



TECH RETREAT 2023

# Introduction and Technology Year in Review

Mark Schubin



# Cinema Is Still Not Dead



Domestic

International

Worldwide

Calendar

All Time

Showdowns

Indices

Daily

Weekend

Weekly

Monthly

Quarterly

Yearly

Seasons

Holidays

Domestic Yearly Box Office

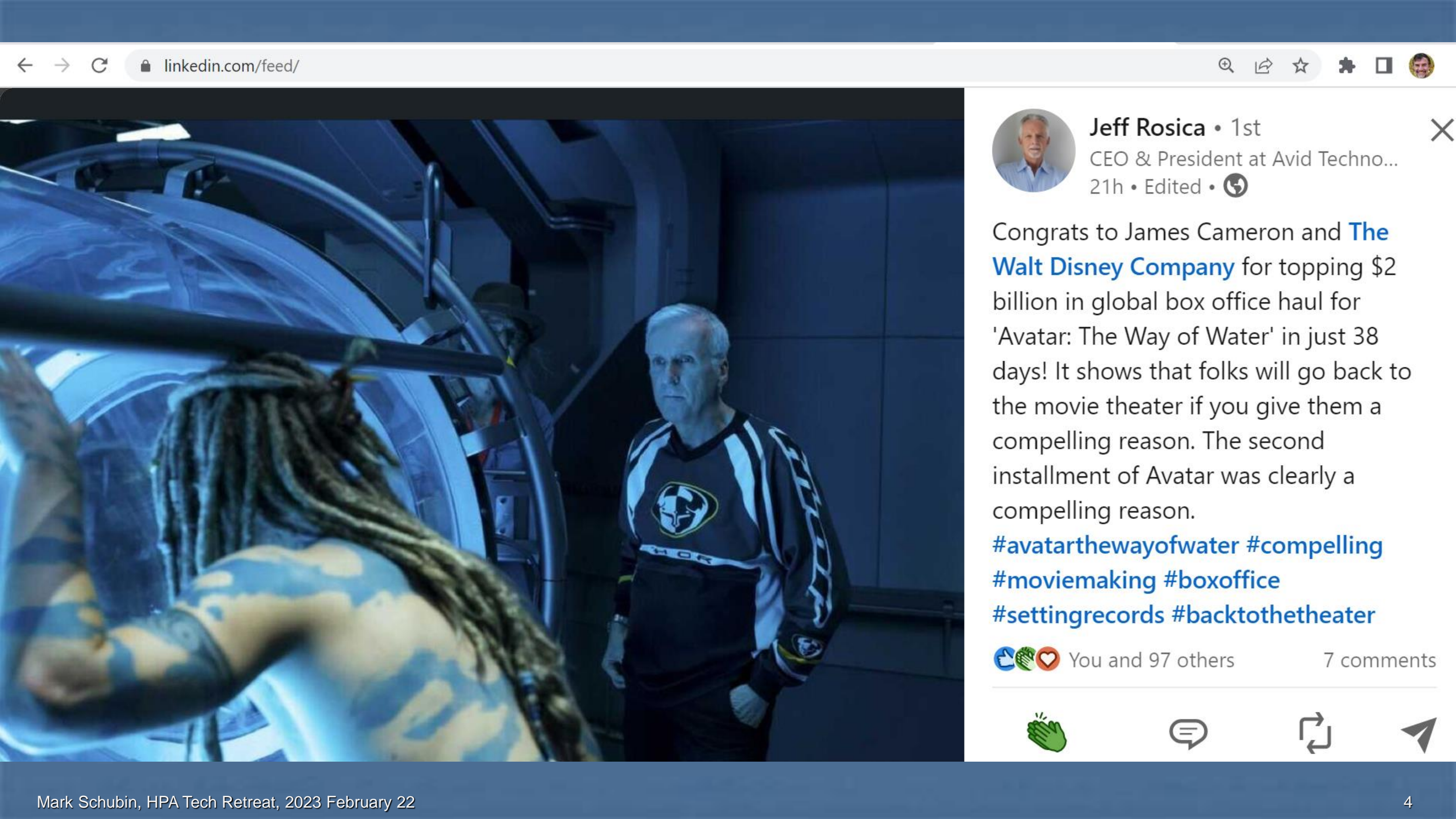
Overview

Calendar grosses

Data as of Feb 15, 1:36 PST

Year	Total Gross	%± LY	Releases	Average	#1 Release
2023	\$756,912,548	-	102	\$7,420,711	Avatar: The Way of Water
2022	\$7,368,808,746	+64.4%	493	\$14,946,873	Top Gun: Maverick
2021	\$4,482,795,864	+112.1%	439	\$10,211,380	Spider-Man: No Way Home
2020	\$2,113,846,800	-81.4%	456	\$4,635,628	Bad Boys for Life
2019	\$11,363,364,796	-4.4%	910	\$12,487,214	Avengers: Endgame
2018	\$11,892,160,011	+7.4%	993	\$11,975,991	Black Panther





**Jeff Rosica** • 1st  
CEO & President at Avid Techno...  
21h • Edited • 🔄



Congrats to James Cameron and [The Walt Disney Company](#) for topping \$2 billion in global box office haul for 'Avatar: The Way of Water' in just 38 days! It shows that folks will go back to the movie theater if you give them a compelling reason. The second installment of Avatar was clearly a compelling reason.

[#avathewayofwater](#) [#compelling](#)  
[#moviemaking](#) [#boxoffice](#)  
[#settingrecords](#) [#backtothetheater](#)

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# Majority of Americans Have Cut Cable for First Time in History

Over half of U.S. households are unreachable by traditional advertising, Samba TV's new report finds

 Loree Seitz | February 13, 2023 @ 7:26 AM



According to the [findings](#), 48% of U.S. adults report they have a monthly cable or satellite TV subscription while a slim majority of viewers turn their attention to streaming services. Without cable, over half of U.S. households are "totally unreachable by traditional linear advertising" in a moment Samba TV CEO and co-founder Ashwin Navin calls a "critical turning point in television and viewing consumption."



*BUSINESS PLAN —*

# Comcast wants Internet users to pay more because customer growth has stalled

New sign-ups are scarce, so Comcast says revenue per user drives broadband growth.

JON BRODKIN - 10/28/2022, 4:44 PM

# Last Year RBTF

← → ↺ theglobeandmail.com/amp/politics/article-cbc-digital-streaming/ 🔍 ↗

**THE  
GLOBE  
AND  
MAIL** 🍁

## CBC signals plans to go full streaming, ending traditional TV and radio broadcasts

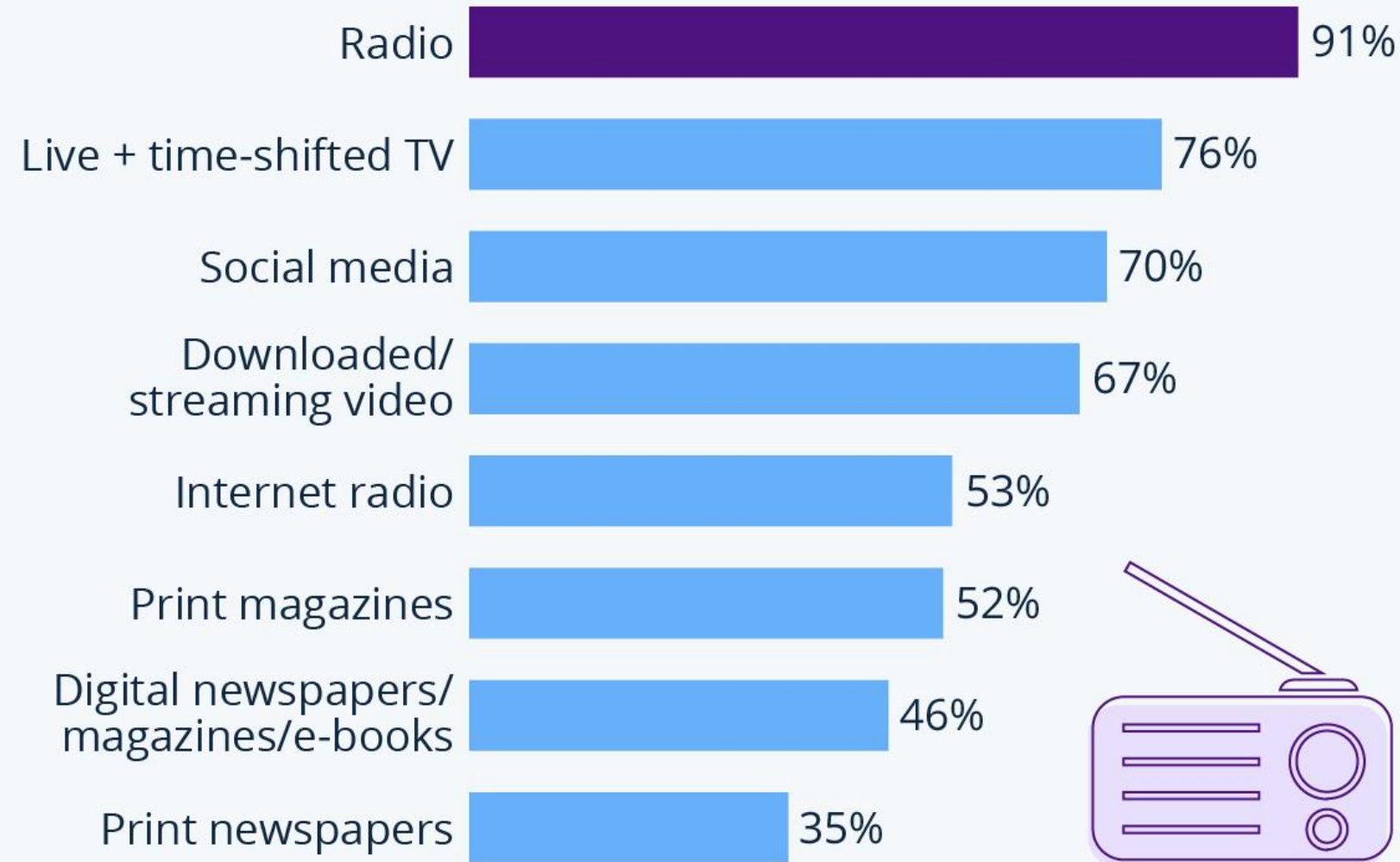
**MARIE WOOLF** >

OTTAWA

PUBLISHED FEBRUARY 7, 2023

# Video Didn't Kill the Radio Star

Weekly media reach among U.S. adults in 2022



Source: MRI-Simmons Spring 2022 Connect





[Home](#) > [News](#) > [Research](#)

# Antenna Adoption Grows Among Younger Viewers

By [George Winslow](#) published 1 day ago

Nearly two in ten viewers now use antennas for over-the-air broadcasts according to Horowitz



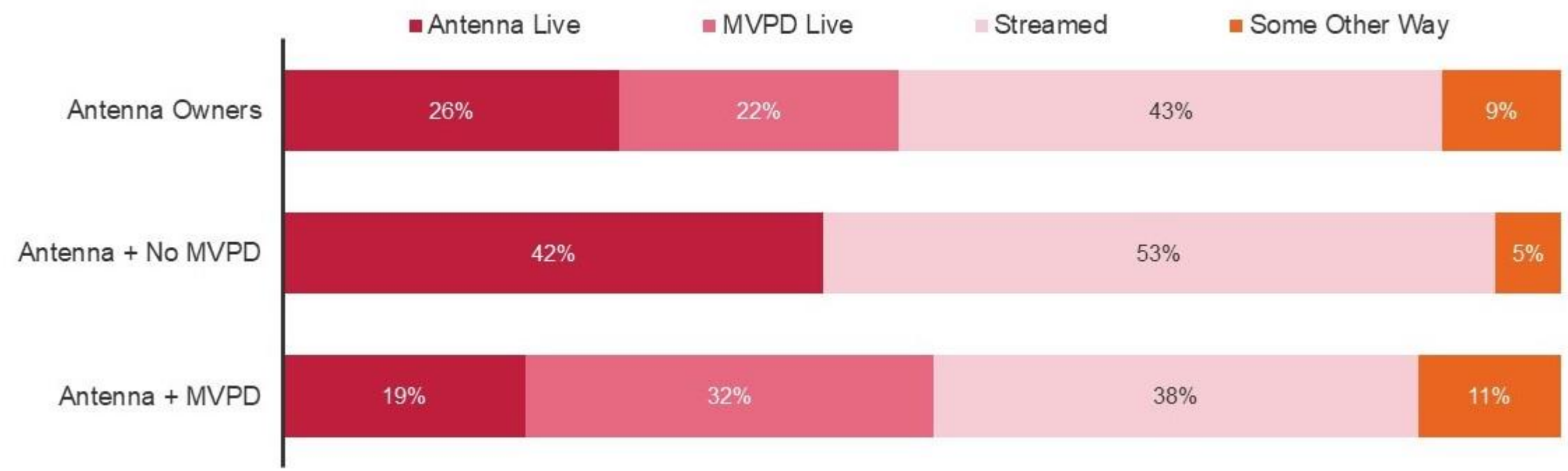
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## PERCENTAGE OF WEEKLY VIEWING BY PLATFORM

Base: TV Content Viewers 18+



# ADVANCED TELEVISION

## Report: How resilient is DTT is Europe?

November 30, 2022

As more than 90 million households, or 30 per cent of European TV homes, still rely exclusively on free-to-air channels for their TV consumption, the ongoing evolution of DTT transmission standards could be seen as a way to rejuvenate a TV access mode which does not appear as prosperous as it was in the past, at first glance at least. Dataxis asks: can the implementation of new DTT standards successfully strengthen these infrastructures?



# Fox scores Super Bowl ratings touchdown with 113 million viewers, the third most-watched TV program ever



By Oliver Darcy, CNN

Published 10:25 PM EST, Mon February 13, 2023

That said, it is worth noting that the decline of linear is present in the viewership data. Fox said Super Bowl LVII was the most-streamed Super Bowl in history, with an average of 7 million people watching via internet-based services. That figure represents an 18% jump from last year.



fairly flat in July, with sports posting the biggest decline—dropping 15.4% for the month and 34% for the year.



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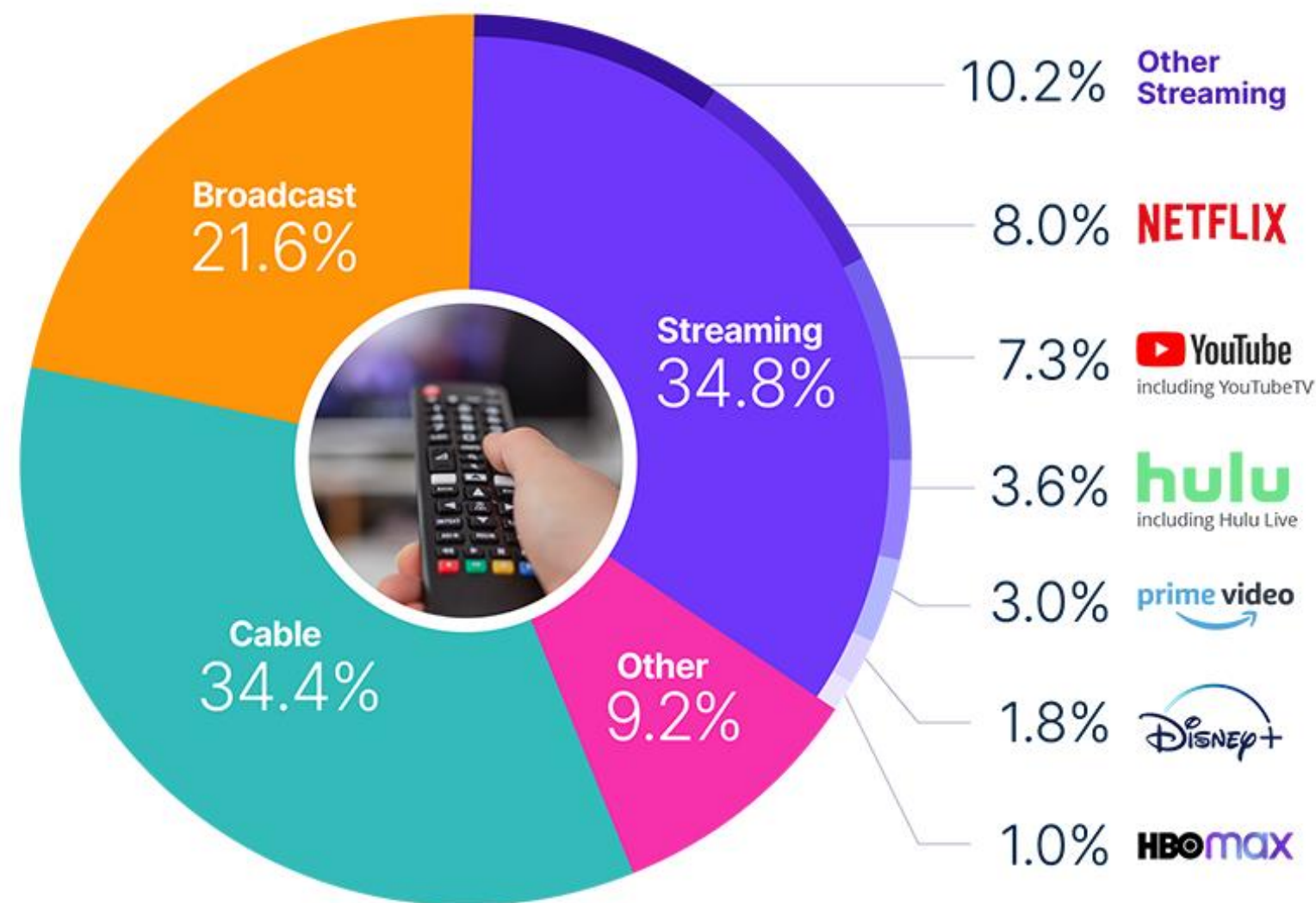
Careers



EN ↓

July 2022

# Total Day Persons 2+







TRENDING

NAB Show

NextGen TV

FCC

Remote Production

TV Tech's February 2023 Issue

[Home](#) > [News](#) > [Streaming](#)

# Digital Video Viewing Time to Surpass TV Viewing in 2023

By [George Winslow](#) published 6 days ago

For the first time, U.S. adults will spend more time watching digital video than traditional linear TV, according a new Insider Intelligence forecast



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**ADVANCED  
TELEVISION**

# Data: Super Bowl stream delay worse than 2022

February 13, 2023

By Nik Roseveare

## Super Bowl 2023: Measured Lag Behind Real-Time

Comparing various streaming sources with the on-field game



[advanced-television.com/2022/02/17/data-super-bowl-streaming-1min-delayed/](https://advanced-television.com/2022/02/17/data-super-bowl-streaming-1min-delayed/)

And when measuring the time difference between the same stream, there was up to a 75 second delay between viewers.



??!!

variety.com/2022/tv/news/house-of-the-dragon-viewers-outraged-scenes-too-dark-1235391259/

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HOME > TV > NEWS Oct 3, 2022 7:09am PT

# ‘House of the Dragon’ Viewers Outraged Over Scenes Too Dark to See, HBO Defends Them as ‘Intentional Creative Decision’

By Zack Sharf ▼

??!!

wsj.com/articles/cant-hear-what-actors-are-saying-on-tv-its-not-you-probably-11669400315



WSJ

PERSONAL TECHNOLOGY: REVIEW

# Can't Hear What Actors Are Saying on **TV**? It's Not You, Probably

There are things you can do to address audio issues introduced by the production process

PHOTO ILLUSTRATION BY CHAYA HOWELL/THE WALL STREET JOURNAL, ISTOCK



# ROBOTIC VACUUM CLEANER MARKET



**\$9.77 Billion**  
2020

**\$11.97 Billion**  
2021

**\$50.65 Billion**  
2028



# Some Things Take Time



original 2002 Roomba

[photo by Larry D. Moore CC BY 4.0 license](#)



# Some Things Take Time



original 2002 Roomba

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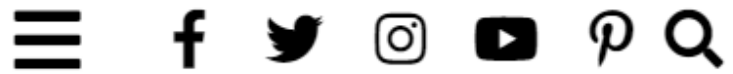


1959 Whirlpool robotic vacuum (patent 1957)

tip o' the hat to V. Michael Bove on LinkedIn

# 4K or Faux K?

← → ↻ 🔒 popsci.com/story/technology/watch-super-bowl-4k-streaming/

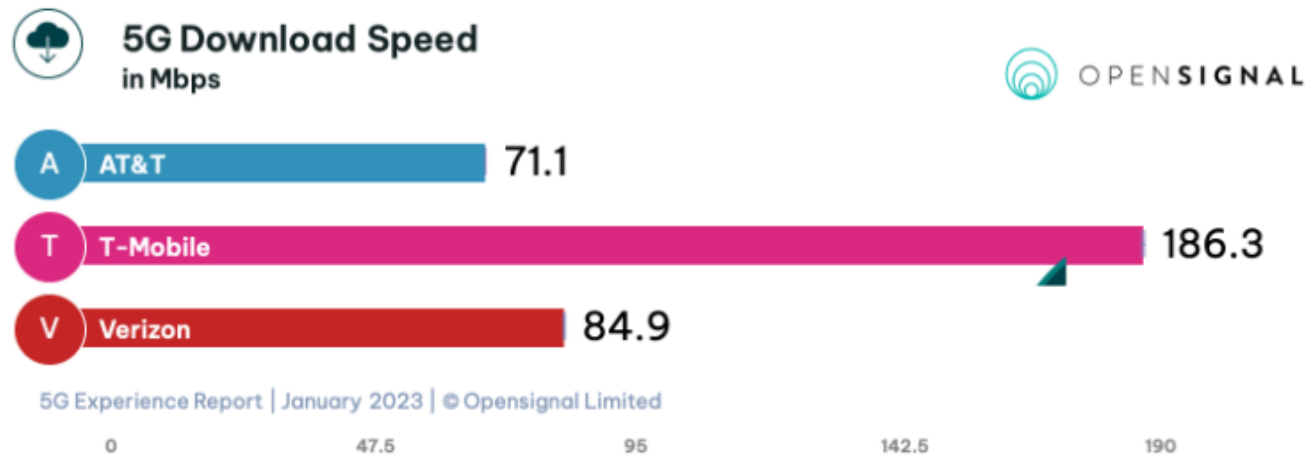


**POPULAR  
SCIENCE**

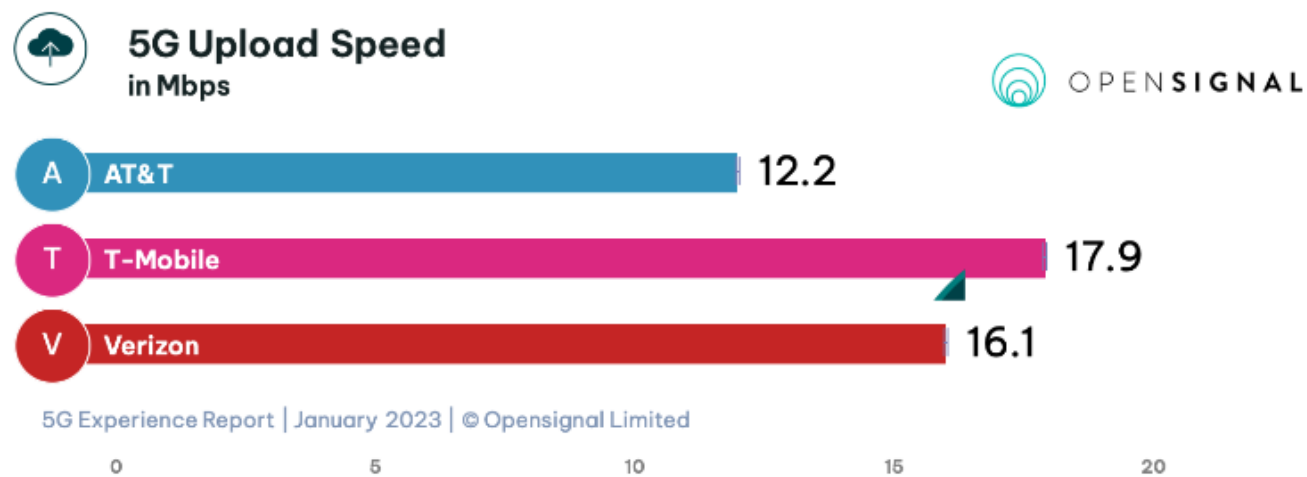
According to Consumer Reports, [Super Bowl LVII will be broadcast in 4K HDR](#). It won't be “true” 4K, though, as Fox will essentially be repeating what it did the last time it hosted the big game in 2020: recording everything in 1080p HDR and upscaling it to 4K.

tip o' the hat to Pete Putman for “Faux K”





And here's a look at how 5G upload speeds stacked up:



5G availability was also a big win for T-Mobile:



# 5G



World ▾ Business ▾ Legal ▾ Markets ▾

## Aerospace & Defense

2 minute read · February 10, 2023 6:48 PM EST · Last Updated 7 days ago

# U.S. airlines urge FAA to extend 5G upgrade deadline

By David Shepardson

← → ↺ <https://www.amazon.com/gp/product/B08HVT59F5>

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\*CORE SUBSCRIPTION REQUIRED.





# Satellite-Assisted Mobile

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www.wsj.com/articles/apples-iphone-satellite-service-kicks-off-smartphone-space-race-11662901201



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TECH

# Apple's iPhone Satellite Service Kicks Off Smartphone Space Race

Years of preparation helped tech giant, but other phone makers, wireless carriers and aerospace companies have similar ambitions

# Satellite-Assisted Mobile

← → ↻ 🔒 t-mobile.com/news/un-carrier/t-mobile-takes-coverage-above-and-beyond-with-spacex 🔗

WIRELESS BUSINESS PREPAID TV BANKING INTERNET



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UN-CARRIER

## T-Mobile Takes Coverage Above and Beyond With SpaceX

August 25, 2022

Companies share their vision to provide truly universal coverage, pairing SpaceX's breakthrough satellite constellation with T-Mobile's industry-leading wireless network

New service aims to connect vast majority of smartphones already on T-Mobile's network to Starlink satellites

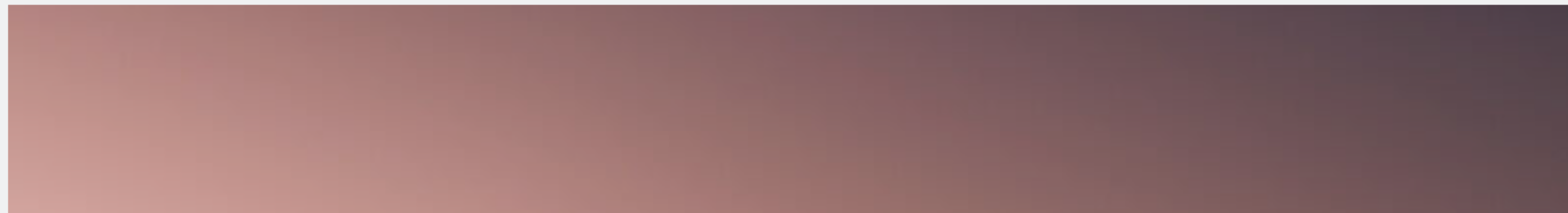


STARLINK SLOWDOWNS —

# Starlink is getting a lot slower as more people use it, speed tests show

Starlink capacity limits hit users—SpaceX says more satellites will make it faster.

JON BRODKIN - 9/23/2022, 1:57 PM





Home » **Wireless and Networking** » Please Do Not Disturb

# Please Do Not Disturb

Article By : Rohde & Schwarz

Category : Test & Measurement

2022-11-24

(0) Comments

The interference-free coexistence of numerous



electrical and radio products cannot be taken for granted. Only targeted measures for EMC can ensure that cardiac pacemakers are not disrupted and aircrafts carry passengers safely to their



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DECEMBER 5, 2022

# EU Denies Review Process on Energy Requirements – What Will Set Makers Do?

**By Bob Raikes**

According to an [article](#) in the Italian trade magazine Digital Day, the European Commission says it has no intention of revising a planned change to EU regulations on TV power consumption ([8K Industry Faces Challenge with New EU Regulatory Ruling](#)). The change will eliminate exemptions to power consumption regulations previously applied to 8K and microLED-based sets. On the face of it, that might cause 8K sets to disappear from the market, but the Commission said that it believed that the change in the regulations would not cause sets to be banned as TV makers would take action to meet the new rules. So what are TV makers doing?

First, some brief background. The EU, along with other national bodies around the world, wants to limit the power consumption



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SEARCH

DECEMBER 19, 2022

## Why 8K OLEDs and QD-OLEDs are So Difficult to Make

By **Bob Raikes**



# 8K



Veronica Seider, supposedly extraordinarily acute vision, died in 2013

tip o' the hat to Ed Grogan

Home / Streaming / Feature

CORD-CUTTER CONFIDENTIAL

# ATSC 3.0 in 2023: Why NextGen TV still needs another year

Over-the-air TV's big update is here, but won't really take off until at least 2024.



**CORD-CUTTER CONFIDENTIAL**

By [Jared Newman](#), TechHive | JAN 12, 2023 3:00 AM PST

Fair warning: This update on the status of ATSC 3.0—also known as NextGen TV—will read a lot like the one from [last year](#), and maybe even [the year before](#).

most sustainable form of motion-image distribution



# In Addition to “Wireless Television,” There’s

[ibc.org/features/top-10-trends-of-2022-fast-ai-virtual-production-and-more/9346.article](https://ibc.org/features/top-10-trends-of-2022-fast-ai-virtual-production-and-more/9346.article)



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FEATURES

## TOP 10 TRENDS OF 2022: FAST, AI, VIRTUAL PRODUCTION AND MORE

By Mark Mayne | 14 December 2022



# Faster Than Quibi



The screenshot shows a web browser window with the URL `nytimes.com/2022/04/21/business/cnn-plus-shutting-down.html`. The page header includes the New York Times logo, a 'PLAY THE CROSSWORD' button, and a 'BUSINESS' category label. Below the header, there is a 'Daily Business Briefing >' link. The main headline reads 'CNN+ Streaming Service Will Shut Down Weeks After Its Start'. The sub-headline states: 'A major investment by CNN, which poached big-name anchors and threw a splashy launch party, ends abruptly at the hands of a new corporate leadership team.'

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☰ 🔍 BUSINESS The New York Times PLAY THE CROSSWORD

Daily Business Briefing >

## CNN+ Streaming Service Will Shut Down Weeks After Its Start

A major investment by CNN, which poached big-name anchors and threw a splashy launch party, ends abruptly at the hands of a new corporate leadership team.



# Or Government

[www.broadbandtvnews.com/2022/09/13/hungary-eyes-legal-ddos-attacks-to-combat-piracy/](http://www.broadbandtvnews.com/2022/09/13/hungary-eyes-legal-ddos-attacks-to-combat-piracy/)



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## Hungary eyes legal DDOS attacks to combat piracy

SEPTEMBER 13, 2022 09.27 EUROPE/LONDON BY CHRIS DZIADUL

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# Some Things Don't Seem To Take Much Time

indianexpress.com/article/technology/chatgpt-hit-1-million-users-5-days-vs-netflix-facebook-instagram-spotify-mark-8394119/



Friday, Feb 10, 2023

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## ChatGPT hit 1 million users in 5 days: Here's how long it took others to reach that milestone

ChatGPT crossed the one million user mark in just five days after it was made public in November 2022. How does that compare to other companies in the world of technology? We take a look.

By: [Tech Desk](#)

New Delhi | Updated: February 9, 2023 10:40 IST





# Some Things Don't Seem To Take Much Time

reuters.com/technology/chatgpt-sets-record-fastest-growing-user-base-analyst-note-2023-02-01/



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Technology

2 minute read · February 2, 2023 10:33 AM EST · Last Updated 5 min ago

## ChatGPT sets record for fastest-growing user base - analyst note

By Krystal Hu

Feb 1 (Reuters) - ChatGPT, the popular chatbot from OpenAI, is estimated to have reached 100 million monthly active users in January, just two months after launch, making it the fastest-growing consumer application in history, according to a UBS study on Wednesday.

*DEEP BLUE WAS JUST THE START —*

# Man beats machine at Go in human victory over AI

Amateur exploited weakness in systems that have otherwise dominated grandmasters.

**RICHARD WATERS, FINANCIAL TIMES** - 2/19/2023, 7:51 AM







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# BBC Replacing Robot News Studio Cameras In Hope Of Consigning Viral Tech Fails To History

By [Jake Kanter](#)

December 28, 2022 5:00am



GAMES

# ‘Overwatch 2’ Will Run At Up To 600 FPS — If Your Rig Can Handle It

**Kris Holt** Contributor ⓘ

*I cover all things games, especially Overwatch.*

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Sep 21, 2022, 04:50pm EDT

0





Home > News

# Japan's NICT Sets New Data Transmission Speed Record

By [Tom Butts](#) published about 21 hours ago

1 petabit per second over fiber equivalent to broadcasting '10 million channels of 8K broadcasting per second'



# "Event" Cameras

sciencedirect.com/science/article/pii/S2095809922002077



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Available online 12 April 2022

In Press, Journal Pre-proof [What's this?](#)



Article

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## Elon Musk Says Brain Implant Startup Neuralink Should Be Ready for Human Testing in Six Months

Neuroscience company also showcases 'telepathic typing' in monkey with brain device, other capabilities, in live-streamed update

# NVIDIA GeForce for Cars









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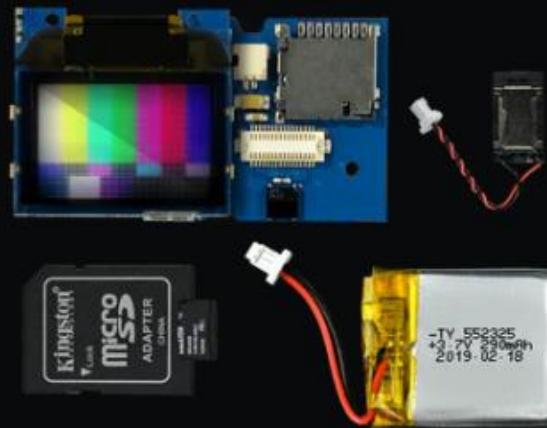
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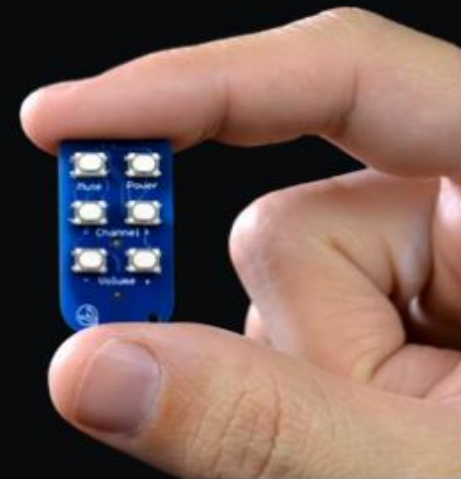
★★★★★ (116)



TINY VIDEO PLAYER KIT

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★★★★★ (15)



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★★★★★ (3)



TINYTV HOUSING

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# Questions?

(if time allows)

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