

CQ REVIEWS:

The Standard C5718DA Twin-Band Transceiver

BY JOSEPH SCHROEDER*, W9JUV

Mobile rigs keep getting smaller while hordes of new features are being added. Cars are getting smaller while their dashes become less and less amateur radio friendly. Car break-ins have become such a problem in some areas that even if you could find a convenient place to mount a mobile rig, there's a serious question as to whether it still would be there the next time you leave your car parked in a downtown area!

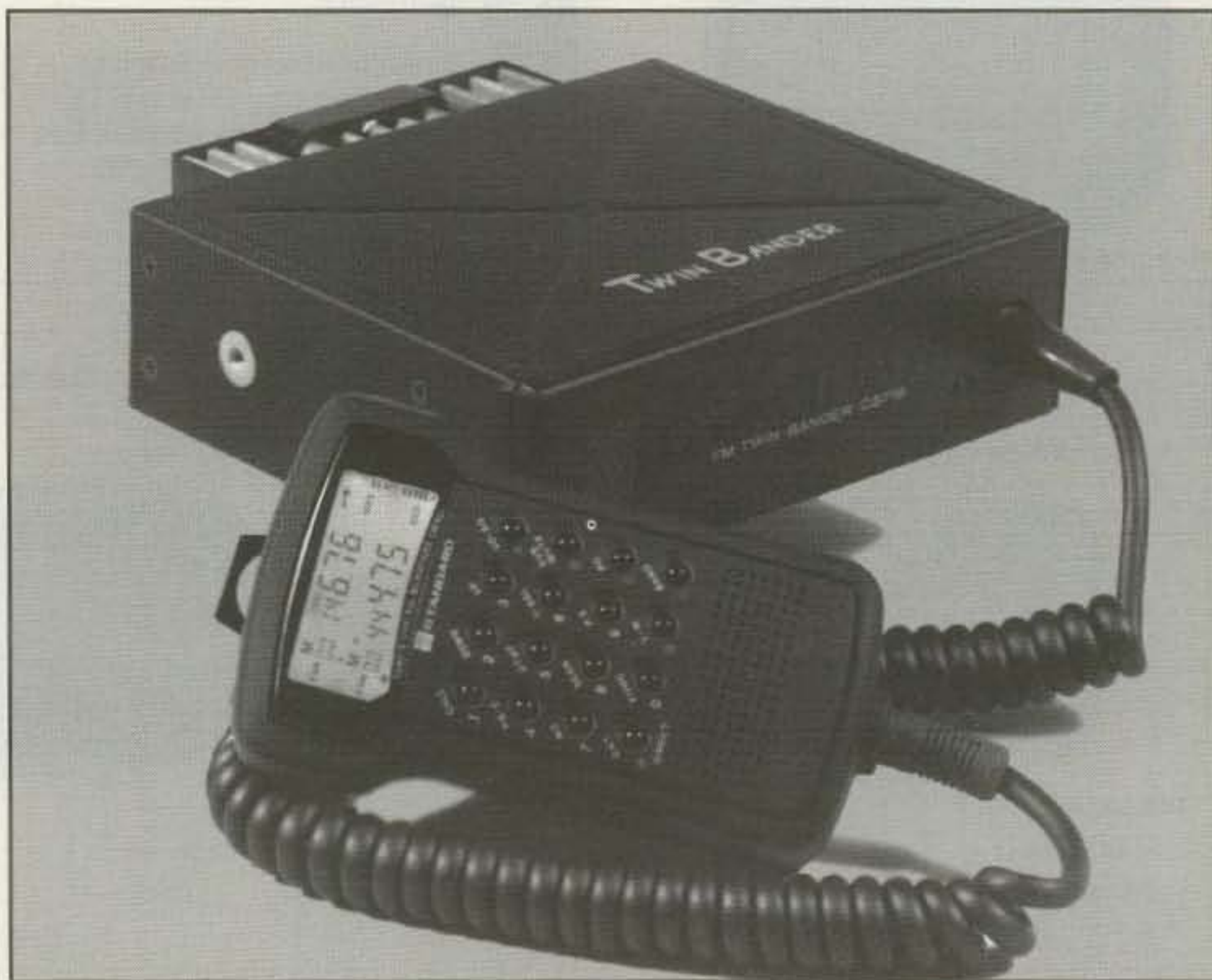
With all these problems, shouldn't we consider giving up mobile operation? Not if you've got a Standard C5718DA!

Standard's C5718DA is a dual-band 2 meter/440 MHz transceiver rated at 50 watts out on 2 and 40 watts on 70 cm. It has so many features that after several months of use I still haven't found—much less used—all of them. Everything used to operate it, display as well as controls, is in the handy speaker mic!

As you can see in the photo, the rig itself has no display or controls, while the speaker mic boasts a large, easy-to-read liquid-crystal display that shows not only the operating frequency on both bands, but all the operating parameters as well. The diagram of fig. 1 shows the full array of displayed information. The 16 pushbuttons on the front, backlit for night operation, control most of the operating and programming functions; the five more on the top of the mic take care of the rest.

With everything you need to operate located on the mic itself, the compact ($1\frac{5}{8}''\text{H} \times 5\frac{3}{8}''\text{D} \times 5\frac{1}{2}''\text{W}$) case of the C5718DA can mount just about anywhere, since you'll never need to get at it again once it's installed. With the radio itself tucked away under the seat, behind the dash, in the glove compartment, or even in the trunk, the security problem as well as the operational problem are solved, since there's no longer that expensive-looking box with all the fancy controls visible to attract the unwanted attention of larcenous passersby.

Furthermore, there's an important safety bonus with the C5718DA. No longer will you have to take your eyes off the road to check frequency or band, or grope around under the dash looking for rig controls while trying to maintain control of your car. Just hold up the mic and you'll have everything you need at eye



Everything needed to operate the very compact C5718DA, display as well as controls, is on the speaker mic.

level, amateur radio wise, while keeping one eye on the road.

The C5718DA programs 100–200 and 250–500 MHz receive on the nominal 2 meter band (more on that "nominal" later), and 100–200, 250–500, plus 800–1000 MHz (with cellular frequencies locked out, of course) on the high band. It works well on those frequencies, too; sensitivity where I had the instrumentation to check it was in the bottom tenth of a microvolt area across most of the spectrum, and of course in the amateur bands, it even included 902–928 MHz! Worst-case FM sensitivity was still better than a microvolt. AM detection is programmed for 100–142 MHz and 250–327.5 MHz, covering both the commercial and military aircraft bands, a valuable bonus for those of us who fly airplanes for fun or profit.

In addition, there's a transmit flexibility that I didn't find mentioned in either the ads or the manual. Either "band" can be programmed for full operation on both 2 meters and 70 cm! This means that if you're like me (more active on 2

than 440), you'll fill the supplied 20 memories of the "low" band with all 2 meter frequencies, and then put additional 2 meter channels, NOAA weather, local airport tower and ATIS, police and fire (VHF or UHF), plus all the 440 MHz machines I operate on the nominal "high" band.

In other words, as the C5718DA comes out of the box you've got 40 channels that you can program with any mix of VHF and UHF frequencies that suit your particular needs. If 40 channels aren't enough, there's an optional memory chip available that increases memory capacity to 100 channels per band—200 memories in all.

The C5718DA is simple to use working the Space Shuttle or MIR! Just set up the Shuttle downlink frequency of 145.550 MHz on one band, and then put the uplink frequencies (144.910, 144.930, etc.) in the memory of the other band. Using the mic's up and down buttons, you can then toggle your calls between the various uplink frequencies while your re-

*2120 Fir, Glenview, IL 60025

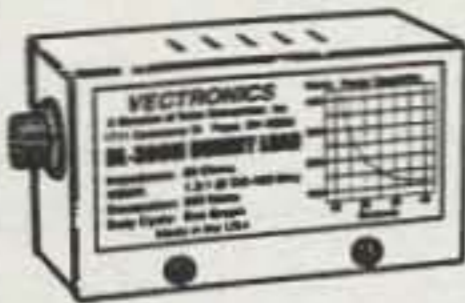
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VC300M 300W Mobile Tuner

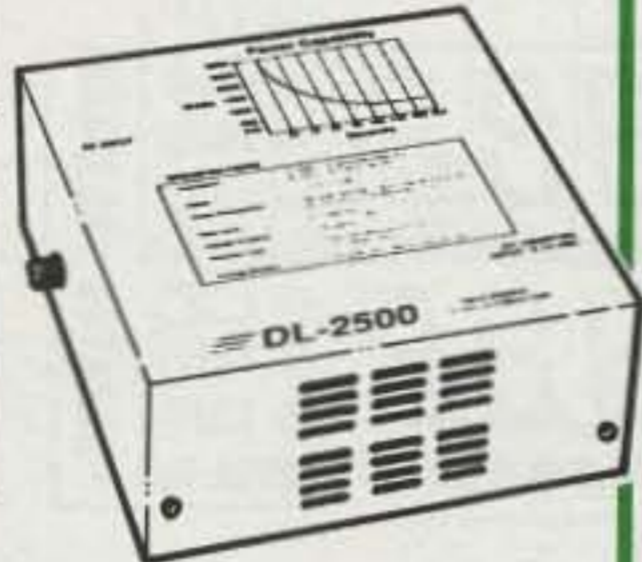


DL300M
300 Watt,
150 MHz, Dry
Dummy Load



VC300DLP 300W Antenna Tuner

DL2500
2500 Watt, 150 MHz,
Dry Dummy Load



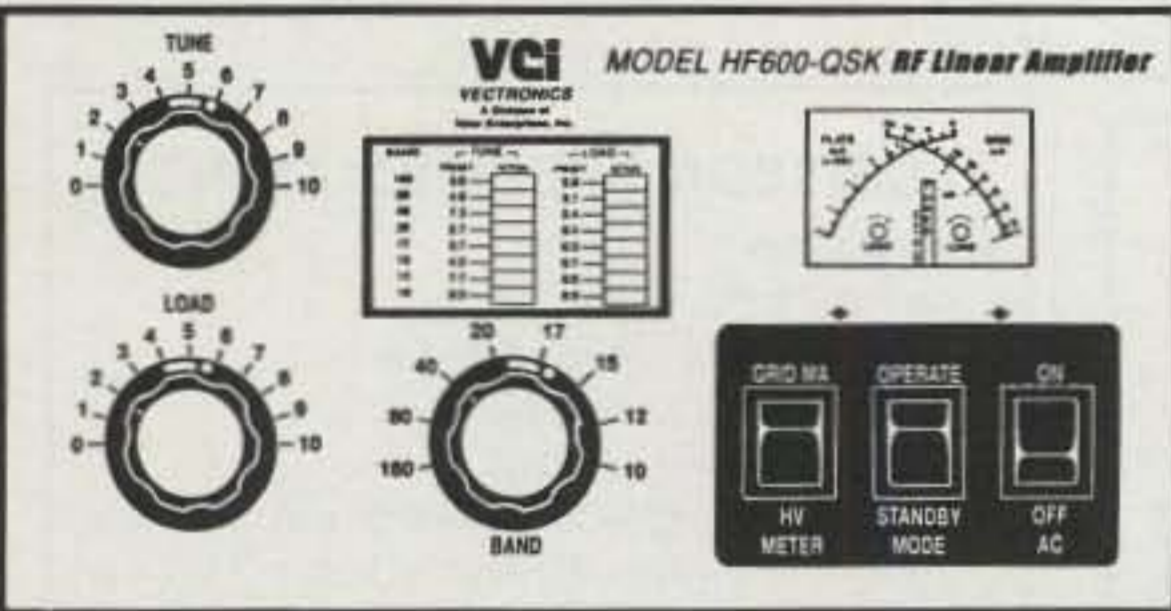
VC300D 300W Digital Antenna Tuner



HFT1500 1500W Antenna Tuner



DL650M
1500 Watt,
650 MHz, Dry
Dummy Load



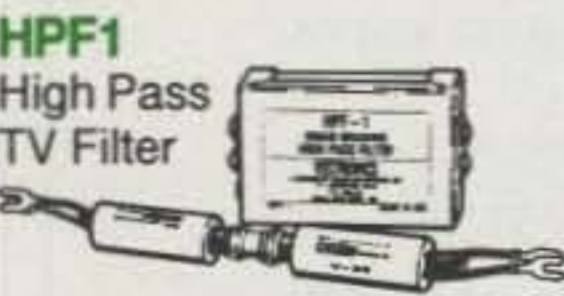
HF600QSK
1kW HF RF
Linear Amplifier with built-in QSK. (Also available: **VECTOR 500** 1000W PEP Linear Ampl.)



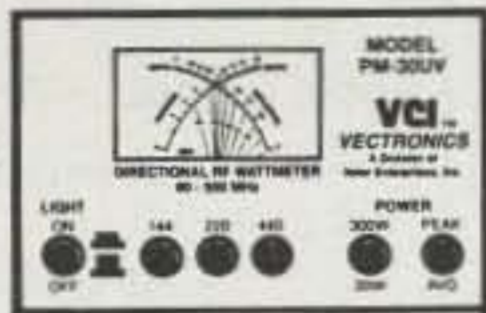
CK200 Deluxe CW Keyer



LP30
1500W Low Pass TVI Filter
(Also available: **LP2500**;
2500W Low Pass TVI Filter)



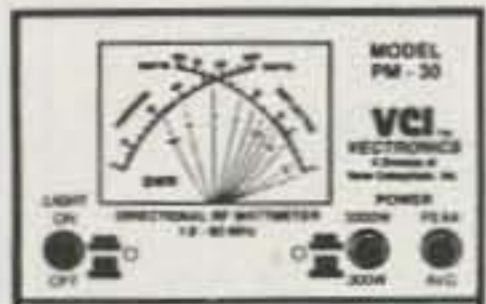
HPF1
High Pass
TV Filter



PM30UV
30W/300W Wattmeter



AT100
Mobile Active
Antenna/Tuner



PM30
300W/3kW Wattmeter



We also have 13.8Vdc Power Supplies



3401
Max Magnet
Mount Kit.
(Black: 3401B)



401
5" Chrome Magnet
Mount Kit. (Black: 401B)



401BSO
SO-239 Black 5"
Magnet Mount Kit.



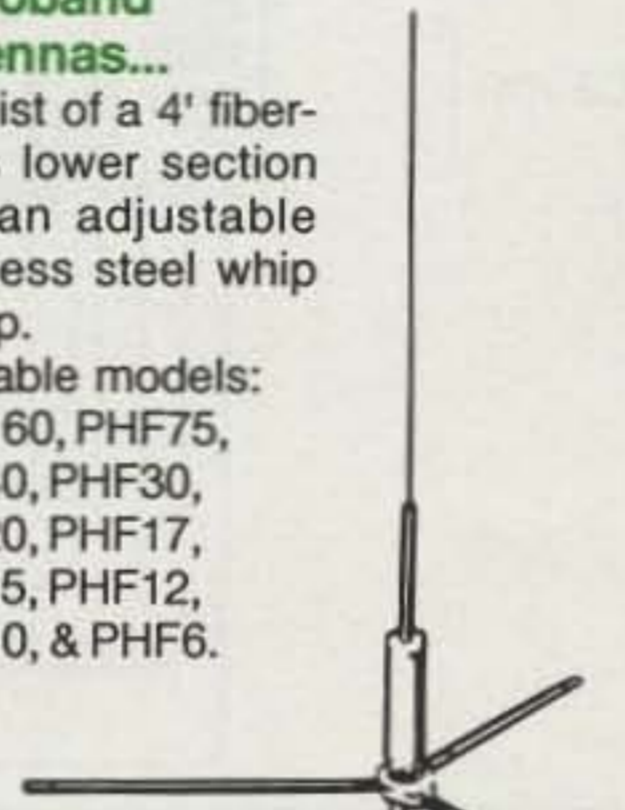
PAM
3-3/4" Chrome Magnet
Mount Kit. (Black: PAMB)

PAM2
3-1/4" Chrome Magnet
Mount Kit. (Black: PAM2B)

PAM4
5" Chrome Magnet Mount
Kit. (Black: PAM4B)

PHF Series Monoband Antennas...

Consist of a 4' fiberglass lower section and an adjustable stainless steel whip on top.
Available models: PHF160, PHF75, PHF40, PHF30, PHF20, PHF17, PHF15, PHF12, PHF10, & PHF6.



AB5
Complete 5 band HF Mobile Antenna System w/ resonators for 10, 15, 20, 40, and 75 meters.

450BNC
1/4 Wave 6-1/2" "Rubber Duck" 430-470 MHz. (Also available: **77BNC**: 12" Dual Band "Rubber Duck" for 2 meter and UHF.

144BNC: 12" "Rubber Duck" 144-148 MHz.
220BNC: 10" "Rubber Duck" 220-225 MHz.

MM450B
MICRO-MAG® Mobile Antenna. 440-450 MHz.



PM144-440
Dual Band Mag Mount Antenna Kit with RG58 Coax and PL-259.



GM270
Dual Band Glass Mount Antenna. 144-148 and 440-450 MHz.

(Also available: **GM144** Glass Mount Antenna for 144-148 MHz.)

MM3B
The MICRO-MAG® Portable Scanner/Tri-Band Antenna transmits at 144-148 MHz (2m), 440-450 MHz (UHF), and 824-896 MHz (Cellular), and receives in the range of 100-1200 MHz.

MM270B
MICRO-MAG® Dual Band Antenna. 144-148 and 440-450 MHz.



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Display Section of the CMP843A Full Remote Controller/Microphone

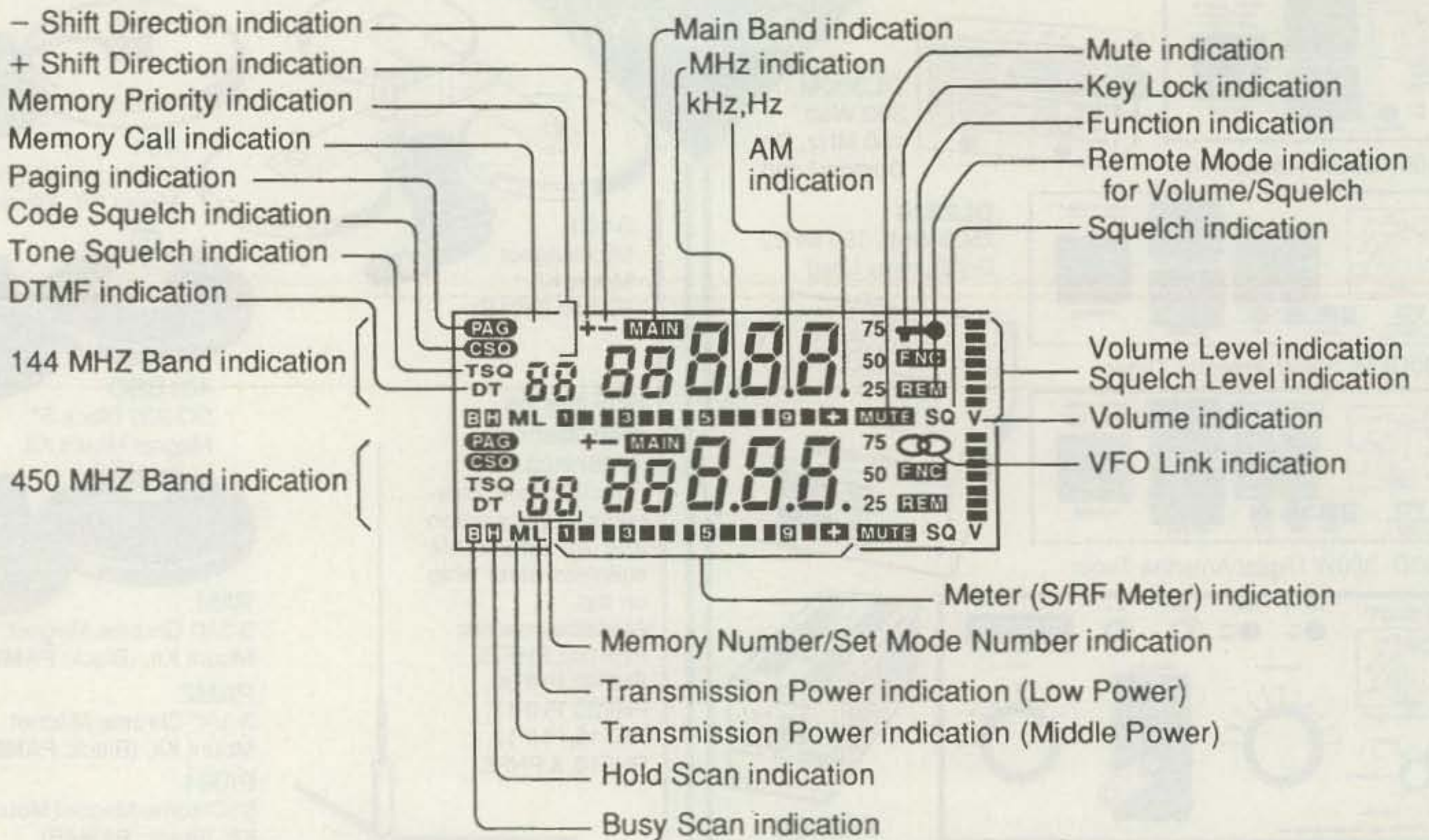


Fig. 1- Diagram shows the amount of information incorporated in the speaker mic display.

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26v (16-30v) coil
light weight, only 3/4" x 2"
long. Mounts anywhere, on the
antenna, mast, boom, etc. Just
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have to keep voltage on it. Switch in traps, coils or
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RF5B \$69

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Finally, an affordable high quality turns counter suitable for many applications. 1/4" shaft coupling at rear. Counts to 9999.9 for precise control of variable inductors. Unit measures 2-1/4" x 3-1/2". Requires 1" x 3" hole in equipment for mechanics.



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(3-9) \$75 ea • (10+) \$69 ea

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#264-3164351+ .375" I.D. \$2.95/set (6-24) \$2.50 (25-99) \$2.25 (100-249) \$2
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* Includes plastic snap sleeve for easy installation. ** Includes tie-wrap to join halves.

Air Variable Headquarters

#CAV-14-15	8-100 pF @ 4kv (.125")	\$45	(3-12) \$42
#CAV-12-53	36-249 pF @ 4kv (.12")	\$65	(3-12) \$62
#CAV-75-37	23-259 pF @ 2.5kv (.075")	\$52	(3-12) \$49
#CAV-75-74	Dual 23-259 pF @ 2.5kv (.075")	\$95	(3-12) \$90
#CAV-154-3-1	25-500 pF @ 2kv (.045")	\$55	(3-12) \$52
#CAV-154-30-13	45-1000 pF @ 1kv (.025")	\$74	(3-12) \$70

High Voltage Electrolytic Capacitors

20uF @ 450vdc	\$ 7	(6-24) \$6.50
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150uF @ 450vdc	\$14	(6-24) \$13
200uF @ 450vdc	\$14	(6-24) \$13
1500uF @ 450vdc	\$12	(6-24) \$19

Time to replace the caps in your amp or Collins / Drake transceiver supply.

FERRITE Toroid

(ICH) FT-240-43
2.4" O.D., 1.4" I.D. Impedance @ 25MHz = 58Ω, 100 MHz = 108Ω. 43 mix. Use for communications projects DC-200 MHz or trap unwanted TVI signals by wrapping speaker or coax cable through core many times. \$12 ea

National R-154 1.1 mH 1 amp

Yowsa! NCL-2000 Plate Choke now available for your amplifier. Deluxe 5-Pi design. ICH-R154 \$25 3/\$69

C5718DA SPECIFICATIONS

Transmitter

Transmit frequency range:
VHF: 144-147.995 MHz (note 1)
UHF: 420-449.995 MHz
Transmit Power Output:
VHF: 50 W (high), 10 W (medium), 3 W (low)
UHF: 40 W (high), 10 W (medium), 3 W (low)
Spurious radiation (VHF and UHF): -60 dB

Receiver

Receiver frequency coverage:
VHF: 100-199.995 and 250-499.995 MHz (note 2)
UHF: 100-199.995, 250-499.95, and 800-999.995 MHz (note 3)
Receiver sensitivity (VHF and UHF):
12 dB SINAD: 0.2 μV
Open squelch: 0.14 μV

Audio output: 3 W (10% distortion)

Power Requirements (at 13.8 V):

Receive: 0.9 A
Transmit (high power): 11.0 A
(medium power): 6.0 A
(low power): 4.5 A

Note 1: Transmit frequency range may be extended for CAP or MARS.

Note 2: On the VHF (upper) band only, the phase lock loop sometimes became unstable above 182 MHz.

Note 3: Cellular frequencies are locked out on the 800 MHz band.

Table 1- The specifications of the Standard C5718DA twin-band transceiver.

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Technical/Customer Service call or fax
402-346-4750 • fax: 402-346-2939

CATALOG 7BII included with your order. Please add adequate shipping. In U.S.-48 figure 30¢ per lb. to 70 lbs. (MINIMUM CHARGE: 1st - 3lbs add \$5). Others please call, fax or write for exact shipping total. We accept Visa, MC, Amexco, checks, Cash On Delivery (UPS only, add \$5) or wire transfer.

Surplus Sales of Nebraska

Display Section of the Control Head (optional)

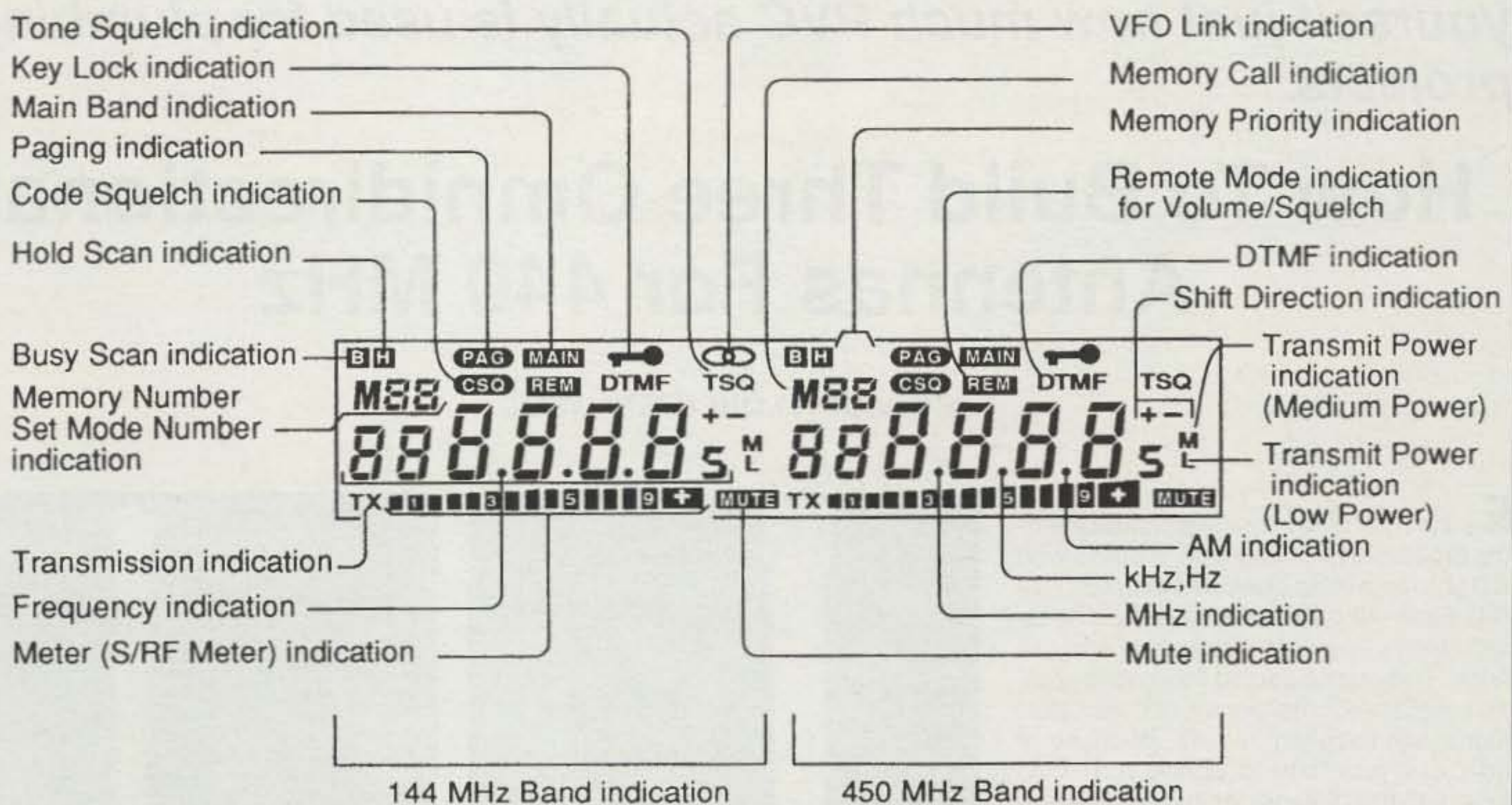


Fig. 2—For those who prefer it, there's an optional control/display panel that mounts on the transceiver module. This diagram shows the information it can display.

ceiver stays on the Shuttle's transmissions!

But how about general operation? Just how easy is it to operate a radio that has everything on the mic? After just a little bit of getting used to, I've found the C5718DA an easy radio to use. The most important buttons are in the corners of the 16-button array, with the CALL channel selection in the upper left (pad number 1), the BAND selection lower right (pad D), VOLUME/SQUELCH adjust selection upper right (pad A), and direct frequency ENTRY at the lower left (pad *).

DOWN and UP are the top center buttons (pads 2 and 3). They toggle memory channels when in memory mode, frequency in steps programmable from 5 to 100 kHz in VFO mode, or audio or squelch levels after the VO/SQ button is pushed. The pad B button mutes the band not in active use (termed the "sub" band in the manual) in user programmable steps of -6, -12, or -18 dB—a real necessity when someone comes up suddenly on the sub-frequency while you're working someone else on the main-band frequency.

The other pad buttons you're likely to want to memorize for use by touch are the # button, which switches between VFO and Memory, and pad buttons 7 and 8, which control memory scan (MS) and VFO scan (SCAN), respectively. The remaining button functions are most often used for programming, so they needn't be memorized.

Literally everything about the C5718DA is

programmable. For example, it has 22 Set Mode functions, from setting the beep tone level to even enabling cross-band repeat! It has selective calling and paging, and tone squelch receive. You can turn off the unused band if you wish, or link both band's VFOs so they track together with the UP-DOWN keys. There are six different scan modes with three different scan methods, and they can be programmed individually for each memory slot! For example, Memory 1 can be programmed for Scan and Hold, while Memory 2 is programmed for Busy, and so on.

There's much more. The manual has 84 pages of detailed instructions and includes a first-class table of contents and index. In addition, the radio is fully packet compatible for up to 9600 baud, and has a built-in speaker plus external speaker jack. There's plenty of audio, which you can program to come out of the mic's speaker, or the speaker built into the transceiver module (or a plugged-in external speaker), or both.

For the long-winded there's a tiny thermostatically operated, extra-quiet cooling fan mounted in the rear cooling fins. Don't forget to leave some clearance around the transceiver module for air circulation, of course. And finally, unlike many other dual-band rigs, the C5718DA doesn't require an external duplexer. RF in/out for both bands is through a single coax.

For those who require it, the C5718DA is also

CAP/MARS compatible; the modification is simple but not easy to get at. Detailed instructions are available when a copy of the appropriate license is supplied to Standard. For those who prefer it, there is an optional control head that mounts on the front of the radio.

Other options include the previously mentioned memory expansion module and a variety of speaker mic extension cables. One of these is even a "Y" cable, ideal for applications such as a camper where you'd like to be able to operate from either the driver's seat or the living area with a speaker mic in both locations.

As a repeater trustee, it's simply great to have one rig with which I can monitor W9AP/R on 147.09 while working the CAP net on 148.15, listening for hot DX tips on the NIDXA 147.36 repeater, or checking weather on 162.55. And unlike other UHF FM rigs, the C5718DA comes out of the box with full 420-450 MHz transmit, so I can also exercise repeater control on W9AP's 420 MHz link. Before this reaches print, I may even have a Space Shuttle or MIR contact with it thanks to the operating tip supplied above.

My biggest problem with the C5718DA? Not being able to afford two of them—one for mobile and one for base!

The C5718DA is priced at \$849.00 and is distributed by Standard Amateur Radio Products, Inc., P.O. Box 48480, Niles, IL 60714 (312-763-0081). ■