GUARANTEED PERFORMANCE

SO NEW! SO DIFFERENT!
IT'S PATENTED!

MODEL SUPER 60

MONEY BACK GUARANTEED TO RECEIVE ALL UHF AND ALL VHF STATIONS IN ALL DIRECTIONS FOR 60 MILES WITHOUT A ROTORMOTOR OF ANY KIND!

WORLD'S MOST POWERFUL UHF—VHF TELEVISION ANTENNA

While antenna reception is guaranteed for 60 miles, perfect pictures have been consistently received as far as 160 miles from stations.

NEW POLYMICA LENE 4 CONDUCTOR TRANSMISSION LINE

- Low Loss External - Air Dielectric
- Matched Impedance
- Eliminates End Sealing
- Eliminates Condensation
- Up to 50% Loss Less Than Tubular When Wet
- Easily Spiraled
- No Breaking or Shorting
- Patents Pending - T. M. Reg.

NEW DESIGN FOR '54

- LOW-LOSS SWITCH
- LOW-LOSS PHENOLIC INSULATORS
- USES NEW 4-CONDUCTOR MATCHED IMPEDANCE LINE
- ONLY 10 INCH SPACING BETWEEN ANTENNA BAYS

LIST PRICE $36.75

All Channel Antenna Corp.
70-07 Queens Blvd., Woodside 77, N. Y.

Money Back Guarantee
IN ALL LOCATIONS
WITH STATIONS IN ALL DIRECTIONS

The new All Channel Model Super 60 is guaranteed to bring in, immediately on installation, every UHF and every VHF station within 60 miles in any direction, giving clearer and sharper pictures than any antenna or combination of antennas with or without rotor motors.

If, immediately on installation, it fails to do this, we agree to refund to the jobber whom we sold and shipped it, his full purchase price.

PRICE INCLUDES
Complete stacked array • 4 stacking bars • 9 position switch • Switch-to-set coupler • 2 - 7½” stand off • Individually boxed in in-moldable carton
JFD's Jet 213S outperforms all other VHF antennas covering the channel 2-13 spectrum. Rugged, completely pre-assembled, the design of the SUPER-JET combines the best of both the BALINE YAGI and the JetTenna for unequaled deep fringe performance and flat-high gain no-dip response. Narrow side lobes in the SUPER-JET provide highly directive UHF coverage equal to stacked bowtie and reflector. An extra feature at no extra cost.

Delivers single 10-element Yagi performance on each channel.

Write for Form 230.

**HERE ARE THE FACTS—COMPARE FOR YOURSELF.**

<table>
<thead>
<tr>
<th>Channel</th>
<th>C</th>
<th>B</th>
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**DB GAIN**

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Model Jet 213 - single - $20.75 list
Model Jet 213S - stacked - $42.50 list

*Complete with stacking transformers.

www.americanradiohistory.com
The CHAMPION is the most sensitive all-channel VHF antenna ever designed!

Stacked CHAMPION provides: 11-13 dB High Band gain 6½-7½ dB Low Band gain

Here is a totally NEW kind of antenna, completely different — in principal and performance — from any VHF antenna you've ever seen! Since the lifting of the TV freeze means a gradual disappearance of the single-channel VHF area, the VHF antenna of the future will be a multi-channel antenna. Prepare now for outstanding reception on all VHF channels — present and future — with Channel Master's super-sensitive CHAMPION! Outperforms every all-channel VHF antenna made today — and many Yagis, too!

COMPARE these features with the antenna you are now using:

- Folded dipoles throughout — give close to 300 ohms impedance across the entire band.
- Screen-type reflector provides high uniform gain on every channel, 2 through 13. Not frequency sensitive — this reflector provides more than twice as much extra gain as straight bar reflectors.
- Phase-correcting harness is built-in and fully assembled; the only wiring you do is to attach the lead-in.
- All-aluminum construction... lightweight, durable, non-corrosive.

MARVEL OF PRE-ASSEMBLY

assembles faster than a 5-element yagi!

Collapsed "Pop-Up" screen opens instantly — no loose rods, elements or hardware. "Trapeze" assembly features automatic Spring Lock Action — all dipoles snap permanently into place without wing nuts or any other hardware.

It's a CHAMPION in any area!

1-bay—local areas
2-bay—secondary and fringe areas
4-bay—super-fringe areas

OUT-PERFORMS:

this... this... this... or this...

The 2-bay CHAMPION actually gives you the performance of:

- Separate 5-element Yagis for every low Band channel!
- Separate 10-element Yagis for every High Band channel!

<table>
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<th>Model No.</th>
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<td>325-4</td>
<td>$4.15</td>
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</tbody>
</table>

Send for complete technical literature.

Copyright 1968, Channel Master Corporation
you're ready for
COLOR TELEVISION
with an AMPHENOL INLINE®

Color television is fast becoming a reality! Sets are expected to be available the first part of next year and stations are purchasing the necessary transmitting equipment. Initial costs, unfortunately, will be high but as improvements in design and production are achieved the price of color television will become within everyone's reach.

The consumer is concerned with the problems presented by television in color. He has read reports on prices and availability; all have been conflicting. He knows, however, that his set will have to be replaced or converted. What he does not know is that if he has an AMPHENOL INLINE®, there will be no extra expense in antenna or installation. AMPHENOL engineers provided for color in the original design of the INLINE®.

Every dealer, distributor and installer will want to acquaint their customers with this reassuring information. The color television market is potentially tremendous. It certainly will prove of benefit if the consumer can be reassured on one part of the cost of conversion to color.

The fact that AMPHENOL INLINEs are able to receive color television so well reflects favorably upon the engineering ability of AMPHENOL. For in ordinary black and white television the same level-gain design has proved valuable. Set owners know, now, that their AMPHENOL INLINE® is providing them with the best black and white picture their sets can deliver.

Antenna Electrical Requirements for COLOR TELEVISION

Information now available on color television has made it clear that the receiving antenna must have these characteristics:

1. Antenna gain must be flat, no gain or loss greater than one db, within 1.5 mc below and 0.6 mc above the color sub-carrier* (a width of 2.1 mc).
2. Antenna gain must be held down across the FM frequencies. Rejection of FM signals is much more important in color than in black and white television.

*Channel frequency widths are at present divided between the monochrome amplitude modulation picture carrier and the frequency modulation sound carrier. The addition of the color sub-carrier is made at 3.58 mc above the monochrome carrier.

The AMPHENOL INLINE® fully meets the two conditions listed above. Besides being engineered to reject FM signals, from 88 mc to 108 mc, the INLINE provides very low gain across all channels, particularly over the color sub-carrier. Typical of the INLINE's performance on all channels is the gain chart illustrated above for channel 3.

1. Measured in accordance with proposed RETMA standards.

AMERICAN PHENOLIC CORPORATION
chicago 50, illinois

www.americanradiohistory.com
TRIO proudly announces

The New ZIG-ZAG

"TWIN-SIX"

(A significant addition to the Zig-Zag line)
Not content to bring out just another all-channel antenna, TRIO studied and tested every other model available. Months of research produced the "Twin-Six", a Zig-Zag that provides all of the desirable features indicated above. Quantitative ratings for antennas are practically meaningless because of some exaggerated claims. For this reason, the "Twin-Six" is announced without the usual gain charts. The new "Twin-Six", however, equals and, in most cases, greatly exceeds the gains of these antennas on every channel. For instance, the "Twin-Six" showed a 2 to 6 db higher gain than a competitive antenna which is advertised as having a 12 db gain.

**MINUTE-UP ASSEMBLY**

There's no antenna easier to assemble. Shipped with all hardware mounted on the boom. Complete assembly consists of matching elements to color coded insulators and snapping on spring clips. Improper assembly impossible.

**NEW ZIG-ZAG "TWIN-SIX" OFFERS:**

**Measureable Higher Gain On All VHF Channels Than Any Other Single Bay All-Channel Antenna**

**PLUS:**

1. One Horizontal Bay Does It All!
2. Single Lead-In Operation!
3. Easy-Up, One Minute Assembly!
4. Rugged Construction Throughout — No Droop, No Sag! Light Weight — Attractive Appearance!
5. UHF Reception For All Primary Areas!
6. Low Standing Wave Ratio!
7. Built and Backed by TRIO — A Name You Can Trust!
8. Competitively Priced!

Team the new Zig-Zag "Twin-Six" with the dependable TRIO Rotator for the maximum in TV enjoyment!

TRIO MANUFACTURING CO. GRIGGSVILLE, ILL.
The BEST SET IS ONLY AS GOOD AS ITS ANTENNA!

The KAY-TOWNES "BIG JACK" IS not A NEW ANTENNA

The "BIG JACK", recognized even by competitive manufacturers as the best performing VHF antenna design ever developed HAS BEEN ON THE MARKET FOR MORE THAN 1 1/2 YEARS!

WE CHALLENGE
any other manufacturer who claims this design as his original idea!

HIGH GAIN ON ALL VHF CHANNELS PREASSEMBLED
1" HEAVY ALUMINUM BOOM CRIMPED & DOWEL REINFORCED HEAVY (7/16" O.D.) ALUMINUM TUBING "SURE-GRIP" CAST ALUMINUM MAST CLAMP WILL NOT SPREAD, BEND OR COLLAPSE.

KAY-TOWNES' "BIG JACK" ANTENNAS PERFORM WITH OUTSTANDING SUCCESS WHERE OTHERS FAIL!
Kay-Townes technical experience and engineering details plus careful manufacture, all combine to make "BIG JACK" the most advanced antenna on the market today. As a matter of fact, certain other manufacturers who have failed to come up with matching performance in antennas of their own design, have attempted to copy the "BIG JACK" design, with questionable results.

HUNDREDS OF STATEMENTS LIKE THE ONE REPRODUCED HERE, PROVE "BIG JACK'S" SUPERIORITY!

Dear Sirs:
I have one of your BJ-2 "Big Jack" Antennas, which was installed approximately 2 months ago. It has consistently proved vastly superior to any other antenna in this locality. I have nothing but praise for this well made, expertly designed antenna. We receive WSB-TV, Atlanta, channel 2, 165 miles away better than anyone else around here, WAGA-TV, Atlanta, channel 5, and WBT, Charlotte, channel 3, also come in clear and sharp.

James R. Rule
Oak Ridge, Tennessee

KAY-TOWNES ANTENNA CO. ROME, GEORGIA
Recognized leaders in the field of fringe area antenna design

December, 1953
Concord Radio presents the world's most powerful UHF-VHF-FM antenna!

MONEY BACK GUARANTEED

TO RECEIVE ALL UHF AND ALL VHF STATIONS IN ALL DIRECTIONS FOR 60 MILES WITHOUT A ROTOMOTOR OF ANY KIND!!

While antenna reception is guaranteed for 60 miles, perfect pictures have been consistently received as far as 160 miles from stations.

**ALL NEW DESIGN FOR '54**

- LOW-LOSS SWITCH
- LOW-LOSS PHENOLIC INSULATORS
- USES NEW 4-CONDUTOR MATCHED IMPEDANCE LINE
- ONLY 10 INCH SPACING BETWEEN ANTENNA BAYS

**NEW! POLYMICALENE 4 CONDUCTOR**

Matched Impedance Transmission Line

Improves both UHF and VHF performance of any ALL-CHANNEL Antenna!

<table>
<thead>
<tr>
<th>Length (Feet)</th>
<th>Price</th>
</tr>
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<tbody>
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<tr>
<td>150</td>
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<tr>
<td>200</td>
<td>$17.90</td>
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</table>

Minimum quantity 100 ft.

**MODEL**

**SUPER 60**

Dealer Price: **$22.05**

List Price: **$36.75**

The 9 position rotating switch electronically rotates the antenna in any stationary position.

PRICE INCLUDES:
- Complete stacked array
- 4 stacking bars
- 9 position switch
- Switch-to-set coupler
- 3 - 7 1/2" stand-offs
- Individually boxed in millable carton

Manufactured by

**ALL CHANNEL ANTENNA CORP.**

New York, N.Y.

Under license Pat. Nos. 2,585,670
2,609,503 2,625,655 2,644,091

Others pending.

WRITE FOR FREE CATALOG

Concord Radio

53 Vesey Street, New York 7, N.Y. * Digby 9-1132

December, 1953
Sparkling Beauty
for the housetops

WARD'S
DYMON-VANE
CONICAL

another in the Tele-vane Series

Ward flashes again with the handsome Dymon-vane, the second model in its new series of Tele-vane TV antennas. Reflecting the modern trend and decor, the beautiful new Dymon-vane enhances any home and becomes a valuable prized addition. Clean cut in design, a flawless performer, the Dymon-vane stands out as a glittering solitaire among all other TV antennas. A conical antenna with aluminum elements and black permalobe cross arm with wrought adornments, the Dymon-vane is designed for complete coverage of H.F. Channels 2—13 in metropolitan, suburban and fringe areas. The New Dymon-vane comes in single bay or two bay stacked models...folded and pre-assembled ready for easy installation.

THE WARD PRODUCTS CORP.
DIVISION OF THE GABRIEL COMPANY

1148 Euclid Avenue, Cleveland 15, Ohio

In Canada: Atlas Radio Co., Ltd., Toronto, Ont.

December, 1953
obviously outstanding

the WW CLIPPER
VHF all channel antenna

Not Just Claims But Unquestioned Proof Of

- PERFORMANCE — an engineering accomplishment providing an outstanding antenna designed for increased sensitivity and higher gain in both primary and fringe areas.
- ACCEPTANCE — a phenomenal customer acceptance resulting from WW's superb performance characteristics — thousands in use throughout the U.S.
- SALES — performance, design, workmanship... outstanding selling points to create unprecedented sales demand. Get your share now!

Specifically engineered and designed for true and complete all-channel VHF reception.

CHECK THESE FEATURES
High Uniform Gain — One Major Forward Lobe — Narrow Beam Reduces Ghosts and Noise Pickup — High Signal to Noise Ratio — Good Front-to-Back Ratio Eliminates Co-Channel Interference — Perfect 500 Ohm Match — Light, Rigid, Quickly and Easily Installed to All Heights — Low Wind Resistance.

ALSO MANUFACTURERS OF

Wells and Winegard
television accessory mfrs.
DEPT. RTN BURLINGTON, IOWA
famous telrex 4-BAY
"CONICAL-V-BEAMS" — the acknowledged champion in 1948 and STILL CHAMPION!

Install genuine Telrex "Conical-V-Beams," the Patented unidirectional, one transmission line array. Models for Ch. 2 to 13 or Ch. 2 to 83. See and hear the difference!

If UHF is available or expected, install Telrex "Dual-band Conical-V-Beam" series. The perfect for rotation hi-gain... Hi-F-to-B all-band one transmission line array with automatic transition from low to hi band with no lossy "distribution" pads.

"Conical-V-Beams" are designed for easy stacking as required for your particular reception area. 1 bay "C-V-B" for peri-area, 2 bay "C-V-B" for sec-area, 4 bay "C-V-B" for fringe areas... If a 4 bay "C-V-B" does not provide a usable TV picture, TV reception is either impossible or impractical!

Broadbanded single channel highest gain hi-F-to-B yagi also available from Telrex Antenna Headquarters builders of world renowned communication yagis for amateur or commercial use.

ULTRA-HI GAIN UHF
"CONICAL-V-BEAM" MODEL 84
- Four bay unidirectional array
- All in-phase signal addition at all frequencies with no lobe splitting
- All-aluminum light weight and rugged

PRE-ASSEMBLED, PRECISION TUNED
5-ELEMENT YAGI
- High gain, broad-band response
- Excellent 300 ohm impedance match
- High F-to-B ratio

WRITE FOR COMPLETE TELREX BULLETINS, TODAY!

www.americanradiohistory.com
Radio & Television News, December 1953