

Step	Item checked	Controls & switches	Input jack	Input signal (Sine wave)	Check points	Measurement conditions	Specifications	Remarks
11	BALANCED amp.	Table 1	RETURN INPUT	-30dB @ 1kHz	BAL. OUTPUT (between pins 2 and 3)	Between XLR1 and 3 short GROUND lift switch ON	+5dB ± 3dB -1dB ± 3dB Less than -67dB Less than -46dB Less than -69dB Less than -46dB	Measure after passing through oct filter.
12	NOISE level	Table 1	Nothing plugged into INPUT or RETURN INPUT jacks.	-60dB @ 400Hz	OUTPUT (FRONT, REAR), SEND PHONES BAL. OUT	Turn A/B footswitch ON and OFF.	Should change between channels A and B. PEQ LEVEL max. Turn EQ footswitch ON and OFF. EQ LEVEL max. Turn EQ footswitch ON and OFF. REVERB max. Turn REVERB footswitch ON and OFF.	Note that unechoed signal is also mixed in.
13	FOOT SW	Table 1	INPUT	-60dB @ 1kHz	OUTPUT	Turn A/B footswitch ON and OFF.	Should change between channels A and B. PEQ LEVEL max. Turn EQ footswitch ON and OFF. EQ LEVEL max. Turn EQ footswitch ON and OFF. REVERB max. Turn REVERB footswitch ON and OFF.	Note that unechoed signal is also mixed in.

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1	PREAMP. (Ach)	Table 1	INPUT	-60dB @ 1kHz	OUTPUT (FRONT, REAR)	Turning each knob from max. to min.	-24dB ± 3dB	Output should disappear when a shoring plug is RETURN
1-1	Gain	Table 1	INPUT	-60dB @ 1kHz	OUTPUT (FRONT, REAR)	Turning each knob from max. to min.	-24dB ± 3dB	Output should disappear when a shoring plug is RETURN
1-2	Frequency response	Table 1	INPUT	-60dB @ 20Hz~20kHz	OUTPUT	Turning each knob from max. to min.	With 1kHz output should be within ±1dB of the curve in fig. 1. -8dB ± 3dB @ 400Hz	Should be within ±3dB of the curve in fig. 1.
1-3	Tone control response	Table 1	INPUT	-60dB @ 7kHz @ 400Hz	OUTPUT	Turning each knob from max. to min.	+5dB ± 3dB @ 7kHz Varies over the following range. TREBLE +18dB ± 3dB MIDDLE +4dB ± 3dB BASS +13dB ± 3dB	
1-4	FAT response	Table 1	INPUT	-60dB @ 400Hz	OUTPUT	Set the FAT switch from OFF to ON (Pull).	Level variation range. +9dB ± 3dB	
1-5	BRIGHT response	Table 1	INPUT	-60dB @ 7kHz	OUTPUT	Set the BRIGHT switch from OFF to ON (Pull).	Level variation range. +13dB ± 3dB	
2	PREAMP. (Bch)	Table 1	INPUT	-60dB @ 1kHz	OUTPUT (FRONT, REAR)	Turning each knob from max. to min.	-4dB ± 3dB	
2-1	Gain	Table 1	INPUT	-60dB @ 1kHz	OUTPUT (FRONT, REAR)	Turning each knob from max. to min.	-4dB ± 3dB	
2-2	Frequency response	Table 1	INPUT	-60dB @ 20Hz~20kHz	OUTPUT	Turning each knob from max. to min.	With 1kHz output should be within ±3dB of the curve in fig. 1. -8dB ± 3dB @ 400Hz	Should be within ±3dB of the curve in fig. 1.
2-3	Tone control response	Table 1	INPUT	-60dB @ 7kHz @ 400Hz	OUTPUT	Turning each knob from max. to min.	+3dB ± 3dB @ 7kHz Varies over the following range. TREBLE +15dB ± 3dB MIDDLE +4dB ± 3dB BASS +12dB ± 3dB	
2-4	FAT response	Table 1	INPUT	-60dB @ 400Hz	OUTPUT	Set the FAT switch from OFF to ON (Pull).	Level variation range. +9dB ± 3dB	
2-5	BRIGHT response	Table 1	INPUT	-60dB @ 7kHz	OUTPUT	Set the BRIGHT switch from OFF to ON (Pull).	Level variation range. +11dB ± 3dB	
3	SEND amp.	Table 1	INPUT	-60dB @ 1kHz	SEND OUTPUT	Turning each knob from max. to min.	-6dB ± 3dB	
4	RETURN amp.	Table 1	RETURN INPUT	-15dB @ 1kHz	OUTPUT	Turning each knob from max. to min.	0dB ± 3dB	
5	P.E.Q	Table 1	RETURN INPUT	Table 3 each frequency	OUTPUT	With controls set as in Table 3, max. to min.	Level variation range obtained as listed in Table 3.	
6	L.P.F	Table 1	RETURN INPUT	-15dB @ 90Hz, 5kHz	OUTPUT	Turning each knob from max. to min.	Output level obtained as listed in Table 4.	
7	H.P.F	Table 1	RETURN INPUT	-15dB @ 90Hz, 5kHz	OUTPUT	Turning each knob from max. to min.	Output level obtained as listed in Table 5.	
8	A/A/B/B level	Table 1	INPUT	-60dB @ 90Hz	OUTPUT	Vary EQ LEVEL from max. to min.	Output level listed in Table 6. Level variation range. ±15dB ± 2dB	
9	EQ LEVEL	Table 1	RETURN INPUT	-15dB @ 1kHz	OUTPUT	Vary EQ LEVEL from max. to min.	Level variation range. ±15dB ± 2dB	
10	PHONES amp.	Table 1	RETURN INPUT	-15dB @ 1kHz	PHONES	Vary EQ LEVEL from max. to min.	-8dB ± 3dB	

Table 3

Control settings	Input frequency (Hz)	Variation range (dB)
Q	FREQUENCY	Level (dB)
min.	100	± 7 ± 2
max.	5K	± 7 ± 2
min.	5K	Less than ± 1
max.	100	Less than ± 1
min.	100	± 15 ± 2
max.	5K	± 15 ± 2

* It is sufficient that the variation range as shown above can be satisfied even when the input frequency is varied between ± 10% from its rating frequency.

Table 5

Control settings	Input frequency (Hz)	Level (dB)
Q	FREQUENCY	Level (dB)
min.	100	-9 ± 2
max.	100	+10 ± 2
min.	5K	+8 ± 2
max.	5K	-10 ± 2

* It is sufficient that the output level as shown above can be satisfied even when the input frequency is varied between ± 10% from its rating frequency.

Table 4

Control settings	Input frequency (Hz)	Level (dB)
Q	FREQUENCY	Level (dB)
min.	100	-8 ± 2
max.	100	+10 ± 2
min.	5K	+8 ± 2
max.	5K	-11 ± 2

* It is sufficient that the output level as shown above can be satisfied even when the input frequency is varied between ± 10% from its rating frequency.

Table 6

Control settings	Switch position	Level (dB)
Q	FREQUENCY	Level (dB)
min.	A/B push switch	-11 ± 3
max.	A/B slide switch	+9 ± 3
min.	A	-6 ± 3
max.	A	-11 ± 3
min.	B	-25 ± 3
max.	B	+9 ± 3

* It is sufficient that the output level as shown above can be satisfied even when the input frequency is varied between ± 10% from its rating frequency.

Fig. 1

