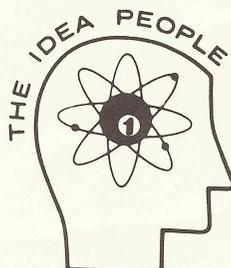


# SCHEMATIC AND PARTS LIST

PS 163

DUAL TRACE  
TRIGGERED SWEEP  
OSCILLOSCOPE



# SENCORE

3200 SENCORE DRIVE, SIOUX FALLS, SOUTH DAKOTA 57107

PS163 PARTS LIST

SCHEMATIC REF. NO.	PART NO.	DESCRIPTION	PRICE
<u>MAIN CHASSIS</u>			
	8B57	Trim Strip, bottom edge	1.25
	8B48	Escutcheon - front panel	3.75
	10B115	Cord wrap bracket	.75
R5&R6	15C1-34	10K,10K dual control	2.50
R7&R8	15C1-35	1K,200K dual control	2.50
R11	15B6-4	20K with push pull switch	3.00
R13	15C1-33	200K, 30%, Linear control	1.25
R15	15C1-32	1 MEG, 30%, Linear control	1.25
R20	15C3-16	50K, 30% control	.75
	18G20	CRT 5UP1F	39.50
	20A5	Grid Lamp type 47	.25
	21A40	Knob-position, focus, etc.	1.50
	21A46	Knob-Concentric	3.25
	21G39	Push button, black (specify art work)	1.00
	21G41W	Push button, white	.25
SW1, SW7	25G64	2P2P slide switch	1.25
SW2	25G138	4 PDT slide switch	1.25
SW3	25A160	3 section push button switch	4.00
SW4	25A146	4 section push button switch	5.00
SW5, SW8	25G161	DPDT slide switch	.50
SW6	25G4	SPDT slide switch	.50
	26G113	Jack, binding post (specify color)	.25
	26G142Y	2V output terminal	.50
	28B48	Transformer, power	48.00
	44G3	Circuit breaker	1.00
	53G43	Shaft coupler, 5X expand	.75
	63B6	Graticule, grid	2.00
	63B7	Graticule, Vector	2.00
	63B8	Green filter	.50
	64B22-1	Light shield, grid	.25
	64B22-2	Light shield, vector	.25
	110C266A	Case, bottom and back	8.00
	110C267	Case, wrap assembly	13.25
<u>PREAMPLIFIER BOARD</u>			
R101, 105	14C29-9005	900K, ½W, 1%	.75
R102, 106	14C29-1115	111K, ½W, 1%	.75
R103, 107	14C29-9905	990K, ½W, 1%	.75
R104, 108	14C29-1014	10.1K, ½W, 1%	.75
R110, 121	14C29-1006	1 MEG, ½W, 1%	.75
R127, 128	14C29-6002	600 ohms, ½W, 1%	.75
R143, 148	14C29-1003	1K, ½W, 1%	.75
R152, 153	14A41-2032	203 ohms, ½W, 1%	.75
R120	15C3-24	500 ohm 10% Linear	1.00
R131	15C7-16	5K Horiz P.C.Mtg.	.50
R134, 137	15C7-21	500 ohm Horiz. P.C. Mtg.	.50
R156	15C10-2	1.2K, 30% w/switch	2.25
TR100,101	19A19	FET, MPF 102 (matched pair)	1.00 ea.
TR102,103	19A21	TD101	3.75
TR104, 105, 106, 109	19C7-1	SE3002/2N3563	.50
TR107	19C14-1	2N4248	.50

DISPLAY BOARD

R409	15C7-14	5K, 30%, Vert. P. C Mtg.	.50
TR400, 401, 404, 405	19C7-1	SE3002 or 2N3563	.50
TR402, 403, 406 407	19C14-1	2N4248	.50
SW400	25A147	Switch, Push button 5 section	8.00
CR400-CR410	50C5-2	1N4148	.25

OUTPUT BOARD

R504, 505	14C29-1003	1K, ½W, 1%	.75
R521, 522	14A52-7	4K, 10W, 5%	.25
R520	15C7-14	5K Vert. P. C. Mtg.	.50
TR500, 501	19C16-1	2N5227	.50
TR502, 503	19C7-1	SE3002 or 2N3563	.50
TR504, 505	19C17-1	D40D1	1.25
TR506, 507	19A23	D40N1	1.50
TR508, 509	19C4-1	2N5172	.50
C502	24G187	91pf Poly	.25

LOW VOLTAGE POWER SUPPLY

CR700-CR709	16G10	400 P.I.V., 1A	.50
TR700, 702	19A17	D40D1	1.25
TR701	19A25	D41D1	.75
C700	24G239	150uf 200V	2.00
C701	24G167	50uf 250V	1.50
C702-C707	24G240	2,000uf 25V	2.25

HIGH VOLTAGE POWER SUPPLY

R609	14C4-302	3K, ½W, 5%	.25
R604	15C7-8	1.2 MEG. Vert. P.C. Mtg.	.75
CR600, 601	16S16	Rectifier, 8KV, P.I.V. Fast recovery	2.50
TR600, 601	19A22	2N3877A	1.00
TR602	19A26	TIP29A	2.00
C601, 602	24G221	.01uf 2KV	.25
C603	24G237	.047uf, 33V, Poly	.25
C604	24G238	.075uf, 33V, Poly	.25
C605	24G271	50 uf 35V	.50
C607	24G214	.001uf, disc	.25
T600	28B47A	H.V. Transformer	7.75
CR600-603	50C5-2	1N4148	.25

PROBES

Low capacity	39G34	10:1 for PS163	12.50
R2	14A71	9M, 1%, HV	6.25
C1	24G99	Trimmer, 3-10pf	.25
	68B5	Probe front	3.00
Demodulator	39G41	Voltage doubler	20.00

Prices in effect at date of printing and are subject to change without notice.  
When ordering parts, please specify model number, part number and description.  
Service and parts invoices are C.O.D. Please include remittance (check or money  
order) with your order to save C.O.D. charges. Minimum billing \$3.00.

SCHEMATIC REF. NO.	PART NO.	DESCRIPTION	PRICE
<u>PREAMPLIFIER BOARD (cont.)</u>			
TR108	19C14-2	TD401	4.25
CR100, 101	50C5-3	TI 1N4148	.25
CR102	50C2-1	6.2V Zener	.50
C100, 102, 104, 105, 107, 108, 110	24G99	Trimmer 1.5-10pf	.25
C103, 111	24G250	75pf POLY	.25
C106, 112	24G231	750pf POLY	.25
C113	24G233	Trimmer .3-5pf	.25
C114	24G253	.01, 600V	.25
C124	24G235	30pf POLY	.25
C125	24G187	91pf POLY	.25
C126	24G175	180pf POLY	.25
C127	24G186	330pf POLY	.25
C132	24G124	125pf POLY	.25
SW100	25B144	Switch, rotary	6.75
<u>TIME BASE BOARD</u>			
R290	14C29-1305	130K, ½W, 1%	.75
R291	14C29-5004	50K, ½W, 1%	.75
R292	14C29-6675	667K, ½W, 1%	.75
R293	14C29-3335	333K, ½W, 1%	.75
R294	14C29-1335	133K, ½W, 1%	.75
R295	14C29-6674	66.7K, ½W, 1%	.75
R296	14C29-3334	33.3K, ½W, 1%	.75
R297	14C29-1334	13.3K, ½W, 1%	.75
R298	14C29-6673	6.67K, ½W, 1%	.75
R299	14C29-3333	3.33K, ½W, 1%	.75
R300	14C29-1333	1.33K, ½W, 1%	.75
R301	14C29-6672	667 ohms, ½W, 1%	.75
R314, 315	14C29-6002	600 ohms, ½W, 1%	.75
R215, 233, 267, 317	15C7-14	5K Vert. P. C. Mtg.	.50
R286	15C7-2	10K Vert. P. C. Mtg.	.75
R288, 331	15C10-1	1.5K-10K Dual W/switch	2.50
R319	15C7-15	200 ohm Vert. P. C. Mtg.	.75
R321, 322	15C7-11	50K Vert. P. C. Mtg.	.75
TR200, 201, 205, 206	19A6-1	FET, U1837E or 2N5163	2.50
TR202, 203, 204 207, 208, 211, 212, 233, 234	19C16-1	2N5227	.50
TR209, 210 215, 216, 217, 220, 222, 227, 228	19C4-1	2N5172	.50
TR213, 214, 218, 219	19A18	TP427A	.50
TR221	19A25	D41D1	1.25
TR223, 224, 225, 226, 230, 231, 232, 235	19C14-1	2N4248	.50
TR229	19A20	FET, 2N5461	1.50
TR236	19C11-1	FET, MPF 103	1.25
C235	24G226	.5uf, 1% Poly	3.50
C236	24G227	.05uf, 1% Poly	.50
C237	24G228	.005uf, 1% Poly	.50
C238	24G229	480pf, 1% Poly	.50
SW200	25C145	Switch rotary 23 pos.	17.75
CR200-CR212	50C5-2	1N4148	.25