

# DXer



**NORTHERN CALIFORNIA  
DX CLUB**

## ***DXer Profile: W6MZQ, Walt Johnson***



Walt Johnson,  
W6MZQ

318 - 321  
Confirmed



↑  
PC Running Packet



← Yaesu FT-990

## *Inside*

President's Comments	2
General Meeting (Club Picnic)	3
G5RV, SK	3
NCDXC Ladder	4
NCDXC WAZ Ladder	4
California Award Status	4
NCDXC Ladder Leaders	5
The D-LAY-5	5
FCC Launches CORES	6
Florida Man Arrested for Interference	6
<i>DXer Profile:</i> W6MZQ, Walt Johnson	7
Roster Updates	7

**No Meeting in August!**  
**Enjoy your Vacation!**

**General Meeting  
September 8, 2000**  
**American Legion Post 105,  
651 El Camino Real,  
Redwood City**

**Program: *To be Announced***

7:00 Attitude adjustment  
8:00 Club Meeting.

**Driving Directions & a Map to  
the Meeting will be published  
in the September *DXer*.**

**Membership Dues  
are Due Now!**  
See Page 2 for details

**N O R T H E R N  
C A L I F O R N I A  
D X C L U B**

**Club Officers:**

President: Chuck Patterson, K6RK  
 Vice Pres: Don Anastasia, AA6W  
 Secretary: Keith Butts, KN6K  
 Treasurer: Bill Maurer, WB6JJJ  
 Director: Dick Letrich, W6KM  
 Director: Bud Bane, W6WB  
 Director: Rolph Stoddard, W6TWO

**The DXer:**

Editor: George Allan, W6YD  
 668 Chemeketa Dr  
 San Jose, CA 95123-3012  
 408-226-0497  
 w6yd@aol.com

Printing, Mailing: Dick Letrich, W6KM  
 Web Page: Chuck Vaughn, AA6G  
<http://www.ncdxc.org>

DX Ladder: John Kelly, KG6XF  
 9-Band Award: John Brand, K6WC  
 Contests: Doug Westover, W6JD  
 California Award: Robert Bickel, K6FX  
 Historian/archivist:

Records Manager: Ron Panton, W6VG  
 Publications Mgr: Ron Panton, W6VG

**Club Repeater, W6TI/R**

Frequency/offset: 147.36 MHz, +  
 Trustee: Bob Vallio, W6RGG  
 Comm. Chairman: Robert Smithwick, W6CS  
 Club simplex: 147.54 MHz (suggested)  
 Thurs. Net QTR: 8 pm local time.  
 Net Manager: Randy Wright, W6CUA  
 DX News: Net Control Operator  
 Swap Shop: Ben Deovlet, W6FDU  
 QSL Information: Mac McHenry, W6BSY

**W6TI DX Bulletins:**

W6TI Station Trustee Bob Vallio, W6RGG, transmits DX information at 0200 UT every Monday (Sunday evening local time) on both 7.016 and 14.002 MHz.

**Club address:** Box 608  
 Menlo Park, CA  
 94026-0608

The DXer is published monthly by the Northern California DX Club and sent to all club members. Unless otherwise noted, NCDXC permits re-use of any article in this publication—provided The DXer and the article's author are credited.

**President's Comments**



I think it has been about twenty years since I last served as president of NCDXC. There have been lots of changes some good, some not so good. We sure could use a shot in the arm. But what? We need more attendance at meetings, we need more net activity on Thursdays and we need more activity on our repeater. One bright spot: The Fresno/Visalia Convention. George, W6YD and his crew have put on some great affairs and we have lots of club participation. Get your ideas to me or DON, AA6W, our vice president.

I have verified that all of the members appointed to various club activities will continue to serve. That includes W6RGG, W6YD, W6CS, W6VG, K6WC, K6FX, W6CUA, AA6G, KG6XF, W6JD and W6BSY. I have asked Randy, W6CUA to verify that his net helpers will continue. One exception: W6VG says we need a new historian.

We will continue to meet at the Legion Hall in Redwood City, but I am open to suggestions for alternate locations. Don, AA6W is working on programs for future meetings. Let him have your ideas and suggestions. Better yet, volunteer and put on a program.

I did a little research with some interesting results:

- Members listed in roster 249
- Members showing e mail addresses 163
- Members signed up for NCDXC mail 46
- (there are also 6 non-members)

My conclusion from this study is that we have a wonderful communications tool but less than 1/4 of the membership is reachable using it. So, if you have the capability (and interest in the club) go to NCDXC.ORG and follow the instructions on how to sign up.

Thanks to Dick, W6KM for holding us together over the past two years. Here's to a great year 00/01.

73,

Chuck, K6RK

**NCDXC Dues Information**

**Full and Associate Members;**

Date Dues are Paid	Member	Family Rate
1 July thru 30 September	\$24.00	Plus \$15.00
1 October and after	\$24.00	Plus \$15.00

\*Members who have not remitted dues by the 30 September deadline are considered dropped from the membership roles. Those desiring to renew membership may do so anytime, but will not be included in the new issue of the NCDXC Roster .

**Absentee Member Dues are \$16.00 per year.**

## General Meeting (Club Picnic)

The NCDXC Picnic was held on July 8th at Amador Valley Community Park in Pleasanton. The following pictures testify to the great camaraderie that was enjoyed by all. What the pictures cannot reveal, however, is how much everyone also enjoyed the great food that was on hand.

A short business meeting was held to elect Laine Park, K6XXN into Membership as an Associate Member and to pass the reins of leadership from Dick, W6KM to Chuck, K6RK.

Thank you, Dick, for a great two years of leadership and another great picnic.  
George, W6YD



## G5RV, SK

Special Bulletin 10 ARLX010  
From ARRL Headquarters  
Newington CT June 29, 2000  
To all radio amateurs

Louis Varney, G5RV, who invented the world-famous G5RV antenna, died June 28. He was 89.

The G5RV multiband wire antenna for HF is among the most popular of all antenna designs. Varney first described the G5RV in the November 1966 issue of the RSGB Bulletin. He employed a full-size and a double-size G5RV, both fed with open-wire feeders, at his own station.

Varney remained an active radio amateur until very recently and kept regular on-the-air schedules. He was an RSGB member for 74 years and served as life president of the Mid-Sussex Amateur Radio Society.



Jun 2000

## NCDXC DX LADDER

CALL	HONOR ROLL				DX TOTALS				DX BAND TOTALS					OTHER BANDS				
	MIX	PH	CW	RTY	MIX	PH	CW	RTY	10m	15m	20m	40m	80m	160m	6m	12m	17m	30m
W6KH	333				378				221	246	331	188	116		36			
W6OAT	333	324	329		363	346	354	1	303	332	353	315	241	25	1	118	139	67
N7NG	332	132	230		361				244	273	315	244	163					
K6RIM	332				356													
N6OJ	332				344	275	105		168	255	314	162	66	12		24	46	36
W6HXW	331	331	1		350	350	1		174	237	324	4	13			6	15	
W6CUA	331	331	328		344	341	337	67	263	306	340	220	142	7		90	141	138
K6LM	331	331	330		344	344	338		100	100	100	100	100	8				
W6BSY	330	330			378	372												
K6TA	330	330	320		365	356	330	5	200	200	300	200	200					
K5YY	330	330	328		362	359	338		179	241	352	231	287	178	42	70	106	39
W6ZKM	330	330			356	356			281	271	300	191	156					
N6HR	330				355				100	100	300	100	100	11		35	53	100
W6XP	330	330			353	353												
K6RK	330	326	328		350	343	335		100	100	100	100	100	159				
AJ8V	330				341	248	286		158	189	273	144	107	14			2	1
K6SLO	330	330	5		337	337	11	1	308	322	337	248	250	7	18	179	148	1
W6EKR		330			335				226	290	335	122	112			24	35	
K6XN	329	325	309		340	336	309		303	301	323	278	185					
JA1BK	329	329	329		329	329	329		100	100	100	100	100		100	100	100	
W6ISQ	328	328	328		368	362	337		261	251	251	282	192	17		70	142	95
W6RJ	328				364				200	200	300	200	300	54				
K6MA	328	327	327		363	351	335		270	305	330	260	145	10		205	255	160
W6LQC	328	328			350	350	89		100	100	100	100	100					
K6VX	328	328			350	350	314	178	260	301	340	304	201	150	1	226	279	224
K1ER	328	322			344	339	301		212	252	340	218	123	1		110	146	133
W6DPD	328	328			338	338												
W6J	328				336													
W6TJM	328				333	261												
W6JD	327		326		348	278	336		181	250	343	259	67	2		84	143	148
K6MD	327				337		203		24	100	107	49	35	1				
W6KM	327				335	100	100		100	100	100	100	66					
AA6YT	327	314	313	157	333	323	321	207	279	296	328	260	215	77	4	223	238	198
K1GT	330	329			376	368	361		232	311	373	227	166	15		142	189	128
K6UR	326				351				100	100	340	290	120					
W6TC	326		325		342		334		264	235	277	278	189	13		172	176	160
W6ZX	326	326			341	334	318	326	288	306	331	205	166	9		213	241	133
K16WF	326	326			328	328	170		266	307	326	173	130	6		33	72	2
N6GX	325	324			333	330			100	100	100	100	100					
W6TEX	325				330	289	304	155	100	100	100	100	100					
K6GNX	325																	
K6LQA	324				350													
W6NPY	324				341	200	300		100	100	100	100	100					
N16T	324	317	324	217	336	323	329	218	252	286	329	303	252	161		200	256	247
W6FAH	324	321			333	331	312		246	288	325	245	176					
K6BIA	324				324													
K6WR	319	318			329	325			100	100	100	100	100					
K6ANP					342	259	271	5	193	230	316	236	179	75		2	5	4
K4UVT					341	310	305		162	239	330	204	68	3		19	43	96
W9UOM					332	327	5		46	51	224	3						
W6CS					331				75	115	255	22	12					
N6JM					328	315	287		231	253	295	163	103	18		8	19	37
KG6I					326	301	312	144	204	236	309	243	192	151	13	137	205	196
K6LRN					325	238	285		106	138	273	133	48	14				
K6UM					323	302	301		244	274	287	143	104	8	57	153	149	20
KC6AWX					322	322	100	39	181	195	293	121	32					
WB6OTB					321													
K6ESL					317	316			204		111							
AC6HY					313				126	197	273	132	178					
N6EK					312	271	285		211	252	287	192	87	14				
W6JOX					310			310										
K16Y					302	285	244		152	217	271	34				57	91	
AK6L					295	278	233		151	135	267	124	31			26	68	38
KE6WL					295	259	266		218	245	273	179	69	8			5	13
N6OJ/QRP					287				115	169	243	102	23	11				
KD6GC					282	42	216		5		2							
W6EE					280	260												
K6BNG					280	279	93		279	2					53			
K7ZV					278	272	132	48	150	155	248	141	163	9		36	42	20
W6EKR/M					277				103	228	182	4	3					
W7BX					263				86	140	157	66	17	2	1	2	8	7
W6YD					235				89	52	144	3	19					
N6VAW					208	186	116		61	34	100	20	1					
KO6MX					165	161	6		32	43	134	18	12					4

Jun 2000

## NCDXC WAZ LADDER

CALL	MIX	PH	CW	RTY	160m	6m	5BAND	WARC
K6ANP				40			40	
KC6AWX	40	40	32					
K6BIA	40						40	
W6BSY	40	40					40	
W7BX	40				1	1	122	10
W6CS	40	40					40	
W6CUA	40	40	40				176	
W6DPD	40	40					40	
W6EE	40	40					40	
W6EKR/M	40	40					40	
K1ER	40	40	39		1		165	86
K6ESL	40	40						
W6FAH	40	40					188	
N6HR	40						195	48
KG6I	40	40	40	36	33	11	190	102
KA6ING	40	40				21	40	
W6JD	40						40	
N6JM	40				10		171	31
W6JOX	40							
AK6L	40	40	40				113	27
K6LQA	40						40	
W6LQC	40	40					40	
K6MA	40	40	40				191	
K6MD	40	40					40	
KO6MX	36	36	10					
N7NG	40						40	
W6NPY	40						40	
W6OAT	40	40	40				200	
N6OJ	40						40	
N6OJ/QRP	40							
WN6R	40	40	29				109	
K6RIM	40	40					40	
W6RJ	40	40					200	
K6RK	40	40					40	
K6SLO	40	40			8	13	196	74
K16T	40	40	40		12		184	97
N16T	40	40	40	38	36		199	113
W6TC	40	40	40		9		200	109
W9UOM	40	40					40	
K4UVT	40	40	40				171	48
AJ6V	40						40	
K6VX	40	40	40	38	35		198	117
K16WF	40	40	35		5		181	44
K6WR	40	40					100	
W6YD	40						40	
W6ZKM	40						191	
N6ZM	40						40	
W6ZX	40	40	40	40				

## California Award Status

Jun 2000

### NCDXC LADDER LEADERS

Mixed		Phone		CW		RTTY			
W6BSY	378	W6BSY	372	KI6T	361	W6ZX	326		
W6KH	378	KI6T	368	W6OAT	354	W6JOX	310		
KI6T	376	W6ISQ	362	K5YY	338	NI6T	218		
W6ISQ	368	K5YY	359	K6LM	338	AA6YQ	207		
K6TA	365	K6TA	356	W6CUA	337	K6VX	178		
W6RJ	364	W6ZKM	356	W6ISQ	337	W6TEX	155		
K6MA	363	W6XP	353	W6JD	336	KG6I	144		
W6OAT	363	K6MA	351	K6MA	335	W6CUA	67		
K5YY	362	K6VX	350	K6RK	335	K7ZV	48		
N7NG	361	W6HXW	350	W6TC	334	KC6AWX	39		
		W6LQC	350						
80m		40m		20m		15m		10m	
W6RJ	300	W6OAT	315	KI6T	373	W6OAT	332	K6SLO	308
K5YY	287	K6VX	304	W6OAT	353	K6SLO	322	K6XN	303
NI6T	252	NI6T	303	K5YY	352	KI6T	311	W6OAT	303
K6SLO	250	K6UR	290	W6JD	343	KI6WF	307	W6ZX	288
W6OAT	241	W6ISQ	282	K1ER	340	W6CUA	306	W6ZKM	281
AA6YQ	215	K6XN	278	K6UR	340	W6ZX	306	AA6YQ	279
K6VX	201	W6TC	278	K6VX	340	K6MA	305	KA6ING	279
K6TA	200	AA6YQ	260	W6CUA	340	K6VX	301	K6MA	270
KG6I	192	K6MA	260	K6SLO	337	K6XN	301	KI6WF	266
W6ISQ	192	W6JD	259	W6EKR	335	AA6YQ	296	W6TC	264
160m		30m		17m		12m		6m	
K5YY	178	NI6T	247	K6VX	279	K6VX	226	JA1BK	100
NI6T	161	K6VX	224	NI6T	256	AA6YQ	223	K6UM	57
K6RK	159	AA6YQ	198	K6MA	255	W6ZX	213	KA6ING	53
KG6I	151	KG6I	196	W6ZX	241	K6MA	205	K5YY	42
K6VX	150	K6MA	160	AA6YQ	238	NI6T	200	W6KH	36
AA6YQ	77	W6TC	160	KG6I	205	K6SLO	179	K6SLO	18
K6ANP	75	W6JD	148	KI6T	189	W6TC	172	KG6I	13
W6RJ	54	W6CUA	138	W6TC	176	K6UM	153	AA6YQ	4
W6OAT	25	K1ER	133	K6UM	149	KI6T	142	K6VX	1
N6JM	18	W6ZX	133	K6SLO	148	KG6I	137	W6OAT	1
								W7BX	1

## The D-LAY-5

Back in the late 70's I let a Ham house sit while Pat and I went on vacation. My friend was delighted to get to use my modest station with a rotatable beam at 35 feet, compared to his simple dipole. I showed him how to run my equipment and how to use the rotator. I took the time to instruct him on the how and why of "Brake Release" on the Ham II.

When we came back home he raved about how many contacts he made and how much he enjoyed the station, but that the beam did not rotate! I soon discovered why. The rotator was destroyed. Guess he did not pick up the knack of just holding the brake open for a few seconds after rotating the beam. I quickly picked up a used Ham II and the first thing I did was to purchase and install a LANCE JOHNSON ENGINEERING, D-LAY-5 rotator brake delay kit. It has served me well!

Now the reason I bring this up is twofold. First, I mentioned last month that I might put a small article in the DXer each month with information about an interesting web site. Secondly, some newer Hams may not be aware of this excellent product and I thought it would be a good choice for my first contribution. Lance has more than just the D-LAY-5 to offer, so here is the web address:

<http://qth.com/lance/index.html>.

The D-LAY-5 sells for \$34.95 and that includes shipping by US PRIORITY MAIL. I have taken two pictures of my unit and as you can see, it only takes a few minutes to install. Considering the current cost of new rotators, you can't afford to ignore this protection.

73,

Dick, W6KM



Two Views of the Installed D-Lay-5

## FCC Launches CORES

QST de W1AW

The FCC has begun implementing the Commission Registration System, known as CORES. While the action has few immediate implications for Amateur Radio licensees, CORES registration eventually will replace Universal Licensing System, or ULS, registration.

Described as an agency-wide registration system for anyone filing applications with or making payments to the FCC, CORES will assign a unique 10-digit FCC Registration Number or FRN to all registrants. The FCC says use of the FRN will allow it to more rapidly verify fee payment.

The on-line filing system and further information on CORES is available by visiting the FCC Web site, [www.fcc.gov](http://www.fcc.gov) and clicking on the CORES registration link.

For the time being, using an FRN is voluntary, although the Commission says it will consider making it mandatory in the future for anyone doing business with the FCC.

CORES registration will supplant ULS registration, but the ULS will remain the licensing database system for Wireless Telecommunications Bureau licensees, including amateurs. For now, the ULS remains available to new registrants. Amateurs who registered in the ULS prior to June 22 automatically have been registered in CORES and will receive an FCC Registration Number in the mail. ULS registrants also may search for their FRN on-line at the FCC's CORES Web site.

A copy of the FCC Public Notice on CORES/FRN is available at <http://www.arrl.org/announce/regulatory/da001596.pdf>



## Florida Man Arrested for Interference

QST de W1AW

Federal authorities have arrested a Florida man and charged him with interfering with Amateur Radio operations and transmitting without a license. William Flippo of Jupiter was taken into custody July 20.

Flippo already faces a \$20,000 fine levied last summer for unlicensed operation, willful and malicious interference to Amateur Radio communications, and failure to let the FCC inspect his radio equipment. The matter was referred to the US Attorney in January after Flippo failed to pay the fine, and the interference complaints continued.

Armed with a search warrant, federal marshals and FCC and FBI agents, accompanied by local authorities, took Flippo into custody. FCC agents seized items related to the alleged offenses, including radio equipment.

Flippo was released on a \$100,000 bond. An arraignment on the federal charges is scheduled for July 31. One condition of his release is that he not make any radio transmissions.

Flippo was charged with four counts of transmitting without a license—each count carrying a maximum penalty of one year in prison and a \$10,000 fine—and four counts of interfering with the operations of licensed stations, which carry the same penalty.



## **DXer Profile: W6MZQ, Walt Johnson**

This month's featured Club member is a die hard DXer and Ham. Actually, that could be said about nearly anyone in the club, but some come and go. They burn out with too much contesting or work them all and then, just kind of fade away. But, not so with this month's featured DXer, Walt Johnson, Jr., W6MZQ.

Like many others in the club, Walt has been around ham radio for a long time. And, like a true DXer, he never tires of this wonderful hobby. He got his first ticket in 1935 and it has been his one and only call sign.... Do you know what that means? He has been good in the Call Book at the same address for a lot longer than many of us new comers. Walt has been a member of the NCDXC since 1977. He has overcome an obstacle that, I hope, none of us ever has to deal with; In 1979, Walt lost nearly everything in a terrible fire caused by an appliance in his garage where his shack was then located. Walt told me of all of the rigs and parts that went up in flames. That means that he lost all of his gear and his QSL's. So, he had to start all over again from scratch. But, his current count, since he first re-submitted in 1978, is between 318 - 321.

As you can tell from the pictures he has a fine station. He has as his main rig, a Yaesu FT-990 and his main Amp is a Ten Tec Centurion with a pair of carbon plate 3-500Z's. His tuner is by Heath Kit with several other rigs about including a Collins KWM-2. The tower is at 60 feet and is topped by a KLM KT-34. Also on the tower is a rotatable WARC band dipole for 24/18/and 10 MHz. For 40 and 80 he uses a G5RV. You may also see that he runs his computer in the Packet mode most of the time.

I also got to meet Walt's Saint Bernard dog. I hear that when Walt is too busy to get away from the rig (when DX is rolling in) the dog rescues him by bringing him refreshments...at least, that's what I thought I heard him say! Anyway, it was again, my pleasure to visit my fellow DXer's shack. 73, Walt.

de W6KM

*(If you would like your shack to be featured, please contact me at the club roster phone number. And, you don't have to have an elaborate setup for it to be enjoyed by fellow club members. Dick, W6KM.)*



## **Roster Updates**

### **Changes;**

**K6TA** Ken Anderson,  
E-mail k6ta@arrl.net

**W6TEX** R.W.(Bill) Fontes  
Bill 1529 Bismarck Lane  
Lourdes Brentwood, CA 94513  
H (925) 240-7422  
W (None)  
Fax (925) 240-7422  
E-mail w6tex@best.com

### **New Member;**

**K6XXN** Laine Park  
Laine 20690 Canyon View Dr  
Ted Saratoga, CA 95070  
H (408) 867-2740



**12 Store Buying Power!**

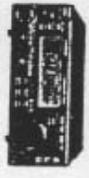


**COME VISIT THE STORE NEAREST YOU:**

**OKLAHOMA, OK 73104**  
 2110 Oklahoma St  
 (903) 531-3727  
 (903) 534-9946

**SUNNYVALE, CA 95088**  
 3101 Lawrence Expressway  
 (415) 239-9198  
 (415) 239-9243

**KENWOOD**



**TS-50SR/TS-60S** 1st Frequency Band  
 • TS-50SR - Heavy Duty speaker of Ten-Ten  
 • TS-60S - New 15-Watt Speaker  
 • 12V Car. Ch. R. 4.4 Hz. 7.16, 14.3, 21.7  
 • 120db speaker (up to 100 Watts)  
 • 200 sq. cm. speaker (TS-50S only)  
**Call Now For Low Pricing!**

**TH-79A/D** 1st/2nd

• 12V Car. Ch. R. 4.4 Hz  
 • 20W Speaker  
 • 20W Speaker  
 • 12V Car. Ch. R. 4.4 Hz  
 • 120db speaker (up to 100 Watts)  
 • 200 sq. cm. speaker (TS-50S only)  
**Call Now For Low Pricing!**

**ICOM**



**IC-705EMK II** 1st/2nd Frequency Band  
 • 100W  
 • 100W 100W  
 • 12V Car. Ch. R. 4.4 Hz  
 • 120db speaker (up to 100 Watts)  
 • 200 sq. cm. speaker (TS-50S only)  
**Call Now For Low Pricing!**

**ALINCO**



**DS-41T/DS-11T**  
 • 100W  
 • 100W 100W  
 • 12V Car. Ch. R. 4.4 Hz  
 • 120db speaker (up to 100 Watts)  
 • 200 sq. cm. speaker (TS-50S only)  
**Call Now For Low Pricing!**



**TH-77A** 2nd Frequency Band  
 • 100W  
 • 100W 100W  
 • 12V Car. Ch. R. 4.4 Hz  
 • 120db speaker (up to 100 Watts)  
 • 200 sq. cm. speaker (TS-50S only)  
**Call Now For Low Pricing!**



**IC-715** DSP 1st/2nd Frequency Band  
 • 100W  
 • 100W 100W  
 • 12V Car. Ch. R. 4.4 Hz  
 • 120db speaker (up to 100 Watts)  
 • 200 sq. cm. speaker (TS-50S only)  
**Call Now For Low Pricing!**



**DX-701** 1st/2nd Frequency Band  
 • 100W  
 • 100W 100W  
 • 12V Car. Ch. R. 4.4 Hz  
 • 120db speaker (up to 100 Watts)  
 • 200 sq. cm. speaker (TS-50S only)  
**Call Now For Low Pricing!**

**YAESU**

**VX-1R**  
 • 100W  
 • 100W 100W  
 • 12V Car. Ch. R. 4.4 Hz  
 • 120db speaker (up to 100 Watts)  
 • 200 sq. cm. speaker (TS-50S only)  
**Call Now For Low Pricing!**



**FT-1000MP** 1st/2nd Frequency Band  
 • 100W  
 • 100W 100W  
 • 12V Car. Ch. R. 4.4 Hz  
 • 120db speaker (up to 100 Watts)  
 • 200 sq. cm. speaker (TS-50S only)  
**Call Now For Low Pricing!**

**COAST TO COAST FREE SHIPPING.**  
 • 100W  
 • 100W 100W  
 • 12V Car. Ch. R. 4.4 Hz  
 • 120db speaker (up to 100 Watts)  
 • 200 sq. cm. speaker (TS-50S only)  
**Call Now For Low Pricing!**

- ALABAMA, AL**  
 New Technology  
 1714 10th St  
 (205) 336-4444  
 Ann, MOBILE, AL
- ARIZONA, AZ**  
 2001 W. Vulture St. Suite 100  
 (602) 944-1176  
 The Leader! The  
 Very Best of Ham Radio  
 in the West!
- CALIFORNIA, CA**  
 2715 Livingston St., Suite 100  
 (916) 354-6444  
 Ham Radio  
 1800 23rd Ave. Suite  
 (916) 354-6444
- FLORIDA, FL**  
 11775 N.W. 11th St. #112  
 (305) 354-4444  
 Ham Radio  
 1800 23rd Ave. Suite  
 (916) 354-6444
- GEORGIA, GA**  
 5000 Lawrence Ave. #100  
 (404) 354-6444  
 Ham Radio  
 1800 23rd Ave. Suite  
 (916) 354-6444
- ILLINOIS, IL**  
 11775 N.W. 11th St. #112  
 (305) 354-4444  
 Ham Radio  
 1800 23rd Ave. Suite  
 (916) 354-6444
- INDIANA, IN**  
 11775 N.W. 11th St. #112  
 (305) 354-4444  
 Ham Radio  
 1800 23rd Ave. Suite  
 (916) 354-6444
- KANSAS, KS**  
 11775 N.W. 11th St. #112  
 (305) 354-4444  
 Ham Radio  
 1800 23rd Ave. Suite  
 (916) 354-6444
- MICHIGAN, MI**  
 11775 N.W. 11th St. #112  
 (305) 354-4444  
 Ham Radio  
 1800 23rd Ave. Suite  
 (916) 354-6444
- MINNESOTA, MN**  
 11775 N.W. 11th St. #112  
 (305) 354-4444  
 Ham Radio  
 1800 23rd Ave. Suite  
 (916) 354-6444
- MISSISSIPPI, MS**  
 11775 N.W. 11th St. #112  
 (305) 354-4444  
 Ham Radio  
 1800 23rd Ave. Suite  
 (916) 354-6444
- MISSOURI, MO**  
 11775 N.W. 11th St. #112  
 (305) 354-4444  
 Ham Radio  
 1800 23rd Ave. Suite  
 (916) 354-6444
- NEBRASKA, NE**  
 11775 N.W. 11th St. #112  
 (305) 354-4444  
 Ham Radio  
 1800 23rd Ave. Suite  
 (916) 354-6444
- NEVADA, NV**  
 11775 N.W. 11th St. #112  
 (305) 354-4444  
 Ham Radio  
 1800 23rd Ave. Suite  
 (916) 354-6444
- NEW YORK, NY**  
 11775 N.W. 11th St. #112  
 (305) 354-4444  
 Ham Radio  
 1800 23rd Ave. Suite  
 (916) 354-6444
- OHIO, OH**  
 11775 N.W. 11th St. #112  
 (305) 354-4444  
 Ham Radio  
 1800 23rd Ave. Suite  
 (916) 354-6444
- PENNSYLVANIA, PA**  
 11775 N.W. 11th St. #112  
 (305) 354-4444  
 Ham Radio  
 1800 23rd Ave. Suite  
 (916) 354-6444
- TENNESSEE, TN**  
 11775 N.W. 11th St. #112  
 (305) 354-4444  
 Ham Radio  
 1800 23rd Ave. Suite  
 (916) 354-6444
- TEXAS, TX**  
 11775 N.W. 11th St. #112  
 (305) 354-4444  
 Ham Radio  
 1800 23rd Ave. Suite  
 (916) 354-6444
- VIRGINIA, VA**  
 11775 N.W. 11th St. #112  
 (305) 354-4444  
 Ham Radio  
 1800 23rd Ave. Suite  
 (916) 354-6444
- WASHINGTON, WA**  
 11775 N.W. 11th St. #112  
 (305) 354-4444  
 Ham Radio  
 1800 23rd Ave. Suite  
 (916) 354-6444
- WEST VIRGINIA, WV**  
 11775 N.W. 11th St. #112  
 (305) 354-4444  
 Ham Radio  
 1800 23rd Ave. Suite  
 (916) 354-6444
- WISCONSIN, WI**  
 11775 N.W. 11th St. #112  
 (305) 354-4444  
 Ham Radio  
 1800 23rd Ave. Suite  
 (916) 354-6444
- MISSOURI, MO**  
 11775 N.W. 11th St. #112  
 (305) 354-4444  
 Ham Radio  
 1800 23rd Ave. Suite  
 (916) 354-6444

**DXer**

P. O. B O X 6 0 8  
 M E N L O P A R K, C A  
 9 4 0 2 6 - 0 6 0 8 U S A

