

# 1987 INDEX

ARTICLE	DESCRIPTION	AUTHOR	ISSUE
<b>AMPLIFIERS</b>			
Everyman's Microwave Amp Power Play Comparison	modification of a microwave cavity RF concepts RFC 2-23 and Tokyo Hi-Power HL 37V30 watt 144 MHz Power Amp	KT2B	OCT p.24
		KT2B	DEC p.34
<b>ANTENNAS</b>			
220-MHz Portable Pocket J-Pole 440-MHz Repeater Antenna	a low-cost quickie with more dB-gain build this antenna in the public safety and commercial spectrum	KB6MIF	SEP p.27
A Foldover Cheapie	40-foot foldover antenna tower	WB2EDV	SEP p.41
General Purpose VHF/UHF Antenna	build a discone	KF4BI	SEP p.19
Non-Etched SWR Bridge	project for SWR	WA1GPO	SEP p.38
Out-of-the-Ordinary QTHs	ideas for the portable antenna	W6IOJ	SEP p.24
QRP Antenna Farming	work the world with a few Watts	K4IPV	SEP p.22
Radio At Green Bank	impressive radio antennas	W0VM	APR p.36
The Cellular Phony Antenna	two-meter mobile antenna	AJON	SEP p.16
The L'il Fixer	ultimate in simplicity	WA2AJQ	APR p.38
The HF Half-Sloper	low-angle radiating wire antenna	W9THN	SEP p.40
Weatherproofed Antennas		W8DYF	SEP p.43
		KD5UJ	APR p.40
<b>ATV</b>			
C-64 Slow Scan	slow-scan television	WB9LYH	MAR p.34
Satellite TV Receiver Components	collection of circuits for 23cm	KB4MDR	OCT p.34
<b>CONSTRUCTION</b>			
220-MHz Portable Pocket J-Pole 40 Meters In A Nutshell	a low-cost quickie with more dB-gain 7-MHz transceiver	KB6MIF	SEP p.27
Battery Charger	A handy NiCd power project	KG5B	MAR p.26
Cubic Inch Keyer	lambic keying on the HW-8	N0FNF	DEC p.52
Dry Cell Tester	project for the technical greenhorn	WB2EMS	NOV p.32
Everyman's Microwave Amp	modification of a microwave cavity	W6WTU	OCT p.48
General Purpose VHF/UHF Antenna	build a discone	KT2B	OCT p.24
Horseflies and Grid Squares	amazing VHF/UHF DXing	WA1GPO	SEP p.38
ICOM BP-4 Charging Adapter	Our own technical editor beats the system	KT2B	SEP p.33
KOKO-The Kids' Own Kode Oscillator	easy code Oscillator for the kids	WB9RRT	DEC p.20
Microwave Building Blocks: The Solfan Special	complete plans for building your own microwave rig	K5JRN	FEB p.48
Micro Morse	interface that fits just about any machine	WB6IGP	JAN p.40
Microwave Building Blocks— The Double-Balanced Mixer	enjoy superior performance	WB8DQT	FEB p.40
Mobile Extender Using VOX Control	Wire up your transceiver to jump over mountains	WB6IGP	OCT p.20
Non-Etched SWR Bridge	project for SWR	K6YDW	DEC p.44
Operators Aren't Standing By	solve your remote-control problems with a over featured DTMF decoder	W6IOJ	SEP p.24
PCBs From TEC-200 Film	make your own PCBs	Piechocki	JAN p.34
PC Infernos	consider doing a little micro surgery on a burned PC board	K3OF	AUG p.43
Remote Base Control	Work DX from your HT	WB4YOD	FEB p.32
Revive A Dying Swan	Swan 250 new life with a home-brew vxo	K9EID	DEC p.106
Repeater Controller PC Board	build this inexpensive repeater board	WA4UZM	MAY p.38
Secrets of Silent Switching	say farewell to chattering, sticky relays	KA3AAQ	NOV p.34
Semi-Rapid HT Charging	ICOM HT charging option	OA4KO/YV5	FEB p.28
TV Tuner Scanner Converter	build a converter for a tuner and scanner and receive 800-900 MHz	K3NXU	MAY p.34
Tesla High-Frequency Transformer	build this spark-excited transformer	W6WTU	OCT p.40
The Glue Ribbon Solution	create your own conductive epoxy for low-resistance bonds	VE7JON	NOV p.12
The Cap Checker	build this simple analog capacitance meter	WB0NRU	JAN p.38
The Two-Meter Transverter Project	build this VMOS transverter	VE6BGL	MAR p.42
The L'il Fixer	ultimate in simplicity	W6YUY	JUL p.32
The HF Half-Sloper	low-angle radiating wire antenna	W9THN	SEP p.40
VIC-20 Beam Rotor Interface	interface project for your VIC-20	W8DYF	SEP p.43
		N1II	NOV p.44
<b>CONTEST</b>			
1986 15/20-Meter SSB Championships Results		KE7C	FEB p.101
ANNOUNCING: 73 Magazine's DX Dynasty Award	join in the frenzy of DXing's newest and hottest award	Staff	JAN p.27
DX Dynasty Award	check out 73's new DX award	Staff	MAR p.44
The National Championships	guile wins out over gigawatts	KE7C	JUL p.30
World SSB Championships	results of the 1986 40-meter fracas	KE7C	JAN p.53
<b>CW</b>			
Cubic Inch Keyer	lambic keying on the HW-8	WB2EMS	NOV p.32
KOKO-The Kids' Own Kode Oscillator	easy code Oscillator for the kids	K5JRN	FEB p.48
<b>GADGETS</b>			
Battery Charger	A handy NiCd power project	N0FNF	DEC p.52
ICOM BP-4 Charging Adapter	Our own technical editor beats the system	WB9RRT	DEC p.20
Operators Aren't Standing By	solve your remote-control problems with a over featured DTMF decoder	Piechocki	JAN p.34
Secrets of Silent Switching	say farewell to chattering, sticky relays	OA4KO/YV5	FEB p.28

Tesla High-Frequency Transformer	build this spark-excited transformer	VE7JON	NOV p.12
<b>HUMAN INTEREST</b>			
Dayton Digest	Dayton Hamfest	WA4BPI	APR p.32
Future Packet	author predicts packet radio of the future	K2TKN	AUG p.24
History of Handhelds Communications	Their Place in Western Communication	KT2B	DEC p.30
History of ICOM 2AT	The World's Most Popular Handheld	KT2B	DEC p.18
Horseflies and Grid Squares	amazing VHF/UHF DXing	KT2B	SEP p.33
The Greenie	an account of a contest	K1YSD	NOV p.55
You, Too, Can Be An SOB	join this elite society of ham radio operators	K9AZG	FEB p.44

I/O			
C-64 Slow Scan	slow-scan television	WB9LYH	MAR p.34
Operators Aren't Standing By	solve your remote-control problems with a Piechocki	JAN	p.34
Make VIC Talk	This little chip offers big benefits	WA4DSO	p.50
PC Infernos	consider doing a little micro surgery on a burned PC board	WB4YOD	FEB p.32
Packet AI	speak with TRON	KE5L	AUG p.29
Shoestring Software	forty-five Baud on a budget	W9ODK	FEB p.34
Tap, Tap, Tap, Clunk	VIC-to-Teletype printer	N1II	FEB p.46
VIC-20 Beam Rotor Interface	interface project for your VIC-20	N1II	NOV p.44
<b>MICROWAVE</b>			
A Guided Tour of 1.2 GHz	23-cm band is the least understood Novice Enhancement	KT2B	JUN p.24
Everyman's Microwave Amp	modification of a microwave cavity	KT2B	OCT p.24
Gunn and IMPATT Devices	safe methods for testing microwave diodes	WB6IGP	OCT p.30
Microwave Building Blocks: The Solfan Special	complete plans for building your own microwave rig	WB6IGP	JAN p.40
Microwave Building Blocks— The Double-Balanced Mixer	enjoy superior performance	WB6IGP	OCT p.20
Satellite TV Receiver Components	collection of circuits for 23cm	KB4MDR	OCT p.34
TV Tuner Scanner Converter	build a converter for a tuner and scanner and receive 800-900 MHz	W6WTU	OCT p.40

MISCELLANEOUS			
Consumer's Guide to HT's	A little help from your friends at 73	NASE	DEC p.28
Dayton Digest	Dayton Hamfest	WA4BPI	APR p.32
Novice Enhancement Buyer's Guide	anything one might want or need for new bands and modes	Staff	JUN p.34
PCBs From TEC-200 Film	make your own PCBs	K3OF	AUG p.43
Radio At Green Bank	impressive radio antennas	AJON	SEP p.16
The Ducky Doctor	heat-shrink tubing	W6APZ	APR p.44
The Glue Ribbon Solution	create your own conductive epoxy for low-resistance bonds	WB0NRU	JAN p.38
Tube Terror	application for every tube in the warehouse	Thompson	APR p.42
You, Too, Can Be An SOB	join this elite society of ham radio operators	K9AZG	FEB p.44
Holiday Buyer's Guide	cornucopia of shopping tips	Staff	NOV p.20

MOBILE			
The Cellular Phony Antenna	two-meter mobile antenna	WA2AJQ	APR p.38
<b>MODIFICATION</b>			
Micro Morse	interface that fits just about any machine	WB8DQT	FEB p.40
Revive A Dying Swan	Swan 250 new life with a home-brew vxo	WA4UZM	MAY p.38
Semi-Rapid HT Charging	ICOM HT charging option	K3NXU	MAY p.34
The Banker:	A memorable accessory for the TS-940 Kenwood	NA1A	DEC p.42
The External PTT	get on packet with ICOM IC-2AT	WB5BSV	AUG p.49
Tuner Transformation	automatic Heath SA-2500	Ferrand	APR p.46
TV Tuner Scanner Converter	build a converter for a tuner and scanner and receive 800-900 MHz	W6WTU	OCT p.40
Yaesu FT 209	Expanding your HT's horizons	KD2WA	DEC p.26

NEW PRODUCTS			
<b>Antennas</b>			
Antenna Elevator System	Glen Matin Engineering		JUL p.15
CB On-Glass			FEB p.19
Larsen AD-2/70 Antenna Duplexer			MAY p.15
MJF New Antennas and Compact Speaker			APR p.18
Mobile Antenna	Austin Tri-Band		SEP p.15
NCG 900-MHz Antennas			AUG p.15
Rotating Tower Hardware	Rotating Tower Systems, Inc.		JUN p.14
Tri-Band 2m/1.25/70CM Suburban Fixed Antenna	Austin Suburban Antenna		OCT p.37
Two New Antenna Tuners	MFJ Enterprises		SEP p.14
Valor 2 plus 2			MAR p.18
Wide Band Antennas	Poyntek Associates		OCT p.37

Books Catalogs and Tapes			
ATC Guide			JAN p.19
Audio IC Op-Amp Applications, Cable and Connector Guide	3rd Howard W. Sams & Co.		APR p.19
Contact East	Nemal Electronics International		JUL p.15
Davle Catalog	product guide		APR p.19
First Book of Modern Electronics Fun Projects and Second			MAR p.18
Forrest Mims' Circuit Scrapbook II	by Art Salsberg		APR p.19
Free Heath Catalog	from Modern Electronics' columns		APR p.19
Free Midian Catalog			MAR p.18
General Catalog from Heath Magazine	ITT Pomona		JAN p.19
How To Read Schematics	by Don Herrington		DEC p.
			JAN p.19
			JAN p.18

## Equipment

BVE EXFER		
Bird Model 4421	Bird Electronics Corp.	
CAE Little		
CES Model 5200 PI		
CSI CTCSS	Communications Specialists	
CSI Paging Encoder		
CSI Tone Output Switch Module	Communications Specialists	
CT-16 Satellite Interface Unit	ICOM	
Centurion Batteries		
Compact VOM		
Dash-Mounted CTCSS Encoders	Selectone Corp.	
Docking Booster	Naval Electronics	
Dual Band Docking Booster FT727	Naval Electronics	
EPI RF Amps	Electron Processing, Inc.	
Electronic Specialists Static Control		
HL-37V Compact Amplifier	Toyko Hy-Power Labs	
Hamtronics WXSAT Converter		
Heathkit Multi-Mode TNC		
ICOM IC-275		
ICOM IC-761	transceiver	
ICOM IC-375A	transceiver	
ICOM IC-1200	transceiver	
ICOM IC-900		
Jensen Stripper		
Kantronics KPC-4 Dual-Port Communicator		
Kantronics Personal Packet Mailbox		
Kantronics Dual Port Communicator	KPC-4	
Kenpro Interface		
Kenwood TR-751A		
Kenwood Dual Bander		
MFJ-1274 HF/VHF Packet TNC	MFJ Enterprises	
MFJ-931 Artificial Ground	MFJ Enterprises	
Mercer Pocket DMM		
Microphone Improved	Astatic Corp.	
Midland LMR	Two-Way FM Portable Radio Model 70-254	
Mini "Bear" Cat Scanner	Engineering Consulting	
Miniaturized DTMF-Encoders	Pipo Communications	
Miracle Flux		
Model 70-253 Portable Two-Way Radio	Midland LMR	
Model HL-725D Dual Band Amplifier	Toyko Hy-Power Labs	
Model S-4 Control Unit	Sibex	
Model TX70-1 ATV Transmitter	P.C. Electronics	
NCG Duplexers	NCG Company	
NCG Hotline-107 Hand Sets		
Net-Kall NK-1	Motron Electronics	
Nevada Caps	Nevada Communications	
Nevada Coil RC 26 "Roller Coaster"		
New All Mode ATV Receiver	Wyman Research	
News From Motron Auto Kall AK-10		
PC Weather	Technology Marketing, Inc.	
Phone Remote	Ti-Communication	
QFAX WX FAX Receive Terminal Unit	Quay Technologies	
Ramsey COM-3		
Regency Informant and Turbo-Scan 800		
Regency R-1090 Scanner		
Repeater Controller	Creative Control Products	
S-COM "5K"	Repeater Controller	
SR 100 and Smart Remote	Satellite Technology Services	
ST-216 Mobilecall Decoder	Selectone	
Scooter Standby Power Supply/ Voltage Regulator		
Simpson Probes	Mercer Electronics	
Super NiCd's for ICOM HTs	Periphex	
Super Small CTCSS Encoder	Communications Specialists	
SuperSCAF	AFtronics, Inc.	
THL HL-2K/A	Toyko Hy-Power Labs	
Teston's Checkman Mini		
The Banker	Inventron Labs	
The Regency R1080 Programmable Scanner		
Toyko Hy-Power Labs 160-W 2-Meter Amp		
Two New ICOM Base Station Transceivers		
Weller Pyropen		
Yaesu FT-109RH and FL-7000		

## Filters

Active Audio Filter	Bel-Tek	AUG p.15
IRI Filters	International Radio, Inc.	FEB p.19
New 8-Pole Crystal Lattice Filters	International Radio	SEP p.15

## Kits

Chip Resistor and Capacitor Kits	Communications Specialists	OCT p.37
DSE Field Strength Meter Kit	Dick Smith Electronics	MAY p.15
Jensen Tools, Inc.	service and maintenance kits	APR p.19
New Heathkit Linear Amplifier Kit		SEP p.14
RFI-Free Choke Kit	MFJ Enterprises	AUG p.15

## Tools

Butane Energized Soldering Iron	Eaglestone	JUL p.15
Davle Tech Tools		JAN p.19
E.L. Jones Quick Silver	bonding paste	JUN p.15
Ergotron Inc.	Engineering Workstation	DEC p.40
Jensen TELVAC Tools		MAR p.18
Jensen Ultratorch		MAR p.19
Personal Grounding Wrist Strap	Davle Tech Inc.	DEC p.40
Rechargeable Screwdriver	Davle Tech, Inc.	FEB p.19
Rota-Lux And Rota-Tough	by Jensen Tools Inc.	NOV p.58
Soldering/Desoldering Station	by Sibex	MAY p.15
Sun-Flex Screens		MAR p.18

## Software

Commodore 64/128 Terminal Program	Kantronics	AUG p.15
HF-Link Hardware and Software		JUL p.15
Laresco Code Software		MAR p.19

JAN p.18	Ludvigson Tonegen Software
FEB p.18	Morse Code Tutor Program
JUN p.15	PCB Design
JAN p.19	
MAR p.18	
JUL p.15	
MAY p.14	
DEC p.40	
MAR p.18	
JAN p.18	
MAY p.14	
JUL p.14	
NOV p.58	
MAY p.14	
MAR p.19	
JUL p.15	
MAY p.15	
AUG p.14	
JAN p.19	
JUN p.14	
JUN p.14	
JUN p.14	
JUL p.14	
FEB p.19	
MAY p.15	
JUN p.15	
SEP p.14	
JAN p.19	
JAN p.18	
SEP p.14	
MAY p.14	
OCT p.37	
APR p.18	
AUG p.14	
DEC p.40	
JUL p.14	
AUG p.15	
JUL p.15	
OCT p.38	
SEP p.14	
OCT p.37	
SEP p.14	
MAR p.19	
AUG p.14	
OCT p.38	
FEB p.19	
JUN p.15	
SEP p.14	
OCT p.38	
MAY p.14	
FEB p.18	
JUL p.14	
FEB p.18	
APR p.18	
JUN p.14	
SEP p.15	
JUL p.14	
NOV p.58	
DEC p.40	
JUN p.15	
MAR p.18	
JUL p.15	
SEP p.15	
FEB p.18	
MAR p.18	
FEB p.18	
AUG p.15	
NOV p.58	
MAY p.15	
AUG p.14	
FEB p.18	
APR p.18	

Ludvigson Tonegen Software  
Morse Code Tutor Program  
PCB Design

## PACKET

Big Time Packet  
Future Packet  
Packet RATS  
Packet AI  
Packet Directory

The External PTT

## POWER SUPPLIES

A Power Supply Primer: Part II

Battery Charger  
ICOM BP-4 Charging Adapter

## QRP

QRP Antenna Farming

## RECEIVING

Cosmic QRN  
The Talking Teletype

## REPEATERS

Repeater Controller PC Board  
Repeater Renaissance

## REVIEWS

144-MHz Antenna Test: Three For Two  
220 Amps: Toyko Hy-Power Labs

220 Toss-up:

Alinco ALX 2T  
A Tale Of Two 220 HTs:  
Beginner's Luck Heil's handbook  
Cadillac Of HF Rigs:  
Digitize Your Dial:

First In Filtering:  
Good 'n' Cheap:

Great Little Dipper:  
HW-8 Replacement:  
Homely On HF:  
Hot It's Not:

ICOM 12-AT:  
If There Only Was A 40-Meter Version:

Including The Kitchen Sink:  
Inside ICOM:  
It's More Micro:  
Kenwood TH215A:  
Kenwood 205A:  
Know The Fax:  
Long Time Coming:

Mellifluous Morser:  
Move Fast:  
New On Two:

New Life On Two:  
No Vertigo:  
Novice Rig:

Novices Take Note:  
On Target:

Jan Crystals Booklet  
Novice Voice-Class "Quick Course"  
Power Gain Systems, Build Your Own  
Satellite Dish Antenna

Radio Handbook  
Repeater Demo Tape  
SEBHC Journal Society of Eight-Bit  
Shortwave Radio Listening  
with the Experts  
Solid-State Projects You Can Build  
The Digital Novice  
Understanding Electricity and  
Electronic Principles  
Understanding Electricity and  
Electronic Circuits  
Understanding IC Operational  
Amplifiers, 3rd Ed.,  
Universal Electronics Publications  
World Ham Net Directory

## Equipment

1.3-GHz Pocket Counter  
33-CM ATV Exciter/Modulator  
220 Transceiver  
Ace AR-2002  
Auto-Kall AK-4

for the Commodore 64  
MFJ Enterprises  
DASOFT Design Systems

control a packet station from your desk or  
around the world  
author predicts packet radio of the future  
resume-after-transmit scanner for IC-27A  
speak with TRON  
packet digipeater or PBBS anywhere with  
this directory  
get on packet with ICOM IC-2AT

straightening out the ripples for the wall  
socket's ac  
A handy NiCd power project  
Our own technical editor beats the system

work the world with a few Watts

hidden messages lurking in the static!  
basic RTTY-to-voice system

build this inexpensive repeater board  
digital repeater

Cushcraft vs. Tonna vs. Cushcraft  
HL-22V and HL-102V 220-MHz Power  
Amplifiers  
ICOM's IC-38A and Kenwood's TM-3530A  
220-MHz Mobile Transceivers  
A big contender in the feather weight class  
Yaesu FT-109RH and the ICOM IC-02AT  
for the rank amateur  
ICOM IC-781 Transceiver  
Torretronics' Universal Digital Frequency  
Display

AFtronic's SuperSCAF  
Dick Smith Electronics Function  
Generator Kit  
Electronic Bank's DM-4061 Dip Meter  
the HW-9 third generation QRP transceivers  
Com-Rad's Hi-Rizer Antenna  
Sony's AIR-8 hand-held programmable  
scanner

Breaking new ground on 23 cm  
The Mirage/KLM 1.2-44 LBX 44-element  
1.2-GHz yagi

ICOM's IC-275A 2m Multimode  
what's different about IC-751A  
ICOM IC-μ2At Two-Meter HT  
High-Class Hand held hammering  
High-Class Hand held hammering  
Alden Weatherchart FAX Recorder  
Microwave Modules' MMT 220/28 220-MHz  
Linear Transverter

The R.A. Kent brass CW key  
Stone Mountain Engineering QSYer  
Alinco's ALR-206T 144-MHz FM Mobile  
Transceiver

Yaesu FT-290R II and the Tonna F9FT Yagi  
Glen Martin Engineering M185A Tower  
Heath HW-99 Transceiver

Ranger AR-3300 10-Meter Mobile Rig  
Telex/Hy-Gain's model 218S OSCAR  
antenna system

Gordon West Radio School

by William I. Orr  
Heath Computerist Journal

by Gerry L. Dexter  
by Rudolf F. Graf  
QSKY Publishing

by Training & Retraining  
by Training & Retraining

by Roger Melen and Harry Garland

by Mike Witowski

P.C. Electronics  
Microwave Modules  
Ace Communications  
MoTron Electronics

DEC p.40  
SEP p.15  
FEB p.19

K1TE JUL p.44  
K2TKN AUG p.24  
WA3DNM MAY p.30  
KE5L AUG p.29

K4NGC AUG p.33  
WB5BSV AUG p.49

K4IPV JAN p.28  
N0FNF DEC p.52  
WB9RRT DEC p.20

W0VM APR p.36

W6HDM FEB p.50  
K9EI FEB p.36

KA3AAQ NOV p.34  
WA6AXX MAY p.26

KT2B JAN p.22

KT2B APR p.26

KT2B JUN p.18

KA1HY DEC p.16

KT2B SEP p.28

KA1MPL JAN p.26

WA4BLC OCT p.12

WA1WMZ/2 JUL p.27

W4THU JUL p.22

KA1MDA MAY p.24

WA4BLC NOV p.10

W8VGE AUG p.22

N1BLH JUN p.20

N1BLH FEB p.26

KT2B DEC p.22

KT2B FEB p.21

KT2B MAR p.20

N1BLH JAN p.20

WB2MIC MAY p.20

N1BLH DEC p.13

N1BLH DEC p.13

WB8DQT OCT p.16

KT2B MAR p.22

KW10 FEB p.24

Z2IEI JUL p.26

KT2B MAR p.24

KT2B JUL p.18

N1EJF APR p.21

KA9HCC APR p.30

and KN2F APR p.30

N1BLH NOV p.28

N1EJE FEB p.22

JUN p.14

AUG p.15

JAN p.18

APR p.19

JAN p.18

MAY p.15

APR p.19

APR p.19

APR p.19

APR p.19

APR p.19

JUN p.15

MAY p.15

JAN p.19

MAY p.14

FEB p.18

MAR p.19

OCT p.38

