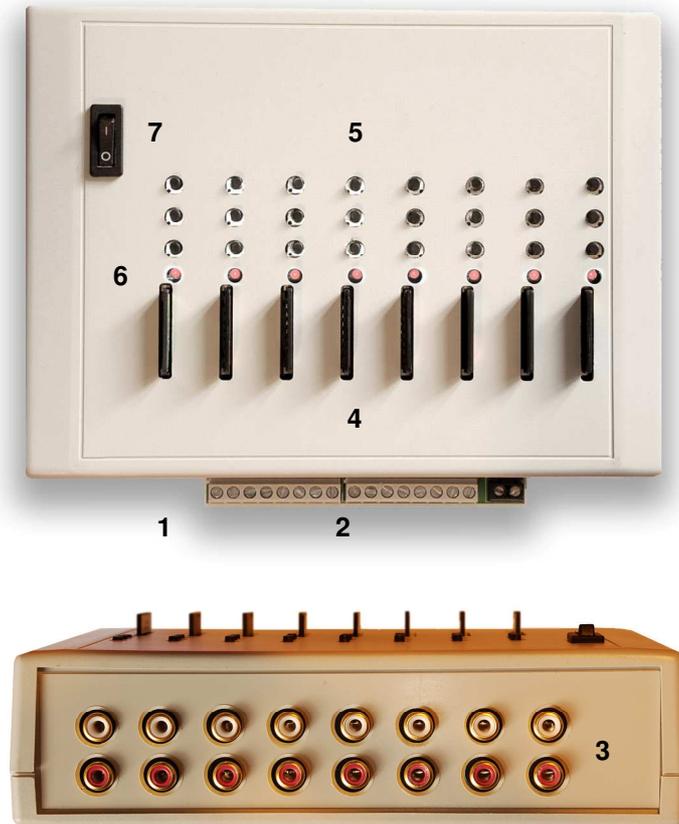


Description



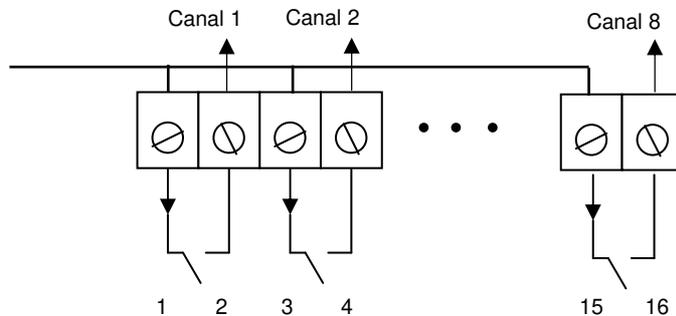
- 1 DC 8-9V. PLUG (+ in the middle).
- 2 TRIGGERS 8 X 2 ways, common and return
- 3 8 X 2 Cinch audio line out (unmixed version, mixed version is 1 x 2 Cinch).
- 4 SD/MMC cards. Sticker faces right.
- 5 Switches. Volume, test, configuration.
- 6 Status Leds.
- 7 ON/OFF switch.

INSTALLATION PROCEDURE

- 1 Check that power is off.
- 2 Connect the triggering switches.



Triggers should behave like simple switches with 2 wires. The device supplies a current source to each pair of connectors. Voltage is 8V and the current when the switch is closed is 15 mA.



- 3 Insert MMC/SD cards.

Beforehand prepared SD or MMC cards (formatting, recording of the mp3 files), are introduced into the receptacles. Metal connectors towards the bottom and the label on the right.

- 4 Connect the audios outputs to the power amplifiers, active speakers or headset. The level is line-out and is envisaged to be connected to an entry with line-in impedance.
- 5 Power on the device.

Check that the power amplifier is set at low level or off to avoid any slapping in high the speakers with starting.

The leds of the 8 channels must go on then off. After ten seconds, if an indicator remains lit or flickers, that indicates that the corresponding card is not correctly installed or is not recognized.

6 Test.

Check that the power amplifier is ready

Test the first channel by pressing the small central switch at the top of the first card on the left. The led should flash and sound should be heard.

If led is flashing and no sound is output, check connection to amplifier and volume setting.

Repeat for each channel.

Now, repeat the test by using the external triggers.

7 Audio level setup.

Each channel can have its audio level set independently of the others. To carry out the adjustment of the level of a channel, use the top switch to decrease the level and the lower switch to increase it.

Settings are stored in flash memory and restored after power down.

To stop playing, press simultaneously Vol- and Vol+ switches

Special settings.

Each channel can operate in 1 of the 2 following modes.

- "normal" mode, the reading is started at the time of the closing of a trigger.

- "continuous" mode, the reading starts with the powering of the apparatus and continues indefinitely.

If only one track is present on the card, this track is played in loop. If several tracks are present on the card, they are played in sequence until the last, then the sequence starts again with the first track. This mode can be useful if one wishes to add a permanent background sound.

Example, wind, a river, or simply a musical background.

It is possible to disable the triggering of one track while it is playing (retriggering)

If there are multiple tracks on card, the channel can be configured to play only the first track, the next track at each new trigger, or, a random track with each trigger.

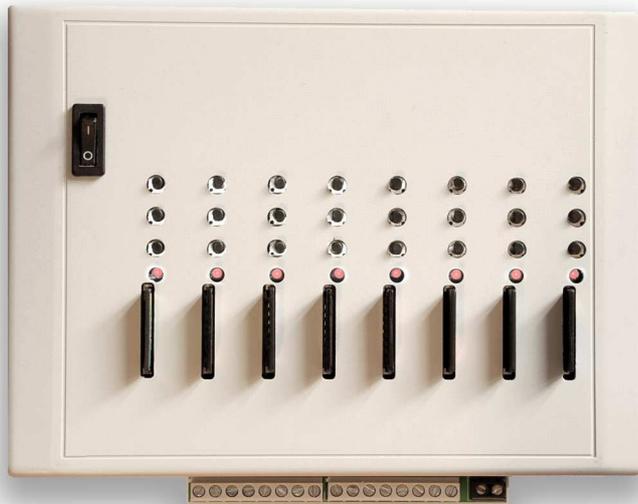
Triggers switch can be normally open (NO) or normally closed (NC)

OPERATING MODE

To proceed to the choice of the operating mode of a channel, do in the following way.

You have to proceed channel by channel.

Each channel have 3 buttons, numbered 1, 2 & 3



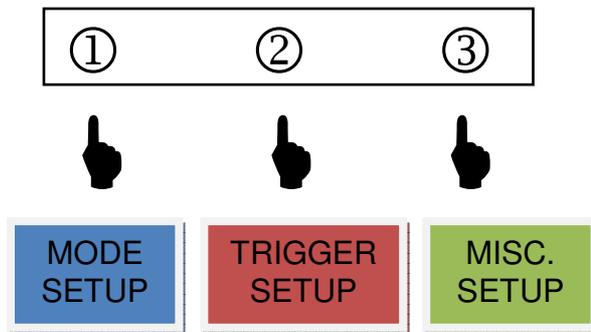
- 1
- 2
- 3



SETUP WITH SWITCHES, for software version BBOXPP01MUTE

SHUT DOWN THE POWER

RESTART THE POWER WHILE HOLDING ONE SWITCH PRESSED



Wait 5 sec and RELEASE THE SWITCH, led flashes, beep...beep...beep

IF YOU HAVE PRESSED “MODE SETUP”
NOW, PRESS A SWITCH AGAIN TO CHOSE A **MODE**



 MODE 2, single track

 MODE 1, continuous player

 MODE 3, loop and event

-Single track, when it has been started, a track is played and the device stops at the end of this track.

-Continuous, all the tracks on the card are played after each other, the player never stops.

-Loop and event, the first track is repeated forever, when a trigger occurs, an alternate track is played, when this one is finished, the player restart looping the first track.

OR IF YOU HAVE PRESSED "TRIGGER SETUP"
PRESS A SWITCH AGAIN TO CHOSE A TRIGGER SETUP



DIRECT (trigger play 1)



CD PLAYER. (trigger play next)



RANDOM.

-Direct, input trigger start a the first track track.

-CD player, input for next track.

-input trigger play a random track

OR IF YOU HAVE PRESSED "MISC. SETUP"
PRESS A SWITCH AGAIN TO CHOSE BETWEEN N.O., N.C. or 15 coded inputs



TRIGGER NORMALY OPEN, must be closed to start



TRIGGER NORMALY CLOSED, must be open to start

To apply different setups, you must power down and restart the process from the beginning.

Preparation of the MMC/SD memory card.

You can use SD memory cards or MMC memory cards.

On a blank card, copy the mp3 files containing the audio tracks. If the memory card is not empty, format it first (quick formatting option).

Audio files have to be previously encoded in mp3 at a rate chosen by the user from 32 to 256 kbs or VBR (variable bit rate).

The files must be copied into the root folder of the card, do not create folders.

The maximum number of files is 250.

The maximum size for a file is 32 Mbytes.

The files will be played in the same order they were copied to the memory card.

Be carefull not to place hidden files or system files on the card, this generally happens with MAC OS.

Check your files by listening to them on your computer from the memory card.

Do not withdraw card of its reader before the copy is fully completed, with a right click on the icon representing the card reader, choose "eject".

In case of trouble**The Led on the module gives indications on its operation.**

At powering ON, the led lights on and remains lit during initialization of the module and memory card. During playing, led is flashing, speed depends on the bitrate.

Led do not light on.

Check power supply, is polarity correct?

On starting, bBox emits a « beep », LED lights on and do not light off.

This indicates a problem with the memory card.

Is there is a SD or MMC card and is it well inserted?

Are there mp3 files on the card? (See 1, preparation of the memory card)

After a trigger contact, LED is flashing slowly but no sound.

Check that Volume is not set to minimum.

Check speakers and their connections.

Firmware upgrade

Each player is factory preloaded with a basic software. It is possible to install new software on each player with a memory card, as you could do with a floppy disk on a PC.

With a PC computer, put the new software on a blank (formatted) card, this should be the only file on the card (choose a tiny capacity card). With power off, put this card in the desired player.

Now press the 2 leftmost switches on the front face (Vol- and Test) at the same time and power ON. Keep the switches pressed for a couple of seconds (1 or 2), the led should go on. You can release the switches, the led should remain on for about 10 sec while the software is upgrading. After 10 seconds, the light will flash. The software is upgraded, switch off the system and remove the firmware card.

Technical specifications

Recording Format :	Digital mp3, 32->256kbs + vbr,
Sample frequency :	22khz or 44khz, mono or stereo.
Bandwith (-3db):	20 – 20khz
Output impedance :	> 32Ω
Separate stereo :	> 58db
S/N :	> 92db
Track access time :	< 100ms
Output Power at 0dB 10K :	700 mV
Interfaces :	Serial port and logical levels
Connectors :	Audio Out Chinch RCA Stereo
Processors :	2 (CPU RISC + DSP)
Recording media :	Flash MMC « MultiMediaCard » or SD
Power Supply :	9VDC with + in the center

Recording Time :

Carte MMC/SD	comments	+ music	« CD » quality
32MB	2 h	90 min	40 min
64MB	4 h	3 h	80 min
128MB	8 h	6 h	160 min
256MB	16 h	12 h	5h 30 min
512MB	32 h	24 h	11 h
1GB	64 h	48 h	22 h