

**This Manual is provided by**  
***CBTricks.com***

Someone who wanted to help you repair your equipment  
scanned this manual.

If you would like to help us put more manuals online support us.

Supporters of CBTricks.com paid for the hosting so you would have this file.

CBTricks.com is a non-commercial personal website was created to help promote the exchange of service, modification, technically oriented information, and historical information aimed at the Citizens Band, GMRS (CB "A" Band), MURS, Amateur Radios and RF Amps.

CBTricks.com is not sponsored by or connected to any Retailer, Radio, Antenna Manufacturer or Amp Manufacturer, or affiliated with any site links shown in the links database. The use of product or company names on my web site is not endorsement of that product or company.

If your company would like to provide technical information to be featured on this site I will put up on the site as long as I can do it in a non-commercial way.

The site is supported with donation from users, friends and selling of the Galaxy Service Manual CD to cover some of the costs of having this website on the Internet instead of relying on banner ads, pop-up ads, commercial links, etc. to pay my costs. Thus I do not accept advertising banners or pop-up/pop-under advertising or other marketing/sales links or gimmicks on my website.

ALL the money from donations is used for CBTricks.com I didn't do all the work to make money (I have a day job). This work was not done for someone else to make money also, for example the ebay CD sellers.

All Trademarks, Logos, and Brand Names are the property of their respective owners.  
This information is not provided by, or affiliated in any way with any radio or antenna Manufacturers.

Thank you for any support you can give.

CRYSTAL SYNTHESIZER SCHEME

<u>CHANNEL</u>	<u>HF CRYSTAL</u>	<u>RECEIVE LF CRYSTAL</u>	<u>RECEIVE OUTPUT</u>	<u>TRANSMIT LF CRYSTAL</u>	<u>TRANSMIT OUTPUT</u>
1	32.700	6.1904	26.5096	5.735	26.965
2	32.700	6.1804	26.5196	5.725	26.975
3	32.700	6.1704	26.5296	5.715	26.985
4	32.700	6.1504	26.5496	5.695	27.005
5	32.750	6.1904	26.5596	5.735	27.015
6	32.750	6.1804	26.5696	5.725	27.025
7	32.750	6.1704	26.5796	5.715	27.035
8	32.750	6.1504	26.5996	5.695	27.055
9	32.800	6.1904	26.6096	5.735	27.065
10	32.800	6.1804	26.6196	5.725	27.075
11	32.800	6.1704	26.6296	5.715	27.085
12	32.800	6.1504	26.6496	5.695	27.105
13	32.850	6.1904	26.6596	5.735	27.115
14	32.850	6.1804	26.6696	5.725	27.125
15	32.850	6.1704	26.6796	5.715	27.135
16	32.850	6.1504	26.6996	5.695	27.155
17	32.900	6.1904	26.7096	5.735	27.165
18	32.900	6.1804	26.7196	5.725	27.175
19	32.900	6.1704	26.7296	5.715	27.185
20	32.900	6.1504	26.7496	5.695	27.205
21	32.950	6.1904	26.7596	5.735	27.215
22	32.950	6.1804	26.7696	5.725	27.225
23	32.950	6.1504	26.7996	5.695	27.255

NOTE: All frequencies are in MHz.

## COMPONENT CODES

J = ±5%

K = ±10%

M = ±20%

IDM15 = 1 coat dipped mica size 15

## PARTS LIST

SYMBOL NO.	DESCRIPTION	PART NO.	SYMBOL NO.	DESCRIPTION	PART NO.
CAPACITORS			C66	12 pF J 200V N750 ceramic	510-3020-120
C1	1000 pF M 50V Y5U disc	510-3002-102	C67	1000 pF M 50V Y5U disc	510-3002-102
C2	6.8 μF M 35V dipped	510-2045-689	C68	47 pF J 200V N150 ceramic	510-3016-470
C4	27 pF J 200V N150 ceramic	510-3016-270	C69	4700 pF M 500V Y5U disc	510-3004-472
C5	5.1 pF J 200V NPO ceramic	510-3013-519	C70	0.047 μF M 16V Y5S disc	510-3010-473
C6	0.010 μF M 50V Y5U disc	510-3002-103	C71	0.047 μF M 50V Y5U disc	510-3002-473
C7	Same as C6		C72	1000 pF J 100V IDM15	510-0001-102
C8	1 pF J 500V composition	510-9002-109	C73	27 pF J 200V NPO ceramic	510-3013-270
C9	Same as C8		C74	1000 pF M 50V Y5U disc	510-3002-102
C10	4700 pF M 500V Y5U disc	510-3004-472	C75	100 pF J 200V N150 ceramic	510-3016-101
C11	150 pF J 100V IDM15	510-0001-151	C76	300 pF J 200V IDM15	510-0001-301
C12	6.8 μF M 35V dipped	510-2045-689	C77	330 pF J 100V IDM15	510-0001-331
C13	0.010 μF M 50V Y5U disc	510-3002-103	C78	4700 pF M 1.4 KV Z5U	510-3001-472
C14	Same as C13		C82	0.22 μF M 250V flat foil	510-1004-224
C15	0.047 μF K 250V flat foil	510-1003-473	C83	4700 pF M 500V Y5U disc	510-3004-472
C16	0.01 μF M 35V tubular	510-1003-103	C85	1000 μF 16V aluminum	510-4006-005
C17	1 μF M 35V dipped	510-2045-109	C88	0.1 μF M 250V	510-1004-104
C18	Same as C17		C90	470 pF J 100V IDM15	510-0001-471
C19	Same as C17		C91	1000 pF M 50V Y5U disc	510-3002-102
C21	820 pF J 100V IDM15	510-0001-821	C92	0.0033 μF M 50V Y5U	510-3002-332
C22	390 pF J 100V IDM15	510-0001-391	C121	0.010 μF M 50V Y5U disc	510-3002-103
C23	0.010 μF M 50V Y5U disc	510-3002-103	CHASSIS PARTS		
C24	Same as C23		BK6	Bracket	017-1781-001
C25	100 μF 10V aluminum	510-4003-005	CH1	Rail chassis	017-1780-002
C26	47 μF 25V aluminum	510-4006-012	CH2	Cabinet	017-1779-002
C27	0.047 μF M 16V Y5S disc	510-3010-473	CH201	Panel	015-0798-006
C28	22 μF M 15V tubular	510-2003-220	CH202	Grille speaker	017-0672-002
C29	6.8 μF M 35V dipped	510-2045-689	NP201	Dial window	559-1007-001
C30	4700 pF M 500V Y5U disc	510-3004-472	NP202	Overlay upper	559-2078-001
C31	6.8 μF M 35V dipped	510-2045-689	NP203	Overlay lower	559-2078-010
C32	0.22 μF M 250V flat foil	510-1004-224	NP204	Medallion	559-2078-020
C33	150 μF 25V aluminum	510-4006-006	DIODES		
C34	56 μF M 6V tubular	510-2001-560	CR1	1N67A 80V 30MA germ.	523-1000-067
C35	0.022 μF M 50V Y5U disc	510-3002-223	CR2	1N883 silicon diode	523-1000-883
C36	Same as C35		CR3	1N67A 80V 30MA germ.	523-1000-067
C37	0.010 μF M 50V Y5U disc	510-3002-103	CR4	Same as CR3	
C39	1000 μF 16V aluminum	510-4006-005	CR5	1N883 silicon diode	523-1000-883
C41	0.010 μF M 50V Y5U disc	510-3002-103	CR6	1N881 silicon diode	523-1000-881
C42	6.8 pF J 200V N750 ceramic	510-3020-689	CR7	Same as CR6	
C43	22 pF J 200V N150 ceramic	510-3016-220	CR8	Same as CR6	
C44	100 pF J 200V N150 ceramic	510-3016-101	CR9	1N67A 80V 30MA germ.	523-1000-067
C45	0.010 μF M 50V Y5U disc	510-3002-103	CR10	10V J 1W zener	523-2003-100
C46	Same as C45		CR11	1N883 silicon diode	523-1000-883
C47	0.010 μF M 16V Y5S disc	510-3010-103	CR12	1N4003 200V 1A rect.	523-0001-002
C48	180 pF J 200V N750 ceramic	510-3020-181	CR13	10V J 1W zener	523-2003-100
C49	0.010 μF M 50V Y5U disc	510-3002-103	CR14	1N883 silicon diode	523-1000-883
C51	1 pF J 500V composition	510-9002-109	CR15	Same as CR14	
C52	33 pF J 200V N150 ceramic	510-3016-330	CR16	1N881 silicon diode	523-1000-881
C53	Same as C52		CR17	1N883 silicon diode	523-1000-883
C54	0.010 μF M 50V Y5U disc	510-3002-103	CR18	Same as CR17	
C55	220 μF 16V aluminum	510-4006-004	CR19	1N881 silicon diode	523-1000-881
C56	0.010 μF M 50V Y5U disc	510-3002-103	CR20	Same as CR19	
C57	Same as C56		CR21	1N4818 200V 1.5A rect.	523-0013-201
C58	1 pF J 500V composition	510-9002-109	CR22	Same as CR21	
C59	33 pF J 200V N150 ceramic	510-3016-330	CR23	Same as CR21	
C60	0.047 μF M 16V Y5S disc	510-3010-473	CR24	Same as CR21	
C61	33 pF J 200V N150 ceramic	510-3016-330	CR26	Same as CR21	
C62	1000 pF J 100V IDM15	510-0001-102			
C64	22 pF J 200V NPO ceramic	510-3012-220			
C65	0.010 μF M 50V Y5U disc	510-3002-103			

PARTS LIST (cont'd)

SYMBOL NO.	DESCRIPTION	PART NO.	SYMBOL NO.	DESCRIPTION	PART NO.
	LAMPS				
DS1	2157D 6, 3V 0, 15A clr.	549-3001-007		Actuator, brown	032-0218-003
DS2	Same as DS101			Interior Cup	023-2707-001
	HARDWARE			Switch, Slide	583-3001-011
EP2	Therma-film TO220 wash.	574-5005-005		Grille Cloth	018-0919-001
EP5	2104-06 terminal lug	586-0005-106		Resonator, Bakelite	018-0918-001
HW2	Strain relief 5V/5VT18	574-0003-002		Connector	515-0003-001
HW12	NO 778 rubber grommet	574-1006-002		Cord Clamp	016-1798-001
HW203	Push-on speednut	022-1614-001		Cable, Microphone	597-2001-005
HW206	Foam pad	018-1000-001		Nameplate	559-0036-002
ML1	Serial number labels	559-3007-001		Viking Head	559-0037-003
ML4	Made in USA label	559-9003-001		Strain Relief	032-0238-001
ML201	Grille cloth	018-0827-006		Cushion	018-0920-002
MP1	Heat sink for TO-39	013-1074-001		METER	
MP2	Heat sink	014-0671-002	M1	Meter 250	554-0014-005
MP7	Shield	017-1782-001		KNOBS	
MP8	Shield	017-1789-001	MP201	Knob, squelch	547-0007-007
MP201	Bracket	017-1790-001	MP202	Knob, volume	547-0007-007
MP204	Standoff	013-1411-001	MP203	Knob, channel	547-0007-008
MP205	Cover speaker	032-0352-001		TRANSISTORS	
MP207	Channel indicator dial	032-0154-002	Q1	SI NPN 50 MHz amp TO92	576-0003-018
NP1	FCC nameplate M250	559-0009-016	Q2	SI NPN gen. purp. TO92	576-0003-011
NP5	Caution label	559-4041-002	Q3	Same as Q2	
TB2	Term. strip 3INS 2GND	586-1001-127	Q4	Same as Q2	
	ELECTRICAL PARTS		Q5	Same as Q2	
EP3	0.14 x 0.13 ferrite bead	517-2002-001	Q6	Same as Q2	
EP4	Terminal tab	515-4101-001	Q7	Same as Q2	
EP48	0.14 x 0.24 ferrite bead	517-2002-002	Q8	Same as Q2	
	FUSE		Q9	Same as Q2	
F1	1/2A fuse	534-0002-014	Q10	Same as Q2	
FH1	Panel mtd. fuse holder	534-1002-001	Q11	SI NPN 40V 4A 60W	576-0002-001
	CONNECTORS		Q12	Same as Q11	
J1	External speaker & PA jack	515-2001-002	Q13	SI NPN 50 MHz amp. TO92	576-0003-018
J2	Antenna jack	142-0101-002	Q14	SI NPN gen. purp. TO92	576-0003-011
J3	5-pin mi ke jack 61HA5F	515-1003-001	Q15	0.4W 27 MHz amp. TO39	576-0004-004
J4	B+ battery input	515-4100-001	Q16	Same as Q15	
	INDUCTORS		Q17	8.4W 27 MHz amp. TO39	576-0004-005
L2	20 mH audio choke	542-8001-011	Q18	SI PNP 50 MHz amp. TO92	576-0003-017
L3	20 μHY choke	542-3002-002		RESISTORS	
L4	13 μHY choke	542-3003-001	R2	10K ohm K 1/2W CC	569-1504-103
L5	Same as L4		R3	47 ohm K 1/2W CC	569-1504-470
L6	Variable inductor 0.75-1.0 μH	542-1005-010	R4	1.0K ohm K 1/2W CC	569-1504-102
L7	Variable inductor 0.24-0.32 μH	542-1005-004	R7	1.0K ohm IF gain adjust	562-0019-102
L8	6.8 μH RF choke	542-3004-689	R8	62 ohm J 1/2W CC	569-1503-620
	SPEAKER		R9	4.7K ohm K 1/2W CC	569-1504-472
LS1	Speaker, 3.2 ohm	589-1004-003	R12	10K ohm K 1/2W CC	569-1504-103
			R13	Potentiometer 10K, volume	562-0001-027
MK1	Microphone Assembly	023-2708-011	R14	150K ohm K 1/2W CC	569-1504-154
	Includes:		R15	68K ohm K 1/2W CC	569-1504-683
	Case front, brown	032-0216-004	R16	100K ohm K 1/2W CC	569-1504-104
	Case back, brown	023-2701-005	R17	2.2K ohm K 1/2W CC	569-1504-222
			R19	2.2K ohm K 1/2W CC	569-1504-222
			R21	2.2K ohm K 1/2W CC	569-1504-222
			R22	680 ohm K 1/2W CC	569-1004-681
			R23	330 ohm K 1/2W CC	569-1504-331
			R24	22K ohm K 1/2W CC	569-1504-223
			R25	330 ohm K 1/2W CC	569-1504-331
			R26	680 ohm K 1/2W CC	569-1504-681

**PARTS LIST (cont'd)**

<b>SYMBOL NO.</b>	<b>DESCRIPTION</b>	<b>PART NO.</b>	<b>SYMBOL NO.</b>	<b>DESCRIPTION</b>	<b>PART NO.</b>
R27	Potentiometer 5K, squelch	562-0012-003	T8	10MM 27 MHz auto-xfmr.	592-5015-005
R29	1.0K ohm K 1/2W CC	569-1504-102	T9	Same as T8	
R31	3.3K ohm K 1/2W CC	569-1504-332	T10	Same as T8	
R32	120 ohm K 1/2W CC	569-1504-121	T11	Same as T8	
R34	3.3K ohm K 1/2W CC	569-1504-332	T12	25-40 MHz osc. xfmr.	592-5014-001
R37	330 ohm K 1/2W CC	569-1504-331	T13	25-50 MHz driver xfmr.	592-5014-002
R38	470 ohm K 1/2W CC	569-1504-471	T14	115 AC-23 DC 1A FWB xfr.	592-3001-001
R39	510 ohm J 1/2W CC	569-1503-511			
R41	27 ohm K 1/2W CC	569-1504-270		<b>PACKAGED ELECTRONIC CIRCUITS</b>	
R42	1.0 ohm K 1/2W WW	569-2503-109	U1	R. F. amp. silicon	544-0003-011
R43	2.2K ohm K 1/2W CC	569-1504-222	U2	1st mixer silicon	544-0002-011
R45	470 ohm K 1/2W CC	569-1504-471	U3	1st I. F. 120 sil.	544-0003-043
R46	15 ohm K 1/2W CC	569-1504-150	U4	2nd I. F. silicon	544-0002-014
R47	2.7K ohm K 1/2W CC	569-1504-272	U5	Noise limit. germ.	544-0002-015
R48	120 ohm K 1/2W CC	569-1504-121	U6	Audio silicon	544-0002-026
R49	680 ohm K 1/2W CC	569-1504-681			
R50	22 ohm K 1/4W CC	569-1002-220		<b>PRINTED CIRCUIT BOARDS</b>	
R51	120 ohm K 1/2W CC	569-1504-121	U7	PC Board	035-0181-003
R52	390 ohm K 1/2W CC	569-1504-391		<b>INTEGRATED CIRCUITS</b>	
R53	39K ohm K 1/2W CC	569-1504-393	U9	Voltage Regulator	544-2003-005
R54	6.8K ohm K 1/2W CC	569-1504-682		<b>AC CORD</b>	
R55	120 ohm K 1/2W CC	569-1504-121	W57	8 ft. AC cord 3-18 blk	597-1001-002
R56	220 ohm K 1/2W CC	569-1504-221		<b>455 kHz FILTER</b>	
R57	120 ohm K 1/2W CC	569-1504-121	Z1	Mech. filt-xfmr. pair	532-1004-001
R58	62 ohm J 1/2W CC	569-1503-620		<b>CRYSTALS</b>	
R59	2.2K ohm K 1/2W *CC	569-1504-222	Y1	5.7350 MHz, fundamental HC-18/u	519-0023-104
R61	3.3K ohm K 1/2W CC	569-1504-332	Y2	5.7250 MHz, fundamental HC-18/u	519-0023-103
R62	470 ohm K 1/2W CC	569-1504-471	Y3	5.7150 MHz, fundamental HC-18/u	519-0023-102
R63	27 ohm K 1/2W CC	569-1504-270	Y4	5.6950 MHz, fundamental HC-18/u	519-0023-101
R64	470 ohm K 1/2W CC	569-1504-471	Y5	6.1904 MHz, fundamental HC-18/u	519-0023-108
R65	120 ohm K 1/2W CC	569-1504-121	Y6	6.1804 MHz, fundamental HC-18/u	519-0023-107
R66	47 ohm K 1/2W CC	569-1504-470	Y7	6.1704 MHz, fundamental HC-18/u	519-0023-106
R67	1.2K ohm K 1/2W CC	569-1504-122	Y8	6.1504 MHz, fundamental HC-18/u	519-0023-105
R68	47K ohm K 1/2W CC	569-1004-473	Y9	32.7000 MHz, third overtone HC-18/u	519-0024-001
R70	1.0K ohm K 1/2W CC	569-1504-102	Y10	32.7500 MHz, third overtone HC-18/u	519-0024-002
R82	27 ohm K 1/2W CC	569-1504-270	Y11	32.8000 MHz, third overtone HC-18/u	519-0024-003
R83	1.0K ohm K 1/2W CC	569-1504-102	Y12	32.8500 MHz, third overtone HC-18/u	519-0024-004
R84	2.2K ohm K 1/2W CC	569-1504-222	Y13	32.9000 MHz, third overtone HC-18/u	519-0024-005
R85	1.5K ohm K 1/2W CC	569-1504-152	Y14	32.9500 MHz, third overtone HC-18/u	519-0024-006
R86	2K 1/8W "S" meter zero	562-0004-202			
R87	47K ohm K 1/2W CC	569-1004-473			
R88	3.9K ohm K 1/2 W CC	569-1504-392			
R89	1 M ohm K 1/2W CC	569-1504-105			
R91	10K 1/8W "S" meter adjust	562-0004-103			
R95	330K ohm K 1/4W CC	569-1002-334			
	<b>THERMISTORS</b>				
RT1	8.0K ohm K -4. 4 therm.	569-3001-001			
RT2	Same as RT1				
	<b>SWITCH</b>				
S2	Channel sel. sw.	583-2029-103			
	<b>TRANSFORMERS</b>				
T1	10MM 27 MHz ant. xfmr.	592-5015-001			
T2	10MM 27 MHz mix xfmr.	592-5015-002			
T3	7MM 455 kHz IF xfmr.	592-5020-004			
T4	Same as T3				
T5	Input/driver xfmr.	592-1007-004			
T6	Out/Mod xfmr. 29/3.2	592-1013-004			
T7	10MM 27 MHz osc. xfmr.	592-5015-004			

## PARTS LIST (cont'd)

SYMBOL NO.	DESCRIPTION	PART NO.	SYMBOL NO.	DESCRIPTION	PART NO.
	DC POWER CABLE			FCC Rule Part 95	022-1635-001
				FCC Form 505	022-1636-001
	Cable Assembly	023-1652-001		Battery Cable	023-1652-001
	Includes:			Connector Package	023-2209-001
	Fuseholder	534-1004-005		No. 20 White Envelope	041-0413-000
	Fuse, 2 amp	534-0003-024		CB Warranty Card	041-0419-014
	Quick disconnect lead assy.	023-2558-001		7x10 Poly Bag	041-0420-001
	18 AWG stranded red wire	071-0912-042		Microphone Clip	537-9004-002
	ACCESSORY PACKAGE			Xmtr. ID Card	564-1001-001
	Operating Manual	002-0223-001		Reduced Schematic	564-3001-250
				Waber 3055 2 prong to 3 prong plug adapter	597-1004-002