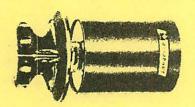
# Langevin

1801 EAST CARNEGIE AVENUE • SANTA ANA. CALIFORNIA • PHONE (714) 546-8830



## Rotary & Straight Line Mixers & Attenuators

### GENERAL

Solid Silver Brush Contacts

Contact noise virtually eliminated Extended life

Printed Contact Boards Heavily Plated with Silver

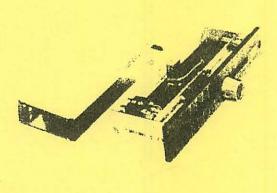
Smooth operation Low drag

Rotary Units

Permanently lubricated within dust-proof enclosure Stainless steel shafts Long life, non-scizing Low friction

Straight Line Units

2-5/16 inches deep behind panel
6-5/8 inches long
Integral female connector
(male connector supplied as an accessory)
Removable slip cover for inspection and cleaning
Adjustable for amount of force required to move slider
(slide wire types only)
Carriage moves on precision ground chrone plated shalt



#### DESIGNATION CODE

RMX ...... Rotary Mixer Attenuator D......Detent (formerly MX) E. .... Escutcheon RPP. Q......Cue Position Straight Line Mixer Attenuator SMX RAT \_\_\_\_\_Rotary Attenuator (except "Mixer" types) SPP Straight Line Panoramic Divider (Pan Pot) (formerly SLPP) RATM. Meter Range Extender V.....Last Step Infinity (formerly ATX) HOW TO ORDER



SPECIAL FEATURES:
D Detented (1)
Q Cur Position (1)
V Infinite Attenuation
when fully CCW

TYPE:
See Cetalog
For Proper
3-Digit Listing.
NOTE: Add "2"

For Dual Unit,

INPUT IMPEDANCE: In Ohms, Use "K" For Thousands of Johns, OUTPUT IMPEDANCE: in Ohms. Use "K" For Thousands of ohms.

250

(mpedonce)

### EXAMPLES OF ORDERING:

S MX Q 1112 / 600 / 600

R AT 616

Straight Mixer-Type With Cue Position [See Catalog] Impedance (Ohms) (Ohms)

Company (Ohms)

#### GENERAL NOTE:

(1) A CONTROL MAY BE DETENTED (CODE "O") OR IT MAY HAVE A CUE POSITION (CODE "Q"), BUT THE TWO ARE MUTUALLY EXCLUSIVE. THERE CAN BE NO "QD" CONTROL WHICH IS BOTH DETENTED AND WITH CUE.

### UNBALANCED LADDER NETWORKS

RMX TYPE CONTROLS are generally tapered to infinity and do not provide detented positions. "Q" positions may usually be provided by adding the letter "Q" to the type code (RMXQ). Resistor Tolerance: ±5%

If a detented control is required, add letter "D" to the type code (RMXD). The "Q" and "D" configurations are mutually exclusive. A detented control can not be provided with a "Q".

RAT TYPE CONTROLS have linear attenuation and detented positions. Normally, these controls do not have an infinity position. However, this step can be provided in most attenuators by adding the letter "V" to the type code (RATV).

Resistor Tolerance: 1%

<u>MULTI-GANG UNITS</u> - Most attenuators can be fabricated with more than one control section coupled to the same shaft. Check tabulation below for availability.

Length of Controls: 1 Gang - 1 5/8" 3 Gang - 4" 2 Gang - 2 7/8" 4 Gang - 4"

	RMX TY			21200	NG			RAT TY			GA	NG	
Description	Cat. No.	Max.DB	Q	2	3	4	DB/Step	Cat.No.	Max.DB	V	2	3	4
20 Steps	DAY 201		CONTRACTOR OF THE PARTY OF THE	450			1.5	RAT-618	30	0	0	0	•
15 <sup>O</sup> /Step 300 <sup>O</sup> Rota.	RMX-201	- 00	0	0	0	•	2.0	RAT-631	40	•	•	•	9
1½" dia.													
30 Steps	RMX-206	œ	STEMPE.	0	0	9	1.5	RAT-634	45			•	0
11 <sup>1</sup> / <sub>4</sub> O/Step 337 <sup>1</sup> / <sub>2</sub> ORota.	RMX-207	00		0	0	0	2.0	RAT-635	60		•	0	•
l½" dia.													
32 Steps	RMX-203	00	0	0	0	0	1.5	(Calconnation to the American	America Carrier Scale Facilities				
10 <sup>0</sup> /Step 320 <sup>0</sup> Rota. 1 <sup>1</sup> / <sub>2</sub> " dia.													
44 Steps	RMX-215	00	O	0	0	0	1.0						
7½°/Step 352½°Rota. 2¼'' dia.													
45 Steps	RMX-205	00	To the last of	0	0	0	1.0	RAT-624	45		•	•	•
7½°/Step 337½°Rota. 2¼″ dia.													

IMPEDANCE - The following terminal impedances are available as standard:
150/150 ohms 300/300 ohms 600/600 ohms 600/1200 ohms
Most other impedances are available upon request without additional charge.

### BALANCED LADDER NETWORKS

RMX TYPE CONTROLS are generally tapered to infinity and do not provide detented positions. "Q" positions may usually be provided by adding the letter "Q" to the type code (RMXQ). Resistor Tolerance:  $\pm 5\%$ 

If a detented control is required, add letter "D" to the type code (RMXD). The "Q" and "D" configurations are mutually exclusive. A detented control can not be provided with a "Q".

RAT TYPE CONTROLS have linear attenuation and detented positions. Normally, these controls do not have an infinity position. However, this step can be provided in most attenuators by adding the letter "V" to the type code (RATV).

Resistor Tolerance: ±1%

MULTI-GANG UNITS - Most attenuators can be fabricated with more than one control section coupled to the same shaft. Check tabulation below for availability.

Length of Controls: 1 Gang - 1 5/8" 3 Gang - 4"

2 Gang - 2 7/8" 4 Gang - 4"

Deseriati	RMX TY				NG			RAT 7			G	ANG	
Descripti	on Cat.No.	Max.DB	Q	2	3	4	DB/Step	Cat.No.	Max.DB	V	2	3	4
20 Steps 15 <sup>0</sup> /Step	RMX-202				- The state of the	CONTRACTOR OF THE PARTY OF THE	1.5	RAT-632	30	-	•		
300°Rota.	KMX-202		9	*	8		2.0	RAT-633	40		•	•	ļ
2 <u>4</u> 11 dia.												-	
30 Steps	RMX-208	00	owdstored	0	•	and deposits of the second	1.5	RAT-638	45		0	*	- AND ASSESSMENT
11 <sup>40</sup> /Step 337 <sup>10</sup> Rota							2.0	RAT-639	60		0	0	
2½" dia.													
32 Steps	RMX-204	∞	•	0	•	es Martiner	1.5	TOP TOP CHARLES AND CHOOSE BUILDING	AND STREET ASSESSMENT	-	art Programmings		
10 <sup>o</sup> /Step 320 <sup>o</sup> Rota. 2 <sup>1</sup> / <sub>4</sub> " dia.													of the latest section in the latest section
44 Steps	RMX-210	00	0	(a)	•	Markin Wild	1.0	THE PERSON NAMED AS POSSIBLE	CO REPUBLISHED VIDEO	Methodigen.	erentation:		
7½ <sup>O</sup> /Step 352½ <sup>O</sup> Rota. 2¼'' dia.	escencerate property and a												- Control of Control
45 Steps	RMX-209	$\infty$	eccentros.	0	•	MATORIAN	1.0	RAT-640	45	0	0	•	
$7\frac{1}{2}$ O/Step $337\frac{1}{2}$ ORota. $2\frac{1}{4}$ dia.	T.C. SECOND STREET												

IMPEDANCE - The following terminal impedances are available as standard:
150/150 ohms 300/300 ohms 600/600 ohms 600/1200 ohms
Most other impedances are available upon request without additional charge.

### BRIDGED "T" NETWORKS

RMX TYPE CONTROLS are generally tapered to infinity and do not provide detented positions. "Q" positions may usually be provided by adding the letter "Q" to the type code (RMXQ). Resistor Tolerance: ±5%

If a detented control is required, add letter "D" to the type code (RMXD).

The "Q" and "D" configurations are mutually exclusive. A detented control can not be provided with a "Q".

RAT TYPE CONTROLS have linear attenuation and detented positions. Normally, these controls do not have an infinity position. However, this step can be provided in most attenuators by adding the letter "V" to the type code (RATV). Resistor Tolerance: \$\frac{1}{2}1\%

MULTI-GANG UNITS - Most attenuators can be fabricated with more than one control section coupled to the same shaft.

Check tabulation on following page for availability.

### BRIDGED T NETWORKS

		DMV TV	RMX TYPE GANG			-		RAT TYPE			GANG				
	Description	The second second		0		3 1	1,	DB/Step	Cat. No.		V		1 3	1 4	
	Description	Cat. NO.	Max. Db	Q	2	ار	-	иб/ этер	Cat. No.	Max. DB	V	2	)	4	
-	10 Steps			The state of the s	Service	CALIFORNIA (CALIFORNIA)		0.1	RAT-500	1.0		0	0	0	*
	15°/Step							0.1	RAT-612	1.0		0	0	0	
1	150°Rota.							0.5	RAT-613	5.0		-	4	0	
-	1½" dia.							0.5	RAT-654	5-0-5		8			
100								1.0	RAT-505	10.0		0	(1)	0	*
-								1.0	RAT-606	10.0		*		0	
-								1.5	RAT-652	15.0		0		0	
								2.0	RAT-600	20.0		(4)	0		
1								2.0	RAT-619	18/00	9	9		9	
1	THE WORLD							10.0	RAT-510	100.0		0	0		*
1						-									
1	20 Steps							0.1	RAT-614	2.0	0	0		0	
1	15 /Step							0.5	RAT-629	10.0	0		1	•	
-	300°Rota.							1.0	RAT-607	20.0		0	0		
- Name	211 dia.							1.0	RAT-630	19/2				*	
			I LEGIS					1.5	RAT-641	30.0	0	0			
1		RMX-601	00	0	•	0	•	2.0	RAT-601	40.0		8	0	•	
1								2.0	RAT-626	38/60	•	13	*	0	
200								3.0	RAT-642	60.0	0	9	0	0	
Sign			manufacture of the same of the	Matter India			-								
1	30 Steps							0.1	RAT-615	3.0	0	•	0	•	
4	10°/Step							0.5	RAT-623	15.0		4			
1	300°Rota.							1.0	RAT-608	30.0	1	•		4	
-	24" dia.							1.5	RAT-645	45,0	0	0	9	0	
								2.0	RAT-602	60.0	0	<b>@</b>	0	0	
MANAGE AND ADDRESS OF THE PARKS	1140/Step	RMX-600	00		9		0	1.5							
STATE OF	337½ Rota.	RMX-603	$\infty$		0	0	6	2.0	RAT-628	58‰	0	*	0	4	
MEST	2½" dia.														
Part and	22 Ct 0-5	RMX-602	00	AND THE REAL PROPERTY.	canama calle	0	mescus dib.	1.5	NAME AND DESCRIPTION OF THE PERSON OF THE PE	THE REST OF THE PARTY OF THE PARTY.	CHICANOSIA	endones	-	Pary Sult (Skiple)	1
Market	32 Steps 10 /Step	KMX-602			69	0	9	1.2				-	-		
and the	320°Rota.							4					-		
100	2½" dia.					i							-		
Sierra	24 010.			1									-		
TOTAL STREET	45 Steps	RMX-606	CO	ALC: N	9	1000000	heres 120	0.5	RAT-636	22.5	-	0	-	-	***
N. S. S.	7½0/Step	RMX-625	00	1	69	-	-	1.0	RAT-637	45.0	-	8			steste
1000	337½ Rota.			-	All I		1		11.11.00/	12.0		-			-
-	2½ dia.			1	1										
1	-4	CONTRACTOR DESCRIPTION OF THE PROPERTY OF THE	PRINCIPLE STREET, STRE	alamaz.	house	ALCOHOLD S	Dente ser	Care and Constitution of the Constitution of t	Contract of the Street Section 1999	COLOR HANDA STATE OF THE STATE	-	-		-	-

IMPEDANCE - The following terminal impedances are available as standard:
150/150 ohms 300/300 ohms 600/600 ohms
Most other impedances are available upon request without additional charge.

\*Type RAT 500 control are precision decade attenuators with a resistor tolerance of  $\pm\frac{1}{2}\%$ .

\*\*Single-gang control are 2 7/8" long; 2-gang controls are 4" long.

Length of Controls: 1 Gang - 1 5/8" 3 Gang - 4" 2 Gang - 2 7/8" 4 Gang - 4"

### "H" NETWORKS

RMX TYPE CONTROLS are generally tapered to infinity and do not provide detented position. "Q" positions may usually be provided by adding the letter "Q" to the type code (RMXQ)

Resistor Tolerance: ±5%

If a detented control is required, add letter "D" to the type code (RMXD). The "Q" and "D" configurations are mutually exclusive. A detented control can not be provided with a "Q".

RAT TYPE CONTROLS have linear attenuation and detented positions. Normally, these controls do not have an infinity position. However, this step can be provided in most attenuators by adding the letter "V" to the type code (RATV). Resistor Tolerance: ±1%

MULTI-GANG UNITS - Most attenuators can be fabricated with more than one control section coupled to the same shaft.

Check tabulation on following page for availability.

### "H" NETWORKS

	RMX TYP	E		G	ANG			RAT T	YPE		(	ANO	3	
Description	Cat. No.	Max.DB	Q	2	3	4	DB/Step	Cat. No.	Max.DB	٧	2	3	4	
10 Steps			CONTRACTOR OF	ATTING COLD	o provinces.	UNISCIMIES	0.1	RAT-501	1.0		0	0	-	*
15º/Step	o Andrews						0.1	RAT-616	1.0		0			
150° Rota.	MATERIA						0.5	RAT-617	5.0		0	0		
2½" dia.	SA S						1.0	RAT-506	10.0		0	*		*
	100		1				1.0	RAT-609	10.0		0	0		
	CREATION						1.5	RAT-648	15.0		0	0		
							2.0	RAT-603	20.0		0	0		
							10.0	RAT-511	100.0		0	0		*
15 Ct	Anna anna anna anna		-	-	MARCHARI		1.0	RAT-621	15.0	0	0	0	-	
15 Steps 10 <sup>0</sup> /Step							2.0	RAT-622	30.0	9				
150 <sup>o</sup> Rota. 2½" dia.														
20 Steps	1	The state of the s					0.1	RAT-625	2.0	•				wk
15°/Step							0.5	RAT-650	10.0		0			dek
300° Rota.							1.0	RAT-610	20.0	0	0			dek
2 <u>1</u> 11 dia.	12						1.5	RAT-651	30.0	0	0			dek
	RMX-604	∞	9	0			2.0	RAT-604	40.0	0	0	-		***
30 Steps	C the construction of the	COLUMN CONTRACTOR CONT	ATEMPOR .	Incommune	descriving.	ninaccoan	0.1	RAT-653	3.0	0	0	ESUMB?	Orestand	rierie
10°/Step							0.5	RAT-656	15.0	0	0			verle
300° Rota.				ĺ			1.0	RAT-611	30.0	0	0			n/en/e
2½" dia.							1.5	RAT-659	45.0	0	0			**
-4 -1			-				2.0	RAT-605	60.0	0	0			dede
32 Steps 10 <sup>0</sup> /Step	RMX-605	∞	9	•			1.5		An activities with a state of the state of t					dede
320° Rota. 2½" dia.									Annual design of the second					

IMPEDANCE - The following terminal impedances are available as standard: 150/150 ohms 300/300 ohms 600/600 ohms

Most other impedances are available upon request without additional charge.

\*Type RATV 500 controls are precision decade attenuators with a resistor tolerance of  $\frac{-1}{2}$ %.

\*\*Single-gang controls are 2 7/8" long; two-gang controls are 4" long.

Length of Controls: 1 Gang - 1 5/8" 3 Gang - 4" 2 Gang - 2 7/8" 4 Gang - 4"

### VU-METER RANGE EXTENDERS (RATM)

VU Meters are adjusted to 3900 ohms. Rotary range extenders should be of the "T" configuration and 3900 ohms impedance. In order properly to read +4 VU a 3600 ohm series resistor is required. Most LANGEVIN Bridge "T" attenuators for such applications provide two fixed resistors in series, one of 3300 ohms and the other of 300 ohms, the terminals of which appear on the back plate of the VU Range Extender Attenuator. This permits the use of a Variable Wire-Wound Resistor for stereo balance or calibration by selecting the appropriate solder terminal.

All units are shipped complete with engraved dial and LANGEVIN Model K-108 RCA Type Knob.

Resistor Accuracy - 1%

Description	Cat.No.	Range	DB/Step	Impedance	Gar 2	ng 3	Note
10 Steps 15 <sup>0</sup> /Step 150 <sup>0</sup> Rota. 1½" Dia.	RATM 300 RATM 301	+4/+14 +4/+24	1 2	7.5K/3.9K 7.5K/3.9K	0	0	1
12 Steps 15°/Step 180° Rota. 2½" Dia.	RATM 309 RATM 310 RATM 311 RATM 312 RATM 320	1 MW/+4/+24/0FF 1 MW/+4/+24/0FF +4/+26/0FF +4/+26/0FF +4/+26/0FF	2 2 2 2 2 2	7.1K/3.9K 7.5K/3.9K 3.9K/3.9K 7.1K/3.9K 7.5K/3.9K	0		2 1 3 2
15 Steps 15 <sup>0</sup> /Step 225 <sup>0</sup> Rota. 2 <sup>1</sup> / <sub>4</sub> " Dia.	RATM 305	+4/+34	2	7.5K/3.9K	0	•	1
20 Steps 15 <sup>0</sup> /Step 300 <sup>0</sup> Rota. 2 <sup>1</sup> / <sub>4</sub> " Dia.	RATM 302 RATM 303 RATM 314 RATM 315 RATM 316 RATM 317 RATM 318 RATM 319	+4/+24 +4/+44 1 MW/+4/+40/0FF 1 MW/+4/+40/0FF 1 MW/+4/+40/0FF +4/+42/0FF +4/+42/0FF +4/+42/0FF	1 2 2 2 2 2 2 2 2 2	7.5K/3.9K 7.5K/3.9K 7.1K/3.9K 7.5K/3.9K 6.9K/3.9K 7.1K/3.9K 3.9K/3.9K 7.5K/3.9K			1 1 2 1 2 3 3 3 1
30 Steps 10 <sup>o</sup> /Stap 300 Rota. 2½1 Dia.	RATM 304	+4/+34	1	7.5K/3.9K	2	0	1

NOTE:

- 1. No zero adjust rheostat required.
- 2. Zero adjust rheostat required.
- 3. External 3600 ohm resistor required.

### POTENTIOMETERS

RMX TYPE CONTROLS are generally tapered to infinity and do not provide detented positions.

"Q" positions on these controls are available, but the diameter of  $1\frac{1}{2}$ " controls will increase to  $2\frac{1}{4}$ ". Controls with a basic diameter of  $2\frac{1}{4}$ " (RMX 641) will increase in length from 1 5/8" for the single-gang control to 2 7/8" if a "Q" position is provided. This increase in size is dictated by the potentiometer circuitry, which does not allow an integral "Q" position.

If a detented control is required, add letter "D" to the type code (RMXD). The "Q" and "D" configurations are mutually exclusive. A detented control can not be provided with a "Q".

Resistor Tolerance: ±5%

RAT TYPE CONTROLS have linear attenuation and detented positions. Normally, these controls do not have an infinity position. However, this step can be provided in most attenuators by adding the letter "V" to the type code (RATV).

Resistor Tolerance: -1%

DUAL OR BALANCED CIRCUITS are not provided as standard units. Any standard 2-gang unit may be wired to obtain a balanced or dual potentiometer. This wiring should be done externally on the control terminal plate. The only precaution is to consider the desired terminal impedance for balanced potentiometers. For this application, order a 2-gang unit with  $\frac{1}{2}$  the desired terminal impedance. If a 50K ohm balanced potentiometer is required, order a 2-gang; 25K ohm control and connect all common terminals to center/ground.

All  $10^{\circ}$  and  $15^{\circ}$  RAT Potentiometers can be supplied with 2-gangs on one deck. This affords considerable space saving behind the front panel of the console since a 2-gang control will be only  $1.5/8^{\circ}$  deep. The diameter of these controls will increase from  $1\frac{1}{2}^{\circ}$  to  $2\frac{1}{4}^{\circ}$ . Please specify on your order "Short Form", otherwise standard length will be supplied. There is no extra charge for this configuration.

CHECK TABULATION ON FOLLOWING PAGE FOR AVAILABILITY.

### POTENTIOMETERS

	RMX TY			1	ANG			RAT TY		1	1	NG		
Description	Cat. No.	Max. DB	Q	2	3	4	DB/Step	Cat. No.	Max.DB	٧	2	3	4	
10 Steps	CALLED AND DESCRIPTION OF THE OWNER.		THE REAL PROPERTY AND ADDRESS OF THE PERTY	ALCOHOLD STATE OF THE PARTY OF	Tirement.	SC-MATTERS.	0.1	RAT-502	1.0	274700	0	0	9	*
15°/Step							1.0	RAT-507	10.0		0	0	(8)	*
1500 Rota.							5.0	RAT-670	50.0	9	0	0	0	
1½" Dia.							10.0	RAT-512	100.0	_				*
20 Steps	energy commences and the	PRINCIPLE PROPERTY.	anning.	esented	napasa.	SCO-SON	1.5	RAT-671	30.0	9	6	0	•	
150/Step	RMX-612	80		0	0	0	2.0	RAT-672	40.0	0	9		0	
300° Rota.							3.0	RAT-673	60.0	0	0	0	0	
1½11 Dia.							5.0	RAT-674	100.0	0	-			
TOWNS THE PROPERTY OF THE PARTY	NAMES AND POST OF THE PARTY OF		200070	ennoc:	opensus.	CVIDEO	and an experience of the second	STOREST CONTROL OF THE PARTY OF		COLUMN	ALCOHOL: 1	CY SUCK	at insuran	
30 Steps							1.0	RAT-675	30.0	40	•	0	0	
10 <sup>O</sup> /Step	RMX-624	- 00		9	0	0	1.5	RAT-676	45.0			0	0	
300 <sup>0</sup> Rota.	RMX-632		_	0	0	9	2.0	RAT-677	60.0	0	0	0	0	
12 VIa.														
32 Steps	RMX-618	00	DATE STATE OF THE PARTY OF THE	1	0	0	1.5							
10 <sup>0</sup> /Step 320 <sup>0</sup> Rota. 1 <sup>1</sup> / <sub>2</sub> " Dia.										Maria de la maria				
45 Steps	RMX641	- 00		1	0	0	1.0	RAT-678	45		働	0	0	
7.5 <sup>0</sup> /Step 337.5 <sup>0</sup> Rota. 2½" Dia.			Six C.Dela	460000	Tubansii i	and the second s	and the second s	ogenbar profit skripe og kripe skripe og skripe			tra pagangirilan	and the contract of the contra		

Most other impedances are available upon request without additional charge.

\*Type RAT500 controls are precision decade potentiometers with a resistor tolerance of  $\pm \frac{1}{2}\%$ .

Length of Controls: 1 Gang - 1 5/811 3 Gang - 411 2 Gang - 2 7/811 4 Gang - 411

All grind controls Type "CG" are discontinued. Please use "RAT" or "RMX" controls, depending on whether a close tolerance linear control or a tapered mixer control is desired. The catalog page on potentiometers will identify the control characteristics of these devices.

The following is a tabulation of all CG-controls and their substitutes:

Cat. No.	Steps	DB/Step	Remarks
CG 300 CG 301 CG 302 CG 303 CG 304 CG 305	32 20 20 20 20 20 32	1.5 2 2 2 2 2 1.5	Use RMX 618 Use RAT 672 II II II II NO DIRECT SUBSTITUTE
CG 315 CG 319 CG 333 CG 334 CG 335 CG 337 CG 338 CG 339 CG 347 CG 348 CG 349 CG 351	10 15 10 15 20 30 30 45 30 20 20	5(Dual) 5(Dual) 5 5 2 1 2 1 2 2 3 1.5	(Similar to RMX 618) Use RAT 6702 NO DIRECT SUBSTITUTE Use RAT 670 NO DIRECT SUBSTITUTE Use RAT 672 Use RAT 675 Use RAT 677 Use RAT 677 Use RAT 677 Use RATV 677 Use RATV 672 Use RATV 672 Use RAT 671 Use RAT 671
CG 355 CG 357 CG 359 CG 361 CG 363 CG 367 CG 369 CG 371 CG 373 CG 375 CG 377 CG 379 CG 383 CG 385	20 20 20 20 20 30 30 30 30 30 30 30 30	2 (Dual) 3 3 (Dual) 5 5 (Dual) 1 (Dual) 1 (Dual) 1.5 1.5 (Dual) 1.5 1.5 (Dual) 2 (Dual) 2	Use RAT 6722 Use RAT 673 Use RAT 6732 Use RAT 674 Use RAT 6742 Use RAT 6752 Use RAT 675 Use RAT 6752 Use RAT 676 Use RAT 676 Use RAT 676 Use RAT 676 Use RAT 6762 Use RAT 6762 Use RAT 6762 Use RAT 6772 Use RAT 6777
CG 387 CG 391	30 45	2 (Dual) 1 (Dual)	Use RAT 6772 Use RAT 6782

### PANORAMIC ATTENUATORS

ROTARY PAN POT - RPP 701

(With K-108 Knob and special Dial)

STRAIGHT LINE PAN POT - SPP 701

(With Knob but less Escutcheon)

These controls are designed to move a monophonic signal across a stereophonic field.

The combined power output of all channels remains constant as the control knob is moved.

### SPECIFICATIONS:

Circuit: Bridged 'T'

Insertion Loss: 6 db per channel.

At center position each output channel is down an addition-

al 3 db (eff.insertion loss 9 db)

Impedance: 600 ohms ''in'' or

"out"

Input Channel: 1
Output Channel: 2
Number of Steps: 20

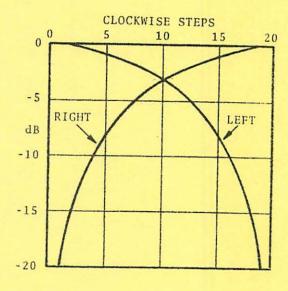
Number of Steps: 20 Degrees per Step: 15° Dial Marking: L -

Physical Size:

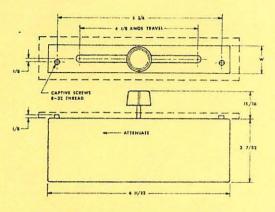
L - C - R RPP 701 -  $2\frac{1}{4}$  dia./

2 7/8" long SPP 701 - 6 11/32 x 1 11/16 x

2 7/32



### Langevin Straight Line Units



WIDTHS: SINGLE: 15/6"
2 GANG: 111/6"
3 GANG: 21/2"
4 GANG: 31/4"
6 GANG: 45%"

### STRAIGHT LINE ATTENUATORS (With Last Step Infinity)

RESISTOR ACCURACY: 5 % Single Units 2 % Multiple Units

CAT. NO.	CIRCUIT	STEPS	DB/STEP	MAX. ATTEN.	No.
SMX 113	Unbalanced	32	0.5		*
SMX 114	Bridged "T"	32	1.5	00	*
SMX 115	Potentiometer	20	2.0	00	
SMX 120	Potentiometer	32	1.5	0	

### STRAIGHT LINE LINEAR ATTENUATORS

CAT. NO.	CIRCUIT	STEPS	DB/STEP	MAX. ATTEN.
SAT 110	Bridged 'T'	30	0,5	15 DB

### STRAIGHT LINE SLIDE WIRE MIXER ATTENUATORS

CAT. NO.	CIRCUIT	DB/STEP	IMPEDANCE
SMX 111)	Unbalanced Ladder	App. 0.1 DB	150 ohms <u>or</u> *

\*Available with 'Q" position

All Straight Line Attenuators are available in 2-gang; 3-gang; 4-gang; and 6-gang assemblies.

In controls with "Q"position the maximum is a 4-gang unit,

#### ESCUTCHEONS

SUFFI	X	WIDTH
ES	Narrow Single	11/4"
EW	Wide Single	11/2"
E2	2 Gang	1 3/4"
E3	3 Gang	2 5/8"
E4	4 Gang	31/4"
E6	6 Gang	43/4"

