# Program Master Modules
BC-PM

The modules BC-PM3 and BC-PM4 are differently luxuriously equipped master modules for the mixer series BC3. One of these modules must be equipped in every BC3 console.

The modules are equipped with the stereo master line, two Aux-master's amplifiers and the stereo Cue master's amplifier. There are available different master's fader-versions with different scales. Farther the modules can be also delivered without master's fader. There is also an insert point, which can be switched before or behind the master's fader for the connection of an external broadcast limiter or other master editing devices.

Additional the module version BC-PM4 is equipped with a limiter, which can be switched before or behind the fader and also a separate tape selection.
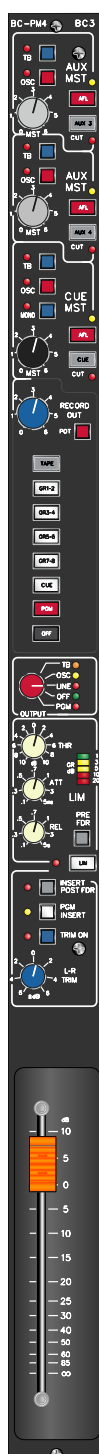
BC3
the adt-audio console system for on air applications.

The realisation of mixing systems up to 72 input channels, 16 audio sub groups, 10 sends with vca and cut grouping facilities is possible as well as configurations for small and medium studios by the extensive range of modules. Depending on the selection of modules it is possible to match the rules of the German IRT-Pflichtenheft 3/5. The consoles are designed for professional operation with highest reliability and longevity. The combination of excellent audio quality and longevity is realized by the use of only high value components. The BC3 consoles are modularly build and makes the construction of customized designed possible.
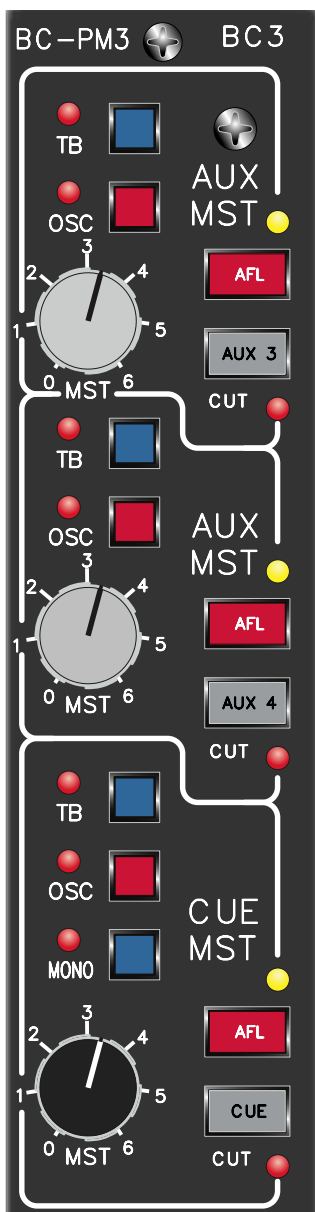
he BC-PM3 is the standard-PGM-Master-module of the system. The BC-PM4 is equipped with some additional features. Both modules can be equipped with many options.

In both module types there are equipped two Aux master amplifiers and the Cue-master's amplifier.

Both Aux-master's amplifiers are implemented identically. The regulation of the master's signal is done by a trick fader. An oscillator-signal and the talkback line TB-AUX can be mixed with the master-sum by pressing the 2 buttons TB and OSC. Additional there exist also a CUT and an AFL button. The allocation of the Aux lines to the master's amplifiers depends of the system configuration.

The Cue-master's amplifier is equipped, in addition, with a Mono button, with which it is possible to change a broadcast stereo signal to mono.

A set of selection buttons for Record out is equipped only in the module BC-PM4. With these buttons it is possible to select the sources PGM (master), Cue, Tape (external selection) and the audio-subgroups GR1 to 8 always in stereo. The button OFF switches off this selection. The selected signal is connected to a separate output whose level is +6 dBu in symmetric technology or - 10 dB in asymmetrical technology (jumper configuration). This output can be used for the connection of recorders for a editing or a production, without blocking of the master or one of the subgroups. For the fading of the output's level, a trick fader can be switched into this stereo-line by pressing of the button POT.

The broadcast switch OUTPUT is equipped in both module versions. The main output of the mixings console (broadcast line) can be switched with a steps switch alternatively to the master PGM, the oscillator, a line connection LINE or command (TALKBACK). An identification generator can be connected to the line-input. In the position OFF the output is muted. Via jumper it can be configured if the monitoring PGM may be done before or behind the broadcast-switch. In the talkback module it is possible to select the kind of the switching of talkback to the broadcast switch by jumpers. In one jumper position the switched TB TO GROUPS output is connected to the broadcast switch. In the other position TB-EXT2 is used for the talkback to the broadcast switch.

The module BC-PM4 is equipped with a master-limiter. The Threshhold can be controlled in an area of 10 dB around the normal level. Additional the Attack- and the Release-time are adjustable. A number of 5 LEDs serves for the signalisation of the gain reduction. The master-limiter is optimized for a very quick build-up time.

The unity is activated by the button LIM and is located usually behind the master's fader. By the button PRE FDR it is possible to switch the limiter also before the master's fader.

In both module versions the rest elements are realized identically.

The insert point is completely buffered (output- and input-amplifiers) and naturally implemented in stereo. Usually it is located before the master's fader but can be switched behind the master's fader and also behind the limiter of the BC-PM4, by pressing the button INSERT-POST-FDR.

The insert output is always connected to the connector panel, the insert input is switched in the audio line by pressing of the button PGM-INSERT. So external devices can remain connected and are used or bridged by switch of the button. Insert input and output can be implemented alternatively electronically balanced or balanced and floating (transformer-balanced).

As the main fader there is used a 100-mm slider fader or optional Penny and Giles fader with 128 mms of sliding way. The fading of the audio-signal is done with high-quality VCA's. In the master no other functions exist like PFL or fader-start.

Alternatively versions of the modules are available without equipped master's fader. Then the output is firmly calibrated on 0 dB. The fader area is covered with a panel. Alternative scales for the production are also availably - but only for the fader version Penny and Giles with 128 mms of sliding way. Here can be inserted a scale with increased fade-out section and 5 dB of maximum gain.
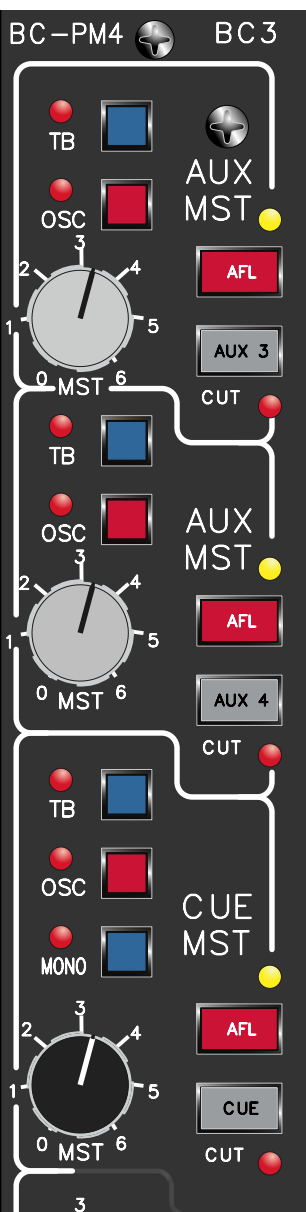
- 2 aux master amplifiers
- Stereo cue master amplifier
- additional record out in module PM4 (record line can be selected and controlled)
- Master limiter in module PM4
- Limiter alternatively pre or post master fader
- switchable master insert pre or post master fader
- different fader versions
- different scalings
- versions without master faders
- 100mm oder 128 mm main fader
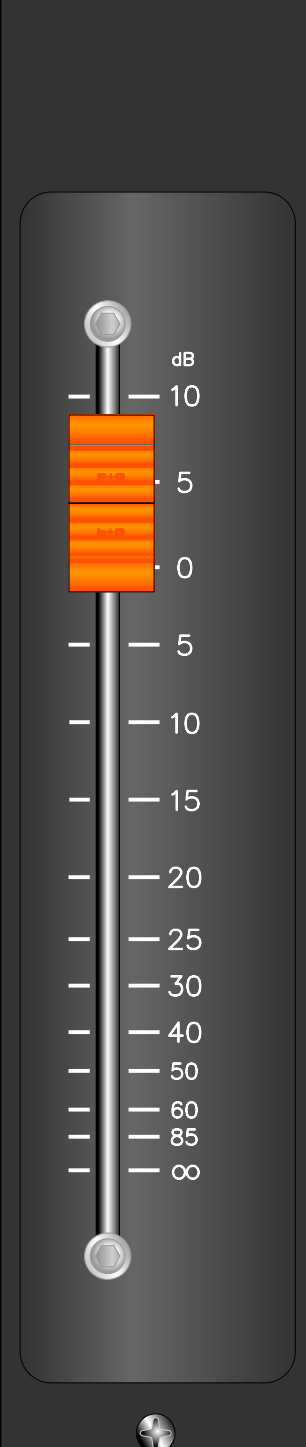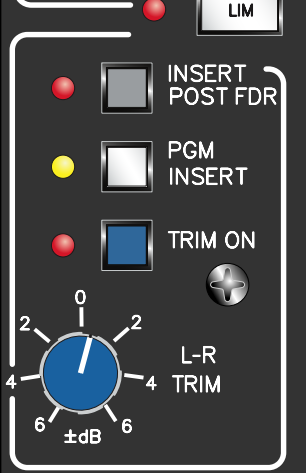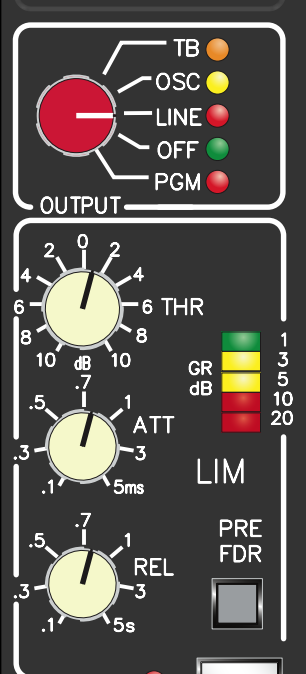
fader area of the version BC-PM3/4s

The fader L-R-TRIM is not usually in the audio line. It can be inserted by pressing of the button L-R-TRIM and regulates in an area of 6 dB to the left against the right master. With this function it is possible to balance the master in the channel, without the equipment of two mono-master's faders.

All audio-connections are implemented with XLR connectors (Neutrik).
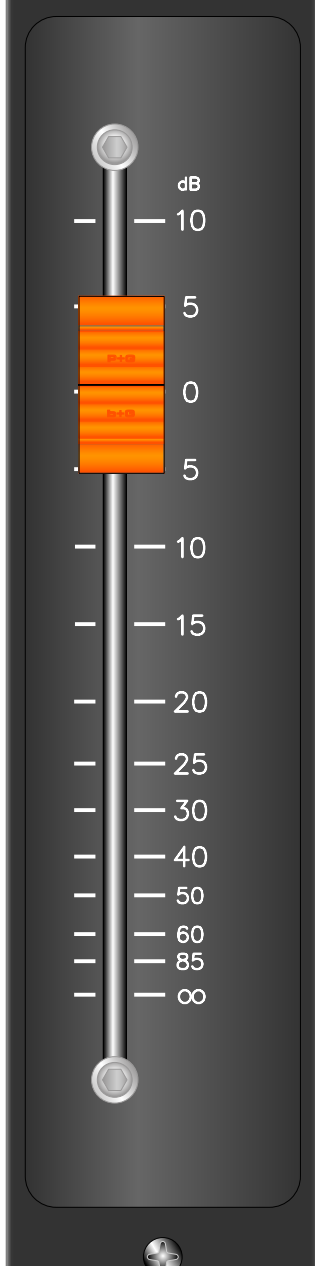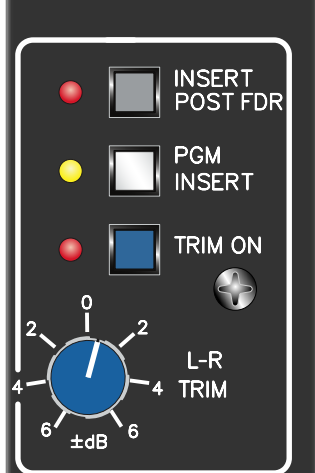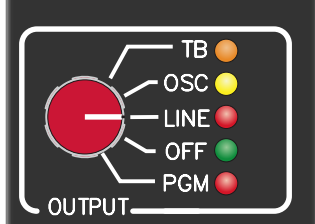
Standard options:

Output level of the tape output +6dB/-10dB other zero levels than + 6dBu
Standard input transformer für Insert-In
Torodial input transformer für Insert-In
Standard output transformer für Aux-Out
Torodial output transformer für Aux-Out
Standard output transformer for PGM-Out
Torodial output transformer for PGM-Out
Standard output transformer for CUE-Out
Torodial output transformer for CUE-Out
128 P&G fader
P&G fader with different skaling or no master fader
additional VU or ledmeters for the program master

vie of the BC-IM3 in original size