



MADE IN USA

PAL 201 BDX BASE AC

INSTRUCTION MANUAL

PAL 201 BDX - BASE AC

PAL ELECTRONICS CO.

6391 WESTMINSTER AVENUE

P.O. BOX 778

WESTMINSTER, CALIFORNIA 92683

NOTE: This unit is illegal on the 11 meter citizen's band in the U.S.A.

SPECIFICATIONS

CASE SIZE: 3" high, 8" wide, 9" deep. WEIGHT: 10 lbs.

POWER REQUIRED: 117 volts AC house current

FREQUENCY RANGE: 25 to 30 MHZ (driver & antenna coils must be changed to use on other than 27 or 28 MHZ)

R.F. DRIVE INPUT: 2 to 6 watts: AM, FM, SSB, & DSB - to accept up to 15 watts of AM drive, driver control nearest the 12JB6 tube can be readjusted to clear audio and accept drive.

R.F. OUTPUT: 200 watts "AM" nominal dependant upon driving power and input voltage. 400 watts SSB

FEATURES:

1. DUAL POWER HI & LO
2. AUTOMATIC SSB & AM SWITCHING (SWITCHES WITH YOUR TRANSCIEVER)
3. RECEIVE BOOST-6 TO 20 S UNITS
4. LIGHTED RF OUTPUT METER
5. 1-12JB6; 2-GE 8950
6. 10 AMP INTERNAL FUSE
7. TRANSMIT & STBY SWITCH

INSTALLATION

MOUNTING: Place in a horizontal position, with enough space (2 in. minimum) around the case for free airflow. If screws or bolts are mounted through the case of cover, be sure they do not touch wire or parts.

WIRING: Ground lug should never be removed from AC cord. Unit must always be grounded or warranty will be void!

RADIO & ANTENNA: Use 50 ohm coaxial cable, such as RG-8 or RG-58 A/U. Connect the radio to "RADIO IN", and the antenna to "ANT OUT". The antenna should have an SWR of not more than 1.5:1.

AMPLIFIER should be installed in line and left off while making an SWR (standing wave ratio) check with your transmitter.

AFTER THIS check out and if SWR is proper-you may turn on and tune on the Hi side only! Always allow the 201BDX 60 seconds to warm up. With both your radio and the 201BDX set to AM, key the mike and adjust the plate and antenna knobs so that the meter needle swings to the maximum right or use a PAL WATTMETER for actual output & SWR. Normally the antenna and plate tuning knobs have a white line and should be at approximately 12 o'clock.

SWITCH OFF: The 201BDX is totally off.

SWITCH STBY: (On switch on) The tubes in the 201BDX are kept warm and the meter light is on; your radio operates normally. (no waiting for warm up)

HI-LO DUAL POWER SWITCH: Always load amplifier in Hi-position. Loading in low position will void warranty! "Hi" allows full power out and "Lo" cuts power to about half.

RECEIVE SWITCH: Boosts receive when in transmit position. (Varies from 6 to 20 S units on different radios)

IF TVI DEVELOPS, use a PAL KW TVI filter for best results! A lot of people do not realize that the TVI starts with the transmitter and is amplified by the amplifier which means it might be necessary to put a TVI filter behind the radio and behind the amplifier.

MINIMUM ORDER FOR PARTS \$250.00 FOB PHOENIX, ARIZONA

ORDERS OF \$500.00 OR MORE TAKE ADDITIONAL 5% DISCOUNT, FOB PHOENIX, ARIZONA

ORDER	ITEM	PART NO.	QUAN.	COST EACH	ORDER	ITEM	PART NO.	QUAN.	COST EACH
SO-239		15-02	2	.44	<u>PREAMP CIRCUIT</u>				
TOGGLE SWITCH SPDT ...		70-02	4	.58	6 PIN TERM. STRIP	17-13	1	.12	
RELAY X-7 2PDT		70-53	1	2.80	RESISTOR 6.8K $\frac{1}{2}$ W	60-62	2	.05	
RELAY X-11		70-54	1	3.30	RESISTOR 270 OHM $\frac{1}{2}$ W	60-41	1	.05	
METER 1-MA		07-01	1	1.55	RESISTOR 470 OHM $\frac{1}{2}$ W	60-45	1	.05	
CAP. 15pf AIR		24-02	1	2.10	CAP. 56 pf 100V	21-12	1	.20	
CAP. 365 pf AIR		24-04	1	1.15	CAP. .01 MF 500V	21-28	1	.20	
KNOB (large)		08-02	2	.40	CAP. 22 pf 250V	21-23	1	.20	
FUSE BLOCK		18-01	1	.22	TRANS. 2N 3904	45-33	1	.40	
FUSE 10 AMP		18-21	1	.12	L BRACKET	06-09	1	.35	
POWER CORD 16-3		15-31	1	1.20	DIODE 1N914	40-02	1	.13	
HAYCO INSULATOR		88-12	1	.10	<u>POWER SUPPLY</u>				
39 OHM 2W		62-46	1	.20	TRANSFORMER PT 1589	35-05	1	19.90	
<u>FINAL PLATE CIRCUIT</u>					<u>POWER SUPPLY BOARD</u>				
3 PIN TERM. STRIP		17-23	1	.12	P.C. RECT. BOARD	16-01	1	1.40	
CAP. .0022 uf 1.4 Kv .		21-39	2	.20	CAP. 30 uf 500V	20-54	2	.95	
RF CHOKE 24 uh		30-16	2	.44	RESISTOR 390K 1W	62-33	2	.20	
BEAD CHOKE 1/8 X 1/8 .		32-01	2	.05	(or) 2W	62-62			
<u>DRIVER PLATE CIRCUIT</u>					DIODE 2 AMP 1 KV	40-36	4	.20	
3 PIN TERM. STRIP		17-23	1	.12	<u>TUBE SUB-CHASSIS</u>				
CAP. .001 uf 1.4 Kv ..		21-38	2	.20	SOCKET 9P NOVAR	15-13	1	.12	
BEAD CHOKE 1/8 X 1/8 .		32-01	1	.05	SOCKET 12P COMPACTRON ..	15-14	2	.12	
<u>VOLTAGE RECTIFIER</u>					SOCKET - LAMP	15-21	1	.12	
5 PIN TERM. STRIP		17-28	1	.12	CAP. .01 50V	21-04	5	.20	
CAP. .01 500V		21-28	2	.20	CAP. 270 pf 3 KV	21-42	1	.20	
CAP. 1000 MF 25V		20-32	1	.58	COIL 27 uh	30-17	2	.20	
DIODE 2A-400V		40-35	1	.20	RESISTOR 220 OHM 2W	62-48	1	.20	
COIL 27 uh		30-17	1	.20	DIODE 1N2970B	40-76	1	1.20	
<u>KEYING CIRCUIT</u>					6.8V 10W				
5 PIN TERM. STRIP		17-28	1	.12	CAP. 15 pf 3 KV	21-41	1	.20	
DIODE 1N914		40-02	2	.13	COIL FORM (large)	31-34	1	.85	
RESISTOR 470 OHM $\frac{1}{2}$ W ..		60-45	1	.05	<u>METER CIRCUIT</u>				
CAP. 10 uf 25V		20-18	1	.33	3 PIN TERM. STRIP	17-23	1	.12	
CAP. 30 pf 500V		22-13	1	.33	DIODE 1N914	40-02	1	.13	
TRANS. 2N2905A		45-32	1	.40	TUBE G.E. 8950 GRADE A .	49-04	2	4.75	
					TUBE 12JB6A	49-03	1	1.80	
					BULB GE 1892	07-04	1	.20	

(OVER)

ORDER	ITEM	PART NO.	QUAN.	COST EACH	ORDER	ITEM	PART NO.	QUAN.	COST EACH
SSB DELAY CIRCUIT									
	3 PIN TERM. STRIP	17-23	1	.12					
	RESISTOR 39 OHM 1/2W ...	61-28	1	.05					
	CAP. 470/500 uf 25V ..	20-24	1	.54					
HARDWARE									
	4-40 SCREW 3/8	24	.01			6-32 SCREW 3/8	4	.01	
	LOCK	24	.01			LOCK WASHER	4	.01	
	NUT	24	.01			10-32 SCREW 5/16	1	.02	
	1/4-20 SCREW 1 3/8	1	.02			SCREW 3/8	2	.02	
	LOCK WASHER	1	.02			WASHER	3	.02	
	FLAT WASHER	4	.02			LOCK WASHER	5	.02	
	NUT	4	.02			NUT	1	.01	
	15/32 LOCK WASHER	4	.01			8-32 NUT	2	.01	
	NUT	4	.01			PAL #8 NUT	2	.01	

TOTAL PARTS COST FOR EACH PAL 201, COVERING PARTS ON THIS SHEET IS \$ 66.34

ORDER BLANK

YOUR NAME _____

COMPANY NAME _____ ACCT. # _____

ADDRESS _____

CITY _____ STATE _____ ZIP _____

P.O. NO. _____ DATE _____

SIGNED _____

WHEN THIS ORDER BLANK IS USED FOR ORDER, A NEW ORDER
BLANK WILL BE SENT FREE WITH EACH ORDER.

LARGE CHASSIS BLUE PRINT (3) DRAWINGS AVAILABLE AT \$7.00 PER SET PREPAID.
INCLUDES CHASSIS, COVER & INTERIOR PARTS. PARTS PRICES ARE SUBJECT TO
CHANGE WHEN INVENTORY ROTATES.



PAL ELECTRONICS CO.

2962 W. WELDON
PHOENIX, ARIZONA 85017
602-264-0214