



**SCIENCE
MUSEUM
GROUP**

TURN IT UP

THE POWER OF MUSIC



SCIENCE MUSEUM GROUP AND TURN IT UP: THE POWER OF MUSIC

**'A toe tapping,
foot stomping
new exhibition.'**

BBC Radio 4,
Front Row

SCIENCE MUSEUM GROUP AND TURN IT UP

With over 5 million visitors each year and an ambitious range of exhibitions, events and online resources, the Science Museum Group (SMG) is a global leader in science, technology, engineering and mathematics (STEM) engagement. We bring informal science education to a diverse range of audiences and age groups, making STEM accessible and relevant to all.

Discover this major new touring exhibition that explores the science behind music's mysterious hold over us and how it drives us to create, perform, feel and share. Prepare to get hands-on, with your ears and hearts open.

Music connects us all. Immerse yourself in music that is forged where creativity and human ingenuity collide. People from all walks of life can interact with extraordinary, unfamiliar and playful musical instruments and performances, created to explore the science of music and to push the boundaries of what's musically possible.

SCIENCE AND INDUSTRY MUSEUM, MANCHESTER

The Science and Industry Museum in Manchester is one of the five museums that make up SMG. It is devoted to inspiring visitors through ideas that change the world, from the Industrial Revolution to today and beyond.

It's a story that we're uniquely placed to tell - on the site of the oldest surviving passenger railway station, in the heart of the world's first industrial city, today alive with innovative discoveries in science and technology.

'The Science Museum Group places science at the heart of Britain's creative economy, celebrating its potential to change our lives for the better.'

Dr Simon Chaplin, Former
Director of Culture &
Society, Wellcome Trust



TURN IT UP: THE POWER OF MUSIC

EXHIBITION INTRODUCTION

Learn about 35 pioneering research studies featured together for the first time, exploring music's impact on different aspects of our daily lives. Uncover 12 personal stories illustrating just how unique everyone's relationship with music is.

The exhibition features several films of scientists and music makers and several listening points with music ranging from classical to pop, electronic to hip-hop.

Throughout the exhibition visitors are invited to discuss and contribute their own musical favourites. Which song brings back strong childhood memories? What is your favourite music and how does it make you feel? What music would you share with a friend to give them a boost?

The exhibition was developed in consultation with a Representation and Inclusion Group which included charities for sight loss, autism, Alzheimer's, Parkinson's, musicians with disabilities, underrepresented young people and deaf children. Visitors with all abilities are encouraged to engage and learn from interacting with various musical experiences, highlighting the power of music as access





CONTENT OVERVIEW

SECTION 1: THE MUSIC MAKING MINDS

Section 1 explores why we continue to innovate and find new ways to play and make music. It presents the building blocks of music by explaining pitch, timbre and tempo and showcases how electronic music has evolved over the last 100 years.

Visitors are welcomed into the exhibition by a mass display of audio play-back devices which people have used to listen to their favourite music over the decades. A soundtrack composed by audio-visual designers at *AY-PE*, starts here and accompanies visitors throughout their visit. Developed in one key and carefully balanced with other sounds in the exhibition, the soundtrack ensures a relaxed rather than cacophonous visit.

Visitors will move onto the first room of the exhibition, where an impressive display of unusual instruments will enthral them. Made from unexpected materials and objects, or played to surprising effect, such as the never-before-seen Anarchestra instrument made from old piano parts and a satellite dish, visitors will explore what it is that makes us continue pushing boundaries in music.

The unusual instruments are brought to life in a creative film which is projected at a large scale. See the instruments carved from ice or powered by flames in action and more importantly, hear how they sound.



Bottom left: interactive musical sculpture 'Musical Playground' light and sound installation, an original commission from Australian immersive designers Amigo & Amigo

Bottom right: visitors enjoying the mass display of music playing devices from the last 100 years

SECTION 1: INTERACTIVES

INSTRUMENT CREATOR

Visitors can design their own unusual instrument, just like those on display, with the 'Instrument Creator'. By spinning three blocks showing a range of instrument parts and everyday objects to imagine their own weird and wonderful instrument. How would your instrument sound and what would you call it?



TIMBRE INTERACTIVE

Visitors will explore how four instruments feel by getting hands-on with a trumpet, panpipes, violin and piano keys. Lift the flaps to hear them play. Visitors will discuss why the instruments sound different when playing the same melody.

BEAT BLOCKS

Play with Duplo Lego like never before on the specially commissioned, gesture recognition-based, multi-player interactive. Visitors will love laying out the blocks to create a masterpiece and experimenting by changing the instruments, the pitch and speed across four large Duplo Lego mats.

MUSICAL PLAYGROUND

The 'Musical Playground' light and sound installation is an original commission from Australian immersive designers *Amigo & Amigo*. Visitors can collaborate and experiment with beats, melodies and harmonies to better understand that there is no right or wrong way to make music, it can just be for fun. Bold colours and dramatic lighting invites visitors to play on 24 touch sensors across three central terminals. The installation uses specifically composed music, carefully balanced with audio elsewhere in the exhibition.



ELECTRONIC MUSIC

Visitors can uncover technological advancements, such as the wearable musical instrument MiMU gloves, used by Ariana Grande to control electronic music-making software with gestures. Also see Haile, the AI musical robot, designed to collaborate with human musicians by playing improvised drum patterns. A range of other pioneering instruments show how accessible music-making is becoming.

MADE MY AI OR HUMANS?

Visitors will listen to three songs and decide which one is made by humans and not artificial intelligence. Will the strange computer lyrics give it away?

CONTENT OVERVIEW

SECTION 2: MIND ALTERING MUSIC

In section 2 visitors can explore how music affects our bodies and minds. They can 'meet' the scientists who are researching our biggest questions like **'Why does music make me want to dance?'** and **'Why does music trigger memories?'**.

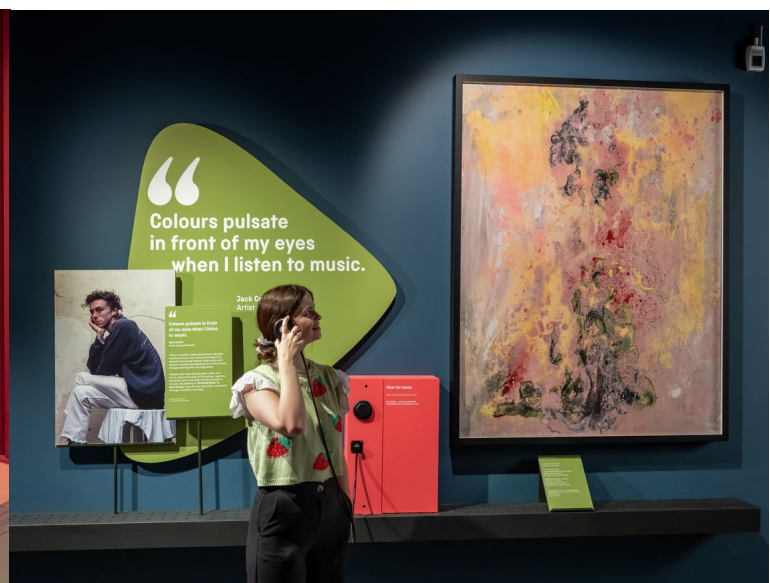
Plus find out the benefit that music is having for a range of people including those living with disabilities, Parkinson's and even babies in neo-natal units.

A commissioned artwork by renowned artist, Jack Coulter, who has produced work for Harry Styles, Paul McCartney and Keith Richards, will wow visitors. A synaesthete, Jack sees sound and music, and he has translated 'Cornfield Chase' by Hans Zimmer for the movie *Interstellar* just for the exhibition.

Discover the power of music in everyday life by exploring **six networks** that abstractly replicate everyday environments, including a supermarket, gym and bedroom.

Visitors can;

- sit in a car to find out which music is proven safer for driving;
- relax on a bed while being soothed by Max Richter's composition for night-time slumber;
- open gym lockers to find out the surprising tracks that motivate sports stars;
- spin the blocks in the supermarket to guess which songs make your food taste sweeter or saltier;
- and listen to hold-music on a phone to test frustration.



Left: supermarket section

Right: visitor listening to song accompanying Jack Coulter song

SECTION 2: INTERACTIVES

MUSICAL JOURNEY

Visitors can step into a 'Musical Journey' composed by the Royal Philharmonic Orchestra, London to emotionally connect with how music makes you feel. Visitors will be transported through a range of feelings such as joy, fear and sorrow. The experience is truly immersive with a paired back, relaxed design to help visitors connect with music. A projected circle on the floor intensifies the experience by visually demonstrating how the music ebbs and flows, trills and clashes.

WORLD MUSIC QUIZ

Visitors can listen to a series of traditional songs from around the world. Testing themselves on whether the song is a lullaby, a love song, a song for healing people or for dancing to even though they don't recognise the song.

DANCE CRAZE DIGITAL MIRROR

Visitors can test their dance routine knowledge with the 'Dance Craze Digital Mirror' as they Vogue, Renegade and do The Twist in the name of science. Visitors can boogie away to the songs they know best as the digital mirror copies their every move.

THE CHORAL EXIT INSTALLATION

A choral crescendo greets visitors before they leave, immersing them in a cappella music set within soft festival like lighting.

Visitors will leave uplifted, empowered to make music themselves as they continue their musical journey with a lot more knowledge about innovation, technology and the science of being human.



Above: Harry Kane locker.

Bottom: Visitor interacting with dance craze digital mirror.



LEARNING OUTCOMES AND FORMAT

LEARNING OUTCOMES

Visitors will...

- understand more about the way that music affects our bodies and minds;
- be surprised by what scientific research is finding out about music and us;
- feel delight at the music-making instruments, technologies and experiences in the exhibition;
- be inspired to experiment with making music;
- be affected by intense musical experiences that trigger memories or emotions;
- reflect on how music impacts the lives of others in a range of ways.

FORMAT

The exhibition is offered as a touring exhibition. This means we provide all the physical assets required, including objects, cases, set-works and audiovisual content.

SIZE

Approximately 500sqm

TARGET AUDIENCE

Children (recommended 5+) and adults alike

HIRE PERIOD

4 months minimum



Above left: family using the dance interactive

Above right: adults enjoying an audio experience

Bottom left: visitor enjoy road trip music

Bottom right: visitors playing in the musical playground

Thank you for taking the time to
consider this exhibition
partnership opportunity.

Together, we can empower audiences
to understand the power of music.

For more information, please contact:

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