

J6, J7 & J10 PULSE GENERATOR SECTION

J6 & J10 THYRATRON & AMPLIFIER SECTION

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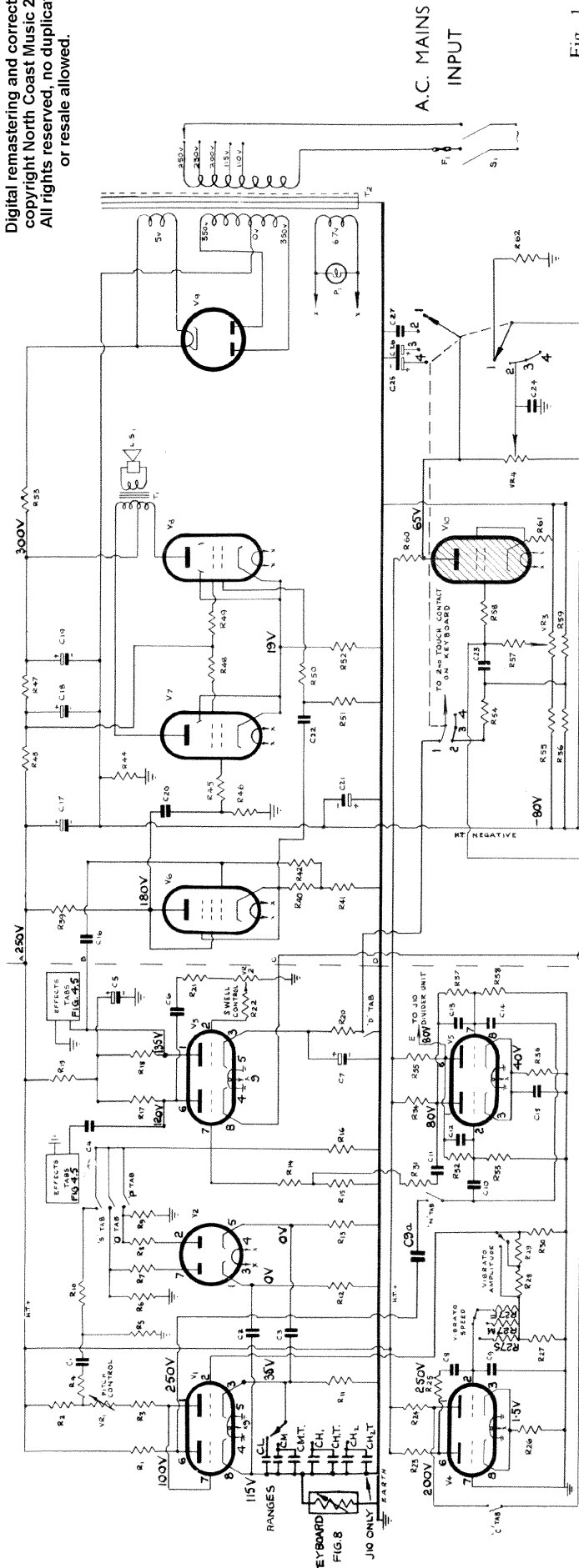


Fig. 1.

North Coast Music J10 SUB-DIVIDER UNIT

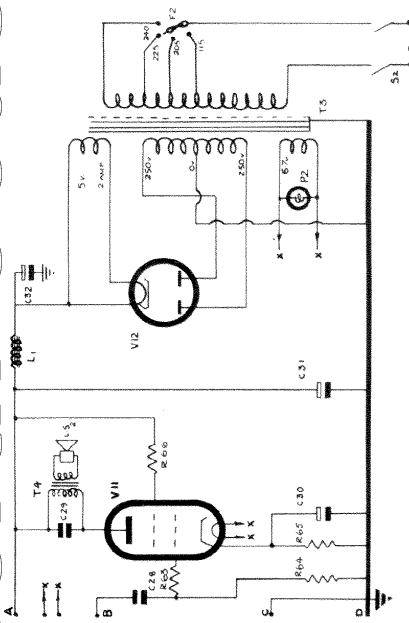


Fig. 2.

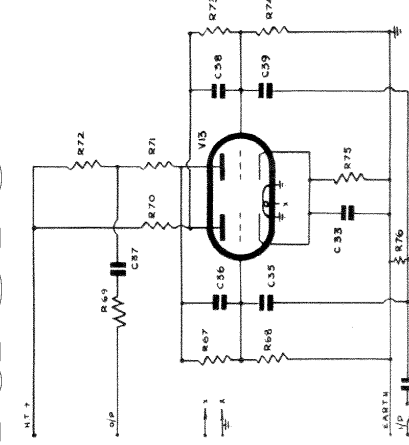


Fig. 3.

UNIVOX

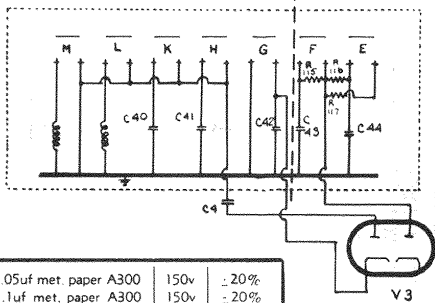
SERVICE DATA

It is important that all agents familiarise themselves with the contents of these service sheets. Any queries regarding servicing should be addressed to the service department at Dartford.

circuit diagram of the
UNIVOX
 electronic keyboard
 models J6, J7 & J10

JENNINGS MUSICAL INDUSTRIES LTD.
 UNITY WORKS · DARTFORD · KENT · ENGLAND

EFFECTS TABS J6



C40	.05uf met. paper A300	150v	±20%
C41	.1uf met. paper A300	150v	±20%
C42	.1uf met. paper A300	150v	±20%
C43	.1uf met. paper A300	150v	±20%
C44	.1uf met. paper A300	150v	±20%

R115	10 Meg ohms type 8	±w	±10%
R116	10 Meg ohms type 8	±w	±10%
R117	4,700 ohms type 8	±w	±10%
L	1 Henry choke		
M	1/2 Henry choke		

Fig. 4.

CAPACITORS

	Specification	Volts	±	Fig
C1	100pf SILVER MICA L.E.M.		15%	1
C2	.01uf SILVER MICA L.E.M.		20%	1
C3	.01uf SILVER MICA L.E.M.		20%	1
C4	.1uf Tubular met. paper T.C.C.	500	20%	1
C5	.4uf Electrolytic B.E.C. C.E.501	350	20%	1
C6	.1uf Tubular met. paper T.C.C.	500	20%	1
C7	.25uf Electrolytic HUNTS	50		1
C8	.1uf Tubular met. paper T.C.C.	500	20%	1
C9	.1uf Tubular met. paper T.C.C.	500	20%	1
C9A	100pf SILVER MICA HUNTS		10%	1
C10	100pf SILVER MICA L.E.M.		15%	1
C11	580pf SILVER MICA L.E.M.		15%	1
C12	580pf SILVER MICA L.E.M.		15%	1
C13	580pf SILVER MICA L.E.M.		15%	1
C14	100pf SILVER MICA L.E.M.		15%	1
C15	.1uf Metalmitite T.C.C.	200	20%	1
C16	.1uf Tubular met. paper T.C.C.	500	20%	1
C17	.32uf Electrolytic B.E.C. C.E.824	450		1
C18	.32uf Electrolytic B.E.C. C.E.824	450		1
C19	.1uf Tubular met. paper T.C.C.	500	20%	1
C20	.50uf Electrolytic B.E.C. C.E. 4008/1	150		1
C21	.1uf Tubular met. paper T.C.C.	500	20%	1
C22	.1uf Metalmitite T.C.C.	200	20%	1
C23	.1uf Metalmitite T.C.C.	200	20%	1
C24	.5uf Tubular Paper T.C.C. type 246	250	20%	1
C25	.8uf Electrolytic B.E.C. C.E. 821	450		1
C26	.16uf Tubular Paper T.C.C. type 246	250	20%	1
C27	.5uf Tubular Paper T.C.C. type 246	250	20%	1
C28	.05uf Tubular met. paper T.C.C.	150	20%	2
C29	.002uf SILVER MICA T.C.C.	150	15%	2
C30	.25uf Electrolytic HUNTS	50		2
C31	.32uf Electrolytic HUNTS	50		2
C32	.32uf Electrolytic B.E.C. C.E.824	450		2
C33	.1uf Met. Paper HUNTS A300	150	20%	2
C34	100pf SILVER MICA HUNTS		5%	2
C35	100pf SILVER MICA HUNTS		5%	2
C36	500pf SILVER MICA HUNTS		5%	2
C37	.1uf Met. Paper HUNTS A300	250	20%	2
C38	500pf SILVER MICA HUNTS		5%	2
C39	100pf SILVER MICA HUNTS		5%	2
CL	20500pf SILVER MICA HUNTS		1%	2
CM	10000pf SILVER MICA HUNTS		1%	2
CH1	5000pf SILVER MICA HUNTS		1%	2
CH2	2500pf SILVER MICA HUNTS		1%	2
CHT	600 600pf Lorlin			2
CH2.T	250pf Cyldon			2

FUSES

	Specification	Fig
F1	2 amp Belling Lee Cartridge type	1
F2	2 amp Fused Mains Selector Link	1

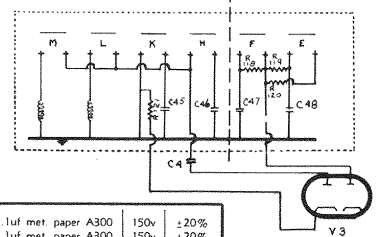
RESISTORS

	Ohms	Watts	±	Fig
R1	1,500		10%	1
R2	22,000		10%	1
R3	22,000		10%	1
R4	1 Meg		10%	1
R5	3.3 Meg		10%	1
R6	1 Meg		10%	1
R7	1 Meg		10%	1
R8	1 Meg		10%	1
R9	1 Meg		10%	1
R10	2.2 Meg		10%	1
R11	1,500		10%	1
R12	10 Meg		10%	1
R13	3,300		10%	1
R14	10 Meg		10%	1
R15	1 Meg		10%	1
R16	3.3 Meg		10%	1
R17	33,000		10%	1
R18	33,000		10%	1
R19	22,000		10%	1
R20	4,700		10%	1
R21	100,000		10%	1
R22	100,000		10%	1
R23	100,000		10%	1
R24	22,000		10%	1
R25	330,000		10%	1
R26	2,200		10%	1
R27	2,200		10%	1
R27S	85,000		1%	1
R27M	70,000		1%	1
R27F	60,000		1%	1
R28	22,000		10%	1
R29	100,000		10%	1
R30	33,000		10%	1
R31	5.6 Meg		10%	1
R32	470,000		10%	1
R33	100,000		10%	1
R34	47,000		10%	1
R35	47,000		10%	1
R36	10,000		10%	1
R37	470,000		10%	1
R38	100,000		10%	1
R39	47,000		10%	1
R40	2,200		10%	1
R41	47,000		10%	1
R42	100,000		10%	1
R43	2,000	Wire Wound	10%	1
R44	1,000	Wire Wound	10%	1
R45	10,000		10%	1
R46	470,000		10%	1
R47	1,000	Wire Wound	10%	1
R48	47		10%	1
R49	47		10%	1
R50	10,000		10%	1
R51	470,000		10%	1
R52	250	Wire Wound	10%	1
R53	Brimistor	CZ4		1
R54	47,000		10%	1
R55	82,000		10%	1
R56	220,000		10%	1
R57	220,000		10%	1
R58	33,000		10%	1
R59	100,000		10%	1
R60	220,000		10%	1
R61	100		10%	1
R62	2,200		10%	1
R63	47,000		10%	1
R64	470,000		10%	1
R65	240	Wire Wound	10%	2
R66	4,700		10%	2
R67	470,000		10%	2
R68	100,000		10%	2
R69	10 Meg		10%	2
R70	100,000		10%	2
R71	100,000		10%	2
R72	22,000		10%	2
R73	470,000		10%	2
R74	100,000		10%	2
R75	10,000		10%	2
R76	33,000		10%	2
VR1	Pitch Control 25K W.W. Linear			2
VR2	Swell Control 100K Log.			2
VR3	25K Miniature Egen Linear			2
VR4	200K Miniature Egen Linear			2

SWITCHES & LAMPS

	Specification	Fig
S1	D.P. Single Throw toggle switch	1
S2	D.P. Single Throw toggle switch	1
J6	Range Switch—3 way single pole	1
J6	Circuit Switch—4 way 3 pole	1
J7	Vibrato Switch—3 way single pole	1
J7	Range Switch—3 way single pole	1
J10	Range Switch—4 way single pole	1
J10	Circuit Switch—4 way 3 pole	1
P1	7 volt 3 amp-pilot lamp	1
P2	7 volt 3 amp-pilot lamp	1

EFFECTS TABS J7



C45	.1uf met. paper A300	150v	±20%
C46	.1uf met. paper A300	150v	±20%
C47	.01uf met. paper A300	150v	±10%
C48	.1uf met. paper A300	150v	±20%

R118	10 Meg ohms type 8	±w	±10%
R119	10 Meg ohms type 8	±w	±10%
R120	4,700 ohms type 8	±w	±10%
L	1 Henry choke		
M	1/2 Henry choke		

Fig. 5.

VALVE BASE CONNECTIONS

KEY	PIN Nos	1	2	3	4	5	6	7	8	9	BASE
VL V3, V5.	12AU7.	a'	g'	k'	h	h	a'	g'	k'	h	B9A
V4.	12AX7	a'	g'	k'	h	h	a'	g'	k'	h	B9A
V13.	12AT7.	a'	g'	k'	h	h	a'	g'	k'	h	B9A
V6.	6BR7.	NC	g1	k	h	h	s	a	g2	g3	B9A
V2.	6AL5	k'	a'	h	h	h	k'	s	a'	.	B7G
V7, V8.	6BW6	1c	g1	k	h	h	NC	a	g2	bp	B9A
V10.	2D21.	g1	k	h	h	g2	a	g2	.	.	B7G
V12	5Z4.	NC	h	NP	a'	NP	a'	NP	kh	.	OCTAL
V9.	5Y3.	NC	h	NP	a'	NP	a'	NP	kh	.	OCTAL
V11	6V6.	NC	h	a	g2	g1	NP	h	kh	.	OCTAL

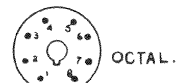
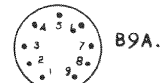
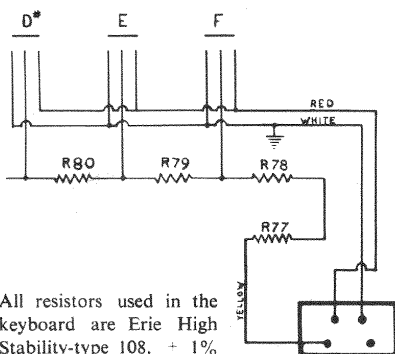


Fig. 7.

KEYBOARD CONTACT WIRING & RESISTORS

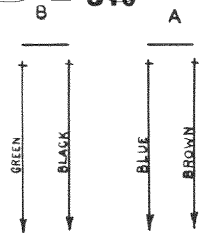


All resistors used in the keyboard are Erie High Stability-type 108, ± 1%

Fig. 8.

	Ohms	Ohms	
R77	100,000	R96	23,500
R78	12,000	R97	24,200
R79	9,000	R98	27,500
R80	8,800	R99	26,000
R81	10,500	R100	29,000
R82	9,500	R101	31,000
R83	11,000	R102	32,500
R84	12,300	R103	34,600
R85	12,000	R104	36,000
R86	14,000	R105	40,500
R87	13,000	R106	40,500
R88	16,000	R107	43,000
R89	15,000	R108	45,500
R90	16,000	R109	52,000
R91	17,500	R110	54,000
R92	18,000	R111	56,500
R93	20,000	R112	56,500
R94	20,000	R113	64,000
R95	22,000	R114	67,500

EFFECTS TABS J10



Green :—To junction of R14, R15 & R31
 Black :—Earth connection
 Blue :—C34 on Double Divider
 Brown :—Anode of First Divider (marked E)

Fig. 6.