

--- GLB ELECTRONICS ---

ARE WE NEW TO YOU?

Not unless you're new to 2-meter FM!

GLB ELECTRONICS, The pioneer in Amateur frequency synthesizers is proud to announce the first complete line of synthesizers covering 6 meters thru 450 MHz.

They all share the same high spectral purity and frequency stability maintained in the famous 400B! Special ranges, mod kits for converting from one band to another are also possible. Write or call us about your requirements.

A number of options have been developed for added capabilities such as digital display, scanning and preset channels.

Another development is the "PARTS-PAX assemblies. These units consist of all the parts, circuit boards and instructions on how to assemble your own custom equipment. They differ from kits in that you supply the cabinets, mounting, etc. And use your own ingenuity to "home-brew". You can build them as is, using the complete assembly and testing instructions, or modify to suit your particular requirements.

Heading up this line is a series of receiver and transmitter assemblies specifically designed to be driven from our CHANNELIZERS. To increase flexibility of application they operate with crystals, too!

All GLB products include high-quality, first-run components. Boards are G10 epoxy with holes pre-drilled, the components are identified with silk-screening and the traces are solder masked!

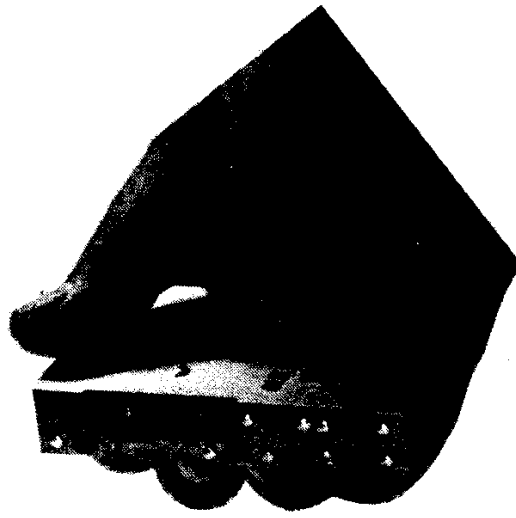
GLB Products are engineered for high-quality of performance, using originality where it counts and proven techniques where it doesn't. Otherwise, why is GLB so popularly copied by others?

Imitation is the sincerest form of flattery!

Our warranty has been extended to a full year on all products.

Sincerely,

Gil Boelke, W2EUP Bennie Sanders W2E6W

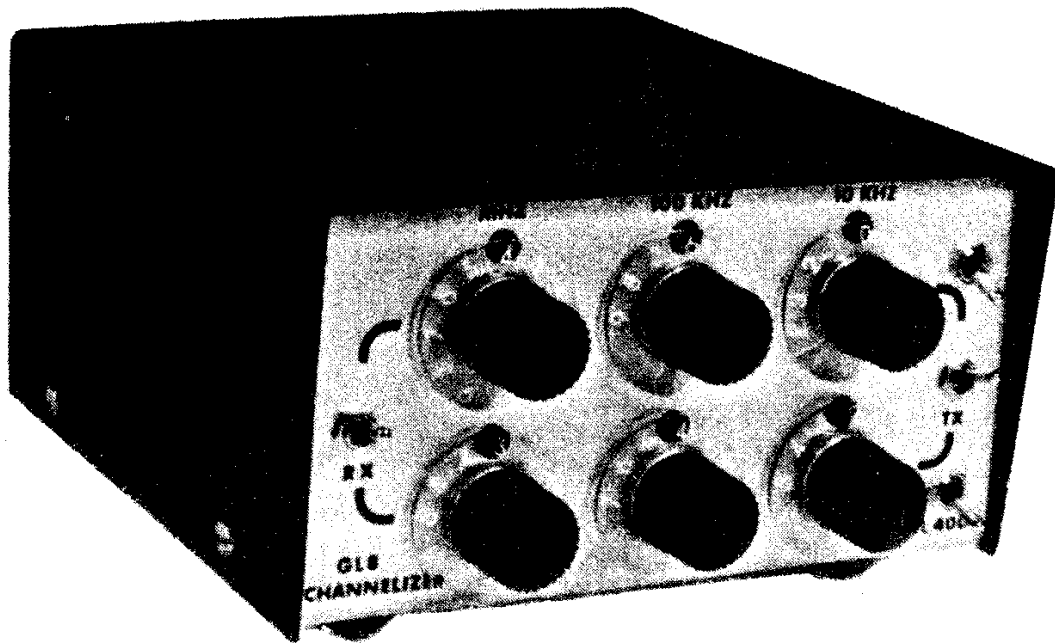


GLB ELECTRONICS MODEL 200 "MINI-SIZER"

- * Chalk up another GLB first! A synthesizer KIT for hand-held radios!
- * Covers 146 to 147.995 MHZ In 5 KHZ steps!
- * Operates on flea power - less than 3.5 ma!
- * Supply voltage 9 to 20 volts!
- * Spur levels beat commercial specs! Better than 60 db down!
- * Cigarette-pack size 2 3/8 x 4 x 3/4"!
- * Thumbwheel switches!
- * Selectable plus or minus 600 KHZ offset over the entire range!
- * Built-in frequency doubler for rigs needing 45 MHZ drive!
- * Direct FM capability!
- * Same high frequency accuracy as the 400B - 5 ppm!
- * Can be used on base and mobile units too - small enough to mount right inside many. Panel is only 4 x 3/4"!
- * Can be supplied for any 2 MHZ VHF range on special order!
- * Custom offsets can be supplied on special order!

MODEL 200, Wired & tested	239.95
MODEL 200 KIT*	159.95

* Kit recommended only to experienced kit builders.



--- THE PROVEN 400B CHANNELIZER ---

- * Covers entire 2-meter band in 5 KHz steps!
 - * Optional 140 to 148.5 MHz coverage! **BAND EXTENDER**
 - * Accommodates virtually any transceiver!
 - * Field programmable for different transceivers!
 - * New board design permits modification for other bands!
 - * Rugged construction, designed for use in severe mobile environments!
 - * Excellent frequency stability - 5 parts per million!
 - * Low spurious levels: 60 db down!
 - * Fast 5 MS lock-up allows use of scanners!
 - * Two sets of frequency controls allow any possible repeater split or reverse pair!
 - * IC sockets used throughout!
 - * 3.1 X 5.6 X 6.4 inches. 1 year warranty!
- MODEL 400B -- Kit - \$134.95, Wired & tested - \$194.95

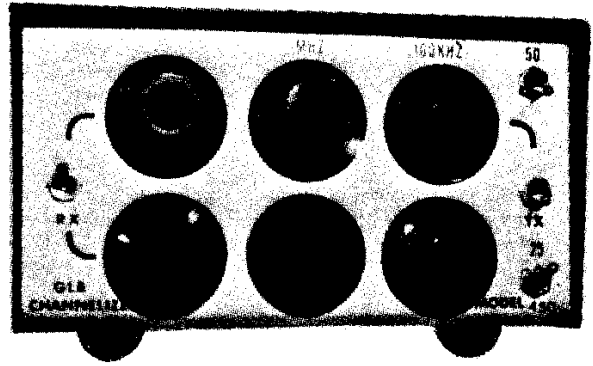
--- MODEL 50 -- 6 Meters!

- * Coverage 50 to 53.995 MHz in 5 KHz steps!
 - * Same high performance as the Model 400B!
 - * Similar in size and appearance to the 400B!
- Model 50 -- Kit - \$149.50, Wired & Tested \$219.50.

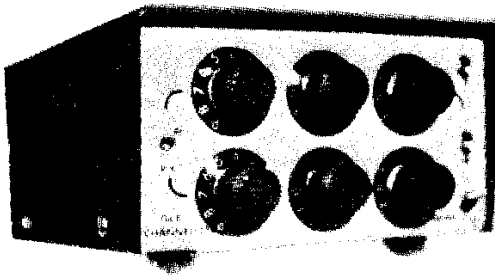
MODEL 450 CHANNELIZER

- * Full 420 to 449.975 MHZ Coverage!
- * 25 KHZ Steps!
- * Same high performance as the proven model 400B!

(See MODEL 400B for other specifications)



MODEL 450A kit	149.95
MODEL 450A Wired & tested	209.95



MODEL 220 CHANNELIZER

- * Covers the entire 220 to 224.990 MHZ Range!
- * 10 KHZ Steps!
- * Same performance specs as MODEL 400B!

For added features, see "options" section!

MODEL 220, Kit	134.95
MODEL 220, Wired & tested	194.95



MODEL 300 CHANNELIZER

- * Low Profile Design -- 2.1 X 5.6 X 6.75 inches!
 - * Built-in automatic 600 KHz offset. Simplex, offset, ~~or reverse pair offset modes!~~ **SELECTABLE HI-LO OFFSET**
 - * 5 KHz steps -- 144 to 147.995 MHz!
 - * Illuminated dials at no extra cost!
 - * Same performance as the MODEL 400B!
- MODEL 300 - Kit - \$119.95. Wired & Tested - \$179.95.
(Pictured unit shown with Preset Option)

MODEL 220A CHANNELIZER

- * Low profile model for 220 to 224.990 MHz! 10 KHz steps!
 - * 1.6 MHz repeater offset or simplex operation!
 - * Same performance as the 400B!
 - * Similar in size and appearance as the Model 300!
- MODEL 220A - Kit - \$129.95 - Wired & tested - \$189.95!

MODEL 450B CHANNELIZER

- * Low profile model for 420 to 449.975 MHz, 25 KHz steps!
 - * Selectable plus and minus 5 MHz offset and simplex!
 - * Same performance as the 400B!
 - * Similar in size and appearance as the Model 300!
- MODEL 450B - Kit - \$149.95 - Wired & tested - \$209.95!

--- OPTIONS FOR CHANNELIZERS ---
 STD - Standard; NA - Not available

MODEL	FREQ. MULT.	5 KHz STEPS	BAND EXT.	ILLUM.	PRESET	SCAN.	OFFSET	HI SIDE
400B kit	STD	STD	7.50	9.95	24.95	14.95	19.95	STD
400B w/t	STD	STD	14.95	14.95	44.95	24.95	29.95	STD
220 kit	STD	9.95	NA	9.95	24.95	14.95	NA	STD
220 w/t	STD	19.95	NA	14.95	44.95	24.95	29.95	STD
300 kit	STD	STD	4.95	STD	24.95	14.95	STD	STD
300 w/t	STD	STD	9.95	STD	44.95	24.95	STD	STD
50 kit	STD	STD	NA	9.95	24.95	14.95	NA	STD
50 w/t	STD	STD	NA	14.95	44.95	24.95	NA	STD
450 kit	STD	NA	NA	9.95	24.95	14.95	NA	STD
450 w/t	STD	NA	NA	14.95	44.95	24.95	29.95	STD

Options ordered separately are the same prices as kits.

5 KHz steps for units having serial # below 004153 @ 14.95 kit, 24.95 installed.

5 KHz steps for units above serial # 004153 @ 9.95 kit, 19.95 installed.

Frequency multiplier--when ordered separately--@ 5.95 kit, 10.95 installed.

High side injection --when ordered separately--@ 2.00 kit, 6.00 installed.

CHANNELIZER OPTIONS AVAILABLE NOW!
SELECTABLE HI-LO OFFSET

-- 600 KHZ AUTOMATIC REPEATER OFFSET KIT! ---

- * Covers the entire 2-meter repeater band!
- * Automatically transmits 600 KHZ below receive frequency ~~when below 147 MHZ!~~
- * Automatically transmits 600 KHZ above receive frequency ~~when above 147 MHZ!~~
- * ~~3~~-Position switch selects normal, repeater, ~~or reverse-pair operation!~~
- * Easy construction and installation!

Kit consists of board, parts and full instructions.
Reduce knob spinning for only.....\$ 19.95!



-- PRESET CHANNELS KIT --

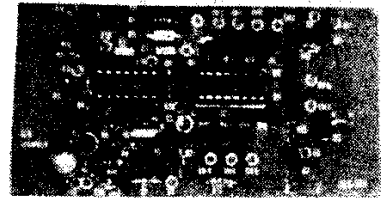
- * Single-switch selection of your busiest channels!
- * Ten positions; 9 presets plus one from panel.
- * Program by soldering diodes to matrix board.
- * Transmit and receive frequencies are independent; program simplex or any offset combination!
- * Adaptable to other makes of synthesizers!

Kit consists of special subminiature switch with knob, etched & drilled circuit and matrix board, ribbon cable for interconnections, all parts, diodes and complete step-by-step instructions.

Hop around fast for only.....\$ 24.95!

10-CHANNEL SCANNER KIT

- * Scans 9 preset and one selectable channel!
- * Selectable modes:
 - (1) scan, hold on active channel for 5 seconds after signal drops out; resume scanning.
 - (2) Scan, hold on active channel for 20 seconds; resume scanning.
- * 2 Optional squelch modes:
 - (1) squelch activated
 - (2) audio activated



ONLY... \$ 14.95

Squelch activation is conventional. Scanner stops when the squelch opens. Audio activation is easier to hook up, since the only connection to the radio needed is an audio line to the speaker. It works surprisingly well for such a simple connection!

- * Uses low current, high noise immunity CMOS logic!
- * 2 3/16 X 4 1/4 x 3/4"H

NOTE: for use with a GLB CHANNELIZER, the preset channels option is required to set up the channels to be scanned. The digital display option is recommended as an aid in determining which channel is currently active.

Kit includes all parts, circuit board and instructions. (But not the preset or display options)



GLB MULTIPLEXED DIGITAL READOUT

If you like digital display of frequency, this is what you've been waiting for! It doesn't fit inside the channelizer because there isn't enough panel space, but you provide the case and it does the rest! Remote it to your dash or console!

- * Large, brilliant 3/8" LED 7-segment indicators!
- * Low-current, high noise immunity CMOS logic!
- * Displays 5 digits in numeric form, with a 5 KHZ indicator light; i.E. "146.76" Or "146.76 *"!
- * Usable on any synthesizer having positive logic BCD control, including ours, of course!
- * 2 3/8" X 3 3/4" x 1" high.

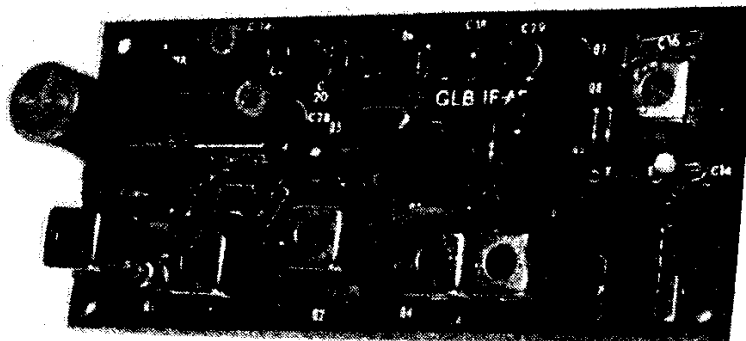
Kit includes all parts, circuit boards and complete instructions!

A great feature for only34.95

PART-PAX ASSEMBLIES

--- VHF RECEIVERS ---

- * Available for 6 & 2 METERS, 220 and 450 MHZ!
- * Two boards for maximum mounting flexibility!
- * Best price/performance available!
- * Full compatibility with GLB CHANNELIZERS!
- * Optional crystal-controlled operation!



IF-AF BOARD:

- * 10.7 MHZ Input, double conversion to 455 KHZ.
- * HARD Limiting action, not marginal as in many FM receivers.
- * The best squelch you've seen! Can be set to open on signals you can't even hear! Resists "chopping" and does not "pop"!
- * Full 2 watts of audio power!
- * 12 Volt DC operation!
- * Built-in electronic transmit-receive switching!
- * Fully compatible with our front-ends and your own!
- * Temperature-stable operation of squelch and audio levels make it ideal for repeater service!

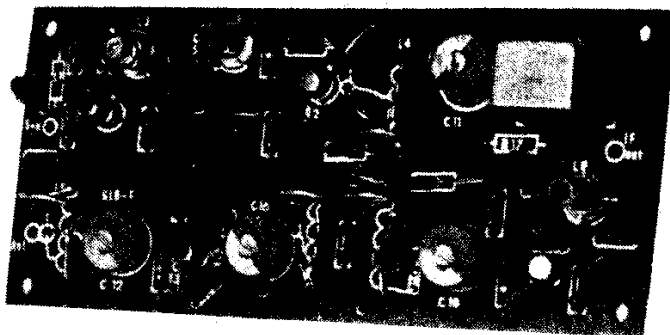
Kit includes circuit board, instructions and all parts for board; requires 2 external 10K pots for volume & squelch control; plus speaker.

IF-AF PARTS-PAX Model 107..... \$ 34.95

High-efficiency 3" speaker with huge ceramic magnet takes full power safely, and LOUDLY! 2.95
(Allow an extra 50¢ for shipping)

industrial grade pots for above, 1/4" shafts;
\$ 3.60 Value!

Squelch (no switch, 10K) 1.25
Volume (10K) with on-off switch 1.50



-- FRONT-END BOARDS --

- * Available for 6 & 2 meters, 220 and 450 MHZ!
- * 3 High-Q tuned circuits at the operating band!
- * 4-Pole crystal filter!
- * High resistance to overload!
- * High sensitivity and adjacent-channel selectivity!
- * 12V DC Operation!
- * Small size! Only 2" x 4.5" X 0.8" High!
- * Interface directly to a CHANNELIZER or use a crystal!
- * 10.7 MHZ Output! Board will accept 6 or 8-pole filters (special order only).

Prices include parts, drilled circuit board, 4-pole crystal filter and complete instructions for building and testing.

FRONT-END PARTS-PAX Prices:

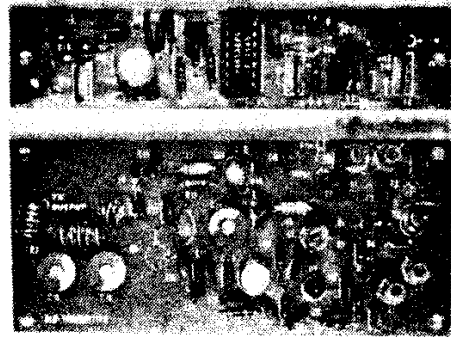
Model R50	40-60 MHZ	\$ 34.95
Model R144	130-175 MHZ	34.95
Model R220	200-230 MHZ	34.95
Model R450	410-470 MHZ	37.95

SINGLE CHANNEL OSCILLATOR DECK

- * Designed to drive our transmitter strip!
- * Temperature compensated for high stability!
- * True FM modulation!
- * 1 x 4.5 x .8 inches!

Kit includes all parts, circuit board and instructions; less crystals. Crystal ordering info included.

All this for only \$9.95



PARTS-PAX

--TRANSMITTERS--

- * Conservative 2.5 Watts output on 50, 144, & 220 MHz!
- * 1 Watt output on 450 MHz!
- * 12 volt DC operation!
- * CLEAN Spectrum - all spurs down 60 db!
- * Directly compatible with GLB CHANNELIZERS or optional crystal oscillator!
- * Direct FM Modulation with full audio processing: preemphasis, clipping and filtering!
- * Built-in tone interface for standard pads!
- * Separate pots to set audio gain, tone pad level and deviation!
- * Transmitter board is 2 x 4.5 x .8 inches!
- * Audio board is 1 x 4.5 x .8 inches!

PARTS-PAX TRANSMITTER PRICES (Including audio board)

Model T50	40-60 MHz.	\$ 29.95
Model T144	130-174 MHz	29.95
Model T220	210-230 MHz	29.95
Model T450L	410-470 MHz -- 1 Watt output	39.95
T450L has built in single channel oscillator.		
Ideal for repeater link transmitter.		
AUDIO PROCESSOR, Separately		9.95
MATCHED Dynamic microphone for above.		9.95

ARE YOU A HOME BREWER? WE'LL SELL YOU THE PARTS!

GLB ELECTRONICS PARTS PRICE LIST 4-24-77

RESISTORS

7.5 OHM 3 WATT 0.75
 180 OHM 1 WATT 0.20
 ALL 1/4 W 0.05

CAPACITORS

39 PF N1500 0.25
 50 PF N5600 0.25
 150 PF N750 0.25
 MYLARS, SPECIFY VAL:
 .005 .0075 .01 .015
 .05 OR .1 UF 0.25
 1 UF TANTALUM 0.35
 2.2 UF TANTALUM 0.35
 22 UF TANTALUM 0.60
 22 UF ALUMINUM 0.25
 470 UF ALUMINUM 0.50
 3-30 PF TRIMMER ~~0.30~~
 .001 UF FEEDTHRU 0.85
 OTHER CERAMICS 0.10

TRANSISTORS & DIODES

1N4148 0.05
 1N753A ZENER (5.6V) 0.75
 1N757A ZENER 0.50
 MV2209 VARACTOR 1.00
 2N3904 0.25
 SN5296 NPN PWR 1.75
 MFE122 OR 40841 1.50

INTEGRATED CIRCUITS

8280 (=74176) 1.75
 8281 (=74177) 1.75
 7473 1.00
 74H00 1.00
 7400 0.50
 MC4044 2.95
 4059 CMOS 6.95
 4060 CMOS 1.50
 4046 CMOS 1.80

COILS

SLUG-TUNED FORMS:

ALLOW 1.00 SHPG; NY RESIDENTS ADD SALES TAX.

4-PIN WITH SLUG 1.25
 3-PIN WITH SLUG 1.00
 CHOKES (1/4 W RES SIZE):
 3.3 UH (VIOLET) 0.50
 1 UH (RED) 0.50
 10 UH (BLUE) 0.50
 1/2 W RES SIZE:
 .33 UH (BLACK) 0.50
 .47 UH (YELLOW) 0.50
 2.2 UH 0.50
 47 UH (GREEN) 0.50
 (CHOKES MAY VARY IN STYLE)

SWITCHES

4-POS ROTARY 1.50
 10-POS ROTARY BCD 2.25
 TOGGLE, SPDT
 BEST U.S.-MADE!! 1.00
 OR 11 FOR 10.00

CRYSTALS-HI STABILITY

25.000 MHZ 11.00
 OFFSET, CUSTOM 11.00
 OFFSET XTAL EXCHANGE 4.00

MISCELLANEOUS

IC SOCKETS 14 OR 16P 0.25
 OR 10/ 2.00
 PHONO JACKS 0.35
 24 MHZ OUTPUT FILTER 1.00
 MINI 3V BULBS 0.35
 KNOBS-NON ILLUM. 1.25
 KNOBS-ILLUM TYPE 1.50
 RG174/U COAX (FT) 0.10
 RG178/U TEF COAX, FT 0.30
 RUBBER FEET 0.10

SPECIAL MISC PARTS

400B MAIN CHASSIS 5.95
 BLACK ANODIZED COVER 4.00
 VCO COVER 1.50
 UNIVERSAL MAIN &
 VCO BOARDS, PAIR 15.00
 ALL MANUALS, EA. 3.50

ORDERING INFORMATION

GLB products are available directly from GLB.

We honor MASTER CHARGE or VISA accounts.
Otherwise, send cashiers check or money order for
fast service.

Allow for shipping and insurance:

\$2.50 for all CHANNELIZERS Air \$3.50 Canada \$4.00

\$1.00 for PARTS PAX Air ~~\$2.00~~ Canada \$2.00

CHANNELIZER orders must include: type of rig,
first IF and crystal multiplication formulas.

Prices subject to change without notice.
SHIPPING is normally by UPS.

GLB ELECTRONICS
1952 Clinton St.
Buffalo, NY 14206

Phone: (716) 824-7936

CHARGE TO MY:

MASTER CHARGE - INTERBANK#

BANKAMERICARD/VISA

ACCOUNT NUMBER _____

EXPIRATION _____

AMOUNT _____

SIGNATURE _____

ORDER FORM

NAME _____ DATE _____

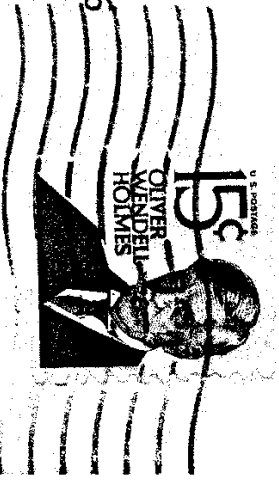
ADDRESS _____

CITY _____ STATE/ZIP _____

QTY	ITEM/FREQUENCY	PRICE	TOTAL

TOTAL MERCHANDISE	
SHIPPING CHARGES	
NYS RES ADD TAX	
REMITTANCE	

GLB ELECTRONICS
 1952 SEPTEMBER ST.
 Buffalo NY 14206
 PAID 1978 NY



TO:

FIRST CLASS MAIL