alda 103

totally solid state SSB Transceiver • 80 through 20 meters • 250 watts

alda 103

— compactness, power and performance!

The best deal in the ham radio market today for under $500!

ALDA 103 — the trim little powerhouse with incredible performance for the price!
The ALDA 103 is only 3-1/4" high by 9" wide by 12-1/2" deep and weighs less than 8-1/4 pounds. It's extremely rugged mechanically and built to provide reliable operation wherever you and your car, jeep, or boat can go. Power-wise, the ALDA 103 provides a full 250 watts PEP input for SSB operation, and 250 watts DC input for CW. And when it comes to performance, the ALDA 103 is the hottest little transceiver going. All solid state and totally broadbanded with all the fuss and bother of tuning up eliminated. RIT that's really handy for both SSB and CW. Super stable VFO with less than 100 Hz drift. Semi break-in CW plus built-in sidetone monitor and CW on either sideband for evading QRM.

Ideal first transceiver for brand new novices!
You'll want a full-capability CW/USB/LSB unit with all the power and performance you can use — and go on using as you graduate to higher licenses. The ALDA 103 gives you 250 watts DC input (nominal at 13.8 VDC) for CW, which is the maximum allowable power for your novice license. When you upgrade to your technician license, you've got 3 bands for CW operation. Then, with your general license — or higher — just plug in your mic and use the ALDA 103's full 250 watts PEP on SSB!

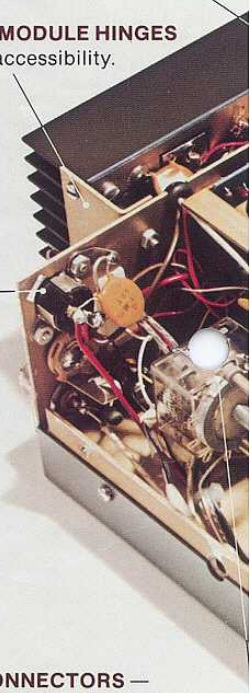
Perfect second or mobile unit for seasoned hams!
If you're looking for a super-sharp, compact unit to use in your car or boat, and you're used to the performance of your sophisticated station, the ALDA 103 will live up to your expectations. Absolute worst case sensitivity 0.5 μV for 10 dB S+N/N — a must for mobile operation. And receiver audio output of 3 watts minimum — another must. Powerful transmit output, too. Also, very low receiver power drain of only 5.5 watts — that's 0.4 ma at nominal 13.8 VDC **including power for dial and meter lamps!** Plus your choice of lightweight portable or heavy-duty accessory power supplies.

ALDA 103

BROADBANDED P
all-solid state Push-
requires no transmit
whatsoever.

EXTRA LARGE POWER AMPLI
HEATSINK — 7-3/16" x 3-1/4"
(182 mm x 82.5 mm) for efficien
dissipation.

TRANSMITTER MODULE HINGES DOWN for easy accessibility.



REAR PANEL CONNECTORS —
• DC Power Input • RF Output/Antenna • External Speaker Jack
• CW Key Jack • Accessory Socket
which is used for PTT control of external amplifier; transmit and receive audio for phone patch, and connections for external accessories such as remote VFO and digital display.

SEMI BREAK-IN CW — T/R relay
circuit stays energized between le
and automatically reverts to recei
pause between words.

ALL-ALUM...UM
lightweight and
severe environm

s quality engineering gives you all these convenient features:

OPTIONAL NOISE BLANKER — easily installed at any time by simply plugging in modular circuit card.

WER AMPLIFIER —
ull Final Stage;
er tuning

IER

heat

BOTTOM-MOUNTED BUILT-IN SPEAKER — 3" x 3" with rear panel jack for external speaker.

BUILT-IN CW MONITOR provides adjustable level on front-panel with full monitoring of CW tone.

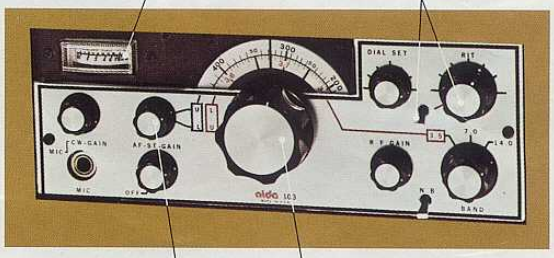
6-POLE CRYSTAL FILTER with 2.5 kHz bandwidth at −6 dB to provide excellent audio characteristics for transmit as well as receive.

HIGH STABILITY VFO — less than 100 Hz drift from a "cold" start at room temperature. Heavy-gauge drawn aluminum cover for maximum protection in mobile applications.

MODULAR PLUG-IN CIRCUIT BOARD ASSEMBLY increases ruggedness required for mobile operation and assures easy serviceability.

FRONT-PANEL METER indicates level of received signal and transmitter relative output power.

SEPARATE FRONT PANEL RIT ON/OFF SWITCH AND TUNING CONTROL for independent receiver frequency adjustment ± 500 Hz nominal.



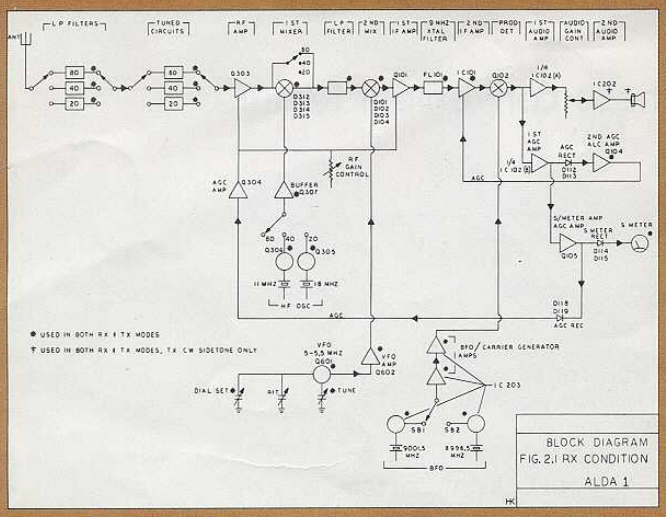
OPTIONAL CRYSTAL CALIBRATOR can be easily added; three-position slide switch — OFF/10 kHz/100 kHz — located under center of front panel.

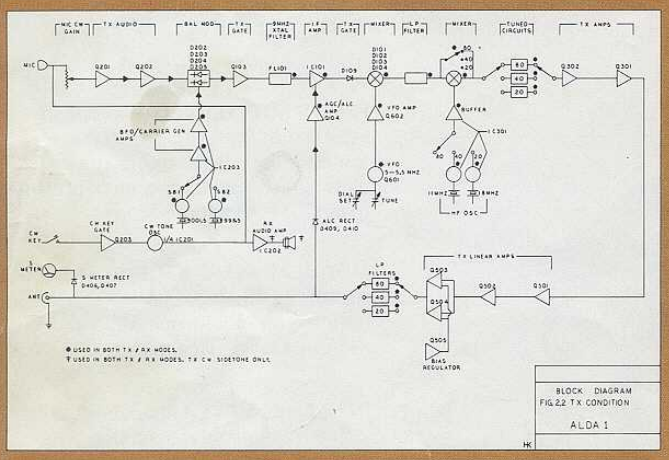
DUAL SPEED VFO DIAL VERNIER — extra smooth zero backlash ball action tuning with 6 to 1/30 to 1 dial drive.

CHASSIS —
orrosion-resistant in
ntal conditions.

AUTOMATIC INTERNAL ANTENNA SWITCHING — antenna control wafer is located on bandswitch for automatic changeover of external bandswitched amplifier or remote-controlled antenna tuner.

UPPER/LOWER SB SWITCH ONLY — unit automatically switches to CW operation whenever key is pressed, so no CW mode switch is required.





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Specifications

GENERAL SPECIFICATIONS

Semiconductors:	39 diodes; 23 transistors; 11 integrated circuits
Power Requirements:	Nominal 13.8 VDC input at 15 amps, negative ground only
Power Consumption:	Receive — 5.5 watts (includes dial and meter lamps); Transmit — 260 watts
Dimensions:	3-1/4" high x 9" wide x 12-1/2" deep (82.55 mm x 228.6 mm x 317.5 mm)
Weight:	8-1/4 lbs. (3.66 kg)

PERFORMANCE SPECIFICATIONS

Frequency Range:	80 meter band — 3.5 to 4.0 MHz 40 meter band — 7.0 to 7.5 MHz 20 meter band — 14.0 to 14.5 MHz
Modes:	CW; USB; LSB
RF Input Power:	SSB — 250 watts PEP nominal CW — 250 watts DC maximum (adjustable)
Transmitter:	
Antenna Impedance:	50 ohm, unbalanced
Carrier Suppression:	Better than −45 dB
Side-Band Suppression:	Better than −55 dB at 1000 Hz
Distortion Products:	Better than −26 dB
AF Response:	500 to 2500 Hz
Spurious Radiation:	Harmonics better than −45 dB below 30 MHz; better than −60 dB above 30 MHz
Frequency Stability:	Less than 100 Hz drift per hour (from a cold start at room temperature)
Microphone:	High impedance 3000 ohm
Receiver:	
Sensitivity:	Better than 0.5 watts audio output for 0.5 μV input
Signal-to-Noise Ratio:	Better than 10 dB S+N/N for 0.5 μV input
Image Ratio:	Better than −60 dB (typical with respect to 0.5 μV input: 80 meters — −130 dB; 40 meters — −100 dB; 20 meters — −75 dB).
IF Rejection:	Better than 70 dB (typical with respect to 0.5 μV input: 80 meters — 110 dB; 40 meters — 80 dB; 20 meters — 75 dB).
Intermodulation Intercept Point:	Better than 10 dBM
Selectivity:	2.5 kHz — 6 dB; 5.0 kHz — 60 dB
Audio Output Power:	More than 3 watts
Audio Distortion:	Less than 5% at 3 watts

ALDA 103 is completely manufactured in the U.S.A.

Options & Accessories

Noise Blanker — Model No. PC 701

100 kHz and 10 kHz Dual Crystal Calibrator—Model No. PC 801

Portable Power Supply — Model No. ALDA PS 115: average duty 15 amp unregulated; input — 115/230 VAC, 50/60 Hz; output —13.8 V nominal at 15 amps

Heavy Duty Power Supply — Model No. ALDA PS 130: output — regulated 30 amp at 13.8 VDC; input — 115/230 VAC, 50/60 Hz

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