ECO 752/DC Power Supply

OPERATING MANUAL

GENERAL DESCRIPTION

The EICO Model 752 provides all necessary operating voltages for the EICO Model 753 SSB/AM/CW Tri-Band Transceiver (200 watts SSB PEP and CW, 100 watts AM). It may also be used to operate other EICO equipment for which this supply shall be specified, or compatible equipment of different manufacture with appropriate alterations in the manner of connection.

The Model 752 is to be operated from a nominal 12-volt DC power source. This power source may be negative or positive ground, but the polarity switch on the chassis (accessible when cover is removed) must be set accordingly, before the supply is connected either to the power source or the transceiver. Set the source polarity switch toward the rear heat sink for a negative ground source, or toward the front connection panel for a positive ground source. If it is attempted to operate the transceiver with the polarity switch incorrectly set, the power source will be shorted through the supply and cause the 40 amp fuse in the supply to blow. However, the supply will not be damaged.

An octal power plug and cable is the means of connecting all the specified output voltages to the transceiver. The cable wiring permits the power supply to be turned on and off at the transceiver.

The Model 752 is designed integrally with the EICO Model 753 and other EICO equipment for which this supply shall be specified. Importantly, the supply regulation is tailored to the requirements of EICO transceivers. Furthermore, a great deal more filtering is incorporated that is not found in other supplies. This additional filtering is absolutely required for proper operation of the EICO transceiver. For these reasons there is no acceptable substitute, to our knowledge, for the EICO 752 supply in mobile operation of EICO transceivers, and EICO can accept no responsibility for substandard performance quality resulting from the use of other supplies.

SPECIFICATIONS

OUTPUT VOLTAGES

HV (High Voltage): 750 volts DC at 300ma (50% duty cycle), 200ma continuous

LV (Low Voltage): 280 volts DC at 170ma

BIAS: -100 volts DC at 5ma

FILAMENT: Same as input voltage

INPUT VOLTAGE: 11-14 volts DC, negative or positive ground

SIZE (HWD): 3-5/8" x 7-3/8" x 7-7/8"

WEIGHT: 10 lbs.

This equipment has been thoroughly tested and inspected before packing. If you find visible damage upon unpacking, notify the dealer at once. If the unit was shipped to you from the dealer, you must file a claim with the carrier, since only you can recover for shipping damages. Your dealer and EICO will cooperate.



ENJOY YOUR BOOKS

PLEASE VISIT OUR STORE FOR EVEN MORE GREAT STUFF!

WWW.EVERYTHING4LESSSTORE.COM

COPYRIGHT NOTICE

ALL MATERIALS INCLUDING CD/DVD AND PDF FILES ARE COPYRIGHTED WWW.EVERYTHING4LESSSTORE.COM VON WALTHOUR PRODUCTIONS AND MAY NOT BE REPRODUCED, COPIED OR RESOLD UNDER ANY CIRCUMSTANCES. YOU MAY HOWEVER MAKE A COPY FOR YOUR OWN PERSONAL BACKUP. MATERIALS ARE FOR PERSONAL USE ONLY.

IF YOU PURCHASED THIS FROM ANYWHERE BUT FROM US PLEASE NOTIFY US IMMEDIATELY SO THAT WE MAY CHECK IF YOU PURCHASED FROM AN AUTHORIZED RESELLER SO WE CAN LET YOU KNOW IF YOU NEED TO RETURN FOR FULL REFUND FROM AN UNAUTHORIZED SELLER.

THANKS AGAIN AND PLEASE TAKE THE TIME TO VISIT OUR STORE.

ATTENTION! EVERYTHING ON SALE NOW!!







INSTALLATION OF THE SUPPLY

The supply may be located wherever is most convenient. However, the drop in the leads from the battery to the supply input must be kept to a minimum, and No. 8 AWG wire or heavier is recommended for these connections.

An 8-wire cable is required to connect the supply outputs to the transceiver, of length determined by the location of the supply. Use No. 18 AWG wire for all supply-to-transceiver connections. An octal male plug with hood is required for connecting one end of the cable to the supply, and an octal female plug with hood for connecting the other end of the cable to the transceiver.

The supply is provided with rubber feet, which will help to prevent the unit from sliding around in a trunk installation. Two sheet metal L-brackets are supplied also, for mounting the unit under the hood or under the dash. These brackets are fastened to the supply by two #6 self-tapping screws through either the upper or lower pair of holes on each side. Where space limitations require it, remove the feet and mount the brackets in the upper pair of holes on each side. When there is space available, the feet remain and the brackets are mounted in the lower pair of holes on each side.

VENTILATION

Avoid placing the unit in a very warm location or in a hot air stream. The vent holes at the rear of the cabinet must not be obstructed.

TRANSMITTER BIAS ADJUSTMENT

After connection of the Model 752 power supply both to a proper power source and to the transceiver being operated, the transmitter bias must be set properly to obtain optimum transceiver performance. The procedure for transmitter bias adjustment is given in the transceiver operating manual. The transmitter bias should be checked regularly and whenever driver or final amplifier tubes in the transmitter are replaced.

CABINET REMOVAL

To remove the power supply from the cabinet, first disconnect it from the power source and from the transceiver. Then remove the two #6 sheet metal screws at the bottom.

WARNING

LETHAL HIGH VOLTAGES ARE PRESENT WITHIN THIS EQUIPMENT. BE VERY CAREFUL TO AVOID CONTACT WITH THESE HIGH VOLTAGES IF FOR ANY REASON THE EQUIPMENT IS OPERATED OUTSIDE OF ITS CABINET.

NOTE ON MOBILE MOUNTING OF THE TRANSCEIVER

The transceiver is normally mounted to the underside of the dash, directly over the transmission hump. With the vibrations and jolts normally encountered in mobile use, there is a tendency for the transceiver to go into a mechanical oscillatory vibration around its mounting axis, with additional motion imparted due to some degree of flexibility in the dashboard metal. Naturally, this sort of vibratory motion will degrade the frequency stability of the transceiver. To eliminate any significant vibratory motion, insert a bracing device between one or both rear feet of the transceiver and the transmission hump in the vehicle.



Circled numbers (1) through (8) are pin numbers on the 8-pin female socket J1 on the panel. Each is to be connected with #18AWG wire to the same-numbered pin on the male 8-pin socket at the rear of the EICO 753 Transceiver (or other EICO transceiver for which this supply shall be specified).

EICO 752 - SCHEMATIC DIAGRAM







PLEASE VISIT OUR STORE FOR EVEN MORE GREAT STUFF!

WWW.EVERYTHING4LESSSTORE.COM

COPYRIGHT NOTICE

ALL MATERIALS INCLUDING CD/DVD AND PDF FILES ARE COPYRIGHTED WWW.EVERYTHING4LESSSTORE.COM VON WALTHOUR PRODUCTIONS AND MAY NOT BE REPRODUCED, COPIED OR RESOLD UNDER ANY CIRCUMSTANCES. YOU MAY HOWEVER MAKE A COPY FOR YOUR OWN PERSONAL BACKUP. MATERIALS ARE FOR PERSONAL USE ONLY.

IF YOU PURCHASED THIS FROM ANYWHERE BUT FROM US PLEASE NOTIFY US IMMEDIATELY SO THAT WE MAY CHECK IF YOU PURCHASED FROM AN AUTHORIZED RESELLER SO WE CAN LET YOU KNOW IF YOU NEED TO RETURN FOR FULL REFUND FROM AN UNAUTHORIZED SELLER.

THANKS AGAIN AND PLEASE TAKE THE TIME TO VISIT OUR STORE.

ATTENTION! EVERYTHING ON SALE NOW!!





THIS PAGE COPYRIGHT VON WALTHOUR PRODUCTIONS WWW.EVERYTHING4LESSSTORE.COM

PARTS LIST

PRICE EACH	<u>SYM. #</u>	STOCK#	DESCRIPTION	PRICE EACH	<u>SYM. #</u>	STOCK#	DESCRIPTION		
CAPACITORS					MISCELLANEOUS COMPONENTS & HARDWARE				
. 60	C1	23007	elec., 50uF/25V	. 01	40000	nut, #6-32	2 hex	(25)	
1.43	C2, 3,	23041	elec., 30uF/400V	. 01	40007	nut, #4-40		(4)	
	4,5			. 04	40011	nut, wing,		(2)	
3.35	C6	24012	elec., 40-20-20-20uf/450V	. 01	40012	nut, #10-3		(4) (3)	
. 80	C7	23010	elec., 10uF/150V	. 07 . 04	40016 40034	nut, 1/2-2 nut, Tinne		(2)	
DIODES/REC TIFIERS			.04	41000		$-32 \times 1/4$, B. H.	(22)		
DIODES	/REC III	ILIW		.01	41002		x 3/8, P.K.	(10)	
1.00	CR1,8	93005	rectifier	. 01	41008	screw, #6		(2)	
3.76	CR2, 3	93024	rectifier, 1.2KV/750mma	. 02	41013	screw, #1	0-32 x 1	(2)	
1.28	CR4,5,	93025	rectifier, IN2094	. 01	41014		$-32 \times 3/8$, B. H.	(2)	
	6,7			. 01	41016	screw, #4	$-40 \times 1/4$, B.H.	(6)	
				. 02	41101		-32 x 1, B.H.	(1)	
FUSES				.01	42002	washer, l		(25)	
10.1	F 1	01010	fuse two 3AC 40 amp	. 01	42003	washer, f		(4) (2)	
. 13	F1 F2	91019 91020	fuse, type 3AG, 40 amp fuse, type 3AG, 250ma	.01 .01	42004 42005	washer, le washer, f		(2)	
.28 1.06	F2 F3	91020 91021	fuse, type 3AG, 10ma	.01	42005	washer, l		(4)	
1.00	rJ	51021	luse, type one, roma	. 01	42008	washer, h		(4)	
JACKS/	CONNEC	TORS		. 01	42011	washer, f		(6)	
<u>01101107</u>				. 02	42013		ibre shoulder, #:		
. 28	J1	97041	socket, 8 pin	.01	42014	washer, b	lack fibre, #10	(1)	
•				. 01	42015		ed fibre, #10	(1)	
TRANSI	STORS			. 03	42029		ubber, 1/2" ID	(3)	
				. 11	42048		nica, insulator	(1)	
4.02	Q1	94046	transistor, Type 2N554	. 05	42073	washer, t		(2)	
18.00	Q2, 3	94045	transistor, Type 2N1518	. 03	42074		nica (TO-36)	(2)	
DEGIG	0.00			. 03	42075		ound mica (TO-3	86) (2) (2)	
RESIST	URS			. 06 . 02	42076 43000	lug, grou	ibre (TO-36) ad #6	(2) (1)	
31	R1,10,	14519	100Ω, 5W, 10%	. 02	43006	lug, grou		(1)	
		11010	10000, 011, 1010	. 02	43021	lug, grou		$(\bar{4})$	
. 35	R2	14319	0.5Ω, 10W, 10%	. 05	46019	feet, rubb		(4)	
. 18	R3	10886	390Ω, 1W, 10%	.02/ft.	58002		stranded, black	(4 ft.)	
. 35	R4	14320	15Ω , $10W$, 10%	.02/ft.	58039	wire, #22	stranded, brown	1 (1-1/2	
. 18	R5,6,	10845	220KΩ, 1W, 10%					ft.)	
	7,8	10050	12.00 000 1000	.02/ft.	58040		stranded, red (
. 31	R9	10979	1MΩ, 2W, 10%	.02/ft.	58041		stranded, orang		
. 31	R12	10980 10414	560KΩ, 2W, 10% 1.8KΩ, 1/2W, 10%	.02/ft.	58042	wire, #22	stranded, yellow		
. 08 . 08	R13 R14	10414	100 κΩ, 1/2₩, 10%	.02/ft.	58059	wino #99	strandod groon	ft.) (2 ft.)	
	201	14306	50 1 10 N 10%	.02/ft.	58064	wire, $#12$ wire, $#12$	stranded, green	(2 ft.)	
RELAY	S	1,200	30%E 10 W 10 P	.09/ft.	58300	spaghetti	Strandeu	(1/2 ft.)	
	<u> </u>			2.85	80190	panel		(1)	
14.16	RY	39009	relay	. 25	81215	bracket,	"L", mounting	(2)	
				2.20	81454	heat sink	, ,	(1)	
SWITCI	HES			3.85	81470	chassis		(1)	
- 1				11.00	81471	cover		(1)	
. 35	S1	62000	switch, slide, DPDT	. 40	81473	bracket,		(1)	
TEDMI		DDC		. 40	81474	bracket, 1	left	(1)	
TERMINAL BOARDS				1.15 .10	81475 89749	shield silicone g	m0380	(1) (3)	
. 10	TB1,9	54003	2 post	. 75	66168	Operating		(1)	
. 10	TB2,4,		4 post w/ground	. 75	66403	Assembly		(1)	
	10				40051	NUT 8-32	KEP	(4)	
. 10	тв3,5,	54008	4 post		41086	SCREW	6-32×5-16	B. H. (4)	
10	7	E 4000	$0 \dots 1$						
. 10	TB6	54006 54004	3 post, 2 right 2 post w/ground	To ord	er replac	ement parts	s, specify descri	ption and	
. 10	TB8	54004	2 post w/ground	part nu	mber. F	lemittance i	must be made wit	th order,	
and include \$1.00 for mailing and handling with each									
TRANSFORMERS order (\$1.50 for each transformer if order in									
19.40 T1 35083 transformer, toroid 1 or more output or por subject to change witho						-		Prices	
23.00	T2	30083	transformer, power	subject	t to chang	e without no	stice.		
SOCKETS & HOLDERS									
		00005	for the labor	ELECTRONIC INSTRUMENT CO., INC.,					
. 99	XF1,	97085	fuseholder	121 01 20th Avenue Elushing N.V. 11250					
. 42	2,3 XQ1	97082	socket, transistor	131-01 39th Avenue, Flushing, N.Y. 11352					
. 74	V.A.T	01002							