TECHNICAL GUIDE TO RANE ANALOG I/O STAGES

	Line-Level Input Stages							Main Output Stages				
		Balanced Inputs			Xsfmr						Unbal Use	Xsfmr	
Model	UNB	SD	BD	SI	Option	R_{IN}	|	UNB	BAL	X-X	(-) Out	Option	R_{OUT}
AC 22/23		■				20k		■					100
AC 22B/23B		■				20k			■		Open		200
AD 22/22B				■		20k			■		Open		200
AP 13	■					20k/5M				■[1]	Gnd		100
AVA 22				■		20k			■		Open		200
CP 31	■					10k			■		Open		200
CP 52/64	■					10k				■[1]	Gnd		300
DA 216a				■		20k			■		Open		200
DC 24		■				20k			■		Open		200
DMS 22				Mic		1k			■		Open		200
GE 130/215		■				20k			■		Open		200
GE 30		■				20k			■		Open	■	200
GE 60		■				20k			■		Open		200
MA 3		■				40K		■					0.10
MA 6A				■		40K		■					0.03
ME 15B/30B		■				20k			■		Open		200
ME 60		■				20k			■		Open		200
MLM 82a		■		Mic		20k/1k Mic			■		Open		200
MLM 103			■	Mic		20k/10k Mic			■		Open		200
MP 22z	■					Var.			■		Open		200
MP 24z	■	■				Var.			■		Open		600
MP 44	■	■				Var.			■		Open		200
MP 2016	■					Var.			■		Open		300
MS 1b				Mic		10k				■[2]	Gnd		100
NM 48		■				27k				■[2]	Gnd		200
NM 84				Mic		5k				■[2]	Gnd		200
PE 15		■				20k			■		Open		200
PE 17				■		20k				■[1]	Gnd		100
PS 1	■					47k				■[1]	Gnd		100
RPE 228d			■			40k				■[2]	Gnd		200
RPM 26v			■	■		14k			■		Open		200
RPM 26i	AES3 Digital In					--			■		Open		200
SM 26B		■				20k			■		Open		200
SM 82	■					100k			■		Open		200
SRM 66			■			20k			■		Open		200
THX 22/44	■					10k		■			–		50
VP 12				Mic		1k			■		Open		200

Abbreviations and Definitions   Revised: 1-17-01

UNB = Unbalanced Input or Output Stage = Single op amp design

SD = Simple Difference Input Stage = Standard single op amp difference design

BD = Buffered Difference Input Stage = Two op amp difference design

SI = Simple Instrumentation Input Stage = Standard three op amp instrumentation design

BAL = Balanced Output Stage = Standard two op amp line driver stage

X-X = Cross-coupled transformer-like output stage using [1]Analog Devices' SSM 2142, or [2]discrete equivalent