

# Introduction to Studio Technical Equipment

Bermuda.funk provides two analogue broadcasting studios that presenters can operate themselves at the Alte Feuerwache in Mannheim. Both can be used for pre-production and live on-air broadcasting. The studios contain devices for playing and recording as well as PCs with access to the internet that you can use for research and audio editing.

A mixing desk by Dateq (BCS50) is the centre piece in each of the two studios.

In each studio, you can use the following devices:

2 x CD, 1 x MD, 1x Tape, 2 x Microphone, 1 x PC, 1 x DJ-Mixer with 2 x Phono und 2 x DJ-CD-Player (DJ-CD-Player only in Studio 2), 1 x Telephone.

Recording: 1 x MD each, 1 x Tape, 1 x PC.

**Studio 1** – Broadcasting studio with a „round table“: the slightly larger studio is set up to provide enough space for guests or even smaller roundtable discussions. In Studio 1, two additional microphone sets can be connected to the mixing desk.

Tel: 0621 33 93 98 01 (outgoing calls: German landlines ONLY)

**Studio 2** - DJ-Studio: The so-called DJ-Studio has record players on a raised level and CD-players with pitch control and DJ-mixer.

Tel: 0621 33 93 98 02 (outgoing calls: German landlines ONLY)

## **Broadcast live on air: Come early enough!**

If you want to broadcast live on air, make sure you are in the studio in good time to get things set up, and to test your vocal and music levels without being too rushed before you begin.

## **Go on air: The Switcher**

To put the studio live on air, you have to press the switch button „Übernehmen“ (unless you are handing over to the following programme in the same studio). You are now immediately live on air and the outside light „Studio 1“ or „Studio 2“ is lit up. 25 seconds before your show ends (unless someone will continue broadcasting from the studio you are in right after you) you have to press „Übernehmen“ („Take over“). Now, the other studio or the Jukebox (automatic system for rebroadcasting) can continue broadcasting. If you forget to press „Übernehmen“, there will be no signal on air!

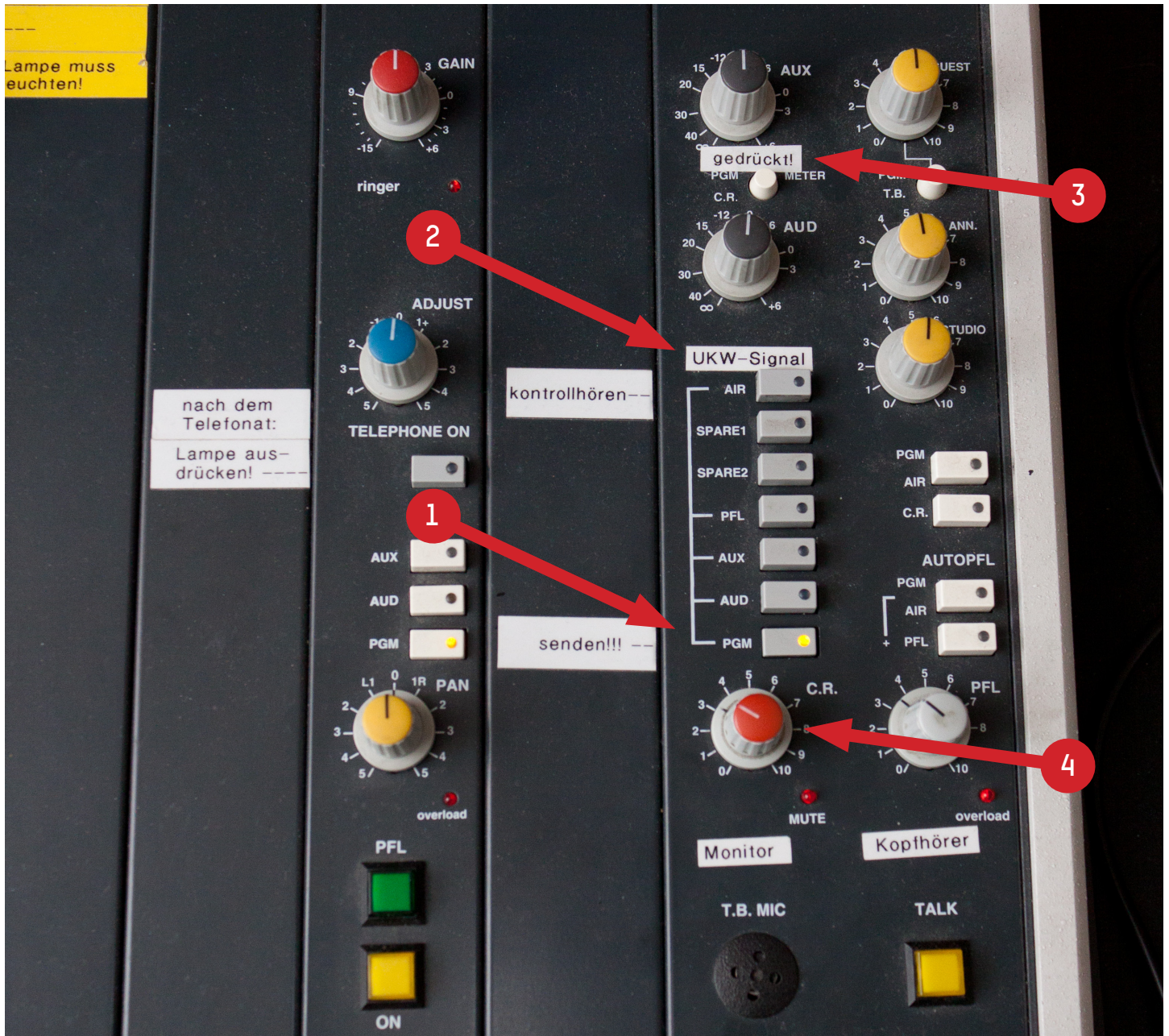
## **Music**

Music can be played from CDs, records, tapes, MDs, from the computer and external devices such as MP3-Players.

In Studio 1, there is an additional small stereo jack cable to connect additional devices.

In Studio 2, the DJ-mixing desk has a cinch cable (Ext. 1) and a mini stereo jack cable (Ext. 2) to connect additional devices.

## Which buttons and keys have to be pressed when?



Input modules

In Studio 1: turn monitor-loudspeakers on.

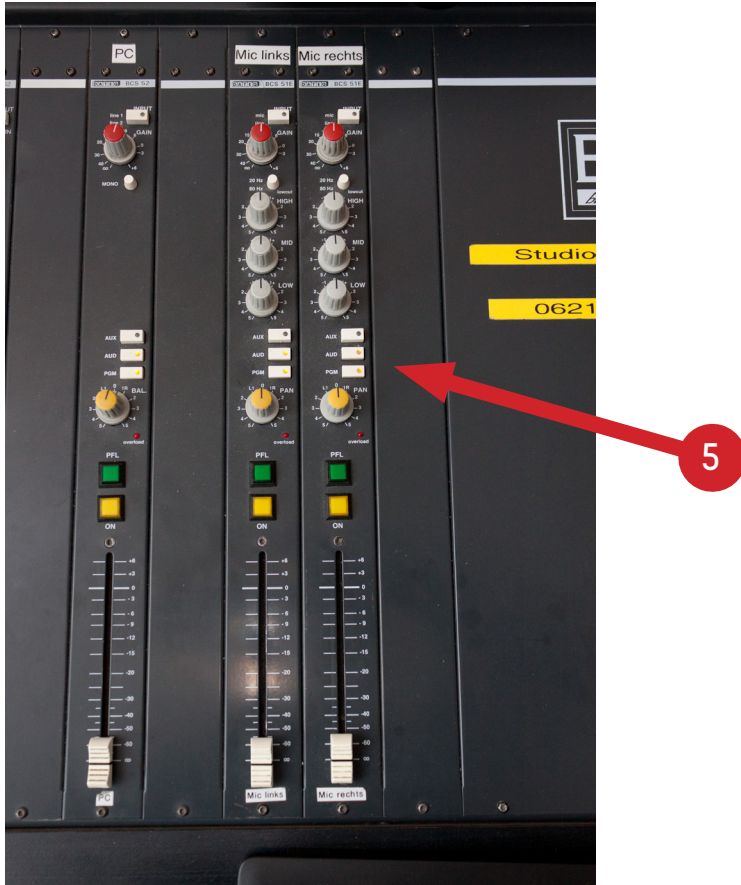
**Important! To set the audio levels for broadcasting correctly, the button "PGM [1]" has to be pressed – only then you can see and adjust the audio level that will be on air!**

When you push the button AIR [2] you can listen to what is currently being played on air. Make sure to deselect this button, otherwise you cannot set the levels for broadcasting!!

The button PGM METER [3] has to be pressed to read the actual audio level for broadcasting.

Close down the turning knob MONITOR [4] while adjusting the audio levels (see page 5) otherwise you may get feedback.





Input modules

The keys AUD and PGM [5] have to be pressed for every input.

**Studio 2 only:** The faders for CD, PC, Mic und MD access one channel only. INPUT [6] may not be on / lit.

MD/Mixer and MD/Tape access two channels. For tape or mixer the button INPUT [6] has to be pressed and lit. Frequent source of defect!





## The microphones

Come close (up to appr. 5 cm)! The popscreen ensures that the distance is correct. The popscreen prevents your plosive sounds (like „b“ and „p“) from popping too much. **Please leave the popscreen in front of the microphones, do not move it away!**

**Important! Make sure you are facing forwards as much as possible when speaking into the microphone!**

Correct microphone setting [7]. You have to be able to read the line „audio-technica“. If you cannot read it, the microphone is twisted and has to be readjusted correctly.

Speak in a normal voice / volume! A special device takes care of levelling out possible volume fluctuations.

**Make sure you are facing forwards [7] as much as possible when speaking into the microphone: „look at the mic with your lips!“**

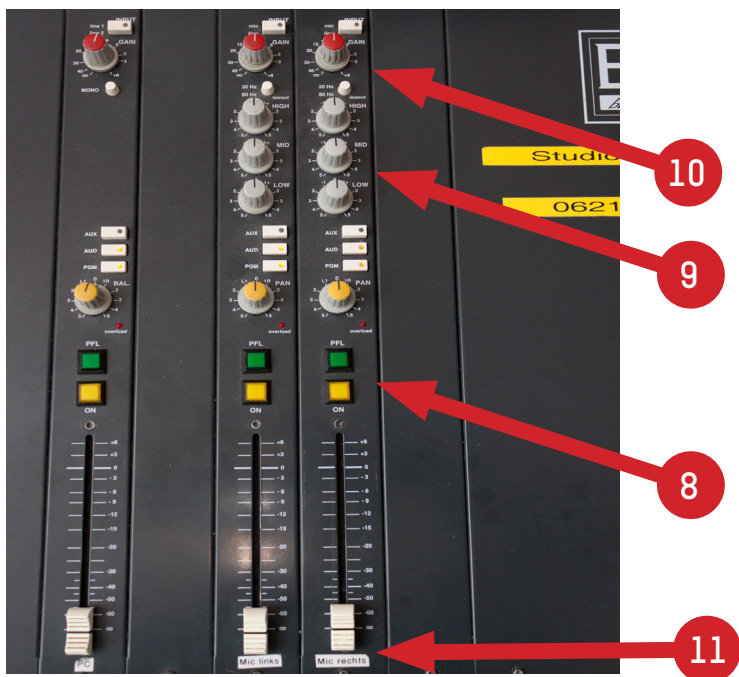
Do not turn your head while speaking, look at others from the corner of your eye, only.

## Prefade-listening and adjusting audio levels of microphones and other sources



Turn down the monitor loudspeaker turning knob in the output module! See Page 1 [4].

Press the green button PFL [8]. The button has to be lit. The level should be around 0 dB. Occasional red peaks are not a problem. Do not move the fader [11] while adjusting the audio level!



High, Mid, Low are recommended to be set at 12 o'clock [9]. If you have a very bassy voice you may increase the High a little bit. Usually, you do not lower or increase Mid and Low.

Speak a short text into the microphone, check the level signal and adjust the red turning knob GAIN [10] until the level signal ranges around 0 dB. Press PFL again to end the pre-listening.

If you have adjusted the audio level of your microphone accordingly, you can pull the fader MIC [11] simply to zero whenever you say anything on air.

## Broadcasting

Turn the monitor loudspeaker turning knob up again.

Pull the fader to 0 or more [10]. Microphones and other sources should always (!) range around 0 dB.

**Please do always take care of this during the show, too!** Adjust accordingly if necessary!

Please do not forget to adjust the audio level of the guests' microphones. They have to be adjusted as carefully as those of the hosts.

HEADSETS are generally recommended to provide a better control over sound and audio levels. **Headsets are indispensable when you present voice-over (talk while music is played simultaneously).** This is because the monitor loudspeakers will go silent as soon as the microphone faders are pulled up, in order to avoid feedback.

ATTENTION! When you do voice-over, make sure to turn the music lower than you think is correct – in the headset, your own voice will sound a lot louder than it actually is, because you can also hear it in inside your head.

**Do not forget to turn off the fader for microphones after presentation and talks. Otherwise, your private conversation in the studio will go live on air!**

## Announcements

Roughly, you should announce your show saying something like this:

„Welcome to the show ... [always on (Day) at (time) or rebroadcasted]. You are listening to bermuda.funk the free radio Rhine-Neckar on 89,6 MegaHertz in Mannheim and 105,4 MegaHertz in Heidelberg, via cable or online at [www.bermudafunk.org](http://www.bermudafunk.org)“.

And in the end:

„This was the show ... You are listening to bermuda.funk, the free radio Rhine-Neckar on Neckar on 89,6 MegaHertz in Mannheim and 105,4 MegaHertz in Heidelberg, via cable or as a live stream at [www.bermudafunk.org](http://www.bermudafunk.org)“

**If you mention dates, times, and days:**

**Please remember that the show will be rebroadcasted!** Therefore, please avoid “Good Morning, Good Evening” etc., do not announce the next show following your own and do not announce events by saying “tomorrow, next Tuesday, next week” – or mention explicitly that this information is valid for the first / live broadcasting only: “In case today is not ..., you are listening to a rebroadcasting of this show”.