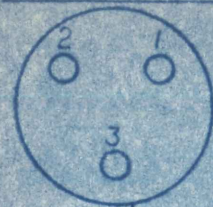


**CANNON PLUG**



**CABLE**

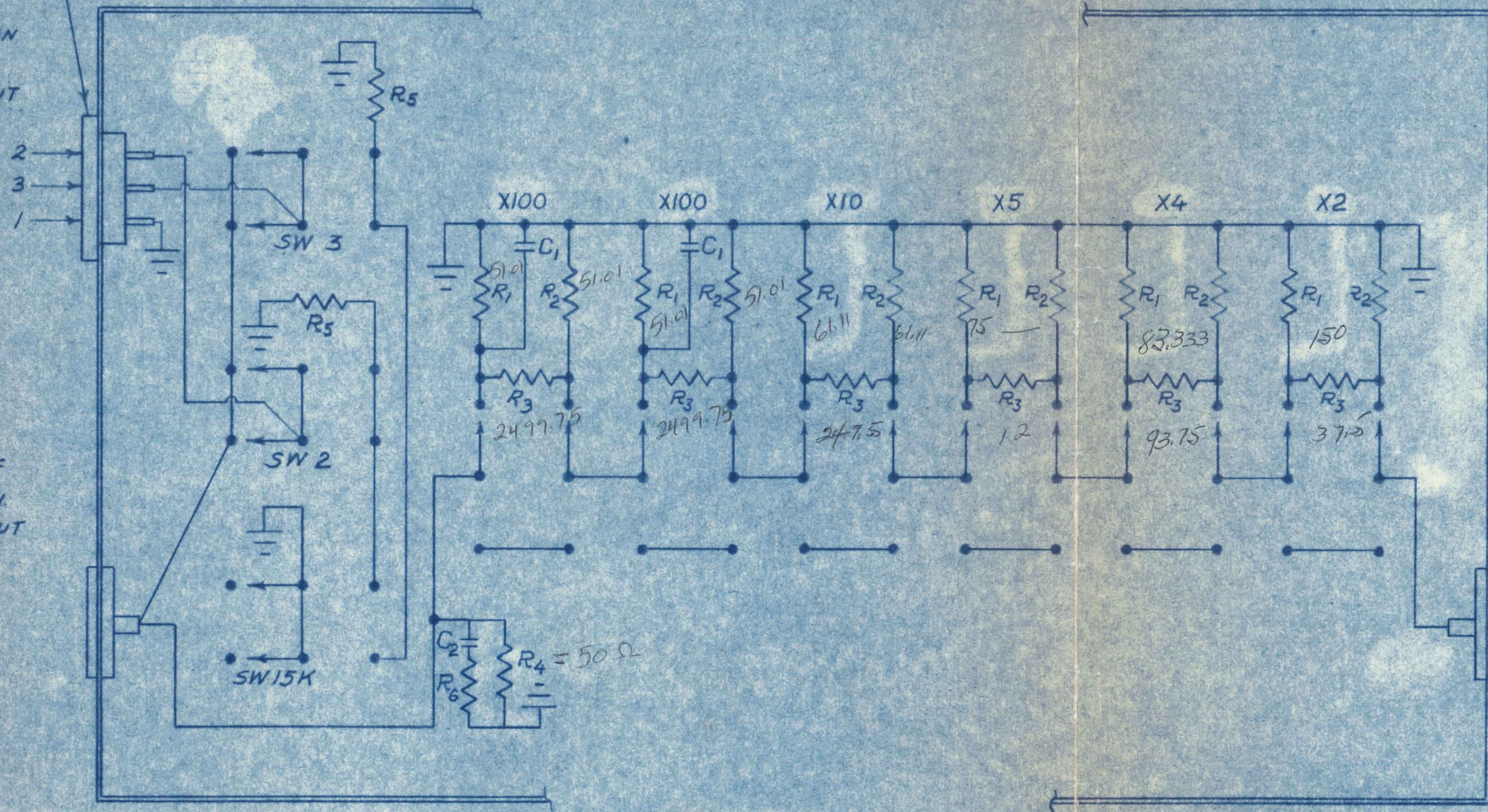
- 1. SHIELD
- 2. RED
- 3. BLUE

**PLUG-IN**

- 1. GROUND
- 2. GRID #7 10MEG
- 3. GRID #2 10MEG

CANNON  
CONN  
OUTPUT

UHF  
CONN  
OUTPUT



**PARTS SCHEDULE**

**TEK MADE SPECIALS**

POS	R <sub>1</sub> & R <sub>2</sub> 0.1% CROSSWOUND-SANDED	NO	R <sub>3</sub> 0.1% SINGLE LAYER-SANDED	NO
X2	150.0	2	37.50	5 1
X4	83.33	2	93.75	5 1
X5	75.00	2	120.0	5 1
X10	61.11	2	247.5	5 1
X100	51.01	2	2499.75	5 1
X100	51.01	2	2499.75	5 1
R <sub>4</sub>	50Ω 0.1% CROSSWOUND-SANDED	4		1

TEK OR DWG NO	DESCRIPTION	NO
131-014	CANNON PLUG	1
131-012	UHF COAX CONN	2
260-014	TOGGLE SW.	9
210-414	Nut. 15/32-32 x 9/16	9
210-473	NUT, SW.	18 9
210-902	WASHER, ST. FL.	9
103-026	UHF "T" CONN	1
211-008	4-40x1/4 BHS	15 12 3
210-406	4-40x1/4 BHS	15
210-003-004	4-40 LOCKWASHER	15
348-013	FEET, RUBBER 1/2"	4
213-088	#4x1/4 THR. FORM. SC.	4
579-C	BOX	1
579-C	BOX BOTTOM	1
336-A	BUSS BAR	1
337-A	SW. SHIELD	6
336-A	SW TO SW BUSS	7
336-A	INNER SW BUSS	6
R <sub>5</sub>	304-153 RES 15K 1W 10%	2
R <sub>6</sub>	316-470 RES 47Ω 1/4W 10%	1
C <sub>1</sub>	281-524 PUFF 150 PF 500V ±30PF	2
C <sub>2</sub>	281-511 PUFF 22PF 500V ±2.2PF	1

**TEKTRONIX, INC.**

TITLE: 50Ω ATTENUATOR SCHEMATIC & PARTS		
DEPT: TEST		
MATL:	ENG: MGF	DR. BY: RXS
DATE: 10/3/62	SCALE: NONE	DRG. NO: 826-B

MOD 11/15/62 RXS

067-075

NOT SCALE DRAWING



## FIELD MAINTENANCE SUPPORT

### 50 Ohm Pi Attenuator

The Tektronix 50 Ohm Pi Attenuator is a low impedance, high bandpass switched attenuator, designed to fulfill a portion of the calibration requirements of the Tektronix Type 2A61. Although the functions of the 50 Ohm Pi Attenuator closely approximate the functions of the B1500-A, the B1500-A was found to be inadequate due to its poor bandpass characteristics. Hence; the Tektronix 50 Ohm Pi Attenuator was designed to include all of the functions of the B1500-A in addition to the features required for the calibration of the 2A61.

#### SPECIFICATIONS:

This device will be called in by Field Maintenance Support annually. Calibration will be performed by I.S.E. Measurements & Standards, and it will be checked to the specifications listed below:

1. 3 db Bandwidth is at least 15 mc on any combination of attenuator steps.
2. Input VSWR is less than 1.05:1 at 2 mc on any combination of attenuator steps.
3. DC Attenuation accuracy is within  $\pm 0.25\%$  on any one step.

Listed below are some of the measurements in which the Tektronix 50 Ohm Pi Attenuator is used:

#### TEKTRONIX TYPE 2A61 PLUG-IN:

1. Gain Tracking Adjustments.
2. Checking Attenuator Accuracies.
3. Checking Maximum Bandpass.
4. Checking Low Frequency Limited Bandpass.
5. Checking High Frequency Limited Bandpass.
6. Checking Minimum Bandpass.

#### TEKTRONIX TYPE "E" PLUG-IN:

1. Heater Balance Adjustment.
2. Checking and Setting Differential Balance.
3. Checking Frequency Response.
4. Checking Noise and Hum
5. Checking Attenuator Accuracies.

#### TEKTRONIX TYPE 122:

1. Checking DC Level Control.
2. Checking and Adjustment of Differential Balance.
3. Setting Gain at 1 kc.
4. Checking High Frequency Response.
5. Checking Low Frequency Response.
6. Adjustment of C-11.
7. Checking Noise and Microphonics.

KIT LEVEL #067-0075-00KIT DESCRIPTION 50Ω PI Attenuator KIT # INST.

NEW ITEM	or 1-3	PART NUMBER	TOTAL QUANT	QTY PER	DESCRIPTION	CIRCUIT #
	3	Dwg. 336-A		1	Buss Bar	
	3	Dwg. 336-A		7	Buss Bar, Inner Switch	
	3	Dwg. 336-A		6	Buss Bar, Switch to Switch	
	3	Dwg. 337-A		6	Shield, Switch	
	3	Dwg. 579-C		1	Box	
	3	Dwg. 579-C		1	Cover, Box (Bottom)	
	3	Special		2	Resistor, 150.0Ω	
	3	Special		2	Resistor, 83.33Ω	
	3	Special		2	Resistor, 75.00Ω	
	3	Special		2	Resistor, 61.11Ω	
	3	Special		4	Resistor, 51.01Ω	
	3	Special		1	Resistor, 37.50Ω	
	3	Special		1	Resistor, 93.75Ω	
	3	Special		1	Resistor, 120.0Ω	
	3	Special		1	Resistor, 247.5Ω	
	3	Special		2	Resistor, 2499.75Ω	
	3	Special		1	Resistor, 50Ω	
	1	103-0026-00		1	Adapter, UHF "T"	(Packaging)
	1	131-0012-00		2	Connector, UHF Coax	
	1	131-0014-00		1	Connector, Cannon	
	1	210-0004-00		15	Lockwasher, Int. #4	
	1	210-0406-00		15	Nut, Hex, 4-40 x 3/16	
	1	210-0414-00		9	Nut, Hex, 15/32-32 x 9/16	
	1	210-0473-00		9	Nut, Switch, 12-sided	
	1	210-0902-00		9	Washer, Flat	
	1	211-0008-00		12	Screw, 4-40 x 1/4 PHS Phil.	
	1	211-0011-00		3	Screw, 4-40 x 5/16 BHS	

