

Television Gallery was inaugurated on
December 05, 2024



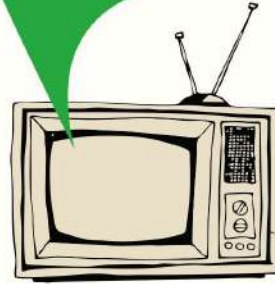
Visiting Hours to the Museum
9:30 am to 6:00 pm
Museum is open every day, except on Holi & Diwali
Special concession for school students in groups



Birla Industrial & Technological Museum

A Unit of National Council of Science Museums
Ministry of Culture, Govt. of India
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Television Gallery



“Today we are on the eve
of launching a new
industry based on
imagination, on scientific
research and
accomplishment”

~ David Sarnoff, President, Radio Corporation of America
announcing the birth of television industry at
New York World's Fair, April 20, 1939



Sketches of a pundit and sahib with
details of their costumes
and make-up from
Goopy Gyne Bagha Byne

Tape a Tale

Stop motion is an animated filmmaking technique in which a physical object is moved in small increments and photographed at every step. Strung together and played rapidly, these images appear to move on their own. Differing from traditional hand-drawn animation, stop-motion animations use physical object accommodated in 12 frames per second.



Stop-motion Storyboard illustrating flying bird animation sequence.

Saga of Storyboarding

Storyboard - a sequential breakdown of each shot or element in visual presentation - conveys the narrative or sequence for a visual experience.

It allows the planning of each shot before going into production, allowing the creation of cinematic experiences that the movies are known for. Universally therefore, the most effective story-tellers are also acclaimed for their meticulous storyboarding.

Tape a Tale is an interactive stop-motion animation kiosk allowing visitors to play around with varying props and backgrounds and film their own animation by capturing and playing the frames in sequence – offering a glimpse of this frequently used technique of shooting commercials, music videos, television shows and feature films.

A Window on the World

Early television had emerged as either an elite pastime, or one for the amateur engineer. Today, it represents a symbol for communication and globalization in the contemporary world.

With changing screen sizes and flexibility of access to customized content at one's leisure, television continues to be the single largest source of video consumption.

Television Gallery celebrates the men and their machines that continue to make it our choice of entertainment - today & tomorrow.

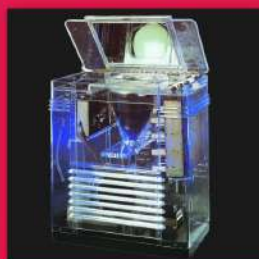
Machine illustrating Motion

The first mechanical television system was developed by the Scottish scientist John Logie Baird in 1924.

He gave the world's first demonstration of a Mechanical TV system based on Nipkow Disc on January 23, 1926.



Baird Television - World's very first mechanical television set



Created for the 1939 New York World's Fair, the transparent TRK-12 Lucite Phantom Telereceiver introduced people to the concept of television

In **Mechanical Television**, a disc, having a series of spiral holes, rotates in front of an object to scan it. Light coming from each point of the object passes through the holes and falls on photocells, where the light is transferred into electrical signals for the receiver. At the receiver, signals on amplification light up a Neon lamp, which flickers because the amount of current received by it depends on the brightness of the scanned image. The varying light of the Neon lamp then passes through an identical rotating disc to reconstruct the image.

Mission Makeover

A screen test showcases an actor's performance, typically used during the casting process to evaluate their suitability for a role. This allows directors and producers to assess an actor's on-camera presence, range, and ability to deliver in the context of the character being portrayed.

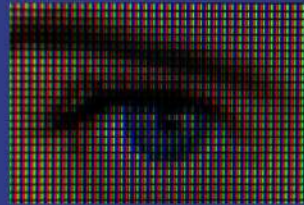


Facial mapping of visitor images superimposed on famous TV characters offers a virtual screen-test to visitors

The console **Mission Makeover** allows visitors to appear for a virtual screen-test by clicking and capturing their facial features, which, after superimposing on their favourite TV characters creates their unique and personal TV avatar.

Trend in Tricolour

Color TV works by broadcasting three monochrome images, one each in the three primary colors of red, green, and blue (RGB). When displayed together or in rapid succession, these images blend together to produce a full-color image that is seen by the viewer. Color Cathode Ray Tube televisions use three electron beams and separate phosphors for red, green and blue.



Red-Green-Blue pixels in a colour television image

Trend in Tricolour allows visitors to capture and see themselves in one of the three basic colours of light by controlling the intensity of RGB filters superimposed on their image.



The first Fleming Diode

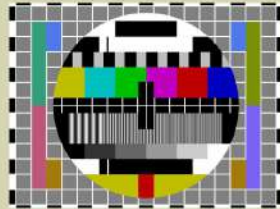
Vintage Valves

Patented by Sir John Ambrose Fleming in 1904, thermionic valves provided a source of electrons in conventional electron tubes like television picture tubes.

Featured in this section are **rotating television sets** with sectional cut-outs showcasing cathode-ray tubes through transparent windows - running iconic footages.

Test Cards

Television test cards were elaborate patterns and graphics used for visual calibration or for filling gaps and dead air in the early days of TV broadcasting.

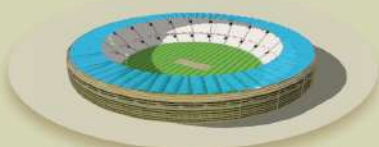


Philips Circle Pattern PM5544, 1970s

Stadium Shots

The natural appeal of sports on television has created large, enthusiastic audiences for generations. In many ways, sports and television are a perfect fit.

TV cameras put viewers in the middle of the action, giving them a much closer view than they could get by sitting in the stands.



Scaled-down football and cricket stadium models feature indicative camera positions, operated through control switches on a camera-viewing console

Televised sports feature live action, high drama, real heroes, villains, and unpredictable endings. **Stadium Shots** features interactive camera controls allowing visitors to explore a game of football and cricket – as seen from different camera angles - along with live indication of camera positions in scaled-down stadium models.

Inside a TV Studio

Chroma key compositing technique – used mostly in newscasting, motion picture, and video game industries - is a visual-effects and post-production technique for layering two or more images or video streams together based on colour hues. The in-house **TV Studio** allows visitors to enter mock-up newsrooms and fantasy studio floors to experience the technique in person.



Green screen inside the TV studio aids in chroma keying

Having captured the visitor motion and position, a colour range in the foreground footage is made transparent, allowing separately filmed background footage or a static image to be inserted into the scene. Chroma keying can be done with backgrounds of any colour that are uniform and distinct, but green and blue backgrounds are more commonly used because they differ most distinctly in hue from any human skin colour.

Television Tomorrow

Tomorrow's television tends towards a greater degree of involvement by the viewer. Future television experiences aspire to take on more of a human face. Hybrid broadcast-broadband systems work together to make one feel more involved. Home entertainment can mean virtual reality headsets coming into the home. Augmented-reality and artificial intelligence enabled characters start to become part of personalized television experiences. Big Data providing personalized recommendations and livestreams.



Smart Home Touchscreen Display Solution

Future of TV then? **Better stay tuned** 