B BUDDY
PREAMP STEREO MIXER

BUDDY
PREAMP STEREO MIXER
B POST SOUND

MODULAR
A
B
2× GAIN

LINE PREAMP
C
D
10× GAIN

LEFT   RIGHT
A
B
C
(st)
D
(st)

LEFT OUT   RIGHT OUT
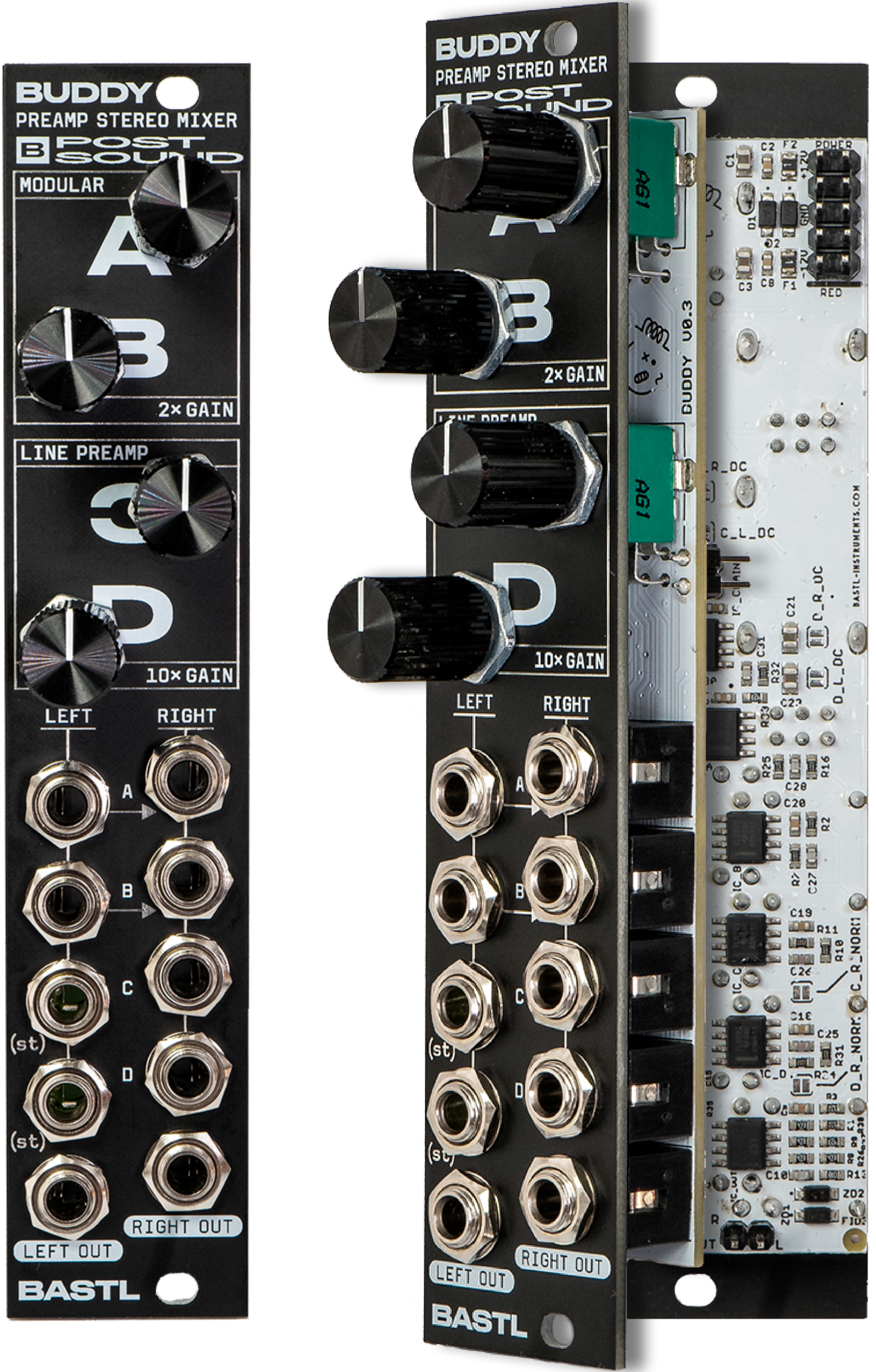
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INSTRUMENTS

BUDDY

Buddy is a four-channel eurorack stereo mixer optimized for hybrid setups. Channels A and B are optimized for eurorack sources (either mono or stereo) with a slight boost (×2 / +6dB). Channels C and D are line-level pre-amps that can boost the signal up to ×10 / +20dB and feature stereo TRS jack inputs for directly connecting desktop units without further adaptors. All channels feature a clean boost via the high-quality, low-noise NE5532 op-amp (same as on the Dude), which delivers smooth overdrive - that can be used to overdrive clean stereo signals. Several Buddy mixers can be chained via jumper cables on the back to expand the number of channels without losing precious inputs.

Setup examples
● Use your eurorack as an effects processor! Buddy will boost your desktop gear to correct levels and be your perfect aux send mixer.
● Use Buddy as a stereo mixdown module for all your stereo/mono voices.
● Use external stereo sound processors with eurorack voices. Buddy will boost their levels back to modular levels.
● Use the Buddy stereo mixdown attenuator to lower the level for line-level devices.

Technical details
● 5hp
● 10pin protected eurorack power connector
● depth 30mm (with power cable attached)
● current consumption +12V: <27mA, -12V: <27mA

Features
● Channels A and B:
   — DC coupled
   — 100k input impedance
   — gain ×2 / +6dB,
   — left input normalized to right channel
● Channels C and D:
   — AC coupled
   — 10k input impedance
   — gain ×10 / +20dB
   — stereo TRS 3.5mm jack input or 2× mono TS 3.5mm
   — solder jumpers to convert to DC coupled
   — solder jumpers to normalize left input to right channel
● Soft Zenner clipping at 10vpp on mixdown stages
● NE5532 op-amp for low-noise pre-amp
● 1k output impedance
● Chaining back jumpers L/R inputs and L/R outputs: Only when Buddy outputs are not patched, the mixdown is sent to the output chain jumpers (patch configurable mixdowns).

MANUAL

BUDDY
PREAMP STEREO MIXER
B POST SOUND

MODULAR

A
B

1

2× GAIN

LINE PREAMP

C
D

2

10× GAIN

LEFT   RIGHT

A →

1

B →

C

(st)

2

D

(st)

3

RIGHT OUT

LEFT OUT

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FID1

C2   F2   POWER
C1   +12V
D1
GND
D2
-12V
C3 C8 F1
RED

!

DESIGNED AND PRODUCED IN CZECH REPUBLIC

BUDDY_V1.0

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C22   C_R_DC

CHAIN_IN   6

C_L_DC

L

4   CHAIN_IN   C24   C29   IC_CHAIN   D_R_DC
R   R30   C29
R40   C21   D_L_DC   7
R34   R28   C14   C31   R32
R39   C32   C4   R33   C23   D_L_NORM
R27   C5   IC_A   R25   R16
C13   R17   C28
C20
FID2   R15   C12   R20   C19   R2   C_R_NORM
R18   IC_B   R7   C27
R19   C16   IC_C   C26   R11   R10
D_ST_NORM C_ST_NORM   R23   C11   C18   C_R_NORM
R21   R31   D_R_NORM
R22   R35   C25   R24
8   8
9   9
R29 R36 R5 R6   R3
R4 R12   C9
R14   C7   C10   R8 R9 R1
ZD3   IC_OUT   ZD2
L   ZD1   FID3
ZD4   R   CHAIN_OUT

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MANUAL

! POWER !

Before connecting the ribbon cable to this module, disconnect your system from power! Double-check the polarity of the ribbon cable and that it is not misaligned in any direction. The red wire should match the -12V rail, both on the module and the bus board.

! please make sure of the following

● you have a standard pinout eurorack bus board
● you have +12V and -12V rails on your bus board
● the power rails are not overloaded by current

Although there are protection circuits on this device, we do not accept any responsibility for damages caused by the wrong power supply connection. After you've connected everything, double-checked it, and closed your system (so no power lines can be touched by hand), turn on your system and test the module.

1 Channel A and B

Channels A and B serve for eurorack sources (mono or stereo) with a slight boost (×2 / +6dB). They are DC coupled with 100k input impedance and the left input is normalized to the right input – if only a mono source is connected, it should be plugged into the left channel, and a copy of this mono signal goes to the right channel.

2 Channel C and D

Channels C and D are line-level pre-amps that can boost the signal up to ×10 / +20dB and feature stereo TRS jack inputs for direct integration with your desktop units without further adaptors. They are AC coupled with 10k input impedancel.

3 Outputs

Left and right mixdown outputs are treated with soft Zenner clipping at 10vpp in the mixdown stages, and they have 1k output impedance.

4

Several Buddy units can be chained to obtain more stereo mixing channels. Use these jumpers to connect to CHAIN_ OUT headers of the previous Buddy in the chain. Match L labeled and R labeled jumpers on both headers.

5

Use these headers on early Buddy in the chain. Signal will be sent to these headers only when the outputs are NOT connected. This setup allows flexible patch configurable mixdown configurations. Match L labeled and R labeled jumpers on both headers.

6

Channel C can be configured to have AC input by closing solder jumpers for both left and right channels.

7

Channel D can be configured to have AC input by closing solder jumpers for both left and right channels.

8

The normalization scheme of channel C can be converted to the same as on channels A or B by cutting the C_ST_NORM and closing the C_R_NORM solder jumpers.
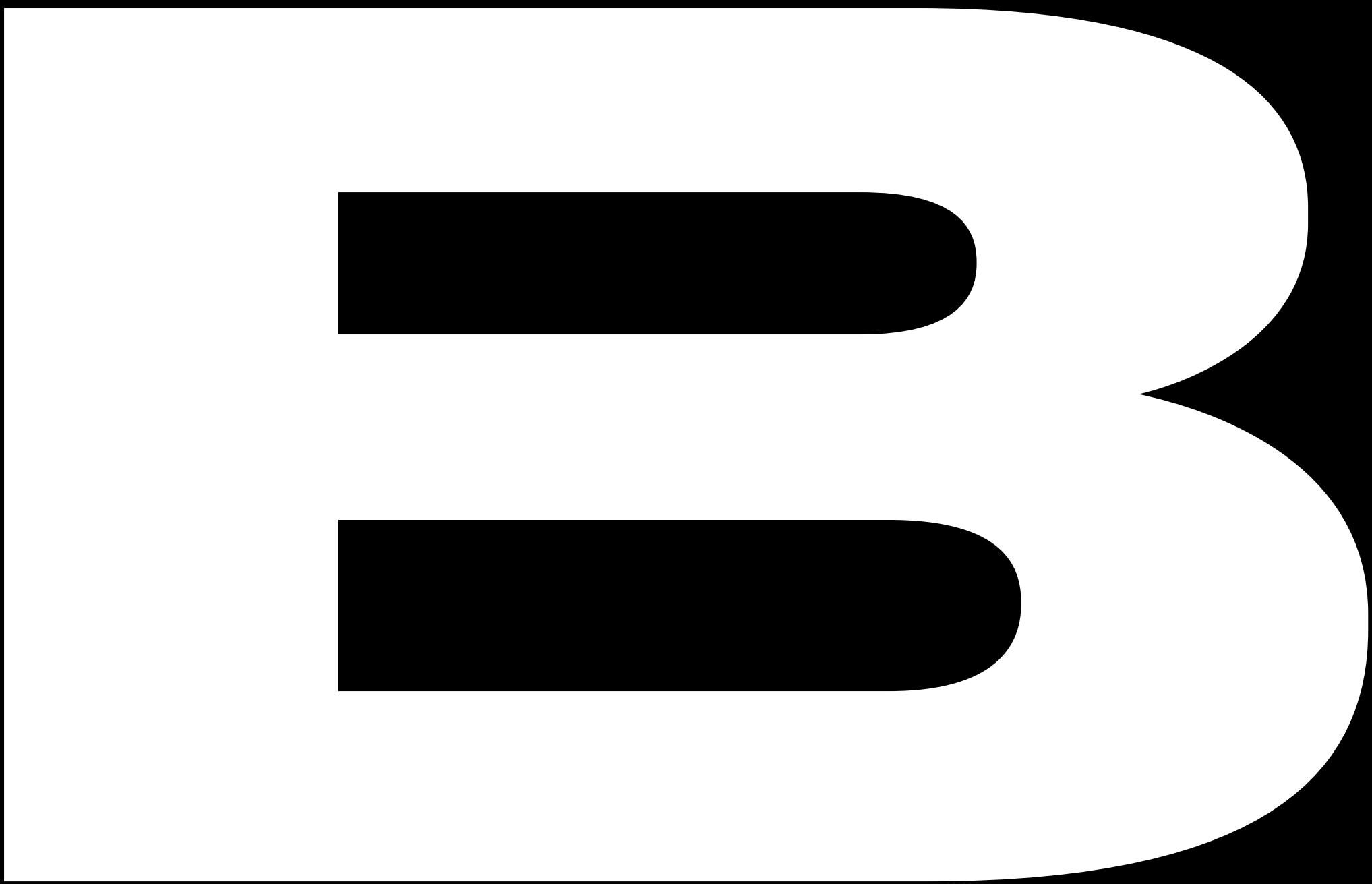
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The normalization scheme of channel D can be converted to the same as on channels A or B by cutting the D_ST_NORM and closing the D_R_NORM solder jumpers.

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more info
and video tutorials

www.bastl-instruments.com