

DESCRIPTION

Description mono channel :

1) MIC socket (XLR)

Electronically balanced XLR connector input socket. For connection of low level signal sources such as Microphones or other low impedance devices

2) Line socket (JACK 6.35mm)

Balanced or unbalanced stereo jack 6.35 input socket. For connection of high level sound sources, such as keyboards, electric guitars, electronic musical instruments or audio playback units. Mono connectors can be also used for automatic signal unbalancing.

3) Insert socket (JACK 6.35mm)

Stereo JACK 6.35 connector for connection of the input and output of a remote device noise gate, Compressor, equalizers in serie with the channel. The command is only available in mono channels.

4) PAD button

When you push this switch, the signal input is decreased of -20dB

5) Gain Button

Used to adjust the signal from the MIC(1) and LINE(2) inputs, ensuring optimal performance of channel circuits. For well balanced gain adjustment, position the volume fader (14) at approximately 3/4 of the Control travel, then adjust gain until the peak LED (10) lights up onlu at signal peaks.

6) High tone controls

This rotary potentiometer is used to adjust the HIGH frequency response of each channel. They correct the signal in a +/-15dB range.

Note : Too much adjustments can distort the sound

7) Mid tone controls

This rotary potentiometer is used to adjust the MEDIUM frequency response of each channel. They correct the signal in a +/-12dB range.

Note : Too much adjustments can distort the sound

8) Low tone controls

This rotary potentiometer is used to adjust the LOW frequency response of each channel. They correct the signal in a +/-15dB range.

Note : Too much adjustments can distort the sound

9) AUX 1 button

With this rotary potentiometer, you can adjust the level of he input signal you want to send to the AUX 1 output.

10) AUX 2 button

With this rotary potentiometer, you can adjust the level of he input signal you want to send to the AUX 2 output.

11) EFF 1 button

This rotary potentiometer adjusts the level of the input signal you want to send to the effect.

12) EFF 2 button

This rotary potentiometer adjusts the level of the input signal you want to send to the effect.

13) PAN button

This control adjusts the signal stereo position. Turn the knob to the left or right to vary the proportion of the two signals. Turn the knob to far left or to far right to eliminate the opposite signal. To connect a stereo source, you must use two mono channels. For the first channel, pan position to left and for the other Channel, pan position to right.

14) Level indicators

Red LED lighs up when the signal level is rear clipping point. The yellow LED is 0dB level and the green LED is -20dB level.

15) PFL switch

Push this switch when you want to hear this channel into you headphone.

16) SUB 1-2 Switch

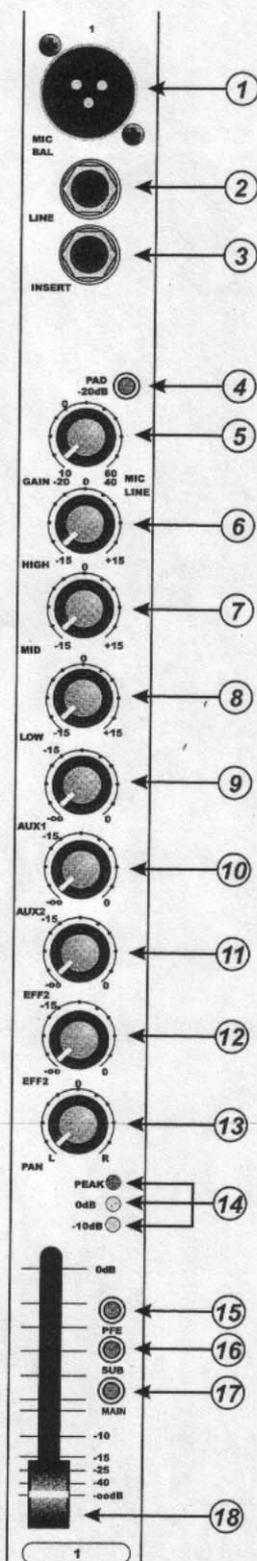
Push this switch if you want this channel to be controlled by SUB 1-2 fader in SUB output.

17) Main switch

Push this switch if you want this channel to be controlled by main L-R fader in main output.

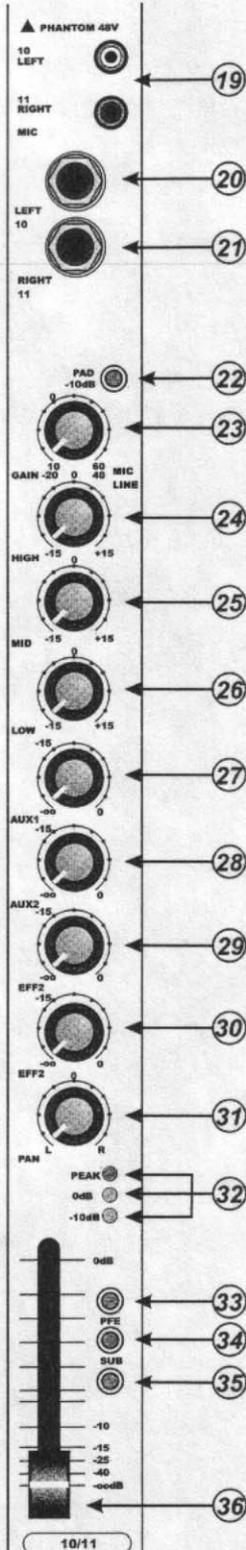
18) mono channel level controls

The channel level slide control can be used to adjust the individual input to obtain the desired volume of Each channel.

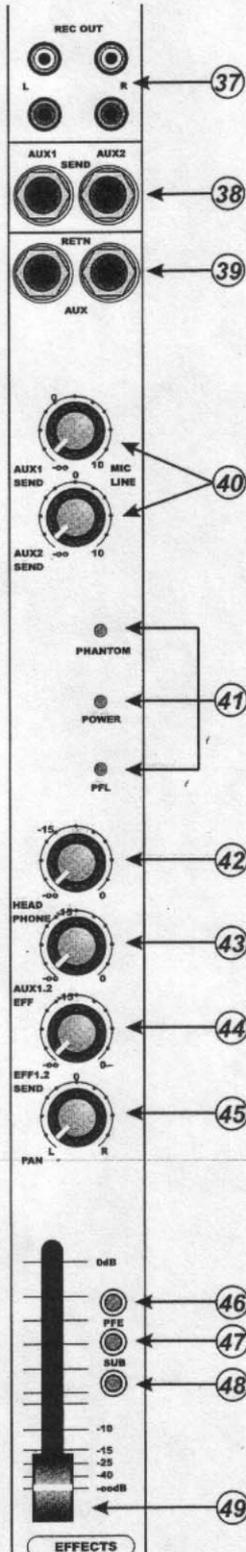


Description stereo channel :

- 19) **Stereo socket (RCA)**
Those sockets are used to connect a line level equipment
- 20) **Left input socket (KACK 6.35mm)**
Used to connect the left input of a line equipment.
- 21) **Right input socket (JACK 6.35mm)**
Used to connect the right input of a line equipment.
- 22) **PAD Switch**
When you push this switch, the input signal is decreased of -10dB
- 23) **Gain button**
Used to adjust the level of the input signal. Useful to harmonize the level of all the inputs.
- 24) **High tone controls**
This rotary potentiometer is used to adjust the HIGH frequency response of each channel. They correct th signal in a +/-15dB range.
Note : Too much adjustments can distort the sound
- 25) **Mid tone controls**
This rotary potentiometer is used to adjust the MEDIUM frequency response of each channel. They corre the signal in a +/-12dB range.
Note : Too much adjustments can distort the sound
- 26) **Low tone controls**
This rotary potentiometer is used to adjust the LOW frequency response of each channel. They correct th signal in a +/-15dB range.
Note : Too much adjustments can distort the sound.
- 27) **AUX 1 button**
With this rotary potentiometer, you can adjust the level of the input signal you want to send to the AUX 1 output.
- 28) **AUX 2 button**
With this rotary potentiometer, you can adjust the level of the input signal you want to send to the AUX 2 output.
- 29) **EFF 1 button**
This rotary potentiometer adjust the level of the input signal you want to send to the effect.
- 30) **EFF 2 button**
This rotary potentiometer adjust the level of the input signal you want to send to the effect.
- 31) **PAN button**
This control adjusts the signal stereo position. Turn the knob to the left or right to vary the proportion of the two signals. Turn the knob to far left or to far right to eliminate the opposite signal. To connect a stereo source, you must use two mono channels. For the first channel, pan position to left and for the other channel, pan positon to right.
- 32) **Level indicators**
Red LED lighs up when the signal level is rear clipping point. The yellow LED is 0dB level and the green LED is -20dB level.
- 33) **PFL switch**
Push this switch when you want to hear this channel into you headphone.
- 34) **SUB 1-2 switch**
Push this switch if you want this channel to be controlled by SUB 1-2 fader in SUB output.
- 35) **Main switch**
Push this switch if you want this channel to be controlled by main L-R fader in main output.
- 36) **Stereo level controls**
The channel level slide control can be used to adjust the individual input to obtain the desired volume of Each channel.

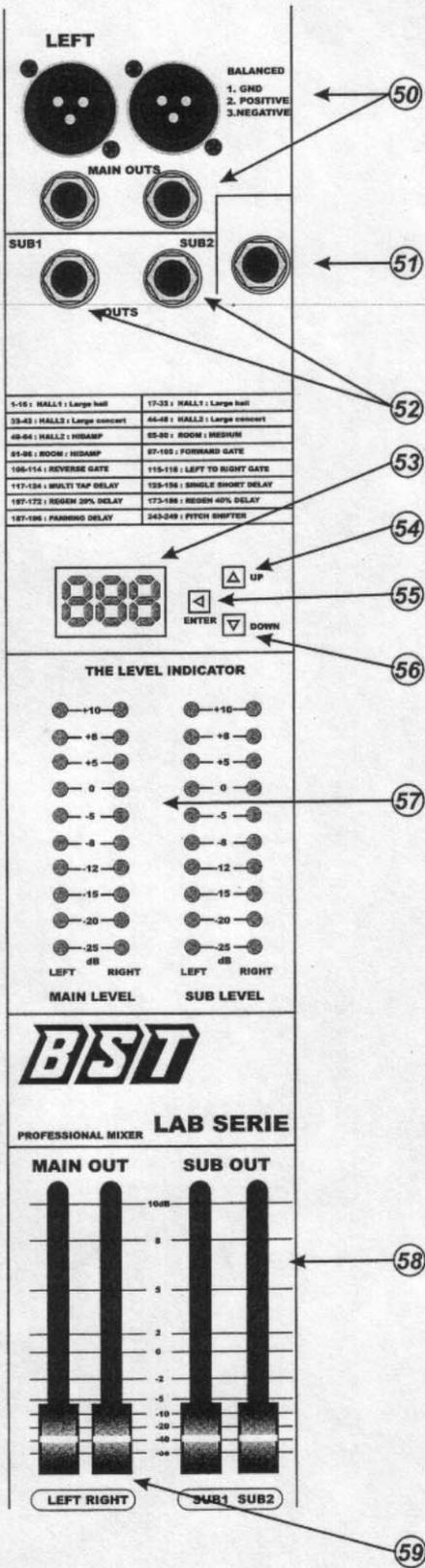


Description of the effect section :



- 37) **REC outputs (RCA)**
Those sockets can be connected with a cassette desk when recording the mixed out signal.
- 38) **SEND AUX 1 & AUX 2 outputs**
Unbalanced JACK connectors for connection of monitors, either amplified or for amplification. The Output signal is regulated by the AUX1 AUX2 controls
- 39) **RETURN AUX 1 & AUX 2 return**
Input connectors allowing the output of the remote effect device to be connected to the mixer.
- 40) **AUX1 SEND & AUX2 SEND level controls**
They regulate the general level of the monitor signals received from the input channels for sending to the monitor speaker of the audio system connected to the mixer by means of the AUX1 AUX2 outputs.
- 41) **POWER, PHANTOM & PFL indicators**
Phantom indicator lights up when the phantom switch is on.
Power indicator lights up when you switch your professional mixer on.
PFL indicator lights up when one of the PFL switch of each channel is pushed.
- 42) **Headphone level control**
This rotary potentiometer is used to adjust the level into the headphone.
- 43) **AUX 1-2 EFF control**
Controls the level of the effect signal to be sent to the AUX1-AUX2 SEND
- 44) **EFF 1-2 SEND control**
They regulate the general level of the effect line signal received from the input channels for sending to the internal effect section.
- 45) **PAN button**
Used this control to adjust the echo sound between left and right
- 46) **PFL switch**
Allows headphone monitoring of the level of the EFF 2 effect. The PFL (Pre fader listen) function allows the level to be listened before the action of the volume control.
- 47) **SUB 1-2 switch**
Push this switch, the effect level can to be the SUB 1-2 fader
- 48) **MAIN L-R switch**
Push this switch, the effect level can to be the main L-R fader.
- 49) **Effect level control**
This is the control of the effect1-2 signal level to be sent to the main, SUB outputs

Description of the master section :



- 50) **Main outputs (XLR & JACK 6.35mm)**
XLR connectors which supply the mixing of the signals controlled by the main L/R faders. The signal taken from these outputs requires use of a remote amplifier for connection to the speakers. If you have activ speakers (with a built in amplifier), directly connect these Output to your activ speakers
- 51) **Headphone socket**
Balanced stereo jack used for connection of your headphone.
- 52) **SUB 1-2 outputs (JACK 6.35mm)**
Connect to these sockets a monitor power amplifier where are connected your monitoring speakers
- 53) **Display**
It shows you the number of the effect you want to choose (see effect table)
- 54) **Up button**
This switch is used to choose the effect you want to simulate (see effect table)
- 55) **Enter button**
This switch allows you to validate the effect you choose.
- 56) **Down button**
This switch is used to choose the effect you want to simulate (see effect table)
- 57) **Vumeters**
All this led give you a visual level of the Main L-R & SUB 1-2 level outputs
- 58) **SUB 1 & 2 level controls**
Used these faders to adjust the level of the SUB 1 & 2 outputs
- 59) **MAIN L-R level controls**
Used these faders to increase or decrease the level of the main output (left / right)

EFFECT TABLE

HALL 1 : Large hall

- 01. HALL 1 1.0S
- 02. HALL 1 1.2S
- 03. HALL 1 1.5S
- 04. HALL 1 1.8S
- 05. HALL 1 2.0S
- 06. HALL 1 2.2S
- 07. HALL 1 2.5S
- 08. HALL 1 2.8S
- 09. HALL 1 3.0S
- 10. HALL 1 3.5S
- 11. HALL 1 4.0S
- 12. HALL 1 4.5S
- 13. HALL 1 5.0S
- 14. HALL 1 6.0S
- 15. HALL 1 8.0S
- 16. HALL 1 10.0S

HALL 2 : large concert

- 33. HALL 2 1.0S
- 34. HALL 2 1.2S
- 35. HALL 2 1.5S
- 36. HALL 2 1.8S
- 37. HALL 2 2.0S
- 38. HALL 2 2.2S
- 39. HALL 2 2.5S
- 40. HALL 2 2.8S
- 41. HALL 2 3.0S
- 42. HALL 2 3.5S
- 43. HALL 2 4.0S
- 44. HALL 2 4.5S
- 45. HALL 2 5.0S
- 46. HALL 2 6.0S
- 47. HALL 2 8.0S
- 48. HALL 2 10.0S

HALL 1 HIDAMP : Large hall with high Frequency filter on decay

- 17. HALL 1 HIDAMP 1.0S
- 18. HALL 1 HIDAMP 1.2S
- 19. HALL 1 HIDAMP 1.5S
- 20. HALL 1 HIDAMP 1.8S
- 21. HALL 1 HIDAMP 2.0S
- 22. HALL 1 HIDAMP 2.2S
- 23. HALL 1 HIDAMP 2.5S
- 24. HALL 1 HIDAMP 2.8S
- 25. HALL 1 HIDAMP 3.0S
- 26. HALL 1 HIDAMP 3.5S
- 27. HALL 1 HIDAMP 4.0S
- 28. HALL 1 HIDAMP 4.5S
- 29. HALL 1 HIDAMP 5.0S
- 30. HALL 1 HIDAMP 6.0S
- 31. HALL 1 HIDAMP 8.0S
- 32. HALL 1 HIDAMP 10.0S

HALL 2 HIDAMP : Large concert with high Frequency filter on decay

- 49. HALL 2 HIDAMP 1.0S
- 50. HALL 2 HIDAMP 1.2S
- 51. HALL 2 HIDAMP 1.5S
- 52. HALL 2 HIDAMP 1.8S
- 53. HALL 2 HIDAMP 2.0S
- 54. HALL 2 HIDAMP 2.2S
- 55. HALL 2 HIDAMP 2.5S
- 56. HALL 2 HIDAMP 2.8S
- 57. HALL 2 HIDAMP 3.0S
- 58. HALL 2 HIDAMP 3.5S
- 59. HALL 2 HIDAMP 4.0S
- 60. HALL 2 HIDAMP 4.5S
- 61. HALL 2 HIDAMP 5.0S
- 62. HALL 2 HIDAMP 6.0S
- 63. HALL 2 HIDAMP 8.0S
- 64. HALL 2 HIDAMP 10.0S

ROOM : Medium size room

- 65. ROOM 0.5S
- 66. ROOM 0.8S
- 67. ROOM 1.0S
- 68. ROOM 1.2S
- 69. ROOM 1.5S
- 70. ROOM 1.8S
- 71. ROOM 2.0S
- 72. ROOM 2.2S
- 73. ROOM 2.5S
- 74. ROOM 2.8S
- 75. ROOM 3.0S
- 76. ROOM 3.2S
- 77. ROOM 3.5S
- 78. ROOM 3.8S
- 79. ROOM 4.0S
- 80. ROOM 4.2S

ROOM HIDAMP : Medium size room with high frequency

- 81. ROOM HIDAMP 0.5S
- 82. ROOM HIDAMP 0.8S
- 83. ROOM HIDAMP 1.0S
- 84. ROOM HIDAMP 1.2S
- 85. ROOM HIDAMP 1.5S
- 86. ROOM HIDAMP 1.8S
- 87. ROOM HIDAMP 2.0S
- 88. ROOM HIDAMP 2.2S
- 89. ROOM HIDAMP 2.5S
- 90. ROOM HIDAMP 2.8S
- 91. ROOM HIDAMP 3.0S
- 92. ROOM HIDAMP 3.2S
- 93. ROOM HIDAMP 3.5S
- 94. ROOM HIDAMP 3.8S
- 95. ROOM HIDAMP 4.0S
- 96. ROOM HIDAMP 4.2S

FORWARD GATE :

- 97. Low density forward gate 100ms
- 98. Low density forward gate 150ms
- 99. Medium density forward gate 200ms
- 100. Medium density forward gate 250ms
- 101. High density forward gate 300ms
- 102. High density forward gate 350ms
- 103. High density forward gate 400ms
- 104. High density forward gate 450ms
- 105. High density forward gate 500ms

REVERSE GATE :

- 106. Low density reverse gate 100ms
- 107. Low density reverse gate 150ms
- 108. Medium density reverse gate 200ms
- 109. Medium density reverse gate 250ms
- 110. High density reverse gate 300ms
- 111. High density reverse gate 350ms
- 112. High density reverse gate 400ms
- 113. High density reverse gate 450ms
- 114. High density reverse gate 500ms

LEFT TO RIGHT GATE

- 115. Medium density left to right gate 500ms
- 116. High density left to right gate 500ms

MULTI TAP DELAY

- 117. 3/4 time echo
- 118. 3/4 time panned echo
- 119. 4/4 time echo 1
- 120. 4/4 time panned echo 1
- 121. 4/4 time echo 2
- 122. 4/4 time panned echo 2
- 123. triplet
- 124. Panned triplet

SINGLE SHORT DELAY :

- 125. Single delay 20ms
- 126. Single delay 25ms
- 127. Single delay 30ms
- 128. Single delay 35ms
- 129. Single delay 40ms
- 130. Single delay 45ms
- 131. Single delay 50ms
- 132. Single delay 55ms
- 133. Single delay 60ms
- 134. Single delay 65ms
- 135. Single delay 70ms
- 136. Single delay 75ms
- 137. Single delay 80ms
- 138. Single delay 85ms
- 139. Single delay 90ms
- 140. Single delay 95ms
- 141. Single delay 100ms
- 142. Single delay 125ms
- 143. Single delay 150ms
- 144. Single delay 175ms
- 145. Single delay 200ms
- 146. Single delay 225ms
- 147. Single delay 250ms
- 148. Single delay 275ms
- 149. Single delay 300ms
- 150. Single delay 350ms
- 151. Single delay 400ms
- 152. Single delay 500ms
- 153. Single delay 550ms
- 154. Single delay 600ms
- 155. Single delay 650ms
- 156. Single delay 700ms

REGEN 20% DELAY :

- 157. Regen 20% delay 100ms
- 158. Regen 20% delay 125ms
- 159. Regen 20% delay 150ms
- 160. Regen 20% delay 175ms
- 161. Regen 20% delay 200ms
- 162. Regen 20% delay 225ms
- 163. Regen 20% delay 250ms
- 164. Regen 20% delay 300ms
- 165. Regen 20% delay 350ms
- 166. Regen 20% delay 400ms
- 167. Regen 20% delay 450ms
- 168. Regen 20% delay 500ms
- 169. Regen 20% delay 550ms
- 170. Regen 20% delay 600ms
- 171. Regen 20% delay 650ms
- 172. Regen 20% delay 700ms

REGEN 40% DELAY

- 173. Regen 40% delay 100ms
- 174. Regen 40% delay 125ms
- 175. Regen 40% delay 150ms
- 176. Regen 40% delay 175ms
- 177. Regen 40% delay 200ms
- 178. Regen 40% delay 225ms
- 179. Regen 40% delay 250ms
- 180. Regen 40% delay 300ms
- 181. Regen 40% delay 350ms
- 182. Regen 40% delay 400ms
- 183. Regen 40% delay 450ms
- 184. Regen 40% delay 500ms
- 185. Regen 40% delay 550ms
- 186. Regen 40% delay 600ms
- 187. Regen 40% delay 650ms
- 188. Regen 40% delay 700ms

PANNING DELAY

- 189. Panning delay 100ms
- 190. Panning delay 100ms regen
- 191. Panning delay 200ms
- 192. Panning delay 200ms regen
- 193. Panning delay 300ms
- 194. Panning delay 300ms regen
- 195. Panning delay 350ms
- 196. Panning delay 350ms regen

DELAY + REVERB :

- 197. delay+reverb
- 198. Regen 20% delay + reverb
- 199. Regen 40% delay + reverb
- 200. Regen 50% delay + reverb

CHORUS :

- 201. Chorus light depth 1
- 202. Chorus light depth 2
- 203. Chorus medium depth 1
- 204. Chorus medium depth 2
- 205. Chorus high depth 1
- 206. Chorus high depth 2
- 207. Chorus fast 1
- 208. Chorus fast 2

SPECIAL CHORUS :

- 209. Fast chorus with long delay
- 210. Quad chorus high feedback
- 211. Quad chorus resonant
- 212. Quad chorus medium depth
- 213. Quad chorus high depth
- 214. Deep stereo flanger

LESLIE : Chorus / tremolo for organ

- 215. Leslie slow
- 216. Leslie fast

CHORUS + REVERB :

- 217. Chorus + reverb 1
- 218. Chorus + reverb 2
- 219. Chorus + reverb 3

CHORUS + DELAY :

- 220. Chorus + delay 1
- 221. Chorus + delay 2
- 222. Chorus + delay 3

FLANGER :

- 223. Light depth flanger 1
- 224. Light depth flanger 2
- 225. St r o light depth flanger
- 226. Medium depth flanger
- 227. St r o medium depth flanger
- 228. Medium depth slow flanger
- 229. High depth flanger
- 230. St r o high depth flanger

FLANGER + REVERB :

- 231. Flanging + reverb 1
- 232. Flanging + reverb 2
- 233. Flanging + reverb 3

PITCH SHIFTER : St pitch shifter cntr delay

- 234. Up M3 rd/down 4th
- 235. Up M3 rd/down 4th
- 236. Up M3 rd/down and 4th
- 237. Up 4th detune
- 238. Down 4th detune
- 239. Up 5th detune
- 240. Down 5th detune
- 241. Up 6th detune
- 242. Down 6th detune
- 243. Down M2nd/ down 4th
- 244. Up oct/down oct
- 245. Up oct detune
- 246. Down oct detune
- 247. Light detune
- 248. Deep detune
- 249. Double
- 250. Detune + regen delay
- 251. Down oct + regen delay

DISTORTION + REVERB

- 252. Low distortion
- 253. Medium distortion 1
- 254. Medium distortion 2
- 255. High distortion

256. NO SOUND (BYPASS)

SPECIFICATIONS

LAB SERIE - PROFESSIONAL MIXER WITH DSP

| Mod I | LAB 10.4 | LAB 13.4 | LAB 16.4 |
|---|--|--|--|
| Mono channel Micro Quantity & type Impedance Max. Input signal Max. gain | 6xXLR Bal 2KOhms 0dB 75dB | 9xXLR Bal 2KOhms 0dB 75dB | 12xXLR Bal 2KOhms 0dB 75dB |
| Line Quantity & type Impedance Max. Input signal Max. Gain | 10xJack stereo 33 - 47KOhms 30dBu 40dB | 10xJack stereo 33 - 47KOhms 30dBu 40dB | 10xJack stereo 33 - 47KOhms 30dBu 40dB |
| Equalizer High Mid Low | +/-15dB +/-12dB +/-15dB | +/-15dB +/-12dB +/-15dB | +/-15dB +/-12dB +/-15dB |
| St r o channel Quantity & type Impedance Max. Input signal | 2xJack stereo 310KOhms 22dBu | 2xJack stereo 310KOhms 22dBu | 2xJack stereo 310KOhms 22dBu |
| Equalizerr High Mid Low | +/-15dB +/-12dB +/-15dB | +/-15dB +/-12dB +/-15dB | +/-15dB +/-12dB +/-15dB |
| Outputs Impedance Max. Input signal Frequency response S/N ratio Distortion | 75 - 200 Ohms 28dBu 20Hz - 20KHz 110dB 0.03% | 75 - 200 Ohms 28dBu 20Hz - 20KHz 110dB 0.03% | 75 - 200 Ohms 28dBu 20Hz - 20KHz 110dB 0.03% |
| Internal effect Sampling frequency A/D D/A Frequency response | 32KHz 24 Bits 20Hz - 15KHz | 32KHz 24 Bits 20Hz - 15KHz | 32KHz 24 Bits 20Hz - 15KHz |
| G n ral Power supply Dimensions | 220V 330x450x100mm | 220V 410x450x100mm | 220V 489x450x100 |

WARRANTY CONDITIONS

BST equipment is covered by a 1-year warranty on parts and labour except for Crossfaders (90 days).
 The following rules apply from the day the equipment leaves the factory:
 Only companies approved by BST are allowed to work on the equipment. Warranty becomes void when other service technicians open the equipment.
 During warranty period, defective equipment must be sent by pre-paid mail in the original box.
 BST will return the goods by pre-paid mail during the first year of warranty; thereafter the mailing cost is to be paid by the recipient.
 Potentiometers have a limited lifetime and are not covered by the manufacturer for more than normal use.
 For all service enquiries, refer to your local distributor, as he is best able to help you.