

ADAPTIVE MUSICAL INSTRUMENTS

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Musicians' Union



CONTENTS

Click section to jump to page

Introduction	3
How to buy a musical instrument	4
Batons	6
Brass instruments Brass accessories	7
Music technology Electronic instruments Software	12 13 20
Percussion	21
String instruments String accessories	23 25
Wind instruments Wind accessories	26 31
Additional support	33
Acknowledgements	35

INTRODUCTION

At Take it away, we believe that everyone should have the opportunity to make music. With the help of interest-free loans, we make it more affordable for people to learn and play music. Since the Take it away scheme launched in July 2007 we have helped more than 95,000 UK customers to purchase a musical instrument, yet barriers to music making persist. For disabled musicians who need adapted instruments, the problems can be particularly challenging.

We have therefore developed this guide to highlight products and adapted instruments that are sold as being accessible, as well as prototypes that have been designed for disabled musicians. The guide also contains a brief introduction of what to look for when buying a musical instrument, but please consult the MIA's guide on Buying a Musical Instrument for a more detailed overview of the main instrument categories.

The guide is not intended to be an exhaustive list, as we know that new products and prototypes are constantly being developed and launched. Also, many of the instruments listed are bespoke designs, tailored specifically to meet the needs of an individual, but we have included them to highlight that options are available. We have endeavored to include images and videos of disabled musicians using the instruments to show what is possible for other musicians who are new to learning or buying an instrument.

Throughout the guide we've indicated on each instrument whether they are commercially available, a prototype, or custom made, as well as including a rough price key ranging from £ to ££££ (£10s to £1,000s). These may change with time, so please do click through to individual sites for more information.

We'd also like to encourage experimentation and creativity! Lots of instruments have a perceived correct use, but there are many other ways that they can be played; a violin can be played like a cello and some instruments can be played with feet rather than hands.

We recognise that every person is different and that the instruments listed in this guide may not meet your needs now, or throughout your musical journey. We have therefore listed some organisations that may be able to provide you with a little extra guidance and financial support.

If you can't find the information that you need, or have any questions about this guide, please get in touch with us. We would love to hear from you.

Take it away @takeitawaymusic info@takeitaway.org.uk 020 7759 1111

HOW TO BUY A MUSICAL INSTRUMENT

There is so much choice out there that making the decision to buy an instrument can often feel like the easy part. Whether you choose to buy online or in person, the following tips and questions should help you to find the perfect instrument for you.

GET THE RIGHT INSTRUMENT FOR YOU

The best way to find the right instrument is to visit your nearest music shop and experiment by playing a range of instruments. Here are some things you should think about when choosing:

- What is your available budget?
- Does your music teacher recommend any brands or models for you to learn on?
- Is there a practice or demonstration room in the shop?
- Does the shop adapt standard instruments to meet your music-making needs?
- Does the shop sell products or adapted instruments that are sold as being accessible?

DON'T FORGET THE EXTRAS!

- Does the purchase include any extras, such as stools, cases, mutes, headphones, or leads?
- Does the music shop offer music lessons or can they recommend a music teacher?

THINK ABOUT AFTER-SALES CARE. INSURANCE AND WARRANTIES

- Do the instruments get checked over and set up before they are sold?
- Are spare parts readily available for the brand you choose?
- Does the shop offer a free check over service after six months?
- Does the shop have a repairer onsite or nearby if something goes wrong?
- What is the shop's repair turnaround time and can they loan you an instrument while yours is being repaired?

HOW TO BUY A MUSICAL INSTRUMENT

- Ensure the full details about your purchase, including serial number of the instrument and information about a free check over service, are included on your receipt.
- If buying an instrument from the internet, ensure that the guarantees / repairs / return policies are fully explained.
- Insure your instrument! This may need a specialist music insurer if your home policy does not cover instruments. <u>Making Music</u> and the <u>Incorporated Society of Musicians</u> run specialist insurance schemes for musicians that may suit your needs.

REMEMBER, THERE ARE DIFFERENT BUYING OPTIONS AVAILABLE

At Take it away, we offer interest-free loans on musical instruments, tuition, equipment and software, enabling you to borrow from as little as £100 up to £25,000 (subject to availability at participating music shops) and then pay the remaining balance back in equal monthly instalments. We work with music shops, music organisations, Arts Council England and Arts Council of Northern Ireland to break down the financial barriers and make learning and playing music more accessible and open to everyone.

The Assisted Instrument Purchase Scheme (AIPS) enables pupils of local authorities and academy schools to purchase musical instruments through their school, net of VAT, providing the sale to the pupil meets the eligibility criteria.

FIND A SHOP

You can search for your local Take it away music shop member here.

The Take it away scheme is available in over 130 shops across England and Northern Ireland. Most of the shops have online outlets too. If you have a local retailer who doesn't currently offer the Take it away scheme, please let us know and we can contact them.

BATONS

Batons are thin sticks that are used to conduct and convey musical direction by a conductor or leader of an ensemble. Here are a couple of adapted batons.

HAPTIC BATON

PROTOTYPE



IMAGE COURTESY OF HUMAN INSTRUMENTS

The baton captures the speed, angle, attack and sway of the conductor's hand in real time and beams it directly to all players wearing receiver bands. They feel the expression and timing of the conductor through vibrations on a wearable device.

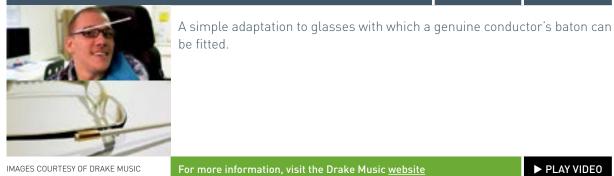
This is a conductor's baton that communicates to visually impaired players.

For more information, visit the Human Instruments website

► PLAY VIDEO

ROSE CONDUCTING BATON

CUSTOM MADE



IMAGES COURTESY OF DRAKE MUSIC

BRASS INSTRUMENTS

The sound of brass instruments is traditionally produced by musicians vibrating their lips against a metal, cup-shaped mouthpiece. The pitch and sound of the instrument is changed by pressing different valves and alternating the pressure on the mouthpiece. Adaptive brass instruments are available.

pBUZZ AVAILABLE ££



This is a new instrument to the 'brass' family. It has the same mouthpiece as the pBone with a simple straight body which slides in and out to create different notes.

Widely available. Search the Take it away website to find your local music shop

IMAGE COURTESY OF WARWICK MUSIC

For more information, visit the pBone website

► PLAY VIDEO

pCORNET AVAILABLE ££



Designed especially for smaller people, the pCornet is shorter, so can be held more easily, and being made from plastic is much lighter (less than half of the weight) than traditional brass cornets.

Widely available. Search the Take it away website to find your local music shop

For more information, visit the pBone website

BRASS INSTRUMENTS

pTRUMPET

AVAILABLE

££



The pTrumpet has fully plastic valves and adjustable tuning slides. It is less than half the weight of a brass trumpet, making it easier to hold and play compared to a traditional trumpet. The pTrumpet hyTech is also available which is a hybrid design and is still less than half the weight of a traditional trumpet.

Widely available. Search the Take it away website to find your local music shop

IMAGE COURTESY OF WARWICK MUSIC

For more information, visit the pBone website

► PLAY VIDEO

iTRUMP



The iTrump is an app that is modelled on the traditional trumpet and covers the trumpet's standard noted range. By downloading the app on your phone or iPad, you can blend notes, add vibrato, set the pitch, and raise or lower the bell to change the volume.

IMAGE COURTESY OF SPOONJACK

For more information, visit the <u>App Store</u>

► PLAY VIDEO

ONE-HANDED TRUMPET

PROTOTYPE

AVAILABLE

AVAILABLE



Developed by Dave Woodhead, the one-handed trumpet enables the valve slides to be operated via a foot pedal. It is fully adjustable for both right and left-handed players.

IMAGE COURTESY OF OHMI

For more information, visit the OHMI website

iBONE



The iBone is an app which mimics a traditional trombone and covers the standard two and a half octave range. By downloading the app on your phone or iPad, you can touch or blow to make a sound, slide your finger to change the pitch, and raise or lower the bell to change the volume.

IMAGE COURTESY OF SPOONJACK

For more information, visit the App Store

BRASS INSTRUMENTS

pBONE AND pBONE MINI

AVAILABLE

££+



The pBone is a lightweight, durable and cheaper alternative to the traditional brass trombone. It also comes in a smaller size and can therefore be easier to play than a traditional trombone.

Widely available. Search the Take it away <u>website</u> to find your local music shop

For more information, visit the pBone website

SYNTHBONE

PROTOTYPE



Created by Petter Ericson and Thomas Hardin, the Synthbone is an instrument prototype designed to enable someone without the use of one hand or arm to play an emulation of the trombone.

IMAGE COURTESY OF OHMI

For more information, visit the OHMI website

CHROMATIC TUBA MACHINE

PROTOTYPE

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Developed by Ryan Baer, the tuba is placed in the chromatic tuba machines and the valves are operated by foot (and knee) instead of by hand. All other aspects of playing the tuba remain the same.

IMAGE COURTESY OF OHMI

For more information, visit the OHMI website

BRASS ACCESSORIES

TRUMPET AND CORNET HOLDER

AVAILABLE

ff



Created by MERU, the trumpet stand supports the full weight of the instrument, enabling a musician who does not have the use of one hand to turn the pages of sheet music. It can also reduce the likelihood of being overstrained when holding the trumpet for a long time.

IMAGE COURTESY OF MERU

For more information, visit the MERU website

► PLAY VIDEO

RATH TROMBONE HAND SUPPORT

AVAILABLE

£££



IMAGE COURTESY OF RATH TROMBONES

The Rath Trombone Hand Support attaches to the main bell stay of the instrument and can help to reduce tension placed on the fingers, hand, arm and shoulder. When fully adjusted, the hand support can take the full weight of the instrument.

For more information, visit the Rath Trombones website

TROMBONE HARNESS

PROTOTYPE

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IMAGE COURTESY OF OHMI

Developed by Michael Rath, this harness supports the weight of the trombone when in a standard playing position. Parts of the harness wrap around the body and over the left shoulder. An arm and handle attachment is then clipped to the instrument, and a curved metal base handle rests on the leg.

For more information, visit the OHMI $\underline{website}$ or contact $\underline{Rath\ Trombones}$

TROMBONE STAND

AVAILABLE

££



Created by MERU, the trombone stand was designed to be easy to construct and transport. It is lightweight and fully adjustable to allow for standing or seated playing.

IMAGE COURTESY OF MERU

For more information, visit the MERU $\underline{website}$

BRASS ACCESSORIES

TROMBONE MOUNT

PROTOTYPE



Created by Thomas Tschirren, the Trombone Mount is moulded to the musician's body and fully supports the instrument.

IMAGE COURTESY OF OHMI

For more information, visit the OHMI website

► PLAY VIDEO

SILENT BRASS

AVAILABLE

££+



This electronic mute fits into the bell of the brass instrument and connects to headphones to allow the players to hear at the volume level that suits them. It can also be connected to smartphones and more to record your playing.

Slings and straps can offer more comfort whilst playing by reducing the weight of the instrument. Some sit on your neck and others can go across

Widely available. Search the Take it away website to find your local music shop

IMAGE COURTESY OF YAMAHA

For more information, visit the Yamaha website

► PLAY VIDEO

SLINGS AND STRAPS

AVAILABLE

£



IMAGE COURTESY OF NEOTECH

Widely available. Search the Take it away <u>website</u> to find your local music shop

your body. They can also be adjusted to fit all sizes.

MUSIC TECHNOLOGY

There is a broad and varied range of electronic instruments currently available on the market, some of which have been designed specifically to be accessible for people of all ages and abilities. These instruments use a combination of hardware and software to trigger sounds and enable fluid musical dynamics and expression by the user.

We have listed some of these electronic instruments below and provided details of where you can buy them or find out more. Don't forget that there is a wide variety of music-making software (some free, some lite versions) and free music education apps to help you learn and practice your instrument of choice.

The electronic instruments in our guide work with some of the following software options:

- Ableton
- Audacity
- Cubase
- Dorico
- GarageBand
- Logic Pro
- ProTools
- Reason
- Sibelius

MIDI Controller definition: MIDI is an acronym for Musical Instrument Digital Interface. A MIDI controller is hardware or software that generates and transmits MIDI data to trigger sounds and control elements of an electronic music performance. The most popular and common MIDI controller is the electronic musical keyboard. When the keys are pressed, the MIDI controller sends MIDI data such as the pitch of the note and its duration which is then heard through a speaker.



AVAILABLE

PROTOTYPE

fff



IMAGE COURTESY OF ABLETON PUSH

instrument or drum machine with the aid of Ableton music software on your computer. At the push of button, you can produce melodies, harmonies

Ableton Push is guite a large, tactile device that can be played as a musical

and beats.

For more information, visit the Ableton Push website

► PLAY VIDEO

AIRHARP



The AirHarp is a digital harp that is played by pressing pushbuttons and strumming invisible harp strings in the air that trigger a sensor in order to play notes.

IMAGE COURTESY OF DRAKE MUSIC

For more information, visit the Drake Music website

ARCANA

PRE-ORDER

£££



IMAGE COURTESY OF ARCANA INSTRUMENTS

This digital instrument can sit in the users lap and is based on a guitar playing technique with tunes, chords, riffs and scales. It has three playable areas; an adjustable keypad, a middle section of buttons to adjust the sound you make and a lever to play the six position guitar notes.

The Artiphon Instrument 1 is a MIDI guitar-style controller that can be

For more information, visit the Arcana Instruments website

► PLAY VIDEO

ARTIPHON INSTRUMENT 1

AVAILABLE

£££

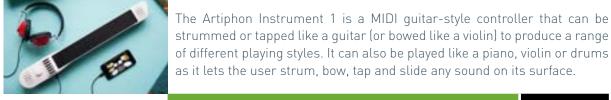


IMAGE COURTESY OF ARTIPHON

For more information, visit the Artiphon website

► PLAY VIDEO

AUDIOCUBES (PERCUSSA)

AVAILABLE

fff



AudioCubes are small, light emitting cubes that act as MIDI controllers. They are operated as sensory controllers, enabling the musician to manipulate sounds by moving their hands or other objects around each side of the cube.

IMAGE COURTESY OF PERCUSSA

For more information, visit the Percussa website

► PLAY VIDEO

BEAMZ

AVAILABLE

£££



Beamz is a gestural controller in which the musician triggers preprogrammed sounds by moving their hands across four laser beams. The Beamz also has pre-loaded songs from a wide variety of genres that can be played along to.

IMAGE COURTESY OF BEAM7

For more information, visit the Beamz website

CLARION

PROTOTYPE

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IMAGE COURTESY OF OPEN UP MUSIC

be played expressively with any part of the body including the eyes. Musical notes are represented by colourful shapes, which can be arranged in a variety of patterns and customized to suit a musician's needs. The Clarion also comes with an ever-growing library of high-quality instrument sounds to choose from.

The Clarion is an accessible instrument available on iPad and PC. Working seamlessly with assistive technology such as EyeGaze and SmartNav, it can

For more information, visit the Open Up Music website

► PLAY VIDEO

CONTROL ONE (BY DIGIT)

PROTOTYPE

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IMAGE COURTESY OF DIGIT MUSIC

Control One is an adaptation of a regular wheelchair controller. The small movements of the joystick and buttons can be programmed using Ableton software to play different instrument sounds. Bespoke audio sessions enable users to perform and interact with complex musical phrases. Multiple devices can be programmed to play different instrument sounds and used in unison to create ensemble performances.

For more information, visit the Digit Music website

► PLAY VIDEO

HI NOTE



IMAGE COURTESY OF HUMAN INSTRUMENTS

PROTOTYPE

Hi Note is developed with a 9-dimensional wireless motion sensor developed by Music Bricks and IRCAM called the Riot sensor. The Hi Note headset enables the player to select and play musical notes with featherlight breath pressure as well the ability to control any computer. Using breath pressure, head position and in the future other mouth controls, the device will allow the player to perform and compose all kinds of music.

For more information, visit the Human Instruments website

JAMBOXX AVAILABLE £££



The Jamboxx is a hands-free, breath-activated MIDI controller that can simulate several different types of instruments. The instrument can be adapted for different ranges of breath capacity, as well as for different ranges of head motion.

Unlike the simple on/off switches of a standard MIDI keyboard, The LinnStrument's notepads sense each finger subtle movements in five ways, allowing you to slide in pitch directly from one note to another, tilt your finger forward/backward for subtle timbral variation, or vary note loudness

with pressure or velocity, all sensitive to very light touches.

IMAGE COURTESY OF JAMBOXX

For more information, visit the Jamboxx website

► PLAY VIDEO

LINNSTRUMENT

AVAILABLE

AVAILABLE

AVAILABLE

£££



IMAGE COURTESY OF ROGER LINN

For more information, visit the Roger Linn website

► PLAY VIDEO

£

iBONE



The iBone is an app which mimics a traditional trombone and covers the standard two and a half octave range. By downloading the app on your phone or iPad, you can touch or blow to make a sound, slide your finger to change the pitch, and raise or lower the bell to change the volume.

IMAGE COURTESY OF SPOONJACK

For more information, visit the <u>App Store</u>

iTRUMP



The iTrump is an app that is modelled on the traditional trumpet and covers the trumpet's standard noted range. By downloading the app on your phone or iPad, you can blend notes, add vibrato, set the pitch, and raise or lower the bell to change the volume.

IMAGE COURTESY OF SPOONJACK

For more information, visit the <u>App Store</u>

MAGIC FLUTE

PROTOTYPE

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IMAGE COURTESY OF MY MUSIC MY BREATH

The Magic Flute is an electronic wind instrument which was conceived to be played without the use of the hands. Since the sound of the instrument is produced electronically and played through amplified speakers, it is a also a good instrument for people with pulmonary dysfunction.

The Mi.Mu musical data gloves were developed and built by Imogen Heap and a small team of musicians, engineers and artists. The gloves combine sensor technology and mapping software which enables users to make music though their own body movements. There's also a build your own

The MotionComposer uses stereo-vision technology; with two cameras, the MotionComposer can identify the human form, as we do with our two eyes. Expressive gestures, shapes and movements are then interpreted by motion

For more information, visit the My Breath My Music website

► PLAY VIDEO

MI.MU GLOVES

AVAILABLE

££££



IMAGE COURTESY OF Mi.Mu GLOVES LTD

For more information, visit the Mi.Mu website

version available here.

► PLAY VIDEO

MOTION COMPOSER

AVAILABLE

££££



IMAGE COURTESY OF MOTIONCOMPOSER

For more information, visit the MotionComposer website

tracking software and converted into musical sounds.

► PLAY VIDEO

ORBA (BY ARTIPHON)

PRE-ORDER

££



IMAGE COURTESY OF ARTIPHON

Orba is a synth, looper and controller that lets the user create music with intuitive gestures like tapping, sliding and waving. It has an onboard synthesizer and built-in speakers which means you can have an immediate playing experience. Users can also use MIDI over Bluetooth or USB to plug into other software. It's small, light and fits in to the palm of your hand.

For more information, visit the Artiphon website

P-BROCK DIGITAL BAGPIPE CHANTER

PROTOTYPE

AVAILABLE

AVAILABLE



Developed by Duncan Menzies at Queen Mary University of London, this is an electronic chanter that uses a custom fingering algorithm, enabling it to be played one-handed.

IMAGE COURTESY OF OHMI

For more information, visit the OHMI website

► PLAY VIDEO

£££

SKOOG



The Skoog is a small, tactile musical interface that enables expressive control of sound by pushing and touching each side of the cube. You will need to download the Skoogmusic app on iPad, iPhone, or other iOS devices to get started.

IMAGE COURTESY OF SKOOG

For more information, visit the Skoog website

► PLAY VIDEO

££

SKWITCH



The Skwitch is a compact device that clips straight on to your iPhone, giving you access to a piece of accessible music technology in minutes.

The one-button musical instrument is responsive, expressive and versatile. Just press the button to play notes. Like the Skoog, you will also need to download the Skoogmusic app to get started.

IMAGE COURTESY OF SKOOG

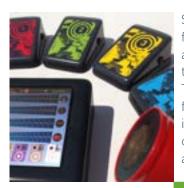
For more information, visit the Skoog website

► PLAY VIDEO

SOUNDBEAM

AVAILABLE

££



Soundbeam (originally invented in the late 1980s for dancers) is a touch-free device that translates large or small body movements into music and sound using sensor technology, additional wireless switches enable the playing of backing tracks, loops, sound effects, chords, notes or film. The controller comes with a pre-loaded library of 'soundsets' (reggae, flamenco, classical, dubstep, familiar songs etc), these are composed of instruments, backing tracks, sound effects, films, rhythm loops etc which can be reprogrammed and customised along with original compositions. It also has on-board recording functions.

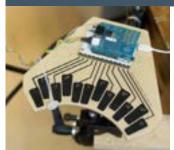
IMAGE COURTESY OF SOUNDBEAM

For more information, visit the Soundbeam website

TOUCH CHORD

PROTOTYPE

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Touch Chord is a touch sensitive breath controlled instrument. This is the first breath powered accessible instrument that allows the player the ability to play notes and chords over three octaves with only two fingers. The unique layout and design means the player does not need previous musical training to play and write complex chord sequences or melodies. The 'keys' on the touch board are created with electronic paint so could be adapted to suit individual needs.

IMAGE COURTESY OF HUMAN INSTRUMENTS

For more information, visit the Human Instruments website

SOFTWARE

Here are three additional pieces of free software that have been developed specifically to use movement as a way of making music. They are free at point of purchase but some do need additional items such as webcams, microphones, eye-tracking devices or motion sensors.

WEKINATOR AVAILABLE FREE

The Wekinator is free, open source software originally created by Rebecca Fiebrink. It allows anyone to use machine learning to build new musical instruments, gestural game controllers, computer vision or computer listening systems, and more. The Wekinator allows users to build new interactive systems by demonstrating human actions and computer responses using a webcam instead of writing programming code. Anything that can output OSC (Open Sound Control) can be controlled by Wekinator.

For more information, visit the Wekinator <u>website</u>

► PLAY VIDEO

EYEHARP AVAILABLE FREE

The EyeHarp is a gaze-controlled or head-controlled digital musical instrument. With eye tracking software, users are able to trigger different sounds with their gaze.

For more information, visit the EyeHarp website

► PLAY VIDEO

SOUND CONTROL AVAILABLE FREE

Sound Control is a piece of software that can be used to create new musical instruments and sounds using different movements. These movements are sensed with a variety of off-the-shelf devices (such as a webcam, mouse, microphone, etc.). Sound Control uses machine learning to enable users to create new musical instruments by demonstrating examples of motions and sounds, which means no programming or musical expertise is necessary. These new instruments can be used to play and manipulate musical material; either new material recorded by users or taken from third-party sample libraries.

For more information, visit the Sound Control website

PERCUSSION

Percussion instruments include any instrument that makes a sound when it is hit, shaken, or scraped. Some percussion instruments are tuned and can sound different notes, whereas others are untuned and have no definite pitch. There is such a breadth of percussion instruments available that they can be a very accessible, fun way to create rhythms and enable musical expression.

PERCUSSION AND SAMPLE PADS

AVAILABLE

££+



that can play various drum sounds and samples. They feature a variety of interactive controls and can be pre-programmed to include sounds that would typically be played using the feet, such as the bass drum or stomp box. The pads can be played with the hands or sticks and can be added to both electronic and acoustic drum kits. Entire drum kits can also be made out of them

Percussion and Sample Pads are portable, flexible percussion devices

IMAGE COURTESY OF ALESIS

Widely available. Search the Take it away website to find your local music shop

► PLAY VIDEO

TABLE-TOP ELECTRONIC DRUM KIT

AVAILABLE

£££+



IMAGE COURTESY OF GEAR4MUSIC

Table-top electronic drum kits are multi-pads that look like a mini drum kit from an overhead view. They usually come with internal speakers and have pedals that can be operated by hand or foot. The main advantage of the table-top drum kit is that they are easy to move around and don't take up too much space.

Widely available. Search the Take it away <u>website</u> to find your local music shop

PERCUSSION

JASON GERLING DRUM KIT

PROTOTYPE



IMAGE COURTESY OF JASON GERLING

Unlike the traditional drum kit which requires a foot pedal to operate the bass drum and hi-hat cymbal, the Jason Gerling Drumkit uses tiny rubber sensors and a mouthpiece to trigger the bass drum.

For more information, visit the Wheelchair Drummer $\underline{\text{website}}$

STRING INSTRUMENTS

String instruments are most often played by drawing a bow across them, or by plucking the strings. In addition to adaptive string instruments, there are other ways string instruments can be played to make them more accessible. Check out Tom Doughty's lap guitar technique or Gaelynn Lea's technique for playing the violin, for some ideas.

AIRHARP

PROTOTYPE



The AirHarp is a digital harp that is played by pressing pushbuttons and strumming invisible harp strings in the air that trigger a sensor in order to play notes.

IMAGE COURTESY OF DRAKE MUSIC

For more information, visit the Drake Music website

► PLAY VIDEO

ARTIPHON INSTRUMENT 1

AVAILABLE

£££



The Artiphon Instrument 1 is a MIDI guitar-style controller that can be strummed or tapped like a guitar (or bowed like a violin) to produce a range of different playing styles. It can also be played like a piano, violin or drums as it lets the user strum, bow, tap and slide any sound on its surface.

IMAGE COURTESY OF ARTIPHON

For more information, visit the Artiphon website

► PLAY VIDEO

CHAPMAN STICK

AVAILABLE

£££



IMAGE COURTESY OF STICK ENTERPRISES

The Chapman Stick can be played solely by tapping or fretting the strings. This enables one-handed note selection and actuation of the strings.

For more information, visit the Chapman Stick website

For more information, visit the OHMI website

STRING INSTRUMENTS

LAP GUITAR

AVAILABLE

£+



The lap guitar is played by placing a standard guitar in a horizontal position on the musician's lap, or otherwise supported. The pitch is then changed by pressing a slide (a metal or glass tube) against the strings, as opposed to using fingers to select the notes. A standard guitar and slide can be used for this.

The Kellycaster guitar was developed for disabled musician, John Kelly. The Kellycaster has an adapted body shape with a short neck, enabling John to strum the strings of the guitar in the traditional way whilst selecting chords

Widely available. Search the Take it away website to find your local music shop

IMAGE COURTESY OF TOM DOUGHTY For more information, visit YouTube ► PLAY VIDEO

KELLYCASTER GUITAR

PROTOTYPE



IMAGE COURTESY OF EMILE HOLBA/DRAKE

using a keyboard with his left hand. For more information, visit the Drake Music <u>website</u>

► PLAY VIDEO

ONE-HANDED BASS GUITAR

PROTOTYPE



Developed by Jacob Harrison, the one-handed bass guitar uses a mechanical device to fret the strings.

IMAGE COURTESY OF OHMI

For more information, visit the OHMI website

STRING ACCESSORIES

BOW HOLDER

PROTOTYPE

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IMAGE COURTESY OF MAY WE HELP

Developed by May We Help, these bow holders are custom made for musicians who do not have fingers, hands or arms.

For more information, visit the May We Help website

CELLO STAND

PROTOTYPE

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IMAGE COURTESY OF MAY WE HELP

that uses rods and fittings to hold the cello at a correct height for the musician when seated. This enables the musician to play the cello with their feet.

Also developed by May We Help, the Cello Stand is a slightly raised platform

For more information, visit the May We Help website

GUITAR STRAPS

AVAILABLE

f+



IMAGE COURTESY OF SLIGER STRAPS

Guitar straps come in a variety of materials, lengths and styles. They are an invaluable accessory for any guitar player, enabling you to position your guitar at a comfortable height whilst playing. There are also ergonomic options available which distribute the weight of your instrument in a different way on your body e.g. the hip guitar strap (pictured).

Widely available. Search the Take it away <u>website</u> to find your local music shop

Wind instruments generally consist of narrow wooden or metal cylinders or pipes that have holes, an opening at the bottom end and a mouthpiece at the top. Holes along the cylinders can be covered by fingers or metal caps called keys which, when opened and closed, change the pitch of the sound coming out. Wind instruments are typically played by blowing air through the mouthpiece. This is either directly into the instrument, such as recorders and whistles, across the hole, like flutes and piccolos, or through a reed. Reeds are small pieces of material (traditionally cane) that vibrate against each other or the mouthpiece when blown across. Reed instruments include oboes, clarinets, bassoons, saxophones etc. Adaptive options are available.

ONE-HANDED RECORDER

CUSTOM MADE

££ to £££



Developed by Peter Worrell, the one-handed recorder uses unique and additional keywork which gives the player access to notes that the second hand would normally play. It is available in left-handed and right-handed models.

IMAGE COURTESY OF PETER WORRELL

For more information, visit the Peter Worrell website

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ONE-HANDED 3D PRINTED RECORDER

PROTOTYPE



Developed by Paul Yeomans at Birmingham City University, the 3D printed one-handed recorder was developed to produce an entry level instrument at an affordable price. Extra keywork enables full range of the recorder with just one hand.

IMAGE COURTESY OF OHMI

For more information, visit the OHMI website

ONE-HANDED RECORDER DOLMETSCH GOLD SERIES

CUSTOM MADE

£££



The Gold Series of recorder is available in left-handed and right-handed models. Levers in between each hole on the lower half of the recorder control the keys on the top half, enabling performance over the full range of the recorder.

IMAGE COURTESY OF AAFAB

For more information, visit the Aafab website

► PLAY VIDEO

RECORDER - DESCANT AND TREBLE

AVAILABLE

££



These recorders have been designed for players who have finger disabilities or missing digits. Some of the finger holes are adjustable, so players can rotate the finger holes to the position where they can play recorder comfortably. A person with any six usable fingers can play an entire chromatic scale from c" to a". If seven fingers are available in any combination, the range is extended by three semitones.

Developed by Maarten Visser, the Swan Neck Headjoint allows for a more relaxed posture when playing. The Vertical Headjoint transforms the flute into a vertical instrument played like an oboe/clarinet. They both come with additional hand supports to allow the player to support the body of the flute

IMAGE COURTESY OF AULOS

For more information, visit the Aulos website

ERGONOMIC FLUTES

CUSTOM MADE

££££



whilst playing.

For more information, visit the Flute Lab website

► PLAY VIDEO

jFLUTE AND TOOT

AVAILABLE

££ to £££



The jFlute by NUVO weighs just over half the weight of a traditional flute. It's made from plastic with silicone key caps making it very durable and even washable. The Toot is a smaller version in between a recorder and flute size. They both come with a 'Firstnote Lip Plate' which need less embouchure control to blow across the hole to play these instruments.

Widely available. Search the Take it away website to find your local music shop

Visit the NUVO website for more information on the <u>iFlute</u> and <u>Toot</u>

ONE-HANDED FLUTE

CUSTOM MADE

££££



Also developed by Maarten Visser, the one-handed flute is available in right-handed and left-handed versions. Additionally, the D# key closes when the D key is pressed, eliminating the need to keep the D# key pressed all the time when playing.

IMAGE COURTESY OF OHMI

For more information, visit the Flute Lab website

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CLARINÉO AND DOOD

AVAILABLE

££ to £££



The Clarinéo and Dood by NUVO both sound like a clarinet and similarly to the rest of the NUVO instruments, have silicone keys to help small fingers. The Clarinéo also has shorter finger stretches, smaller tone holes and an adjustable thumb rest. The Clarinéo weighs 250g making it over 2.5 times lighter than a traditional clarinet. The Dood uses standard recorder fingering and both have easy-action ligature on the mouth pieces.

Widely available. Search the Take it away website to find your local music shop

IMAGE COURTESY OF NUVO Visit the NUVO website for more information on the <u>Clarinéo</u> and <u>Dood</u>

► PLAY VIDEO

ONE-HANDED CLARINET

CUSTOM MADE

££££



Developed by Peter Worrell, the one-handed clarinet is a fully chromatic instrument that can be played one-handed. The key work is designed so that it can be mirrored for right-handed and left-handed playing.

IMAGE COURTESY OF PETER WORRELL

For more information, visit the Peter Worrell website

► PLAY VIDEO

COR ANGLAIS - SMALL HANDS

AVAILABLE

££££



Howarth of London developed a 'student' Cor Anglais which is relatively light in weight and has covered keys, making it easier to play. Its design of key mechanism, specifically helps players to hold the instrument comfortably and enables easier playing.

IMAGE COURTESY HOWARTH OF LONDON

For more information, visit the Howarth of London website

BASSOON - MINI-BASSOON PLUS+

AVAILABLE

££££



Created by Howarth of London, the Mini-Bassoon PLUS+ is a smaller version of the standard bassoon, with almost identical key work which means it's easier for smaller hands. It also weighs just under a third of a full-size Howarth Bassoon at 1.05kg. Howarth of London also have the Tenoroon which is bigger than the mini but still smaller than the full size as well as a few other children's bassoons which have easier to reach keys and are generally lighter. Get in touch to discuss the different options.

IMAGE COURTESY HOWARTH OF LONDON

For more information, visit the Howarth of London website

AEROPHONE AVAILABLE £££



The Aerophone is a lightweight digital wind instrument that supports traditional saxophone fingering, but is also pre-loaded with lots of other instrument sounds such a clarinet, flute, violin and drums. Settings allow the player to adjust the breath sensitivity which makes this a wind instrument suitable for those who have less control over breath pressure.

Widely available. Search the Take it away website to find your local music shop

IMAGE COURTESY OF ROLAND

For more information, visit the Roland website

► PLAY VIDEO

CLOVERLEAF SAXOPHONE

PROTOTYPE

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action' on the upper keys to keep the holes closed when at rest, enabling one-handed playing. Tenor and Soprano Saxophones are available.

Developed by Maarten Visser, the Cloverleaf Saxophone uses 'reverse

IMAGE COURTESY OF OHMI

For more information, visit the OHMI website or contact Flute Lab

SAXOPHONE INTERFACE

PROTOTYPE

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Developed by Simon Moxon, the Saxophone Interface enables the keys normally played by the right hand to be operated using micro-switches located on, or around, the left-hand keys.

IMAGE COURTESY OF OHMI

For more information, visit the OHMI $\underline{website}$

TOGGLE KEY SAXOPHONE

PROTOTYPE



IMAGE COURTESY OF OHMI

For more information, visit the OHMI website

► PLAY VIDEO

BLAIR DIGITAL CHANTER

AVAILABLE

£££



This electronic chanter has individually adjustable finger sensors which are embedded into the body of the chanter and can be adjusted to the way you play. Unlike the traditional chanter, it can be played without breath control.

Developed by Jeff Stelling, the Toggle Key Saxophone uses a unique mechanism which enables one index, middle, or ring finger to perform the

functions normally done by the same fingers on both hands.

IMAGE COURTESY OF BLAIR BAGPIPES

For more information, visit the Blair Bagpipes website

► PLAY VIDEO

P-BROCK DIGITAL BAGPIPE CHANTER

PROTOTYPE



Developed by Duncan Menzies at Queen Mary University of London, this is an electronic chanter that uses a custom fingering algorithm, enabling it to be played one-handed.

IMAGE COURTESY OF OHMI

For more information, visit the OHMI website

WIND ACCESSORIES

FLUTE MOUNT

PROTOTYPE



IMAGE COURTESY OF OHMI

Developed by John Lunn, the Flute Mount device fully supports the weight of the flute, even when both hands are removed.

For more information, visit the OHMI website or contact John Lunn

► PLAY VIDEO

CLARITIE

AVAILABLE

££



IMAGE COURTESY OF WOODWIND & REED

Developed by Daniel Bangham at the Cambridge Woodwind Makers Workshop, the Claritie is a device which relieves the weight on the thumb for instruments such as the clarinet, oboe and larger recorders. It may help musicians with double joints, strain injuries or who only have the use of one hand by taking the weight of the instrument and providing stability.

For more information, visit the Woodwind and Reed website

SIMPLEFIT MOUTHPIECE FOR CLARINET

AVAILABLE

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IMAGE COURTESY OF HOWARTH OF LONDON

This mouthpiece for a Bb Clarinet was created by Howarth of London and is designed to be a simple one-piece unit with a channel to hold the reed in the correct place and is secured with a simple fastening.

For more information, visit the Howarth of London website

THUMB/FINGER REST AND CUSHIONS

AVAILABLE

££



Thumb and finger rests or cushions help to better position the weight of a flute, oboe or clarinet, preventing fatigue of the thumb/finger and hand. The height of some thumb rests can also be adjusted. Pictured is the Thumbport for Flutes which are widely available and come in lots of different colours.

Widely available. Search the Take it away $\underline{\text{website}}$ to find your local music shop

IMAGE COURTESY OF THUMBPORT For more information, visit the Thumbport website

WIND ACCESSORIES

KEYS CUSTOM MADE ££



Most woodwind instruments have metal keys. These can very often be adapted by extending or remoulding them. Many music shops have in house workshops with (or know of) technicians who can be consulted on what adjustments might be able to be made to instrument keys to make them more suited to you.

Widely available. Search the Take it away <u>website</u> to find your local music shop

IMAGE COURTESY OF SOPHIE OGUNYEMI For

For more information, visit the Brannen Flutes website

SLINGS AND STRAPS

AVAILABLE

£



IMAGE COURTESY OF NEOTECH

Slings and straps can offer more comfort whilst playing by reducing the weight of the instrument. Some sit on your neck and others can go across your body. They can also be adjusted to fit all sizes.

Widely available. Search the Take it away <u>website</u> to find your local music shop

ADDITIONAL SUPPORT

Whilst Take it away aims to make music more open to everyone with the help of interest-free finance, we recognise that sometimes a little extra financial support and advice may be required to help you or your child progress in your musical journey. The following organisations may be able to help:

• Awards for Young Musicians – a-y-m.org.uk

This organisation supports talented young people from low-income families by helping them to overcome financial and social barriers in music-making. They provide funding for instruments, lessons and transport.

• Drake Music - drakemusic.org

A UK charity pioneering the use of assistive music technology to create opportunities and instruments that make music fully accessible.

• Future Talent – futuretalent.org

The Young Musicians Development Programme provides bespoke development opportunities, guidance, mentoring and financial assistance for music lessons and courses.

• Help Musicians UK – helpmusicians.org.uk

This charity delivers various schemes which provide funding opportunities for musicians.

• Human Instruments - humaninstruments.co.uk

An organisation that researches, designs and develops high quality musical instruments for disabled people.

• Joy of Sound – joyofsound.org

This charity uses inclusively designed and made instruments to help people who might otherwise be excluded from the creative arts to make music.

Music for All – musicforall.org.uk

A charity providing advice and financial assistance to individuals who want to make music, including advice on how to buy a suitable musical instrument and how to find a music teacher

ADDITIONAL SUPPORT

• Music for Youth – mfy.org.uk

A national youth arts charity working to provide young people aged 21 and under across the UK with free, life-changing performance and progression opportunities, regardless of background or musical style.

• Meru – meru.org.uk

Meru designs and manufactures unique, assistive products for disabled people.

• Open Up Music – openupmusic.org

A UK charity that aims to make orchestras accessible to young disabled people.

• The OHMI Trust – ohmi.org.uk

A UK charity pioneering the development and adaptation of musical instruments for physically disabled people.

The Wrightson Trust – wrightsontrust.co.uk

This trust provides financial assistance for lessons, performances and music college fees for those aged from 11–18.

Universal Music UK Sound Foundation – emimusicsoundfoundation.com

This foundation provides financial assistance towards the purchase of musical instruments and equipment.

• Youth Music – youthmusic.org.uk

A national charity leading music-making projects that help children and young people up to the age of 25 to develop personally, socially and musically.

• Snowdon Award Trust - snowdontrust.org

A trust providing grants to physically disabled and sensory impaired students who are currently studying in the UK (further or higher education) or training towards employment.

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- Tim Yates of Drake Music (Take it away Consortium steering group member)
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- Take it away Music Retailers

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- Musicians' Union
- Norman's Musical Instruments
- Arts Council England
- Arts Council of Northern Ireland

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TAKE IT AWAY CONSORTIUM

<u>Creative United, Drake Music, Music for Youth, The OHMI Trust, Open Up Music</u> and <u>Youth Music</u> came together in 2018 to form the '<u>Take it away Consortium</u>'. Working together, the key objectives of the Consortium are to:

- Improve our collective understanding of the potential demand for adapted and specialist musical instruments for use by aspiring and professional musicians of all kinds and in particular disabled children and adults across the UK
- Enable existing prototype adaptations to be taken further into small-scale batch production for wider distribution and use
- Enable the development of bespoke new accessible musical instruments to meet the needs of an individual, and the documentation and sharing of designs in the open source model
- Explore ways in which we can develop and train a workforce that has the knowledge and skills to introduce and demonstrate adaptive instruments located in 'centres of music retail excellence' around the UK
- **Provide financial assistance to families and individuals** that need access to these types of instruments by providing a combination of grants and loans to ensure equality of access for all
- Raise the profile of music making by disabled children and adults, increasing awareness of the opportunities and sources of support available to enable more people to access music.

This guide to buying adaptive musical instruments is a key output of the work of the Consortium, and an important first step towards addressing some of these objectives. We look forward to continuing to work together as a Consortium in the year ahead to ensure that access to music making is as inclusive and accessible as possible for everyone.



Music enriches lives, bringing people and communities together.

Take it away is a Creative United initiative that gives music-makers the backing they need. With interest-free loans for musical instruments, equipment, software and tuition, we help to support musicians at every level.

info@takeitaway.org.uk takeitaway.org.uk 020 7759 1111

- **y** @takeitawaymusic
- f @takeitawayscheme



Creative United is an independent Community Interest Company that provides finance-based products and services designed to deliver economic growth and social impact within the arts, creative and cultural sectors.

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TAKE IT AWAY CONSORTIUM PARTNERS















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