



B BEAT PRO16



USER MANUAL





Precautions for use and safety



Before using the equipment, read this manual carefully

SAFETY PRECAUTIONS

In this manual, symbols are used to emphasise warnings to be observed in order to avoid accidents.

The meaning of the symbols is as follows:



Something that can cause damage or damage the device.

OTHER SYMBOLS



Actions required



Prohibited actions

OPERATIONAL WITH EXTERNAL AC/DC POWER SUPPLY.



Connect the apparatus to the power supply and use the apparatus only with the external power supply unit supplied by the manufacturer with the apparatus.

In the event of damage, contact the technical service department and replace only with a power supply unit identical to the one supplied with the B.Beat PR016



Do not use beyond the range of the system and other electrical equipment. Before connecting the external power supply unit to the power supply network, check the power supply unit's

compliance with the technical characteristics of the power supply network.

MODIFICATIONS



Do not open the unit or attempt to modify the product.

MANAGEMENT



Do not drop or tip the unit and do not exert excessive force.



Take care not to allow foreign objects or liquids to enter the unit.



The appliance may be used by children of at least 8 years of age and by persons with reduced physical, sensory or mental capabilities, or lack of experience or the necessary knowledge, provided that they are supervised or have received instructions concerning the safe use of the appliance and understanding of the dangers involved.



Children must not play with the device. Cleaning and maintenance intended to be carried out by the user must not be done by unsupervised children.



Do not use near or in environments subject to danger of explosion.



Do not use in excessively humid places, or in the presence of rain or jets of water. Do not immerse the device in

Precautions for use and safety



liquid materials.



The apparatus must be placed on stable and solid surfaces, at a minimum distance of 15 cm from the edge of the surface to avoid accidental falls.



The equipment must not be used when closed inside boxes or containers of any kind. The support feet must not be detached from the bottom of the apparatus. Do not use the device on surfaces that are not rigid or flat.



Leave the ventilation grille at the bottom free.

ENVIRONMENT



Do not use the unit in extreme temperatures (high or low).



Do not use near heat sources, such as radiators and stoves.



Do not use in excessively humid places or in water.



Do not use in places with excessive vibration.



Do not use in places with excessive dust or sand.

MANAGING AN EXTERNAL AC/DC POWER SUPPLY UNIT



When disconnecting the AC-adaptor from the system, always grasp the body of the AC-adaptor. In the event of a thunderstorm, or if the unit is not used for a long period, unplug from the AC socket.



Only connect the power supply unit to power supply sockets that are easily accessible to the user.

CONNECT CABLES AND INPUT/OUTPUT JACKS



Always switch off all equipment before connecting cables.



Always unplug all connection cables and the AC adapter before moving the unit.



Only connect the device to instruments that comply with the safety requirements of the applicable harmonised technical product standards. Connect the connecting cables to the auxiliary accessories in such a way that they do not present a danger of pulling downwards due to possible unintentional shocks, in order to eliminate the risk of the device falling.



Precautions for use and safety

PRECAUTIONS FOR USE INTERFERENCE WITH OTHER ELECTRICAL EQUIPMENT

B.Beat PR016 equipment complies with the essential requirements of Annex I of Directive 2014/35/EU (Electromagnetic Compatibility Directive). In particular, the equipment has been designed and manufactured with technological progress in mind, so that:

- a) the electromagnetic disturbance produced does not exceed the level above which radio and telecommunications equipment or other equipment cannot function normally;
- b) they have a level of immunity to foreseeable electromagnetic disturbance in accordance with their intended use that allows normal operation without unacceptable degradation.

However, equipment susceptible to interference or emitting powerful electromagnetic waves could cause interference if placed nearby. If this is the case, place the other appliance away from each other. With any type of digitally controlled electronic equipment, including, electromagnetic interference, it can cause malfunctioning, damage and destroy data, and create problems. Be careful

CLEANING

Use a soft, dry cloth to clean the unit. If necessary, moisten the cloth slightly. Do not use abrasive cleaners, waxes or solvents, including alcohol, benzene and paint solvents.

MALFUNCTIONS

If the unit breaks down or does not work, unplug the AC adapter immediately, switch off the unit and disconnect the other cables. Contact the distributor from whom you purchased the unit or a B.Beat PR016 service centre with the following information: product model, serial number and detailed symptoms of error or malfunction, together with your name, address and telephone number.

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Precautions for use and safety

DISPOSAL

INFORMATION FO USERS pursuant to Italian Legislative Decree no. 49 of 14 MARCH 2014 "Implementation of Directive 2012/19/EU on waste electrical and electronic equipment (WEEE)"

The crossed-out wheelie bin symbol on the equipment or on its packaging indicates that the product at the end of its service life must be collected separately from other waste.

The separate collection of this end-of-life equipment is organised and managed by the manufacturer. Users who wish to discard this equipment should therefore contact the manufacturer and follow the system the manufacturer has adopted to enable separate collection of end-of-life equipment.






Data Sheet B.Beat PR016

Internal Audio File Format	PCM (uncompressed) 48 kHz 24 bit
Compatible Audio Formats during import (which will be converted into the internal format)	WAV 44.1 kHz, 48 kHz, 96 kHz 16/24 bit MP3 fixed bit rate [64 - 320] kbps MP3 VBR OGG fixed bit rate [64 - 320] kbps AAC STEMS MTA M-Live
Internal Video Format	H-264 HD / Full HD (1280 x 720 / 1920 x 1080)
Compatible Video Formats during import	MP4,MOV
Compatible image formats	JPG, PNG
Video resolution for lyrics	1920 x 1080
Digital processing Internal audio outputs	16 D/A channels 24 Bit Sigma/Delta 48 kHz. Typical S/N ratio 112 dB
Input	- 12 Line Jack 6.35 mm mono inputs, unbalanced - Impedance 10 k Ω - Range 18dBu, 6 Vrms - Typical THD+N -93 dB - Typical SNR 107 dB
Digital processing Internal audio inputs	12 channels A/D 24 Bit Sigma/Delta 48 kHz. Typical S/N ratio 107 dB
Output	- 16 Audio outputs Jack 6.35 mm mono, balanced - Range 10dBu, 2.5 Vrms - Range 20dBu, 5 Vrms (balanced) - Typical THD+N -94 dB - Typical SNR 112 dB
Display	24" OLED, 128x64, Monochrome
Jack Headphone Output	- Stereo Jack 6.35 mm output - Typical SNR 105 dB - Range 6dBu, 1.5 Vrms
Internal memory	128GB, 1TB depending on version
Network Interface	RJ45 10/100/1000 Mbps Ethernet socket



Data Sheet B.Beat PR016

MIDI port	MIDI OUT DIN 5-pole standard MIDI IN via USB-MIDI cable (optional)
Pedal	Switch Pedal N/O or N/C, Jack 6.35mm
Power supply	12VDC, 2A, max. consumption 19W
Video	2x Video Type A output Maximum resolution 1920x1080 with video
USB ports	2x USB 2.0 Hi-Speed Type A per Memory Stick, Wireless  USB interface. Max. total current delivered for the two ports: 500mA
External power supply unit	AC/DC Adapter Mod. 13/90288-00 INPUT 100-240VAC Freq 50-60Hz OUTPUT 12VDC - 2A



We present
to you



Thank you for choosing B.Beat PRO16, an innovative and unique product. B.Beat PRO16 is the ideal tool to enrich and simplify Live performances of Bands using Stereo or Multitrack Sequences, even with synchronized Video and Images. Here we want to summarise the main features of the device:

READING MUSIC FILES AND VIDEOS

B.Beat PRO16 plays Music files in WAV 24 Bit per sample format (if the file is 16 or 32 Bit it is converted to 24 Bit), Multitrack Audio, Stems, Midi, Video Mp4 and JPG. B.Beat PRO16 reads various digital¹ formats, from simple Mp3 files to full-fledged multitrack audio projects from Daw, up to 24 Mono tracks. B.Beat PRO16 can store many Backing Tracks and the available space depends on the available internal memory versions: For example, in the 128 GB version with Backing Tracks on 4 mono tracks, around 60 hours of music can be stored. The calculation is indicative and depends on several non-standardisable factors.

❗ We suggest completing the editing of the Backing Tracks via the DAWs you use for recording before importing the project into B.Beat PRO16. Any changes to timbres and effects will not be possible once the project is loaded into B.Beat PRO16. Backing Tracks can be synchronised to a Video or Images that will be transmitted to the Video Wall from the Video output. Synchronisation operations must be performed with dedicated Apps before uploading Audio - Video projects to B.Beat PRO16.

INTEGRATED DIGITAL MIXER

B.Beat PRO16 includes a digital mixer to handle 16 separate outputs, 12 inputs, a headphone output for Click, return from Mixer and Backing tracks; with 4 convenient potentiometers the musician can balance in real time what he wants to hear in the headphones during the performance. The 16 outputs can be used to send Backing Tracks to the stage Mixer. An audio signal can be fed back to B.Beat PRO16 from any source via the 12 inputs, and B.Beat PRO16 recognises the Click track and can feed it to any of the 16 available outputs and simultaneously to the headphone output. B.Beat PRO16 records up to 12 audio tracks [even while playing backing tracks, in the PLUS version].

B.Beat PRO16 includes a Sound card for PC and MAC with 12 in and 16 out. So you can use the computer on stage, together with B.Beat.

B.BEAT PRO16 ON STAGE

B.Beat PRO16 has been studied and designed for maximum reliability during LIVE performances. There is a special button on the [LIVE] panel that can be used the moment the show starts because from that moment on, the processor of the B.Beat PRO16 will be busy ensuring maximum performance without wasting resources.

B.Beat PRO16 handles individual Backing Tracks that can be organised into convenient Playlists, or actual Shows consisting of several scenes. Projects can contain Music, Video and Pictures but also MIDI tracks to send messages to the vari-

We present
to you



ous Live devices. The philosophy behind B.Beat PRO16 is to simplify the management of Backing Tracks and Videos during a Show. With B.Beat PRO16 there is no need to bring Computers, Tablets, Sound and Video cards, Cables, more or less small Mixers and other accessory devices onto the stage: B.Beat PRO16 solves this issue without the need for additional peripherals.

PREPARING B.BEAT PRO16 FOR THE SHOW

The Backing tracks and videos that make up the show you want to manage with B.Beat PRO16 must be created with your DAW and the dedicated Apps. Once you have finished your studio work by also completing the synchronisation with the videos accompanying the music, you are ready to transfer the music material to B.Beat PRO16. The video may also be unsynchronised. Connect B.Beat PRO16 to your computer (Windows or Mac OS) via network cable and launch the B.Beat Manager App: from now on you can import all material required for the show into B.Beat PRO16. On B.Beat Manager you can compose playlists, or you can put together a real show consisting of several scenes. You can also combine the audio tracks with a Midi track that can be used to launch Midi commands to the devices you use on stage. If you have Mp3 backing tracks that you simply want to upload to B.Beat PRO16 without going through the PC, you can use the USB stick and very quickly transfer the files to the internal memory, or you can play them directly from the stick. If they were Backing Tracks without Click you can add it directly from B.Beat PRO16 or from B.Beat Manager

via a special function based on Artificial Intelligence algorithms

ADVANCED FUNCTIONS

B.Beat Pro16 can transmit via Video both a video commentary of the music and the video that includes the lyrics of the song being played. It can also send scores via Wireless via the free Prompter app (for Android and iOS). Lyrics and scores information can be uploaded via the accompanying B.Beat MANAGER App.

SITO SONG SERVICE

B.Beat PRO16 can read MTA (Multitrack Audio) format files produced and distributed by M-Live via the Song Service site. The musical repertoire is vast and new Backing Tracks from the international pop repertoire are produced every week. MTA files are multitrack files that B.Beat PRO16 reads with 8 stereo tracks. The Backing Tracks are organised as follows: Track 1 Drums, Track 2 Bass Guitar, Track 3 Guitar, Track 4 Keyboards, Track 5 Orchestra, Track 6 Wind Instruments, Track 7 Click, Track 8 Melody. Audio projects with 16 separate stereo tracks are also available, which can be freely adapted to B.Beat PRO16 with any DAW. Site addresses:

www.songservice.it*

www.song-service.com*

www.song-service.de*

Good music, with B.Beat PRO16!



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WHAT'S IN THE BOX

B.BEAT PRO16

you will become inseparable!



**ACCESSORIES NOT FORMING PART
OF THE APPARATUS AND SUPPLIED WITH IT.**

POWER ADAPTER



NETWORK CABLE



INSTRUCTION MANUAL,
you are reading it.



OPTIONAL ACCESSORIES

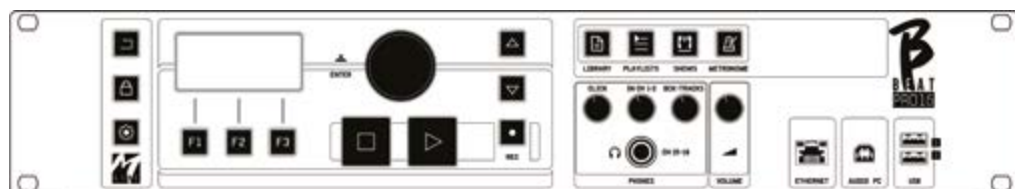
M-Pen2 for Wireless  connection and Hotspot generation



Let's take a look at



Front panel



BACK button goes back one level.

LIVE: B.Beat PRO16 in live mode, to avoid blockages and accidental actions, such as unintentional button presses. To activate: press Live and confirm your choice with F3, to deactivate press LIVE again and F3 to confirm. If you are in Live mode when pressing any button, you will be asked whether you want to deactivate Live mode.

Long press: SWITCHING OFF: switch off B.beat by pressing and holding the LIVE button for 1 second. Only then will it be possible to switch off the power supply to the B.Beat via the On/Off button on the rear. **ATTENTION:** failure to switch off via the LIVE button may lead to the need for a RESET. The reset procedure is possible from B.Beat MANAGER or via USB stick. For more information, read the B.Beat Manager guide.

To switch off B.Beat press and hold the LIVE button for one second until the switch off screen appears.



Switch off B.beat from the switch on the back, or press ReBoot F3 to restart B.beat.

SYSTEM button: to access the System menu.

Function keys: F1 - F2 - F3 they are assigned to different functions each time, depending on the screens. The description of the functions is in the lower boxes of the display.

STOP: pressed once stops playback of the current Song/Video, in pause position. Pressed a second time starts the current song/video. Pressed the third time empties the Ram memory of B.Beat PRO16. B.Beat PRO16 can load video-synchronised Audio Backing Tracks, or unsynchronised and independent audio and video. In this case, the Play and Stop buttons will relate to music and images independently. You can select Video or Audio with the F2 key from the Player screen.

PLAY: the Play button starts the Backing Tracks Audio (if you are positioned on AUDIO or the Video if you are positioned on Video). When the player is paused, to re-start it you have to press Play again.

REC: the button enables Recording mode. With B.Beat PRO16 plus you can record while a base is playing.

Alpha Dial - Enter: the Alpha dial is used to

scroll through a list on the Display, to modify a value (e.g. the volume of a track). Pressed in the middle gives ENTER consent.

UP - DOWN: generally used to scroll through lists on the display, to change the position of the active cursor or to increase/decrease a selected value.

LIBRARY: gives access to individual items contained in internal memory, Backing Tracks and Videos. If inserted it gives access to the USB Stick. When a USB Stick is inserted, you can position on the stick and browse its contents. Individual tracks (stereo Mp3 or Wav) can be played as desired.

PLAYLIST: gives access to the list of Playlists in B.Beat PRO16. Playlists can be played or edited.

SHOWS: gives access to the list of Shows and Scenes in the internal memory of B.Beat PRO16.

METRONOME: gives access to metronome management.

POTENTIOMETERS:

The CLICK, IN CH 1-2 and BCK-TRACKS potentiometers are active if B.Beat is set to PHONE ON mode. In this case, the headphone is active and from the B.Beat manager you can assign the tracks coming out of the headphone. If B.Beat PRO16 is set in PHONE OFF mode the headphone



output will not be active and channels 15-16 can go to the mixer. To check how to activate the PHONE ON/OFF mode, please refer to the B.Beat MANAGER guide.

BCK-TRACKS: adjusts the level of the Backing Tracks going into the headphones. This data can be managed with both B.Beat Manager and B.Beat PRO16.

CLICK: adjusts the headphone level of the Click or Metronome track

LINE IN: adjusts the headphone level of the signal entering from the Line In inputs.

VOLUME: adjusts the general output volume.

ATTENTION: the signal in headphones uses channels 15 and 16. This means that all the tracks that were routed to the headphones will be output on those channels.

ETHERNET: to connect via network to the PC.

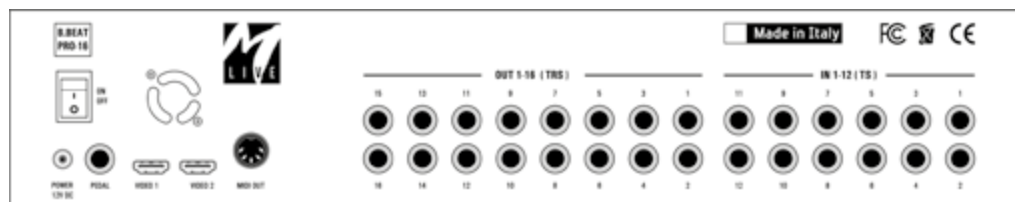
USB: USB sticks or M-Pen M-Live Wireless connection sticks can be inserted. When inserting a USB stick B.Beat PRO16 displays its contents in the Library window. Connecting the M-Pen Wireless stick to the USB slot will open the connection for Smartphones and Tablets in order to use the Prompter App and view scores and backing track lyrics.

PC AUDIO: connection to the computer to use the internal sound card.

Let's take a look at

B.BEAT PRO16

Back panel



ON OFF: switches B.Beat PRO16 on or off.

SWITCHING OFF: switch off B.beat by pressing and holding the LIVE button for 1 second. Only then will it be possible to switch off the power supply to the B.Beat via the On/Off button on the rear. ATTENTION: failure to switch off via the LIVE button may lead to the need for a RESET. The reset procedure is possible from B.Beat MANAGER or via USB stick. For more information, read the B.Beat Manager guide. To switch off B.Beat press and hold the LIVE button for one second until the switch off screen appears.

[put screen switch off]. Switch off B.beat from the switch on the back, or press Re-Boot F3 to restart B.beat.

PEDAL: : a Start Stop pedal can be connected. The first press corresponds to PLAY, the second press corresponds to STOP.

Here is a list of functions:

- Pressed once: PLAY
- Pressed the second time: STOP (pause)
- Pressed twice quickly: starts the selected Next song.
- Pressed longer than 1 second: in case you have a loaded Playlist, it enters the playlist [corresponds to ENTER].

- When in playlist: pressed once scrolls the list down, pressed twice quickly scrolls back up the list.
- When in Playlist: held down for more than one second loads the selected element in the memory.

Video 1 and 2: connects any video device with an Video interface.

OUT 1-16: 16 Balanced Mono audio outputs. Tracks 1 to 16 can be routed to channels 1 to 16. Tracks 17 to 24 can be output in channels 1 to 8. Tracks 17 to 24 cannot be routed to the headphones.

IN 1-12: 12 unbalanced audio inputs. Inputs 1 and 2 are those that enter the Headphone and are adjusted with the potentiometer: In Ch 1-2

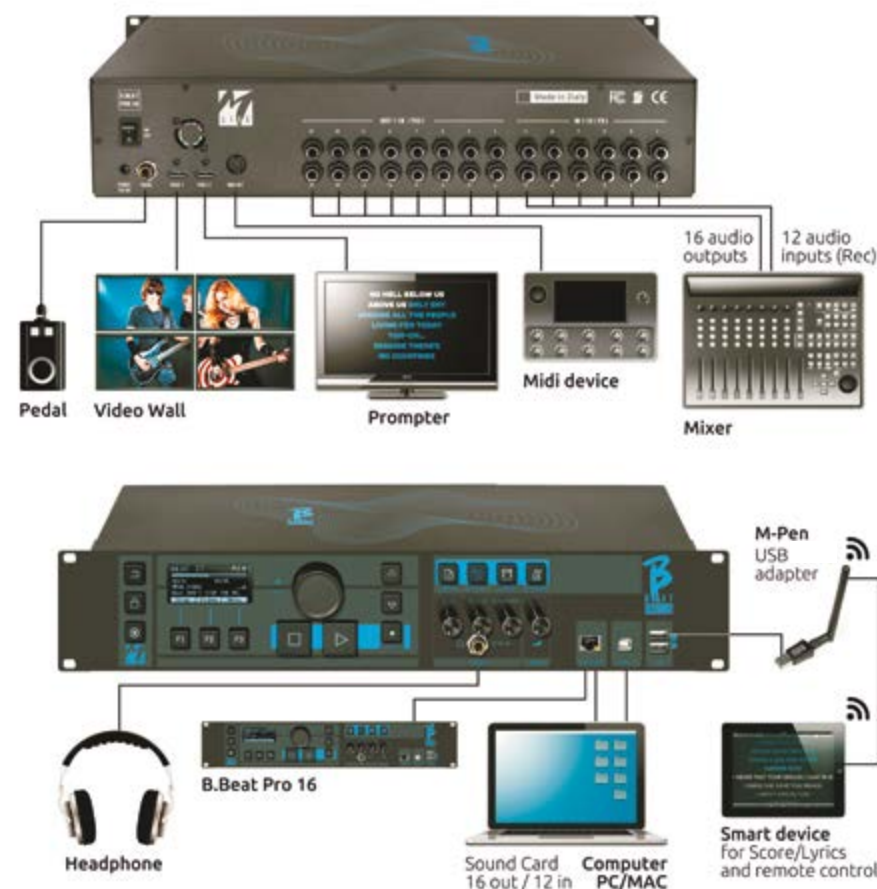
C'MON,
let's start!



MAIN FEATURES AND CONNECTIONS

The primary function of B.Beat PRO16 is to accompany your live performances by playing pre-recorded DAW audio tracks. In addition to audio tracks B.Beat PRO16 can play videos, images and lyrics that can be sent via Video to a monitor; it reads and transmits Midi Files that contain messages for your instrument set-up on stage. Let's first see a complete connection dia-

gram of B.Beat PRO16 by imagining a live set-up, on a stage. B.Beat includes a 12 in and 16 out Sound card and a 12-track recorder. Two B.Beat PRO16 can be synchronised to be used as Main and Spare in case of failure or crash.





TRANSFERRING DATA TO B.BEAT PR016

All Audio, Video, Images and Midi material must be prepared via a DAW and other Audio Video synchronisation programmes. Once the sound and video material of your show is assembled and mixed properly, you are ready to transfer it to B.Beat PR016. For this you use B.Beat PR016Manager, a software made available in both Windows and Mac versions. If you have Audio Backing Tracks in Mp3 Stereo or Wav format, you can upload them to B.Beat PR016 using the USB input, with a stick. B.Beat PR016 reads the contents of the Stick and plays it in real time, or it can import files into its memory. To transfer the repertoire of Backing Tracks, Videos, Images and Midi Files synchronised with the audio, you can use the B.Beat Manager software, below are the PC connection methods.

CONNECTING B.BEAT PR016 TO THE COMPUTER

Here are the connection modes between B.Beat PR016 and Computer, which can be PC or Mac:

The easiest way to connect B.Beat PR016 to the computer is to use the Ethernet network.

As follows:

1. Connect the supplied network cable between B.Beat PR016 and the Computer

2. Switch on B.Beat PR016

3. Launch the B.Beat Manager App

4. After about 60 seconds the App will see the B.Beat PR016 connected, you can connect to the B.Beat PR016 by pressing the button on B.Beat Manager:



5. The display of the B.Beat PR016 shows this screen confirming the connection has been made



If your PC has no Ethernet input, you have two options:

1. Use a USB - Ethernet PC interface

2. Create a Wireless Hotspot with B.Beat PR016 to which the PC can connect. The optional M-Pen2 is required to generate the hotspot. The password for entering the Hotspot of B.Beat PR016 by default is 12345678.

3. Connect the Computer to the hot spot of B.Beat PR016 which will be detected automatically. The default password is 12345678. It can be modified later by the B.Beat Manager software.

To connect B.Beat PR016 to the Wireless

network we recommend this procedure [Optional M-Pen2 required for B.Beat PR016. In the PLUS version, Wireless connection is included]:

1. Insert M-Pen2 on B.Beat PR016

2. Connect the B.Beat PR016 to the PC via the supplied Ethernet cable (or via hotspot as above)

3. Open the B.Beat Manager on the PC and connect to B.Beat PR016 (see above)

4. In the Software click on options (gear icon top right)

5. Open the 'networks' tab

6. Select the Wireless network you wish to connect to

7. Write down the password of the Wireless network in use

8. Click on save and connect

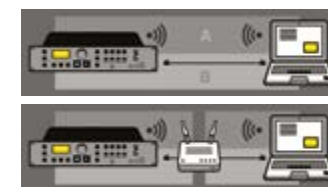
9. Your B.Beat PR016 is connected to the Wireless network in use (if you are connected to the PC on Hotspot at this point the connection to B.Beat PR016 will be interrupted but you can re-activate it as above)

10. Disconnect the Ethernet cable from the B.Beat PR016

11. Also connect your PC to the Wireless network (if you haven't already done so)

12. Open the B.Beat Manager on your PC and connect to the B.Beat PR016 in your new Wireless network.

The above procedure also applies to Hotspot networks generated by Smart Phones or Tablets. From now on, the network data (address and password) are stored on B.Beat PR016, which will automatically recognise the network. This solution is perfect when you use B.Beat PR016 in home and want to use Wireless .



To transfer a large number of Backing Tracks and Videos, we recommend using the Network cable connection mode. The network connection guarantees maximum speed and reliability during data transfer.

SOFTWARE INSTALLATION B.BEAT MANAGER

The B.Beat Manager software is available in two versions for two operating systems: Windows 10 and later - macOS 10.15 Catalina and later. Full compatibility is not guaranteed on earlier systems. The software can be downloaded free of charge from this address: Windows
https://download.m-live.com/download/bbeat/manager/bbeat_manager_win.exe
Mac
https://download.m-live.com/download/bbeat/manager/bbeat_manager_mac.dmg





BACKING TRACKS - FORMATS

Audio Backing Tracks can be of different formats, which we summarise here:

1. Audio Mp3 or Wav (or other formats digital) in one stereo track (without click)
2. Audio Mp3 or Wav (or other formats digital) in two mono tracks (with click in one of the two tracks)*
3. Multitrack audio (mp3 or wav or other digital formats) **
4. Stems (multi-track audio according to an established protocol)

B. Beat PR016 can play the 4 formats we have listed.

*B.Beat PR016 automatically recognises the Click if it is present in one of the tracks of the Audio project or Stereo file you want to import.

❗ ** B.Beat PR016 can read individual Backing Tracks with up to 24 Mono tracks. This means that if Backing Tracks had stereo tracks the maximum number of tracks would be 12. Backing Tracks can also have mono or stereo tracks, the important thing is that the maximum number of 'channels' does not exceed 24. For example, 7 stereo and 10 mono. If your Backing Tracks has more tracks you will have to delete some tracks or mix them with other tracks in the project through your DAW.

ATTENTION: the first 16 tracks can be output on channels 1 to 16, freely. Tracks 17 to 24 can be output in channels 1 to 8.

IMPORTING A MULTITRACK AUDIO PROJECT ON B.BEAT PR016

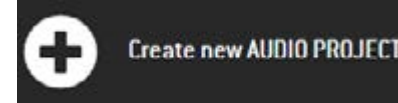
Once you have created the Audio file constituting the Backing Tracks on your DAW, you can save the same project in separate tracks, so each track will constitute a single Audio file (Wav or Mp3). Save to a folder that will contain all the tracks of that single Audio project.

❗ The maximum number of tracks you can play with B.Beat PR016 is 24 mono, or 12 stereo.

Tracks 1 to 16 can be output in channels 1 to 16. Tracks 17 to 24 exit from channel 1 to 8. The configuration is done on B.Beat MANAGER. Tracks 17 to 24 cannot be routed to the headphone.

You are now ready to import your newly created project into B.Beat PR016:

1. Connect B.Beat PR016 to the PC in one of the preferred modes
2. Launch the B.Beat Manager programme
3. Press this button in the main screen of the B.Beat Manager programme:



From this point you can transport audio projects to B.Beat PR016. See B.Beat Manager Software guide.

IMPORT A VIDEO OR IMAGES ON B.BEAT PR016

B.Beat PR016 can play Video files in Mp4 and MOV format.

Video files can be previously synchronised with an Audio project. Synchronisation can be done with any video Editing software e.g. iMovie, Final CUT and others.

Once you have synchronised the video with the music, you can transfer both the audio and video project to B.Beat PR016 and create a project that will be handled by B.Beat PR016 as if it were a single Audio and Video element. This is particularly effective for performances where you want to combine a Video commentary with music. The video can be associated with a Backing Tracks even without being synchronised, but the moment you combine it with the music on B.Beat Manager the two elements will be joined and will be played together by B.Beat PR016.

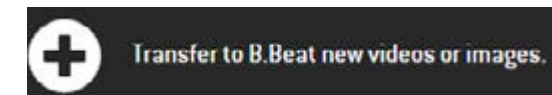
The video can also be transferred to B.Beat PR016 without being linked to a Backing Tracks, in which case the file will be independent of the music but can be played at any time, and will accompany



your performances.

You are now ready to import the Video/Images into B.Beat PR016:

1. Connect B.Beat PR016 to the PC in one of the preferred modes
2. Launch the B.Beat Manager programme
3. From the Library menu, select Media.
4. Click on the button:



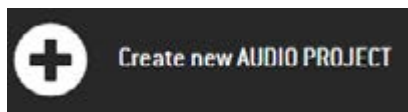
From this point you can transport video files to B.Beat PR016. See B.Beat Manager Software guide.

IMPORT MIDI FILES ON B.BEAT PR016

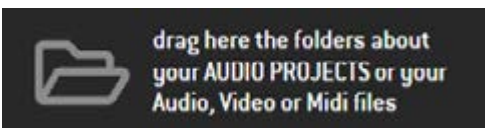
Projects imported from the PC to B.Beat PR016 can contain Audio, Video and Images as well as a MIDI File. With the Midi File you will be able to issue particular commands to the various devices in your set up. These messages, if synchronised with the music, will make your performance more effective. Via Midi you can send program change or system exclusive messages to keyboards and expanders or other modules you use in the live part of the show. You can build the MIDI File on your DAW, and then transfer it to B.Beat PR016 within an Audio-Video project that will form the sound and vid-



eo part of the show. The Midi File can be of any type (0 or 1), can contain all Midi messages including Notes, and up to 16 Midi channels. Time changes are permitted. MIDI is recommended for channel and system messages. The Midi track will be played by B.Beat PRO16 through the MIDI output. In order to transfer the Midi file associated with the Audio project correctly, it is recommended to save the Midi file to the same folder where the Audio and Video tracks of the project are located. Switching to B.Beat PRO16 from the computer can be done simply by pressing the "+CREATE new AUDIO PROJECT" button from the main screen of B.Beat Manager:



Then the folder containing the Backing Tracks and the associated Midi File can be dragged.





For further procedures for importing files and creating Playlists and Shows, please refer to the B.Beat Manager online help.

WRITING LYRICS AND DISPLAYING THEM

Using B.Beat manager, Song lyrics can be written and synchronised to the music. For this, please consult the B.Beat Man-

ager online guide. The lyrics will then be sent to the dedicated Video output, to be displayed on a monitor for the Prompter.

IMPORTING AND VIEWING SCORES

Using B.Beat manager, one can import PDF scores and synchronise them to the music. For this, please consult the B.Beat Manager online guide. Scores will be sent via Wireless  (with M-PEN2 or Wireless  antenna included in the PLUS model) to be displayed on the Prompter app.

PLAYLIST AND SHOW

B.Beat PRO16 is able to play single Backing Tracks, accompanied by Video - Images and Midi Files, or it can organise the repertoire into Playlists that can be built either on the B.Beat PRO16 or even better on a PC with the B.Beat Manager software.

Playlists can be changed during the evening, either temporarily or permanently. You will then see how it is possible to interact with the Playlist during a live performance. The Playlist provides a lot of flexibility between songs, and changes can be made very easily.

The **Show** is an evolved playlist. A Show is made up of multiple scenes. Scenes may contain one or more items called SLOTS. Shows can be built with B.Beat Manager software. Show management allows you to combine music with video and/or images so that your show is perfectly organised and all you have to do is press PLAY

to start it. The sequences between Audio and Video or images will be automated, including pauses and other connecting details between the various scenes that make up the show. The Show offers the advantage of having automatic sequences that link music tracks to each other, but you can also insert pauses or you can create Slots where the only thing playing is the Click or the metronome.

Playlist and Show environments are easily accessible thanks to dedicated buttons:



OPERATIONAL ENVIRONMENTS

B.Beat PRO16 during performances can be operated in 4 different operating environments that can be reached by clicking the relevant button. By default, B.Beat PRO16 switches on in the Library environment, but will then switch to the last selected environment before switching off.

LIBRARY



By pressing the Library key you enter the general archive of all Audio or Video projects that have been imported from the various sources (PC/USB STICK) and by means of the Alpha Dial and the UP and DOWN keys you can scroll through the list. By selecting PRJ or MEDIA you choose whether you are interested in the Audio or Video archive. If you have inserted a USB Stick into the dedicated slot of B.Beat PRO16, the USB function will appear on the F2 button giving access to the stick. When a File is selected, these possibilities open up:

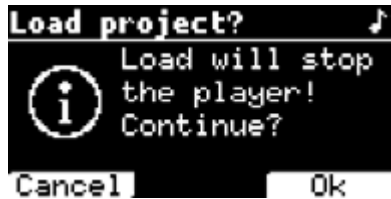
1) PRESS PLAY: play the selected item, if a track is already playing it will switch to the new one immediately.

2) PRESS ENTER: enter a sub-page from which you can:

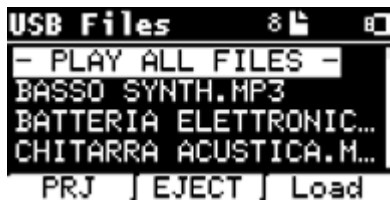
- a) Set as next: place the selected element on the NEXT SONG location, in fact the element will be ready to play at the end of the current execution.
- b) Delete: deletes the selected item. Selecting this option will open a new window to confirm or cancel your choice.

3) PRESS F3 LOAD: the chosen song is loaded into memory, ready to be played. If another song that is playing is loaded into memory, a confirmation screen appears because the current performance will be stopped. Press OK to confirm or Cancel to cancel. LIBRARY





When the USB Stick is not plugged in, the F2 button controls the TXFER function to connect to the B.Beat Manager, if you are connected to the PC.



USING THE USB STICK

B.Beat PR016 reads USB sticks that can contain Backing Tracks in Mp3 or Wav format.

When inserting a USB stick into the B.Beat PR016 drive, the following screen appears:

From this screen, which lists the names of the files contained in the stick, it is possible:

- 1) Navigate the key archive (via the Alpha Dial, keys Up Down)
- 2) Play the files directly (also

in sequence if you select 'Play all files'). You point to a file and press Play to play it.

- 3) Import files into the internal archive of B.Beat PR016.
 - a) You point a file with Alpha Dial or up - down
 - b) Press Enter on Alpha Dial
 - c) From the next screen press 'Import'
- 4) Select a project such as Next Song from the USB
 - a) You point a file with Alpha Dial or up - down
 - b) Press Enter on Alpha Dial
 - c) From the next screen press Set as next
 - d) From then, the project is placed in the Next Song location

When a USB stick is inserted into B.Beat PR016, the internal memory can be accessed by pressing the LIBRARY key, and the stick by pressing the F2 USB key. If you want to eject the stick press F2 Eject from the Stick read position.

PLAYING BACKING TRACKS

To play an Audio project:

- 1) Press [Library]
- 2) Rotate [Alpha dial] or press [up

- and down] to select the file
- 3) Press [Play] to play, the song starts.
- 4) The Player screen appears



At the top is the title of the running file, the icons on the right indicate that B.Beat PR016 is connected to a network, the running file has an associated Video, the file is in pause position.

The Song Position Pointer is under the title. You can move along the Song by turning the Alpha Dial. The SPP moves to the desired point and pressing Enter will switch to that point.

Below the SPP are time indicators: time elapsed since the beginning, time to the end of the song.

Under the indicators, the currently Playlist being executed is described, if present. Otherwise, this line is empty.

On the right there are the Vu Meters which signal the levels of the Outputs: be careful if the volume potentiometer is at zero these vu meters are not active.

NEXT: indicates the Song that will follow the current one. The Next song can be freely selected, or it can be the Song in the playlist if you are using a Playlist or Show. To the right of NEXT the word MAN indicates that Play at next must be giv-

en manually, either by pressing PLAY or by pressing the Start/Stop pedal if present. This screen allows you to check the Player's situation and perform certain actions: **STOP:** if pressed once, the project currently being executed will be placed in Pause. If pressed a second time, the project will be WRAPPED. If you press Stop the third time, the memory will be emptied and it will switch to the Playlist screen.

PLAY: activates playback of the current project. If the button flashes Blue, it means the project is paused, press Play to continue. When the Play button flashes quickly, it means that a Song is loaded in memory, ready for Play.

ALPHA DIAL: by turning the alpha dial the song position moves along the time line of the project loaded in memory, the display shows the destination song position (GO TO) in minutes and seconds. By pressing enter the performance starts from the chosen Song Position. This can happen even while the project is being executed.

If a PLAYLIST is loaded, this icon appears on the Player screen:

The playlist is playing and when the ENTER button is pressed, the list of projects in the playlist is directly accessed. From here, some selection and editing actions can be performed on the Playlist. See the PLAYLIST chapter.

Function keys on the PLAYER screen:

1. **SKIP (F1)** allows you to skip the Back-





ing Tracks that appear in the 'Next' field. The "Next" field indicates which title will be played after the Backing Tracks currently being played, if the Next field is empty (---), it means that there will be no Projects to be executed at the end of the current execution.

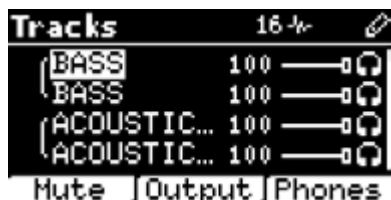
2. VIDEO (F2) if there is a Backing track and a video being executed, you can access the video management without affecting the playback of the musical Backing Track. Pressing F2 VIDEO takes you to a screen that allows you to control Stop and Play of the currently playing video.

3. MENU (F3) offers two options:

- a.Edit tracks
- b.Level Meters

EDIT TRACKS

ⓘ Editing of tracks and mixes on the DAW is recommended. In any case, a number of interventions to improve performance are possible from B.Beat PRO16 and especially from the B.Beat Manager software. This can be done from the Edit Tracks page:





From this screen, you can select a track (press Up or Down to move along the tracks) and make changes as follows:

- **Mute a track:**

select the track with Up and Down
-> press [F1] Mute.


Press F1 again if you want to unmute.

The Mute icon appears on the left: 
The Family Mute: on B.Beat PRO16 it is possible to establish Instrument Families. This option is managed from B.Beat Manager; see specific guide. For example, you can establish various instrument families (keyboards, bass, percussion, etc.) and assign them to the specific family. In this way you can define a Mute relative to the specific family, by B.Beat manager. By activating the Mute of a family, all tracks belonging to the specific family will always be muted, for all Audio projects loaded on B.Beat PRO16. If you want to exclude the family mute from a specific project, you can always do so from the Mute function on Edit Tracks. When an instrument family is muted, this icon appears next to the track name: 

Family Mute can only be used on Backing Tracks that have separate tracks. For example on the MTA files that can be downloaded from www.songservice.it

- **Send the track to the Headphone output:**

select the track with Up and Down
-> press [F3] Phone.

The icon appears on the right 

Press F3 again if you want to exclude the track from the Headphone output.

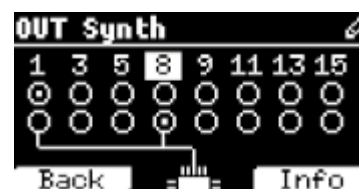
ⓘ The headphone output will be adjusted via the BCK-TRACKS potentiometer.

- **Adjust the volume of a track:**

select the track with Up and Down
-> turn the Alpha Dial to lower/raise the volume. The value is indicated in graphics and by a number from 0 to 100.

- **F2 Output button:**

pressing F2 accesses the Audio output setting:



tracks 1 to 16 can be output in channels 1 - 16. Tracks 17 to 24 can go out on one or more outputs between 1 and 8. Turn the Alpha Dial and select an output, press ENTER to activate the output, press again to deactivate the same output.

Pressing F3 INFO allows you to check which track comes out on the selected output.

- **Playing a Video (Media)**

1. Press [library]
2. Press function key [F1-MEDIA]
3. Rotate [alpha dial] or press [up and down] to select

4. Press [play] to launch playback

5. The Main screen appears

PLAYLIST

The Playlist is a set of audio (or audio + video) projects that is selected from the B.Beat PRO16 Library and can be played in sequence in a predefined order. Between tracks the playlist can stop or can continue automatically via Autoplay (see menu System -> Autoplay).

The Playlist can also be used as a simple collector of Projects that are used at particular events. Projects can be recalled at will.

When the Playlist is loaded into memory, the complete list of contained tracks can be viewed by pressing ENTER, on the Alpha Dial from the Player's main page. The Play List environment contains the list of Play Lists that were transferred from B.Beat Manager or were created on B.Beat PRO16. The following functions are possible from this operating section:

1. **PLAY button:** Immediately plays the selected playlist via Up and Down
2. **ENTER button:** to enter the content of the Playlist and edit it at will.





3. **F1 Delete key:** delete the playlist selected via Up and Down
4. **F2 New button:** create a new Playlist
5. **F3 LOAD button:** load the selected Playlist into the memory via Up and Down
6. **Up and Down buttons:** when the player is in STOP press Up or Down to move quickly between Songs of the playlist.

SELECT A PLAYLIST

1. Press [PLAYLISTS] the list of Playlists resident in memory appears.
2. Rotate [ALPHA DIAL] or [up down] to select
3. Press F3 [LOAD] to load the Playlist in memory. It is now ready to play. Alternatively you can press PLAY and the Playlist will start immediately.

❗ If the player is playing another audio or video a confirmation screen will appear before loading the memory and interrupting the current playback.

NEXT SONG

The title of the Song next to the one in Play appears when a Playlist is playing in the "NEXT" field. Pressing the F1 "Skip" key allows you to skip the next Song and move on to the next one. When you press skip, a window appears asking you to confirm the choice. Basically, when I play a playlist I can decide, even while the playlist is playing, to change the song list.

AUTO PLAY

System Menu > Options > Auto Play: If you selected the Auto Play 'ON' function, at the end of a Song, the next song will start immediately. Conversely, the next song only starts when the Play button is pressed, or the Start Stop pedal, if connected.

PLAYLIST > [ENTER] EDIT

From B.Beat PRO16 it is possible to edit a Playlist. To edit:

Press [PLAYLISTS] Rotate [Alpha Dial] or [Up Down] to select the Playlist you want to edit.

Press ENTER on alpha dial to enter the following screen:



three options appear: More, Remove, Add.

To move a Song from its position:

Press F1 [MOVE] wheel [ALPHA] or [Up Down] to move
Press F1 [CANCEL] to exit or F3 [OK] to confirm.

To delete a Song from the Playlist:

Turn [ALPHA] or [Up Down] to select the Song to be deleted
Press F2 [Remove]
Confirm with F3 [Remove] in the next confirmation screen, or F1 [Cancel] to cancel your choice.

To add a Song to the Playlist:

Press F3 [ADD] the page will move to the LIBRARY and you can select the Song to be added to the Playlist by scrolling through the list via [Alpha Dial] or [Up Down].
Once you have found the song to be added press F3 [ADD] to add the song or F1 [CANCEL] to cancel the operation.
The Song will automatically be added to the bottom of the Playlist. Then it can be moved with the MOVE function.

PLAYLIST > F2 DELETE

To delete a Playlist.

Select the Playlist you want to delete via [ALPHA] or [Up down]. Press F2 [Delete] a screen will appear asking for confirmation: Press F3 [Delete] to delete the Playlist, press F1 [Cancel] to cancel.



PLAYLIST > F3 NEW

Press F3 [NEW] to create a new Playlist. The new playlist will automatically be named LIST # as there is no way to name elements on B.Beat PRO16. At a later stage you can change its name from the B.Beat Manager software.

PLAYING A PLAYLIST

You have seen how to create, edit, search and select a Playlist. Now let's see what you can do while a Playlist is being executed.

Select a Playlist and load it into memory via the F3 [LOAD] button. You can then start the Playlist at will. The Player screen appears as shown below:



Press ENTER to access the Playlist display, and the songs contained therein.



From this screen there are three possible functions:



F1 [SKIP] Excludes the selected song from the playlist being executed. Select Song by turning [ALPHA DIAL] or [Up down] press F1 [SKIP]. An icon will appear, indicating that the Song will not be played in the current Playlist.

F2 [NEXT] Inserts the selected song in the Next location. Then the song will be played after the one currently playing. Select Song by turning [ALPHA DIAL] or [Up down] press F2 [NEXT]. The letter 'N' appears next to it and the song is placed in Next.

F3 [LOAD] Loads the selected song into memory, ready to be played. Select Song by turning [ALPHA DIAL] or [Up down] press F3 [LOAD]. The song will be loaded into the Player and ready to be played.

UP and DOWN buttons: when the playlist is in STOP mode, the Up and Down buttons move quickly within the Playlist. Having found the relative song, press Play to play.

❗ If the player is playing another audio or video a confirmation screen will appear before loading the memory and interrupting the current playback.

PLAY: to play any of the Songs in a playlist. Select Song by turning [ALPHA DIAL] or [Up down] press PLAY. The song will start immediately, interrupting the Song that is playing.

SHOWS

The Show is a tool for organising a show from its preamble until the moment the lights go out on stage. With the use of Show you can organise all the moments of our evening, both when you are active on stage playing and singing but also in the breaks, e.g. with videos and background images. To create and edit the Show, we refer you to the B.Beat Manager Software guide.

Structurally, the B.Beat PRO16 Show is divided into Scenes, which in turn contain Slots.

The Slot is an event that can contain:

1. Backing Tracks, with or without background images
2. Images
3. Video
4. Audio tracks (uploaded on B.Beat PRO16 as projects)
5. Metronome [without Backing Tracks] with or without background images
6. Silence (moments when the show goes on but, for example, there is a musical break)

The Scene can contain a video/background image that can be an alternative to the video/image contained in the Slot. The video in the Slot takes precedence over the Scene Video. The scene can be placed in LOOP so at the end it starts again from

the beginning. This can be useful in pauses if you have a playlist of recorded audio tracks: the playlist will be repeated from the beginning until you stop the Scene to move on to the next one. The video part accompanying the music will also be repeated, if present in the form of images or a video sequence.


The show and scenes can easily be built on B.Beat Manager, please refer to the guide on B.Beat Manager for more on this topic. Once programming of the Show is complete, it must be transferred to B.Beat PRO16 for Live performance.

By pressing the **SHOWS** button, you enter the list that collects them within B.Beat PRO16.

The screen has the usual three Function keys assigned: F1 [SHOWS] shows the list of archived Shows. F2 [SCENES] Shows the list of archived Scenes. F3 [LOAD] pressing this button loads the show or a selected scene into memory, at which point it will be ready to be played with the PLAY button. To select a Show you can scroll through the list with the Alpha Dial or the Up and Down keys. Pressing PLAY executes the selected Show or Scene.

Here is the screenshot of the Player when loading a Show:



The  icon represents the Show, to the right is the title of the loaded Show (or scene). When you load a SHOW the B.Beat PRO16 is ready to play the list of all the events contained in the SHOW which, we remind you, is a highly evolved Playlist. Here are the differences that characterise a SHOW:

1. The SHOW contains a series of SCENES, SCENES are composed by one or more contents (named SLOT) Audio and/or Video.
2. Within a show you can put the Scenes in the lineup. A Scene may consist of several SLOTS.
3. Each event (Slot or Scene) is connected by a transition that can be automatic (the next slot starts automatically after a delay of 'n' seconds) or manually (awaits consent from the Play button).

During the execution of a Show the options you have are similar to those of the Playlist, in fact by pressing the ENTER button you access the list of SCENES and the events contained in the scenes.

ENTER (IN SHOW ENVIRONMENT)

When loading a Show into memory, the Enter key allows you to enter the SHOW and view its constituent Scenes and Slots.



From this screen you will have some operational possibilities:

F1 [SKIP] Excludes the selected SLOT from the execution of the Scene. Select the SLOT by turning [ALPHA DIAL] or [Up down] press F1 [SKIP]. An icon will appear, indicating that the SLOT will not be played in the current Scene.

F2 [NEXT] Inserts the selected SLOT in the Next location. Then the SLOT will be executed after the one being executed. Select the SLOT by turning [ALPHA DIAL] or [Up down] press F2 [NEXT]. The letter "N" appears next to it, and the SLOT is placed on Next location.

F3 [LOAD] Loads the selected SLOT into memory, ready to be executed. Select the SLOT by turning [ALPHA DIAL] or [Up down] press F3 [LOAD]. The SLOT will be loaded into the Player and ready to be executed.

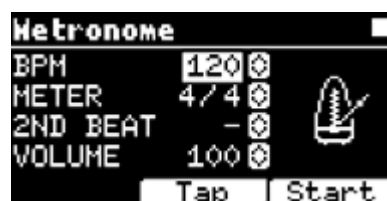
❗ If the player is playing another Slot (audio or video) a confirmation screen will appear before loading the memory and interrupting the current playback.

PLAY: to play any of the SLOTS of a SHOW. Select the SLOT by turning [ALPHA DIAL] or [Up down] press PLAY. The SLOT will start immediately, interrupting the SLOT that is being executed.

❗ The PLAY button is immediate-action, so if the player is playing music or video, these will be stopped permanently.

METRONOME

B.Beat PRO16 includes a metronome. It can be used as a guide during a Live performance. It can be placed within a scene that will make up a show. Pressing the Metronome button takes you to the dedicated page.



BPM: indicates the chosen speed. It can be changed with the Alpha Dial (rotate left or right) or with the TAP function.

TAP: press F2 [TAP] -> tap the stop button to give the metronome time -> press F3 [DONE] when completed.

METER: choose the metric subdivision. You can change the value with Alpha Dial.

2nd BEAT: choose the presence of a second beat within the measure, you can select the fourth or eighth of the measure on which you want the second beat.

VOLUME: choose the output volume of the metronome. Change the value with Alpha Dial.

SOUND: choose the sound to be used for the

metronome. Turn Alpha Dial to select.

OUTPUT: choose the output. Change the value with Alpha Dial.

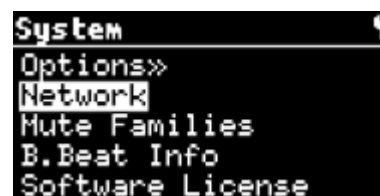
LIGHT: allows the CLICK sound to be associated with a timed light in the METRONOME button.

UP and DOWN keys: change tempo while the metronome is being executed.

Once the settings have been made, the metronome is ready to start: press F3 [START] or Play to begin. The metronome can be programmed within a SHOW as a Slot. You can programme it if you need to send the Metronome to the musicians on stage during a performance, even without a running music base. From the Main screen, you can change the BPM by pressing the two arrows Up and Down.

SYSTEM

The System button gives access to a number of settings of the B.Beat PRO16, as well as managing the Wireless connection and System information.



OPTION>>

The option menu contains the following submenus, which can be accessed by pressing ENTER:

AutoPlay: activates or deactivates the AutoPlay function. Press Enter on Autoplay and then select Off or On. Auto Play ON enables automatic play during the Playlist being executed. When Autoplay is in the OFF position at the end of each track in a playlist B.Beat PRO16 stops until the Play button is pressed to continue the playlist. For Shows and Scenes the function of Autoplay, Stop is specifically defined.

Stop on Pedal (Live): in activated LIVE mode this option allows STOP to be inhibited if the pedal is pressed accidentally. It has two modes: Disable (stop disabled) - Allow (stop allowed). To activate it, select Allow > Save.

AutoHotSpot: if in the ON position, the Hot Spot function for device or mobile phone connection is always active when switching on the B.Beat PRO16, provided that you do not wish to activate a Wireless connection to a public network. The Hot Spot allows Smart Devices to connect to B.Beat PRO16 and use the Prompter App to display lyrics and scores.

Enable Headphones: selecting ON activates the Headphone output. In this way, the headphone output on the front panel will be active and can be used during Live



performances. In this case, it is suggested not to use output channels 15-16, (which are disabled in the B.Beat manager) because everything you want to hear from the headphone will come through those channels. Basically, if you want to use headphones, channels 15-16 cannot be used as outputs to the stage Mixer. Through the B.Beat manager you can select which tracks to send to the headphones.

Mono Headphones: selects the headphone mode from two options, Mono or Stereo.

Display Brightness: adjusts the brightness level of the Display. Press Enter and change the level via Alpha Dial.

Key Brightness: adjusts the brightness level of the keyboard. Press Enter and change the level via Alpha Dial.

Midi Clock: B.Beat can send a MIDI Clock signal to synchronise other Midi devices on stage. To send the Midi Clock, it is necessary to insert a Midi file into the Audio project to be played. In addition, the MIDI Clock function must be enabled. MIDI CLOCK is enabled when selected in ENABLE mode.

Sync Mode: selects the Sync mode of B.beat. By default it is set to Main- When a device is set to Spare, the device will search at start-up for a Main device to synchronise with. For further clarification, please read the SYNC MODE chapter.

Prompter Theme: choice of theme for the prompter on video output, may be one among: Custom, Default, Inverted, Big, Small, Left. The configuration of the Custom theme is executed via B.Beat Manager.

Prompter Scroll: chooses the speed of vertical scrolling of the lyrics, possible options are Slow, Medium, Fast.

Time Format: you can select the display mode of the Timer, which has two options: countdown - duration from start.

Default L Output: B.Beat PRO16 has 16 Audio outputs. You can select which of these is assigned to the LEFT channel of a stereo Audio track. Press Enter to enter the configuration screen and rotate the Alpha Dial to choose the desired output. Press Enter or F3 [SAVE] to set. Output 1 is selected upon purchase.



Default R Output: B.Beat PRO16 has 16 Audio outputs. You can select which of these is assigned to the RIGHT channel of a stereo Audio track. Press Enter to enter the configuration screen and rotate the Alpha Dial to choose the desired output. Press Enter or F3 [SAVE] to set. Output 2 is selected upon purchase.

Default Clic Output: B.Beat PRO16 has 16 Audio outputs. You can select which of these is assigned to the CLIC track of a multitrack backing track. Press Enter to enter the configuration screen and rotate the Alpha Dial to choose the desired output. Press Enter or F3 [SAVE] to set. Output 3 is selected upon purchase.

Default Guide Output: B.Beat PRO16 has 16 Audio outputs. You can select which of these is assigned to the GUIDE track (voice prompts) of a multi-track backing track. Press Enter to enter the configuration screen and rotate the Alpha Dial to choose the desired output. Press Enter or F3 [SAVE] to set. Output 6 is selected upon purchase.

NETWORK

B.Beat PRO16 connects to different entities, in different ways.

B.Beat PRO16 can connect to a computer via Ethernet cable, or via Wireless (optional M-Pen required) and can also generate a Wireless Hot Spot to connect to Smart Devices (Tablet or Smartphone) for using the Prompter App and reading out lyrics and sheet music.

Wireless or Hot Spot connection are alternatives, if B.Beat PRO16 is used as a Hotspot it cannot connect to a Wireless network, and vice versa. Wireless



connection and Hot Spot generation are only possible with the optional M-Pen.

From the Network page you can check how B.Beat PRO16 is connected and change its settings. In addition, you can get the data to enter its Hot Spot.

Ethernet: this entry indicates the connection via network cable to a PC or network. By pressing F2 [INFO] you can see the IP address of the current connection.

Hotspot: this item indicates whether or not the private Wireless network is activated (with optional M-Pen). With the function keys you can change settings:

1.F1 [BACK] to exit this page.

2.F2 [INFO] displays the IP and password to enter the network "12345678" by default; from the B.Beat Manager Software you can change this Password in the options area. To connect to the B.Beat PRO16 Hot Spot, the QR code can be used by pressing F3 [QR-code] on the Info page. It is necessary to connect to the B.Beat PRO16 hot spot in order to use the Prompter App for the purpose of displaying lyrics and scores in the Backing tracks.

3.F3 [ENABLE - DISABLE] to activate or deactivate the hot spot. NOTE: when the hot spot is active, it is not possible to use the Wireless connection to a public network.



Wireless : Wireless connection to active networks can be activated to connect even without the Ethernet Cable. Entering the Wireless page activates three functions (with the optional M Pen2 or with the internal connection in the PLUS version):

- 1.F1 [BACK] to exit this screen.
- 2.F2 [INFO] to check the network to which B.Beat PRO16 is connected
- 3.F3 [CONN - DISABLE] to search for an available network and connect. To instruct B.Beat PRO16 on Wireless networks, B.Beat Manager must be used. With the App you can detect the active and available network and train B.Beat PRO16 to recognise it, and you can also enter the network password. Once you have trained B.Beat PRO16 to a particular Wireless network all you have to do is press CONN and it will recognise it to enter. If no Wireless network is included among those that B.Beat PRO16 is trained to recognise, this message appears: "USE B.Beat Manager to connect". When B.Beat PRO16 connects to a public network the F3 fast becomes [DISABLE] and pressing it will disconnect B.Beat PRO16 from the public network.

MUTE FAMILIES

These are groups of tools that are estab-

lished to simplify Mute operations in particular cases.

Families are created with the B.Beat Manager software and tracks of audio projects can be assigned to specific families. For example: the violin can be assigned to the Family Orchestra, as can the viola and the cello.

If on B.Beat PRO16 you MUTE the Orchestra family, no tracks (including Violin, Viola and Cello tracks) assigned to that family will be played. In this way, groups of instruments can be quickly muted without going into project editing one by one.

B.BEAT PRO16 INFO

It contains this information: Firmware version / Serial Number / Memory space available and used / Time elapsed since last power-up.

SOFTWARE LICENSES

It displays the Firmware licences.

WRITING SCORES AND LYRICS

Our Backing Tracks can contain Lyrics and Chords that will be displayed via the Prompter App. The App runs on smartphones and tablets of all kinds, and is available free of charge on Apple Store and Google Play. The M-Live MTA8-format Music Bases available at www.songservice.it - www.song-service.com* can contain Lyrics and Chord information.

To write Lyrics please refer to the guide of the B.Beat MANAGER software. To write scores, please refer to the help of the B.Beat MANAGER software. B.beat reads lyrics and chords in standard M-Live and Lyrics formats.

RECORDING AND SOUND CARD

SOUND CARD

If you want to use the Computer during sound check, you can connect it directly to the B.Beat PRO16 via the front 'Audio PC' connector. Thus B.Beat PRO16 becomes a real Sound card 12 in and 16 out. When Audio Card mode is active B.Beat PRO16 cannot play or record.

To enable sound card mode, connect a USB cable from a Computer to the 'PC Audio' connector. B.Beat Pro16 will ask if you

want to enable the USB Audio mode.



Press OK (F3) to confirm. After the above sequence, the Sound Card mode is activated. Then the screen below appears:



If you want to deactivate the Sound Card mode, press the F3 EXIT button and confirm your choice.



The Sound card mode can be reactivated by going to the SYSTEM>ENABLE USB AUDIO menu (with the USB cable connected to B.Beat).

RECORDING

B.Beat Pro16 is capable of recording up to 12 audio tracks via its 12 input channels. The basic version can record when the working memory (RAM) is empty, i.e. if no Audio Project is loaded, while the PLUS version can record even while an Audio Project is being executed, i.e. it will be possible to add up to 12 tracks to the

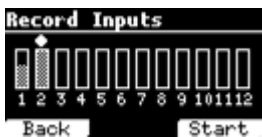
*For copyright reasons, the Song Service may not be available in all countries.



loaded Audio Project (if the sum of the project tracks and the recorded tracks does not exceed the total of 24 tracks available on B.Beat PRO16). This function is particularly convenient for recording live performances, or for adding audio tracks just before the performance, in rehearsal or sound check, without having to go back to the DAW.

RECORDING WITHOUT A PROJECT IN PLAY

To record with B.Beat press REC without having any projects loaded in the working memory (RAM), the red LED starts flashing but recording has not started. Automatically, the recording screen appears, displaying the v-meter with the input levels and checking for possible distortions, which are indicated with a dot.



From this moment on, by pressing the F3 (START) button, or PLAY, or REC, the B.Beat will start recording. The red LED of the REC button will be lit.

To exit the recording environment without recording, press F1 (BACK).



To end recording, press STOP or the REC button.

At the end of the recording you can choose whether or not to save what you have recorded. This screen only appears if an incoming audio signal is detected.



To delete the recording select F1 (REJECT), Press F3 (Save) if you want to save the recording. In this case a new project called "Rec <progressive number>" will be created.

The new project will contain as many tracks as there are inputs where audio was present during recording. All tracks will have the same duration (equal to the duration of the recording) and will be synchronised with each other.

Tracks will play from the outputs set as default (See System). The newly created project will immediately be ready to be played and you can immediately hear the result of the recording.

RECORDING ON A LOADED AUDIO PROJECT [ONLY FOR B.BEAT PRO16 PLUS]

If you have a B.Beat PRO16 PLUS it is possible to make a recording even while you are playing an audio project. Proceed as

follows:

Load the audio project on which you want to make the recording. Position yourself at the point where you want to start recording, e.g. at the beginning of the project. Press REC, the red LED starts flashing but recording has not started. You enter the recording screen, which displays the v-meter with the input levels and control over any distortions, which are indicated with a dot.



From now on, by pressing the F3 (START) button, or PLAY, or REC, the B.Beat will start recording and playing the loaded audio project. The red LED of the REC button will be lit.

To exit the recording environment without recording, press F1 [BACK].

To end the recording, simply press STOP or the REC button again.

At the end of the recording you can choose whether or not to save what you have recorded. In addition, you can decide whether the recording should be part of the project loaded in memory, or whether you want to create a new project with the newly recorded tracks.



To delete the recording select F1 [REJECT], Press F2 [Same] if you want to mix the newly recorded tracks with the project loaded in memory. ATTENTION: if the sum of the recorded tracks and those of the loaded project exceeds the number of 24, the recorded tracks cannot be mixed to the current project. Press F3 [New] if you want to save the recording in a new project. In this case, a new project named 'Rec <project number> - <project title>' will be created. If you choose to save the tracks to the same project by pressing F2 [SAME] the B.Beat will add the recordings to the played project (one track for each recorded input) by moving them out of the default channels (See System). The newly created project will immediately be ready to be played and you can immediately hear the result of the recording.

ATTENTION: if the sum of the number of recorded tracks and those of the project loaded in memory exceeds the maximum number of 24, the recorded tracks must be saved in a new project. This new project can be exported and processed with a DAW via the B.Beat Manager.

SYNC MODE

Sync mode allows two B.Beat devices of





the same type to be synchronised. Two synchronised B.Beats will have the same contents (Library, Playlists, Shows) and can play the same Backing Tracks synchronously. In Sync mode one of the two B.Beats will be the MAIN unit and the other will be the SPARE unit. ATTENTION: two B.Beats can be synchronised where the Spare has the same or higher memory capacity as the Main unit. B.Beat can be synchronised with B.Beat - B.Beat PRO16 with B.Beat PRO16.

B.Beat is normally configured as Main; the configuration can be seen in System > Options > Sync Mode as in the following picture.



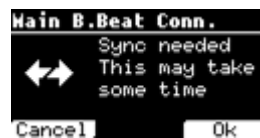
To configure a device in Spare mode, change the configuration value to Spare.



The Spare device will be restarted and will start searching for a Main device. The search takes a few seconds. If STOP (F1) is pressed, the search will be interrupted and it will not be possible to use the device in Spare mode.



When the Main device is detected, a screen appears asking for confirmation of Synchronisation. Press OK (F3) to launch the synchronisation of the two B.Beats. Press Cancel (F1) to exit synchronisation and leave B.Beat in stand-alone mode.



You are then asked to confirm with OK (F3) because the synchronisation procedure deletes all data on the Spare device. Again, it is possible to exit the procedure by pressing Cancel (F1).



During the synchronisation in the B.Beat configured as Spare the progress of the operation will be visible, while in the Main a message about the synchronisation will be shown for the duration of the synchronisation.



At the end of the operation, which lasts from a few seconds to tens of minutes depending on the size of the repertoire, the Home page will be shown.



From now on, the devices are synchronised and any command executed on the Main will also be reproduced on the Spare.

During playback of an audio project, the synchronisation icon will be shown when this is active.



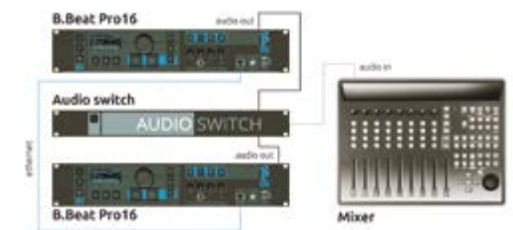
SYNC MODE: USE WITH AN AUTOMATIC SWITCHING DEVICE (E.G. RADIAL SW8)

Two B.Beat units configured in Synch mode can play synchronously, following commands given on either unit. This feature is useful if you want to avoid player crashes during a live performance by using a switch that automatically switches the audio outputs related to the Spare machine, should the main machine

crash for some reason.

To realise this configuration, it is necessary to generate with the DAW within the projects a track called DRONE. The track must contain a specific service signal dependent on the switching device used (e.g. a 1 kHz sinusoidal signal of the same duration as the audio project). This DRONE track will be assigned to an output channel dedicated to the automatic switching device (e.g. Radial SW8).

If the DRONE track is assigned to the SERVICE family, the volume control via B.Beat's Vol potentiometer does not act on the DRONE track (the output level is always the maximum) and the signal is not played on the headphone.





EXPANSION OF AUDIO OUTPUTS WITH TWO B.BEAT

If you need to increase the number of output Audio channels of your B.Beat, you can “join” a second B.Beat in synchronism and share Audio projects. One part of the tracks of the same project will play on the main B.Beat using the output audio channels (MAIN) and one part will play on the other machine (Expansion) using the audio channels available on the second B.Beat.

In this way, for example, you can use 2 B.Beats and play a project with 12 output audio channels (6 + 6). Here is a list of combinations that can be used to increase the number of outputs of your B.Beat:

MAIN DEVICE	EXPANSION	NUMBER OF TRACKS	NUMBER OF OUT CHANNELS
B.Beat	B.BEAT	32	12
B.Beat	B.BEATX	32	14
B.BeatX	B.BEATX	32	16
B.Beat PRO16	B.BEAT	32	22
B.Beat PRO16	B.BEATX	32	24
B.Beat PRO16	B.BEAT PRO16	32	32

All B.Beat are Main, they can then be set as SPARE (except B.Beat X which is EXPANSION) (use with Audio Switch for redundancy) or as EXPANSION (use as Expansion to increase the number of tracks and channels). The mode setting is done on the SYSTEM>Option>Sync Mode page of B.Beat.

To change the mode: select SYSTEM, then click on OPTION and scroll down to Sync Mode, press enter. Scroll through the values with the Up and Down buttons or by rotating the alpha dial and select the mode.

The B.Beat MAIN is the one that is “coupled” to the Spare or Expansion unit. The Main manages and controls the actions

of the Spare or Expansion. Once the two B.Beat are connected via the Ethernet cable, the Main machine controls the Spare, so any action performed on the Main will also affect the Spare.

A B.Beat set in Expansion mode can also function independently, without the controlling B.Beat MAIN.

In order to use two B.Beat in Expansion mode, projects called “Shared” must be created.

A Shared Project has one part of the tracks coming out of the B.Beat MAIN unit, and the others will be routed to the “Expansion” unit. The shared project can have a number of tracks greater than 16 (up to 32) and a number of Audio out channels

that will be the sum of the Audio channels available in the Main + Expansion machines.

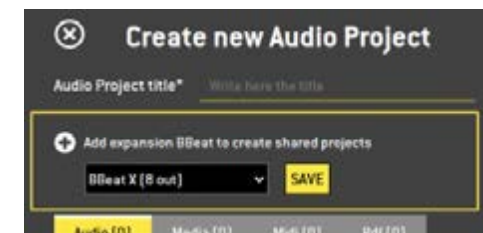
HOW TO CREATE A SHARED PROJECT

As we have already seen, to expand the outputs and tracks of an audio project, it is necessary to share the same project on two B.Beat: the MAIN and Expansion. This is done using the B.Beat Manager:

Creating a shared project from scratch:

1. Connect the B.Beat MAIN to the Computer and open the B.Beat Manager.
2. Choose: “Create new audio project”
3. From the window select “Add device to create shared projects”
4. Click on: Add device to create shared projects.
5. Choose the new device that will be merged with the B.Beat already in use

If the project has more than 16 tracks, these are loaded and automatically assigned to the two B.Beat units in alphabetical order.



Modify a Project by adding a second B.Beat unit:

1. Connect the B.Beat MAIN to the Computer and open the B.Beat Manager.
2. Select the project we want to Share.
3. Select a track and open the window that is used to assign the audio output.
4. Click on: Add device to create shared projects.

Choose which model is used as Expansion. Then the Audio Outputs window will show at the top the outputs of the Main machine and at the bottom the audio outputs of the Expansion machine we have chosen. Then a track can be assigned to one of the two machines at our disposal.





The maximum number of tracks that are manageable per B.Beat is 16. When 16 tracks are assigned to one of the 2 B.Beat, the Audio Output selection area will be disabled when new tracks are added. The Output channel of a track can be changed at any time in the editing page of the Audio project. The headphone output for shared projects is only active on the Main; therefore, it is not possible to assign the music tracks that will play on the Expansion to the headphone.

In the B.Beat manager, tracks that are managed on the Main and Expansion will be highlighted.

B.Beat di destinazione		
Main	✓	Expansion ✗
Main	✓	Expansion ✗
Main	✓	Expansion ✗
Main	✓	Expansion ✗
Main	✓	Expansion ✗
Main	✓	Expansion ✗
Main	✓	Expansion ✗
Main	✓	Expansion ✗
Main	✗	Expansion ✓

All Shows and playlists involving shared projects are manageable from B.Beat Main.

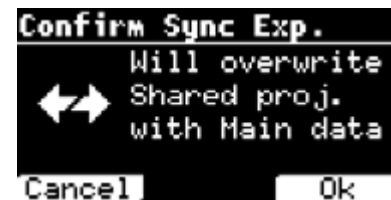
After the creation of the shared projects we have to “synchronise” the two B.Beat, i.e. the Main and the Expansion. After synchronisation between Main and Expansion, all shared project information resides on the two devices.

B.BEAT SYNCHRONISATION

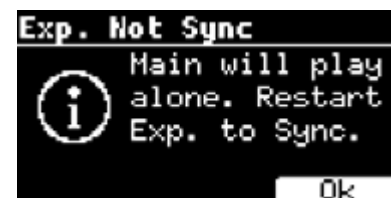
1. Connect the two B.Beat with the Ethernet cable provided.
2. Switch on the two units.
3. As soon as the B.Beat Expansion detects a connected B.Beat Main, confirmation will be required (on Main) for the synchronisation of shared projects.
4. Choose OK to start synchronisation



Then the required confirmation:

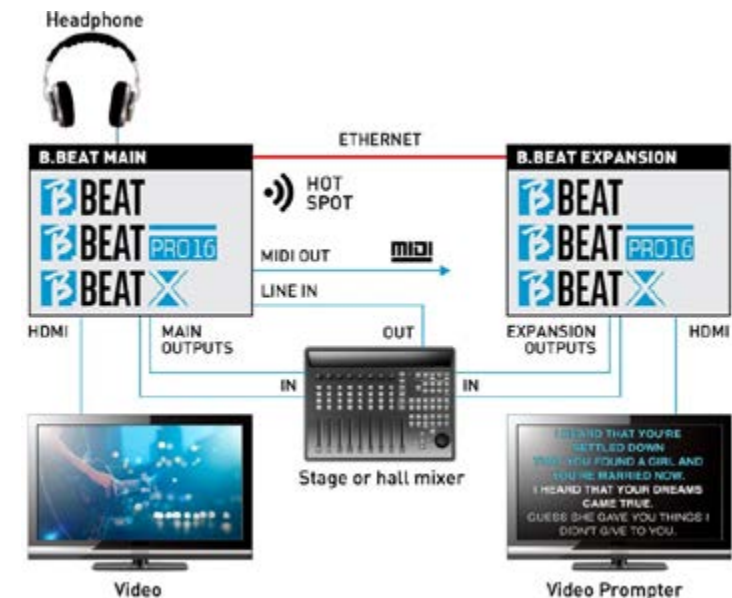


Upon confirmation, all shared projects are synchronised to the version on the B.Beat Main. If a shared project is present on the Expansion but not on the Main, it is deleted. Two B.Beat cannot play together if they are not synchronised. If the “Cancel” option is chosen, the following message appears on the Main:



OPERATION OF THE EXPANSION

When the two B.Beat are connected and synchronised, their connection diagram is as shown:



Once correctly connected, the music tracks are routed partly in the Main and partly in the Expansion. The hotspot will be generated by Main only, in order to connect the prompter and the Remote controller.

Commands (Play, Stop, etc.) can only be given by the MAIN unit.

VIDEO OUTPUTS

The video output of the B.Beat can be set to transmit video files or lyrics when they are present within the project. Having two devices in Expansion mode we can choose to use the two video outputs separately:

one for video and the other for prompter.

MIDI OUT

In expansion mode, both B.Beat Main and Expansion transmit Midi information, so both Midi outputs can be used indiscriminately.

PEDAL

The B.Beat MAIN pedal is the one that will be active to control the two machines.





E.BEAT

B.BEAT EMULATOR

Emulate and edit all the functions of B.Beat Manager to manage backing tracks without connecting B.Beat to the computer.

E.Beat is a software that allows you to 'emulate' a B.Beat via PC or Mac. With E.Beat, you can work on your Backing Tracks repertoire without connecting to B.Beat: you can prepare all your music at home or while touring with your band.

Once you have finished your editing work on the PC via E.Beat simply download everything to a USB Pen that you will then use to 'update' the physical machine.

1. Wherever you want and as much as you want with E.Beat you edit your performance modifying all parameters
2. Save your show, playlists and audio projects on the USB stick
3. Get on stage and update B.Beat with just the USB stick, no need to connect it to your PC

IMPORTANT: to use E.Beat you need to update the B.Beat Manager app to version 4.0 or higher.

With E.Beat you can edit your Audio projects: change volumes, assign tracks, define Audio routing. Perform all editing operations on your backing tracks. Combine Midi and video tracks to make your show unique. Upload sheet music and lyrics and synchronise them to the audio track, you can upload sheet music of several instruments to a single backing track. Organise your performances by creating complete Playlists and Shows down to the last detail.

For more information and to download E.Beat visit www.songservice.it / www.song-service.com / www.song-service.de



B.BEAT PRO16



Display icons

Icon	Meaning
	Active hotspot (optional M-Pen required to generate Wireless)
	Active connection via Ethernet cable
	Active connection via Wireless
	Play status
	Pause status
	Stop status
	Live mode active
	Edit mode. You are changing the data of: •Playlist •Project (Tracks)
	The adjacent number is the number of elements in the selected environment
	The adjacent number is the number of tracks in the project
	Working environment: Library - internal memory
	Working environment: Library - external USB memory
	Working environment: Playlists
	Working environment: Shows
	Mute track (configured as mute)
	Muted track due to the configuration of the family to which it belongs
	Headphone enabled output
	The element is a Project
	The element is a Project with media (video or Jpg)
	The element is a metronome
	The element is a silence
	The media is an image
	The media is a video, e.g. the slots of a scene.

Display icons

	Options menu
	Autoplay of Next (applies to single projects, playlists)
	Starting Next is manual (press Play or pedal)
	Starting Next is automatic after a certain time (Show)
	The scene is in Loop mode (on repeat)
	Information notice
	Request for action or confirmation
	Warning
	Shutdown request
	Hotspot information
	Wireless information
	Ethernet Information - Connected cable
	Ethernet information - Cable not connected
	Delete element
	Live Mode confirmation
	Metronome configuration
	Metronome configuration - Tap
	Import audio files from USB
	File transfer (B.Beat PRO16Manager) activated
	System Update or DSP
	Load element into memory
	Load element as NEXT
	Edit Project Tracks
	View Vu meters
	Registration status
	Active synchronisation
	Device synchronisation
	USB Audio Mode



Ver. 2 giugno 2024



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