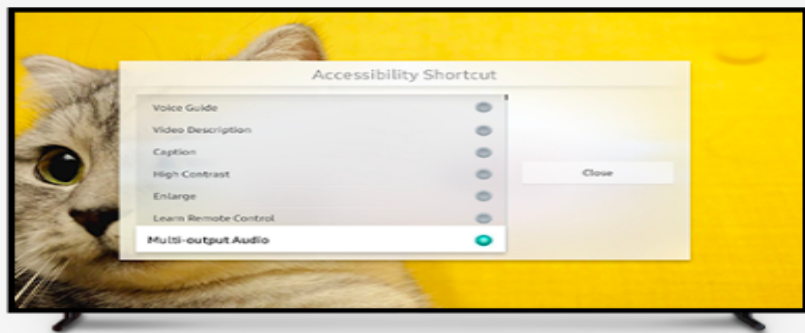


Features for VI users and HI users



Voice Guide

Voice Guide enables the television to read on-screen text back to you and provides verbal feedback about the selected volume, current channel and programme information. It also reads aloud all the text displayed in the Electronic Programme Guide (EPG). Voice Guide works for every menu on the TV, you can also adjust the pitch and tone of the Voice Guide to suit your preferences.



Multi-output Audio

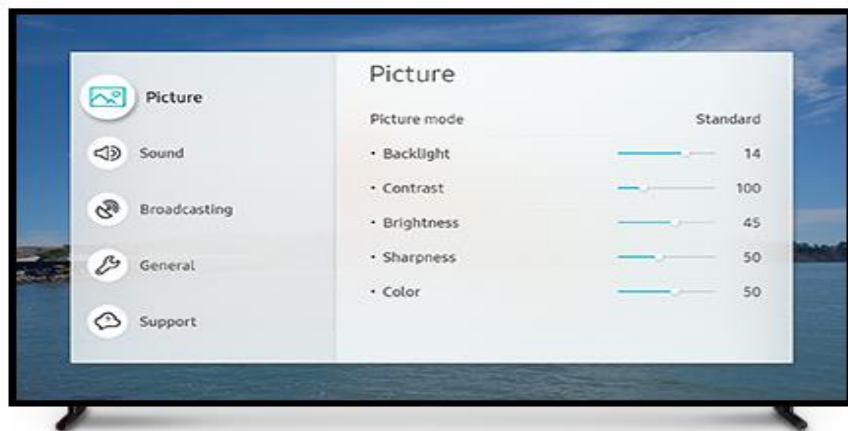
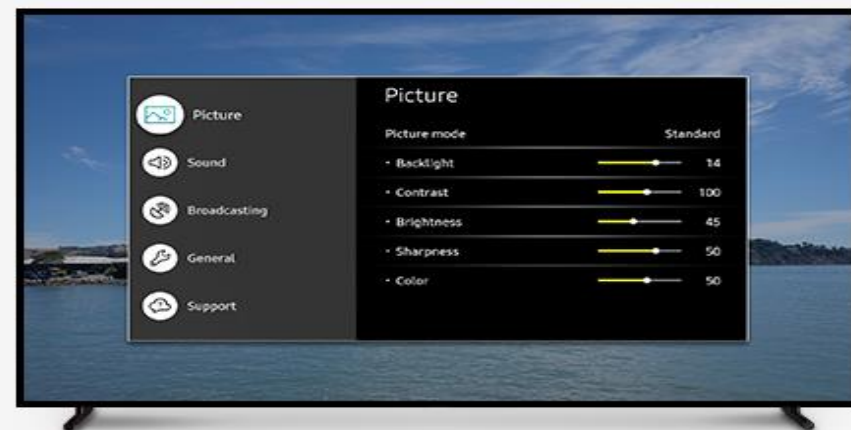
Multi-output Audio gives you the flexibility to configure the television audio output when Bluetooth headphones are connected to the TV. You can choose to have audio directed to multiple devices with independent volume control. If one member of your family has hearing difficulties and needs to listen through their own headphones, Multi-output Audio facilitates this without automatically disabling the audio from the TV speakers.

Improving readability of menus



High Contrast

High Contrast mode configures the TV to display all menus with an opaque black background and a white or yellow font. This provides you with maximum contrast and visibility of the text, and is extremely useful if you have any form of visual impairment.



Enlarge

Enlarge enables you to see important elements on the screen with a larger, or zoomed-in, effect.

Tutorials built-in



Learn Remote Control

Learn Remote Control is a new feature whereby the TV enters a teaching mode to help you get the most from your viewing experience. In this mode the TV assists you by telling you, each time you press a button on the remote control, what that button does. Through this feature visually impaired or blind users can quickly learn the location and operation of the buttons on their remote control without affecting normal TV operation.



Learn Menu Screen

Learn the menus on the TV screen. Once enabled, your TV will tell you the structure and features of the menus you select.

Coordinated by



Hosted by



Contributing to



Co-organised by



User Interface Enhancements



Grayscale

You can change the colour of the TV screen to a black and white tone to sharpen blurred edges caused by colours.



Color Inversion

You can invert the colours of the text and background displayed on the TV screen to make it easier to read them.

Supporting Colour Blindness



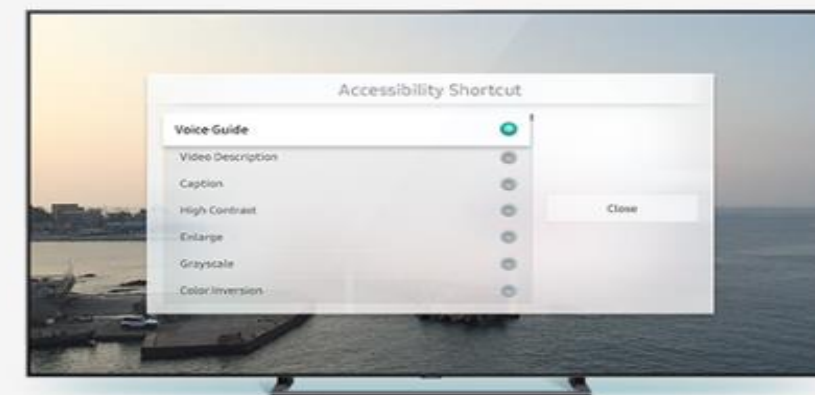
See Colors

SeeColors app - making it possible for color vision deficient people to see a full spectrum of colors on Samsung QLED TV screens.



Accessibility Shortcuts

Accessibility Shortcuts is an easy, one-touch route to an on-screen menu which allows you to view or adjust the status of the TV's Accessibility features. You can activate most TV accessibility features by pressing and holding the or on the Smart Remote or from the Accessibility Menu within System Settings.



Voice Control + Accessibility Website



Voice Assistant on TV

Control your TV the more intelligent way with Voice Assistant. It's easier, too. Just tell it to flip the channel, search for content, and open your apps. It can also control your home IoT devices.

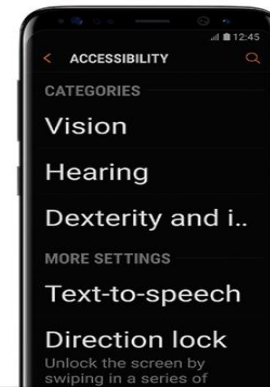


Talk to your TV via the remote control



Accessibility Feature Highlights

To continue making our technology accessible to everyone, Samsung has developed and applied a variety of technical solutions. With its intuitive, easy-to-operate design and accessibility, Samsung has allowed everyone to easily use technology and take advantage of new and exciting features.



Mobile Accessibility

Larger Font Sizes

You can read content more easily by selecting from eleven different font sizes to find the one that's best for your eyesight.

Negative Colour

You can invert screen colours to help you pick out content and navigate more easily.

[LEARN MORE](#)

<https://www.samsung.com/uk/accessibility/overview/>

Coordinated by



Hosted by



Contributing to



Co-organised by



SmartTV Apps



The following Apps have some Text-to-Speech support – using the open standard interface on our TV and the inbuilt TTS engine.



App developers: Should your app be listed here?

(All the details are freely available on our app developer web pages.)

Note: there may be other apps supporting TTS

Product range



Based on 2018 models listed last month on www.samsung.com/uk/tvs:

Type	Model series	Size	Features	Cost (approx.)
QLED UHD	Q9 / Q8 / Q7 / Q6	49"+	Voice Guide (TTS) / High Contrast UI/ Enlarge / Greyscale/ Invert colours/ See Colours / Learn Remote control Accessibility shortcuts / Multi Audio output	~ £999
UHD	6000 7000 8000	40"+	Voice Guide (TTS) / High Contrast UI/ Enlarge / Greyscale/ Invert colours/ Learn Remote control Accessibility shortcuts / Multi Audio output	~£350+
Full HD / HD	M5520	32"-55"	Voice guide/ High contrast/ Enlarge/ Learn TV Remote	~ £330

Note features may vary on specific models, price may also vary, correct at the time.



The End

Coordinated by



Hosted by



The United Nations
in Vienna

Contributing to



Co-organised by

