SHARP Changes the World with 8K Technology

8K isn't just technology that simply delivers clear, high-definition images. It has the potential to eventually change society as it develops and expands into sectors such as not only broadcasting and video, but also healthcare, security, and education.

Here are Sharp, we will leverage our "8K Ecosystem" strategy while cooperating with other companies to develop and disseminate 8K according to each company's strengths.

We will aim to collaborate with a wide variety of partners to create a series of value chains ranging from video creation and processing to distribution and displays. We will also aim to create major innovations in various sectors such as broadcasting, healthcare, security, education, examination systems, and infrastructure maintenance.

The utilization of 8K technology is already being tested in a variety of areas. Starting with Japan's Ministry of Internal Affairs and Communications, various real-world testing for 8K technology is already being conducted by other organizations such as NHK, local governments, art museums, and companies. In the healthcare sector, 8K technology is already being utilized to perform telemedical diagnoses, as well as inspections and operations involving the use of endoscopes, etc. There are also several museums using 8K displays.

In this manner, 8K technology is being applied in a wide variety of sectors other than broadcasting, and Sharp's displays are being used at the forefront of these new and exciting ventures.

Our Achievements

SID Display of the Year	CEATEC AWARD 2018 Grand Prix	TV Technology NAB Best of Show Award	digital VIDEO NAB Best of Show Award	SOUND & VIDEO CONTRACTOR NAB Best of Show Award
For70-inch 8K LCD TV (8K Display for Japan, China)	For 8T-C80/70/60AX1 (Japan model)	For 8K Camcorder & 70X500X (8K Display for Europe)	For 8K Camcorder & 70X500X (8K Display for Europe)	For 70X500X (8K Display for Europe)

SHARP
Be Original.

Captures real beauty
The world of AQUOS 8K is here.

AQUOS 8K

Specifications

AQUOS 8K TV		8T-C80AX1X	8T-C70AX1X	8T-C60AX1X
Screen Size (Diagonal)		80"	70"	60"
Display	Resolution		7,680 x 4,320	
	Panel Frequency		120Hz	
	Digital Tuner		DVB-T2	
	HDR		Yes	
	Upconverter		8K Upconverter	
	Noise Reduction		Yes	
	Local Dimming		Yes	
Audio	Output (Subwoofer)	10W x 4 (15W x 2)		10W x 4 (15W x 1)
	Eilex PRISM		Yes	
	Decoder		Dolby Audio	
Smart	Platform		Android TV	
	Voice Recognition		Voice Search	
	App Store		Google Play	
	Web Browser		Yes (Download Apps)	
Connectivity	Smartphone Connectivity		Chromecast built-in	
	Bluetooth		GATT/HID	
	Wireless LAN		Yes	
	Ethernet LAN		Yes	
	HDMI		6 (4K x 5 + 8K x 1)	
	USB		2	
	Digital Audio Output		1	
	OPC (Optical Picture Control)		Yes	
Dimensions	without stand (mm) (WxHxD)	1809 x 1048 x 110	1562 x 916 x 103	1354 x 797 x 103
	with stand (mm) (WxHxD)	1889 x 1491 x 643	1562 x 993 x 440	1354 x 874 x 440
Net Weight	without stand (kg)	55	41	30.5
	with stand (kg)	60.5	49	38.5
Power Consumption		775 W	551 W	481 W

AQUOS Audio			8A-C31AX1
Total Output			450W (Soundbar 250W, Subwoofer 200W)
Connectivity	Audio Input	Digital	HDMI x 1, Optical Cable x1
		Analogue	Stereo mini jack x1
	Audio Output		HDMI (eARC) x 1
	Wireless		Bluetooth 2.1, EDR A2DP, AVRCP
Dimensions	Sound bar (mm) (WxHxD)		1200 x 85 x 140
	Subwoofer (mm) (WxHxD)		261 x 337 x 261
Net Weight	Sound bar (kg)		5.0
	Subwoofer (kg)		7.2
Power Consumption (Standby)	Sound bar		44W (7W)
	Subwoofer		33W (3W)

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Immersive realism that you can almost reach out and touch.
AQUOS 8K is now here

AQUOS **8K**

AQUOS **8K**

Real Colour

Real Contrast

Real Detail
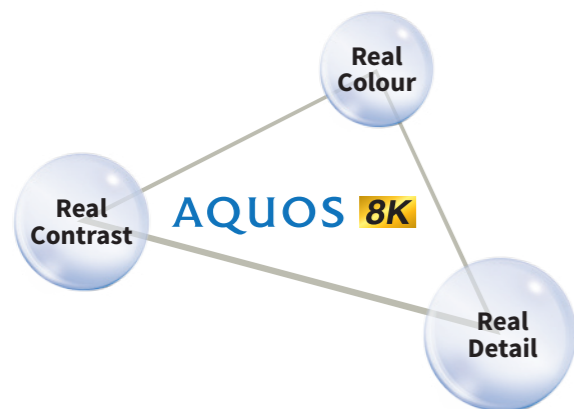
8K delivers astounding high-resolution image quality with 16 times more pixels than conventional full HD. AQUOS has sought to achieve an even greater level of realism by utilizing a colour gamut that greatly expands the range of colour reproduction, and by reproducing the true brightness and contrast of images.

AQUOS **8K**

80V

70V

60V

AQUOS AUDIO

Connect this home theater system to an AQUOS 8K TV to experience the immersive stereophonic sound for 8K in your living room.

✳ Items such as an AC power supply and an antenna connection are required to watch television. The picture on the screen is an inserted image.
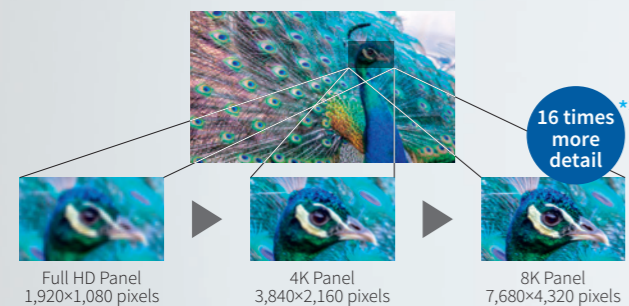
Astonishing realism made possible with AQUOS 8K

AQUOS **8K**

In 1953, Sharp was the first company to mass-produce Japan-made television sets in 1953.
Fast forward 65 years later, and in 2017 Sharp also became the first company in the world to produce an 8K television in 2017.
At long last, Sharp has also started selling 8K television sets in Singapore for the first time.

AQUOS' highest image quality yet.
Newly developed 8K 120Hz panel with high brightness and a wide colour gamut.

Real 8K Resolution with IGZO*1
33 mil pixels, 16 times more resolution*2

This new display can precisely reproduce images like never before, making it seem as if the objects on screen are actually right before your eyes. This unit also drives the super high-definition panel at a blazing speed of 120 Hz, outputting a tremendous amount of data consisting of 120 images, each around 33 million pixels, per second.
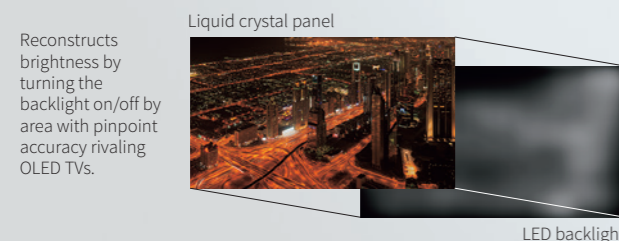
16 times *2
more detail

Full HD Panel
1,920×1,080 pixels

4K Panel
3,840×2,160 pixels

8K Panel
7,680×4,320 pixels

IGZO panel enables unprecedented transistor miniaturization and circuit thinning, results in rising sense of resolution.

Only for AQUOS

Conventional

8T-C80AX1

Real 8K Contrast
13 times brighter luminance*3

The high-transmittance liquid crystal technology creates highly dense and rich 8K images that are bright and vibrant. In addition, high-brightness technology is employed to display vivid and more lifelike images, which is achieved through brightness reconstruction technology that automatically analyzes video signals and detects the brightness composition of images. This allows the technology to reconstruct brightness 13 times better*3 than conventional models, creating beautiful light in images.

Reconstructs brightness by turning the backlight on/off by area with pinpoint accuracy rivaling OLED TVs.

Liquid crystal panel

LED backlight

Real Colour

Real Contrast

AQUOS **8K**

Real Detail

Real 8K Colour
138% wider colour*3

Combines an optimal balance between newly developed wide colour gamut colour filters and phosphors to richly reproduce a wide colour gamut that's 138%*3 compared with conventional models. Displays more realistic colour reproduction by making colours more translucent and creating a greater feeling of depth in images.

80AX1X

DCI
(Conventional Colour Standard)
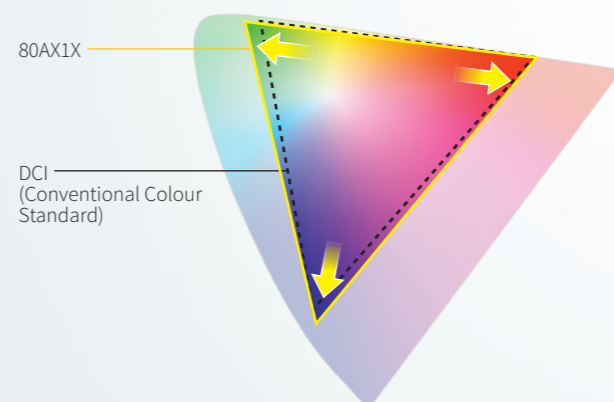
8K 12-bit processing

Uses smooth gradation to display changes in colour and brightness, allowing for more natural image expression.

Conventional TVs

64 times

AQUOS 8K

10bit = 1 billion colours

12bit = approx. 68 billion colours

Real 8K Input
Following JEITA standard accept 8K60P

AQUOS 8K AI Revelation Engine
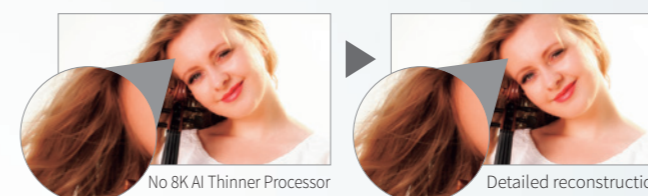### Upscales 2K and 4K video content in real-time to high-resolution 8K.

Sharp has newly developed an image processing engine that uses ultra-small semiconductor process technology to achieve 8.8 times more processing power*4 than conventional models. This technology is used to not only deliver large capacity 8K video at 120 Hz (twice the speed of conventional full HD) in real-time, but also upscale various content, such as television broadcasts and 2K/Ultra HD Blu-ray content, to high-resolution 8K video. Experience video content like never before.

AQUOS 8K AI Revelation Engine

8K AI Thinner Processor

Analyzes low resolution videos and signals, predicts minute details in original objects, and reconstructs minute information to upscale images to 8K resolution, resulting in clear, high-definition videos.

No 8K AI Thinner Processor

Detailed reconstruction

8K AI Noise Reduction

Analyzes the components of video signal noise and performs dynamic noise reduction processing according to the video's characteristics to create clear and natural images with both reduced noise and accurate reconstruction.

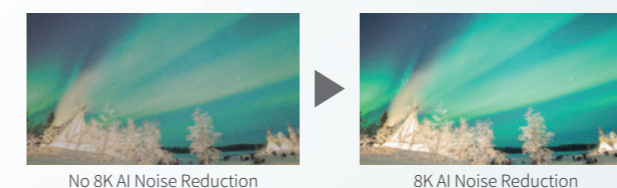No 8K AI Noise Reduction

8K AI Noise Reduction

8K AI Upconvert

Broadly analyzes target pixels and surrounding information, and predicts the original shape of objects on screen. It reconstructs information that is easily lost during the upscaling process to create realistic video content.

No 8K AI Upconvert

Realistic reconstruction

8K 120 Hz

Equipped with high-speed arithmetic processing circuits that process extremely large amounts of data (32 times*5 more data than full HD) in real-time. This technology analyzes highly dense 8K video content, detects the movements of subjects on screen, and forms and interpolates intermediate 8K images to create smooth, realistic-looking, high-resolution videos.
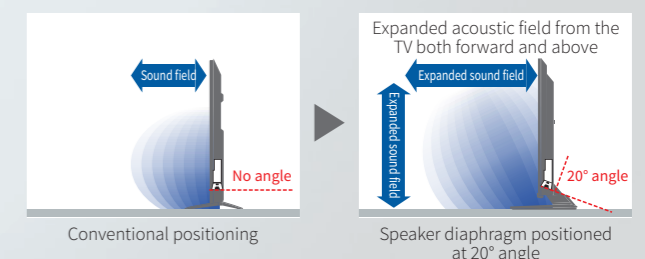
60 Hz

120 Hz
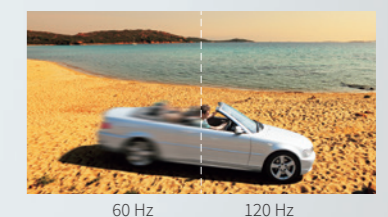
Sound made for 8K

Equipped with Eilex Prism™ which delivers powerful sound and increases the sweet spot range

Eilex utilizes a sophisticated algorithm to calculate techniques to deliver powerful sound from the center of the screen. This technology allows users to clearly hear the sound of each musical instrument on screen.

Dimentional & Clear Sound.

Conventional

with Eilex
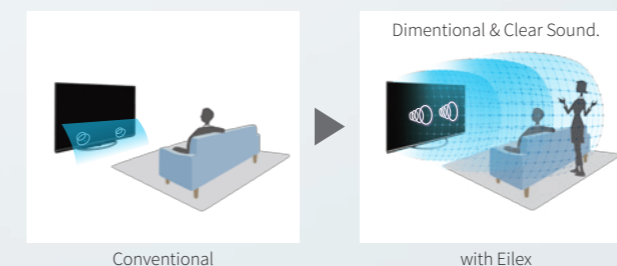
Uniquely shaped speakers and double subwoofer deliver natural and clear high-quality sound.

The angled structure of the 2-way speaker unit creates a broader sound field reproduction area projecting sound upward and in front of the TV. In addition, the tweeters have been intuitively positioned in a manner that expands the sound stage in the middle of the TV screen. This allows users to enjoy a richer and more ambient listen experience.

Expanded acoustic field from the TV both forward and above

Sound field

Expanded sound field

No angle

20° angle

Conventional positioning

Speaker diaphragm positioned at 20° angle

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* Pictures are sample images, and illustrations, etc. are used to explain functions so they differ from actual images and structures.
* Items such as an AC power supply and an antenna connection are required to watch television. The picture on the screen is an inserted image.
*1 IGZO is for 80 inch only.   *2 Compared to Full HD.   *3 8T-C80AX1. Compared to SHARP Full HD TV.
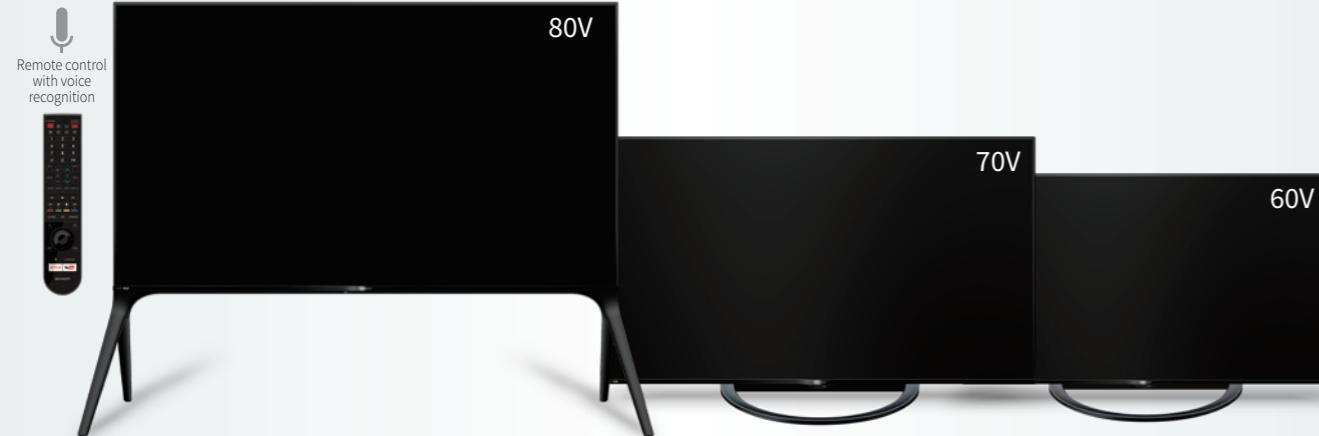
*4 Compared to SHARP highest engine adopted for flagship model below 8K TV range.   *5 Supports full HD (1,920×1,080 pixels 60 Hz), 16 times more resolution, 2 times more frames per second

AX Series

8K 120Hz panel and AQUOS 8K AI Revelation Engine allows AQUOS to deliver its best image quality to date.

androidtv

Remote control with voice recognition

80V

70V

60V

| 80 inch | 8T-C80AX1X | 70 inch | 8T-C70AX1X | 60 inch | 8T-C60AX1X |

SYMMETRICAL DESIGN

Comes equipped with the latest Android TV™, delivering top-grade smart features with supreme image quality.

Android Gaming on the Big Screen

Introducing console-style Android games on your TV with a gamepad. Immerse yourself in arcade racing, 2D side-scrollers, 3D battles, and beautiful adventures. Or play a quick round of your favorite casual game. Whether you explore alone or compete online to earn achievements, Android TV offers a new way to play Android games on your phone, tablet or TV.

Less Browsing, More Watching

Android TV brings great content to you, so you can spend less time browsing and more time watching. Just pick the personalized recommendation, and it will appear automatically on your home screen. If you know what you want, use Voice Search and Android TV will find "The Sopranos" for on-demand episodes, behind-the-scenes YouTube videos, and full seasons on Google Play. Or for date night, try "romantic comedies" or "Hugh Grant movies."

SHARP TV with Chromecast built-in

Chrome cast built-in is a platform that lets you stream your favorite entertainment from your phone, tablet or laptop right to your TV. Easily control your TV with apps you already know and love from your iPhone®, iPad®, Android phone or tablet, Mac® or Windows® laptop, or Chromebook. Now there are many ways to stream your favorite entertainment to your TV. You can upgrade your existing TV with a Chromecast device or purchase a new TV or display with Chromecast built-in.

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AQUOS AUDIO

Enjoy realistic-sounding acoustics in your living room.
Sound Bar Home Theater System that envelopes your entire body with sound

Hi-Res AUDIO | DOLBY ATMOS
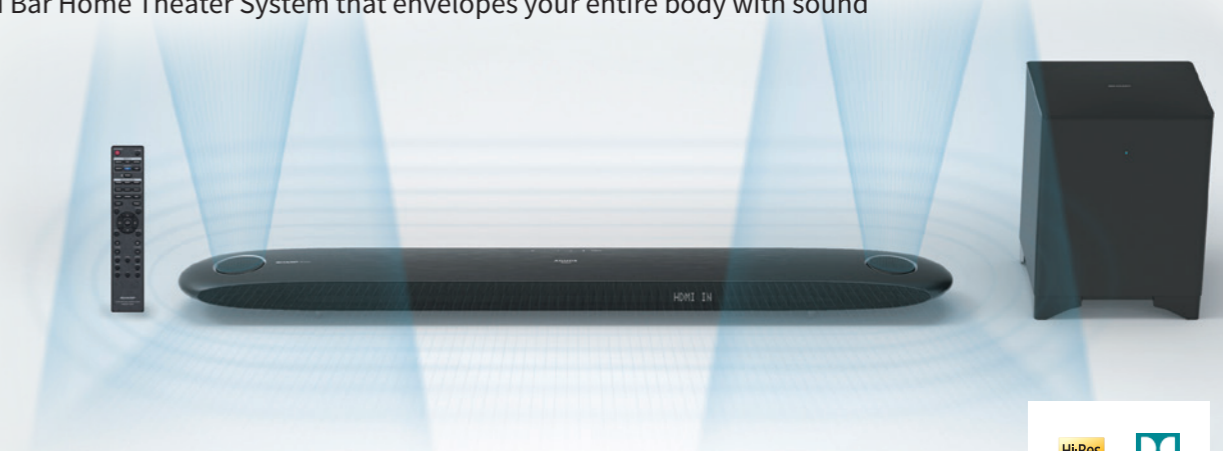
8A-C31AX1

Three-dimensional audio system that accentuates the realism and high resolution of AQUOS 8K

Delivers sound to the user from every direction (three-dimensional) to provide a listening experience that envelopes the entire body with sound, making users feel as if they are experiencing the moment itself. Users can now experience the stunning realism of 8K video while being completely immersed in sound.

Enabled speakers (two: left and right)

This reflects sound off the ceiling to reproduce a three-dimensional experience as if sound was coming from above.

20° angle
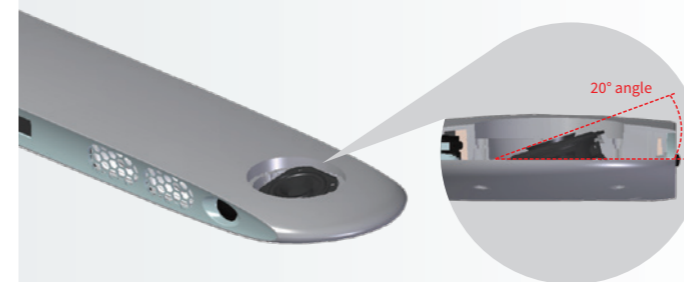
Designed around high sound quality

The speaker stand employs a spiked structure that allows it to produce the clearest and most beautiful sound. Particular attention has been given to delivering high-quality sound, such as the use of high-density brass materials to prevent noise caused by vibrations.

HDMI (eARC) support

Up-mix signal processing lets you enjoy the three-dimensional sound of 2ch and 5.1ch signals.

Conventional input sources can now be enjoyed with greater three-dimensionality. Analyzes frequency of original source to distinguish between environmental sounds and reverberated components. Also breaks down soundscape components for both horizontal and vertical sounds. Uses virtual technology to create surround sound effects with horizontal sounds to mimic sound being projected from behind the user. Also achieves stereophonic sound by outputting vertical sound from its enabled speakers.
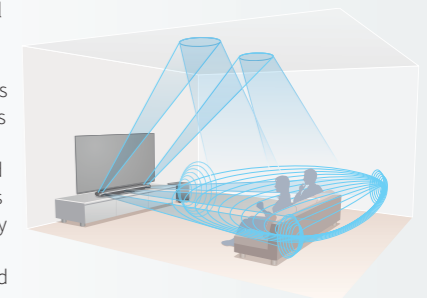
Supports Hi-resolution audio

Can play hi-resolution audio (WAV, FLAC) by reading memory from USB sticks, etc. connected to its USB port.

Uses DOLBY ATMOS
Recreate three-dimensional sound in your living room

DOLBY ATMOS is an acoustic system that was developed for theaters. Up until now, sound has only been reproduced horizontally, but DOLBY ATMOS also reproduces vertical sound sources, enabling it to express sound in a three-dimensional space so users can accurately hear horizontal and vertical movements.

● Music playback is also possible through Bluetooth® via smartphone.