



**OWNER'S
MANUAL**

REGULATED POWER SUPPLY

LABPAC B602 D
B603 D

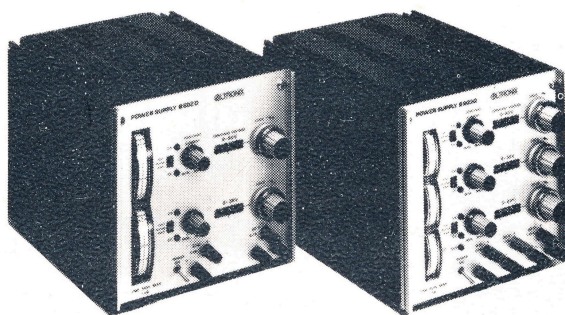
Serial No

USERS INSTRUCTIONAL LEAFLET

OLTRONIX

LABPAC B602D
B603D

UIL-1(4)
1977-03-28



RATING DATA ¹⁾

		B602D	B603D
Source voltage	U_S	— 220V±10%, 240V±10% ²⁾ , 48-63Hz—	
Output voltage/current			
output 1	U_{ex}/I_{ex}	0-60V/0,7A	0-60V/0,65A
— " — 2		0-30V/1,4A	0-30V/1A
— " — 3			0-6V/3A
Ambient temperature, operating	t_{amb}	————— 0-40°C —————	

PERFORMANCE RATINGS ¹⁾ (Data subject to Change)

Source current, max	I_{Sm}	————— 0,85A _{rms} —————
Load effect, all outputs (load regulation) $I_{ex}=0-100\%$	U_{erL}	————— <15mV —————
Source effect, all outputs (line regulation) $U_{Snom}=U_S\pm 10\%$	U_{erS}	————— <1mV or 0,01% —————
Temperature coefficient $t_{amb}=0-40^\circ\text{C}$	α	————— <0,01% ⁰ C ⁻¹ —————
PARD (ripple and noise) $f_B=20\text{Hz}-20\text{MHz}$	U_{PARD}	————— <1,5mV _{p-p} —————

Drift (stability) $\tau=8h, f_B=0-20Hz$	U_{erD}	<u>B602D</u> <u>B603D</u>	
		_____ <0,05% _____	
Load transient recovery time $I_{ex}=0-100\%$ Trans. rec.band= $\pm 50mV$	τ_R	_____ <50 μs _____	
Setting range, output 1	U/I	0-70V/0,04-0,74A	0-70V/0,03-0,68A
" " " 2		0-36V/0,07-1,47A	0-36V/0,05-1,05A
" " " 3		—	0-7V/0,15-3,15A
Control ranges	-	_____ See Output Chart _____	
Control deviation, max of rated voltage	Δ_m	_____ $\pm 0,3\%$ _____	
Crossover area, max	$(U/I)_{const}$	_____ 100mV/50mA _____	
Reverse current protection, max	I_{Rm}	_____ 1A <u>3A on output 3</u> _____	
Reverse voltage protection, max	U_{Rm}	_____ 1V _____ (One diode voltage forward drop)	
Isolation voltage, max on output terminals relative to the chassis	U_{isol}	_____ $\pm 500V$ _____	
Insulating resistance, min $U_{test}=500V$	R_{insul}	_____ >100Mohm _____	
Transformer OTP, automatic	t_{OTP}	_____ 110 $^{\circ}C$ _____	
Storage temperature	t_{stor}	_____ -40 $^{\circ}C$ to 85 $^{\circ}C$ _____	
Overall dimensions	height	_____ 176mm _____	
	width	_____ 176mm _____	
	depth	_____ 255mm _____	
Mass	m	5,0kg	5,3kg
Mains fuse	F_{10}	_____ 1,6A slowblow at the rear _____	
Mains cable (see Mains, page 3)	-	Fixed, 1,8m with 10-16A/250V, earthed EUR-connector.	

1) Rating Data and Performance Ratings are expressed in accordance with international recommendations, notably IEC-478.

2) Connected for $U_{Snom}=240V$ on order or changed at Service Center.

To make the best use of your new LABPAC, follow these instructions!
(Applicable to both models, unless otherwise indicated).

MAINS

The unit has a fixed mains cable with earthed 10-16A/250V EUR-connector, fitted at the rear. Adjacent is the mains fuse. The unit is thermally protected by an automatic cut-out in the mains transformer.

As an option, mains filter may be provided with a single detachable mains cable using CEE22/4 (6A)-connector.

For 220/240V mains tap-changing, see Service Instruction LPB602/3D-1.

VOLTAGE ADJUSTMENT (Figure 1)

The output level is set by means of the "CONSTANT VOLTAGE" potentiometer. The set value is displayed in the adjacent window to within $\pm 0.3\%$ of the rated output voltage.

A mechanical brake "LOCK" provides for a secure setting against unintentional turning.

CURRENT ADJUSTMENT (Figure 1)

The max output current is controlled by the "CONSTANT CURRENT" potentiometer. It can be set to any current between the max rated and down to 5% thereof.

CONSTANT VOLTAGE / CONSTANT CURRENT (Figure 2)

The cross-over area of the CV/CC is determined by the setting of the two parameters and is less than 100mV for a 50 mA change.

MONITORING (Figure 1)

The operating mode for each output is indicated by two light emitting diodes "CV" and "CC". The output voltage or current are indicated on the meter as selected by the "VOLT-AMP" switch.

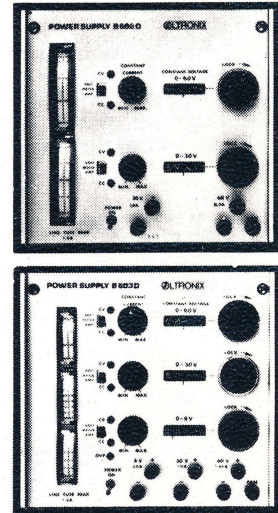


Figure 1

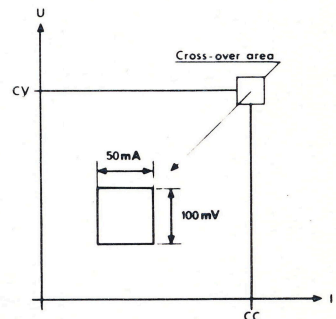
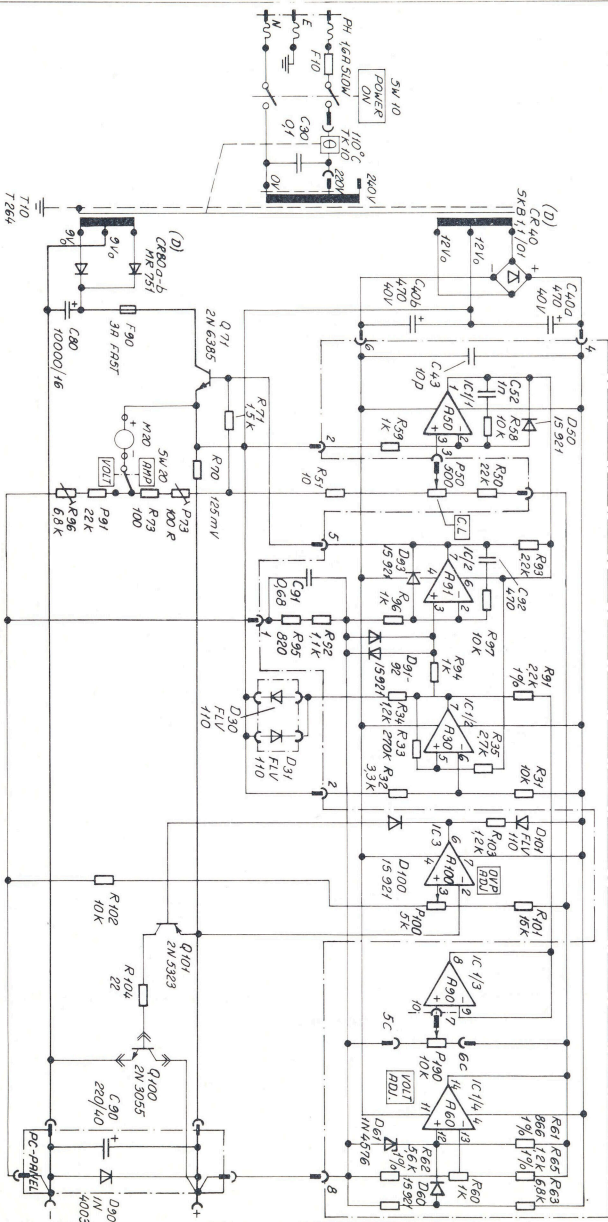


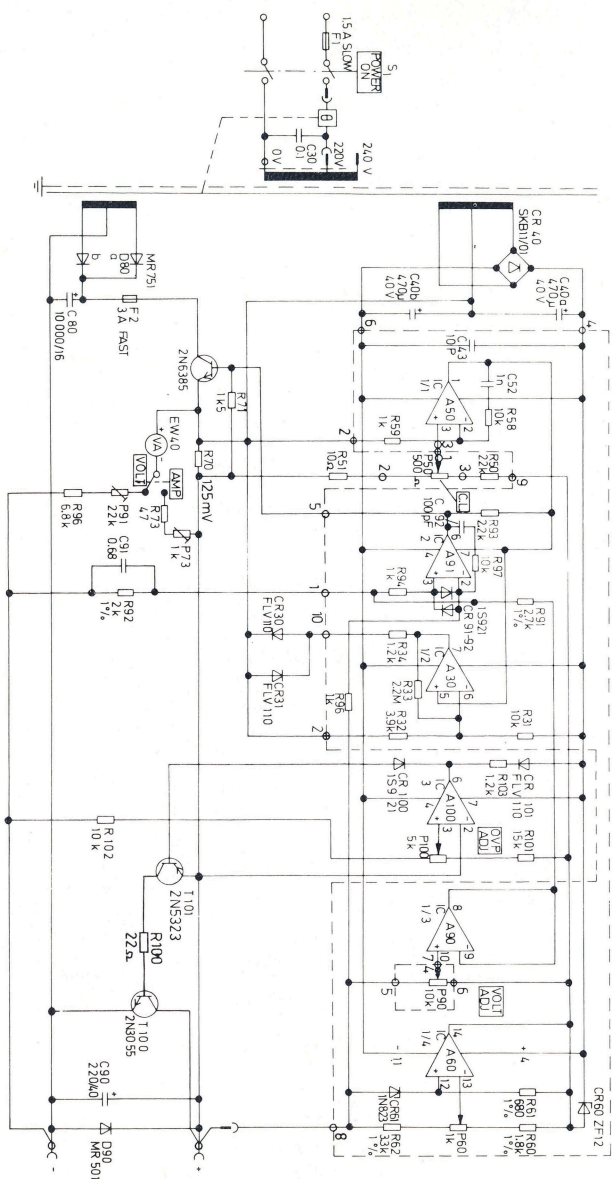
Figure 2

OP-BMP5
QURD, R50 IC 1/12 LM348N SINGLE; R91, IC2 LM741CN
R30 1/2
R60 1/4
R100 IC3



NB: ALL RESISTOR VALUES IN OHMS, UNLESS OTHERWISE SPEC.
ALL CAPACITOR -u- -u- -u- -u-

DATE NO.	SCALE	<input checked="" type="checkbox"/> AB <input type="checkbox"/> BV <input type="checkbox"/> GmH	MODEL B603D 260 - 73 - 1/1
PCB R44: M10.5700			
WIR. NO.			
SUB. TEST			
ISSUED DATE	SIGN	PREP. DATE	SIGN
77.05.09	DA/BB		

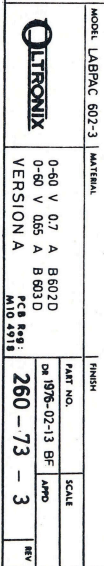


MODEL

MATERIAL

FINISH

MODEL LABRAC 603 D	MATERIAL	FINISH
PART NO.	SCALE	REV
LABRAC B 603 D	0-6V 3A	PCB 8-8
VERSION A	260 - 73 - 1	M10 5918





OLTRONIX LABOR AG
Rüschlistrasse 21
CH 2502 BIEL
Switzerland
Tel: 032/23 81 03
Tlx: 34637

OLTRONIX GMBH
Postfach 2011
D 757 BADEN B OOS
West Germany
Tel: 07221/61653
Tlx: 78110

POWER ELECTRONICS BV
Euroweg 15
LEEK (Gr)
Holland
Tel: 05945/2700, 2784
Tlx: 53301

OLTRONIX AB
Jämtlandsgatan 125
S-162 29 VÄLLINGBY
Sweden
Tel: 08/8703 30
Tlx: 10738