

The Original



Select-A-Tenna

Since 1971

The unique AM Signal Intensifier device that works with the built-in antenna in your radio

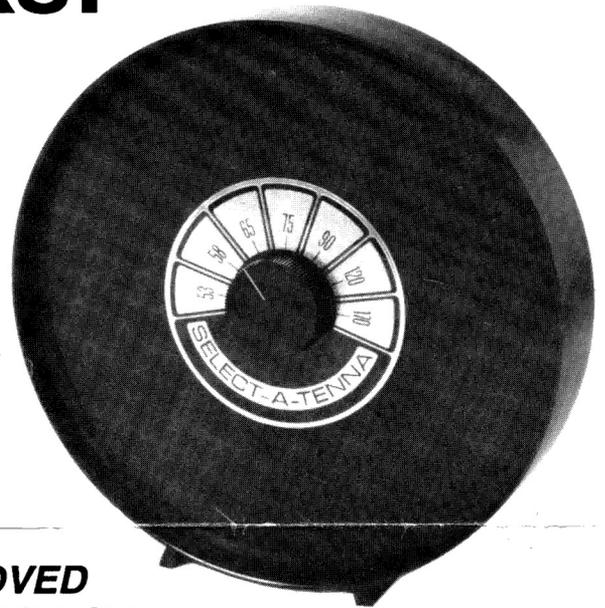
By Intensitronics Inc.

***Incredible.....
but it really works!***

+ 30 db

FEATURES

- NO AC PLUG-INS
- NO BATTERIES REQUIRED
- NO CONNECTION TO YOUR RADIO
- ASSEMBLED & READY TO OPERATE
- ADJACENT CHANNEL REJECTION IMPROVED
- ENGINEERING DEGREE NOT REQUIRED TO USE
- SATISFACTION GUARANTEED OR MONEY BACK



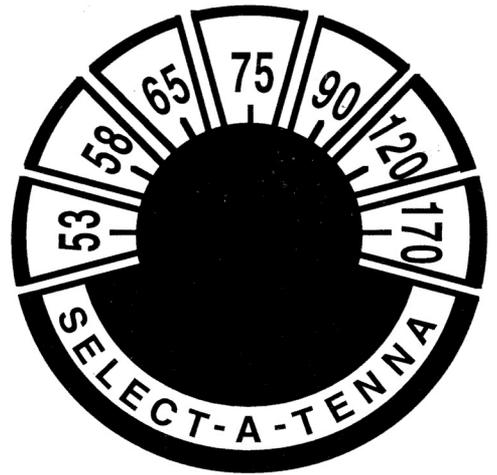
WHO NEEDS SELECT-A-TENNA ?

- DAY TIME LISTENERS IN POOR SIGNAL AREAS
- NIGHT TIME LISTENERS WITH SIGNAL FADE AND DROP-OUTS
- ANYTIME LISTENERS WITH DISTANT SIGNALS TO CAPTURE
- CITY LISTENERS WITH STRONG ADJACENT SIGNALS TO CONTEND
- MOBILE HOME & CAMPER LISTENERS WITH SIGNAL ATTENUATION

SPECIFICATIONS

MODEL 541

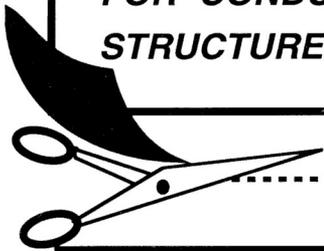
- **POWER REQUIRED - NONE.**
- **SIZE - 10.75 IN. (DIA) X 2.25 IN. (WIDE)**
- **WEIGHT - 2 LBS. (0.9 KG.)**
- **TUNING CONTROL - ONE CONTINUOUS.**
- **FREQUENCY RANGE - 535 KHZ. TO 1700 KHZ.**
- **RADIO INTERFACE - INDUCTIVE COUPLING TO THE RADIO BUILT-IN ANTENNA. (JUST PLACE NEAR YOUR RADIO.)**
- **GAIN - +30 DB TYPICAL , (EXACT GAIN DEPENDS UPON FREQUENCY AND YOUR RADIO ANTENNA SIZE.)**



MODEL 541-M

- **ALL THE SAME FEATURES AND SPECIFICATIONS AS THE MODEL 541 AND ALSO INCLUDES PROVISIONS FOR AN EXTERNAL ANTENNA CONNECTION TO THE SELECT-A-TENNA. THIS FEATURE IS USEFUL FOR CONDUCTING SIGNALS INSIDE ALL-METAL BUILDING STRUCTURES, LIKE CAMPERS AND TRAILERS.**

MADE IN USA



**INTENSITRONICS CORPORATION
P. O. BOX 562 HALES CORNERS
WISCONSIN 53130**

**TOLL-FREE
1-800-382-4155**

**ORDER
BLANK**

NAME _____

STREET _____

CITY _____ STATE _____ ZIP _____

PRICES	
MODEL 541	\$ 64.90
MODEL 541-M	\$ 74.90

ORDER MODEL #	QUANTITY

SHIP BY: UPS POSTAL

TOTAL (INCLUDES SHIPPING) \$ _____

INSTRUCTIONS

SELECT-A-TENNA MODEL 541

INTRODUCTION

SELECT-A-TENNA IS A DEVICE THAT AMPLIFIES SIGNALS TO RADIOS WITH BUILT-IN ANTENNAS. IT REQUIRES NO CONNECTION TO THE RADIO, NO BATTERIES OR AC POWER CONNECTION. THE PRINCIPLE IS ANALOGOUS TO THE FOCUSING OF LIGHT RAYS OF THE SUN USING A LENS.

OPERATION

TUNE YOUR RADIO TO A WEAK STATION. POSITION *SELECT-A-TENNA* (SEE NOTES UNDER: **ORIENTATION, POSITION, AND DISTANCE**) AND SLOWLY TUNE IT TO ABOUT THE SAME NUMBER (FREQUENCY). WHEN TUNED CORRECTLY, A VERY SHARP INCREASE IN VOLUME WILL OCCUR, AND ADJACENT SIGNAL INTERFERENCE IS REDUCED. READJUST THE TUNING OF THE RADIO AND THEN AGAIN FINE TUNE THE *SELECT-A-TENNA* FOR BEST RESULTS. WHEN SEEKING THE BEST POSITION AND ORIENTATION ALWAYS RE-TUNE *SELECT-A-TENNA* AND RE-TUNE YOUR RADIO.

SELECT-A-TENNA AMPLIFIES BOTH STRONG AND WEAK SIGNALS EQUALLY, BUT THE AMPLIFICATION EFFECT IS NEGATED ON STRONG SIGNALS BY THE OPERATION OF THE AUTOMATIC GAIN CONTROL INSIDE THE RADIO. THUS THE AMPLIFICATION EFFECT IS ONLY NOTICEABLE ON WEAK SIGNALS.

ORIENTATION, POSITION AND DISTANCE

THE BUILT-IN ANTENNA OF YOUR RADIO IS DIRECTIONAL AND SO IS *SELECT-A-TENNA*. BEST RESULTS WILL BE OBTAINED WHEN THE DESIRED RADIO STATION, *SELECT-A-TENNA* AND YOUR RADIO ANTENNA ARE, ALL THREE, LINED UP.

REFER TO (FIGURES 1. AND 2.) THESE TWO EXAMPLES SHOW THE BEST ORIENTATION OF *SELECT-A-TENNA* FOR DIFFERENT ORIENTATIONS OF THE BUILT-IN RADIO ANTENNA. SIMPLE EXPERIMENTATION WILL DETERMINE WHICH EXAMPLE APPLIES. POSITION *SELECT-A-TENNA* TO EACH EXAMPLE (FIGURE 1. AND 2.) AFTER TUNING FOR MAXIMUM IT WILL BE EVIDENT WHICH ORIENTATION IS APPLICABLE.

DISTANCE BETWEEN *SELECT-A-TENNA* AND THE RADIO BUILT-IN ANTENNA IS NOT CRITICAL, BUT OBVIOUSLY, TOO GREAT A SEPARATION WILL CANCEL THE AMPLIFICATION EFFECT.

SELECT-A-TENNA WILL GENERALLY NOT WORK IF ORIENTED COMPLETELY FLAT OR HORIZONTAL.

ADDITIONAL OPERATION DETAILS

NOISE SOURCES

THERE ARE MANY SOURCES OF MAN-MADE RADIO NOISE. EXAMPLES ARE: TV RECEIVERS, LIGHT DIMMER MODULES, COMPUTERS, NEON LIGHTS, FLORESCENT LIGHTS, AC/DC ELECTRIC MOTORS, ELECTRIC FENCES, HIGH-VOLTAGE POWER LINES, AND GENERALLY ANY ELECTRICAL DEVICE THAT PRODUCES ARCING OR SPARK DISCHARGE, ETC.

IF THE OFFENDING DEVICE CANNOT BE TURNED OFF, SOMETIMES IT IS POSSIBLE TO ORIENT THE RADIO AND *SELECT-A-TENNA* TO NULLIFY THE NOISE, YET ALSO RECEIVE THE RADIO STATION OF INTEREST. THIS NULL PROCESS WILL WORK BEST WHEN THE FACE OR THE BACK OF *SELECT-A-TENNA* POINTS TOWARD THE OFFENDING NOISE SOURCE. TILTING *SELECT-A-TENNA* FROM THE VERTICAL POSITION IF NECESSARY TO ACCOMPLISH THE NULL ORIENTATION TO THE NOISE SOURCE SHOULD ALSO BE EXPERIMENTED.

NIGHT TIME RECEPTION

DURING NIGHT TIME HOURS, SIGNALS FROM VERY LONG DISTANCES MAY BE RECEIVED. THESE SIGNALS ARRIVE VIA REFLECTIONS OFF THE IONIZED LAYERS HIGH ABOVE THE EARTH. THEY ARE CALLED SKY WAVES. DURING DAYTIME THEY ARE GENERALLY NOT PRESENT AND THE PRINCIPAL SOURCE OF SIGNAL IS THE GROUND WAVE. THIS IS PRESENT, BOTH DAY AND NIGHT. GROUND WAVES GENERALLY DO NOT PROPAGATE AS FAR AS SKY WAVES, THUS DAYTIME RECEPTION IS MORE LIMITED.

SELECT-A-TENNA AMPLIFIES BOTH SKY WAVES AND GROUND WAVES EQUALLY WELL, BUT THE DIRECTIONAL FEATURE OF BOTH IT AND YOUR RADIO MAY SOMETIMES BE USED TO ADVANTAGE IN THE SITUATION WHERE A SKY WAVE OF A DISTANT STATION, BUT OF THE SAME FREQUENCY, IS INTERFERING WITH THE GROUND WAVE SIGNAL OF A LOCAL STATION. THE ALTERNATE SITUATION OF OFFENDERS COULD ALSO BE THE CASE.

THE GROUND WAVE HAS MAXIMUM STRENGTH IN A VERTICAL PLANE, WHILE THE SKY WAVE HAS MAXIMUM STRENGTH IN A PLANE THAT IS TILTED AT AN ANGLE FROM VERTICAL. (REFLECTED IN FROM HIGH ABOVE THE EARTH.) BY TILTING SELECT-A-TENNA OFF VERTICAL, TO PLACE THE FACE OR BACK POINTING TOWARD THE INCOMING OFFENDING SIGNAL, THE NULL FEATURE MAY BE MORE FULLY EXPLOITED THAN BY SIMPLY POINTING IN THE DIRECTION OF THE OFFENDING STATION ONLY IN THE VERTICAL PLANE. INCIDENTALLY, IF THE DESIRED SIGNAL AND THE UNWANTED SIGNAL ARE ARRIVING FROM EXACTLY THE SAME DIRECTION, THE NULL FEATURE CANNOT BE EXPLOITED TO THE ADVANTAGE OF ONE SIGNAL OVER THE OTHER. HOWEVER THIS IS RARELY THE CASE.

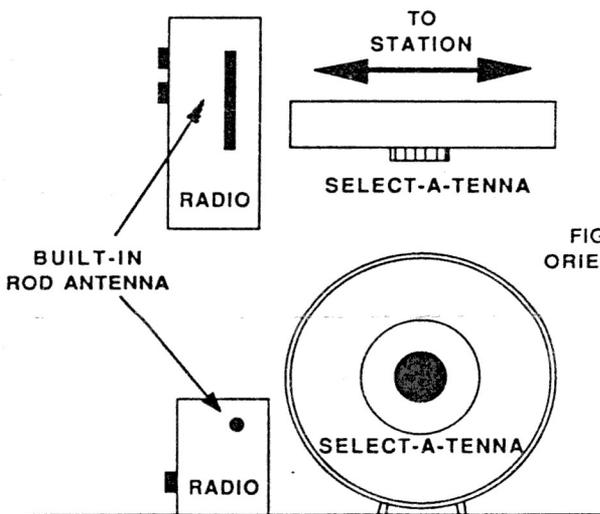


FIGURE 1
ORIENTATION

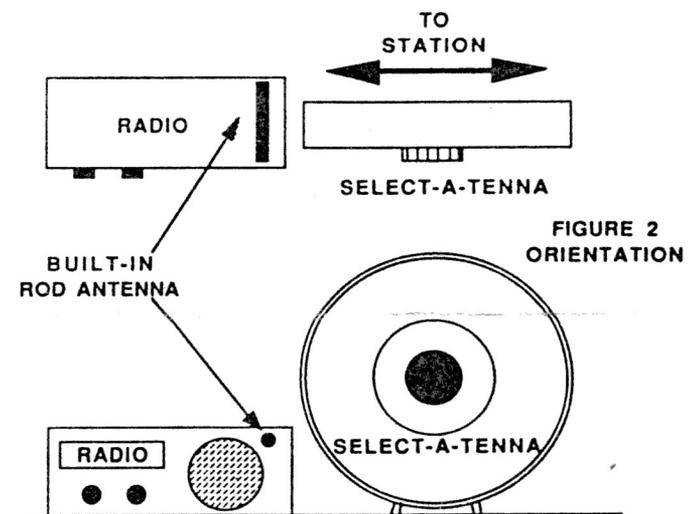


FIGURE 2
ORIENTATION

INTENSITRONICS CORPORATION
P.O. BOX 562
HALES CORNERS, WISCONSIN 53130

INSTRUCTIONS

SELECT-A-TENNA MODEL 541-M

INTRODUCTION

THE **SELECT-A-TENNA** MODEL 541-M HAS THE SAME PERFORMANCE AND OPERATING FEATURES AS THE MODEL 541, BUT IN ADDITION, IT HAS THE FEATURED PROVISION FOR THE EXTERNAL CONNECTION OF A GROUND AND ANTENNA. THIS FEATURE IS USEFUL UNDER THE FOLLOWING TWO CONDITIONS:

- 1. INSIDE A METAL STRUCTURE REQUIRING AN EXTERNAL ANTENNA.**
WHEN USING A RADIO THAT HAS ONLY A BUILT-IN ANTENNA WHILE INSIDE A METAL BUILDING OR METAL CAMPER VEHICLE THE STRUCTURE ACTS AS A SHIELD TO THE OUTSIDE RADIO SIGNALS. THE MODEL 541-M ALLOWS CONNECTION BETWEEN IT AND AN OUTSIDE ANTENNA WHICH THEN IS COUPLED TO THE RADIO WITHOUT ADDITIONAL CONNECTIONS.
- 2. RADIOS WITHOUT BUILT-IN ANTENNAS**
WHEN USING THE **SELECT-A-TENNA** WITH A RADIO THAT REQUIRES AN EXTERNAL ANTENNA CONNECTION, THE MODEL 541-M CAN PROVIDE THE ALTERNATIVE TO CONVENTIONAL OUTSIDE ROD OR WIRE ANTENNAS AND GROUND. THIS FEATURE ALSO CAN IMPROVE NOISE AND SELECTIVITY IN ADDITION TO DIRECTIONALITY THAT IS INTRINSIC TO THE **SELECT-A-TENNA**

OPERATION WITH JACK AND PLUG

ANTENNA EXTERNAL TO METAL STRUCTURE

- 1. UNSCREW THE BLACK PLASTIC CAP FROM THE PHONE PLUG.**
- 2. ROUTE A WIRE OF ABOUT 50 FEET IN LENGTH THROUGH THE PLASTIC CAP AND SOLDER TO EITHER TERMINAL OF THE PLUG. INSULATED DOOR BELL WIRE, OBTAINED AT ANY HARDWARE STORE, IS APPROPRIATE.**
- 3. ROUTE A SECOND WIRE THROUGH THE PLUG CAP AND SOLDER TO THE OTHER PLUG TERMINAL. INSERT INSULATION BETWEEN THE TERMINALS TO INSURE THAT THEY DO NO SHORT TOGETHER WHEN THE CAP IS INSTALLED.**
- 4. REPLACE THE CAP AND INSERT THE PLUG INTO THE JACK ON THE UNIT.**
- 5. BEST RESULTS WILL BE OBTAINED BY ROUTING THE FIRST OF THE TWO WIRES FROM THE EXTERNAL JACK OUTSIDE THE METAL STRUCTURE AND ELEVATED ABOVE THE GROUND. THE OTHER WIRE SHOULD BE ATTACHED TO THE METAL OF THE STRUCTURE OR A GROUND SOURCE SUCH AS A WATER PIPE. (SEE FIGURE 1).**

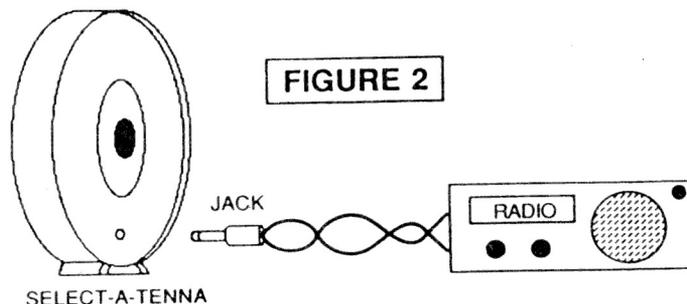
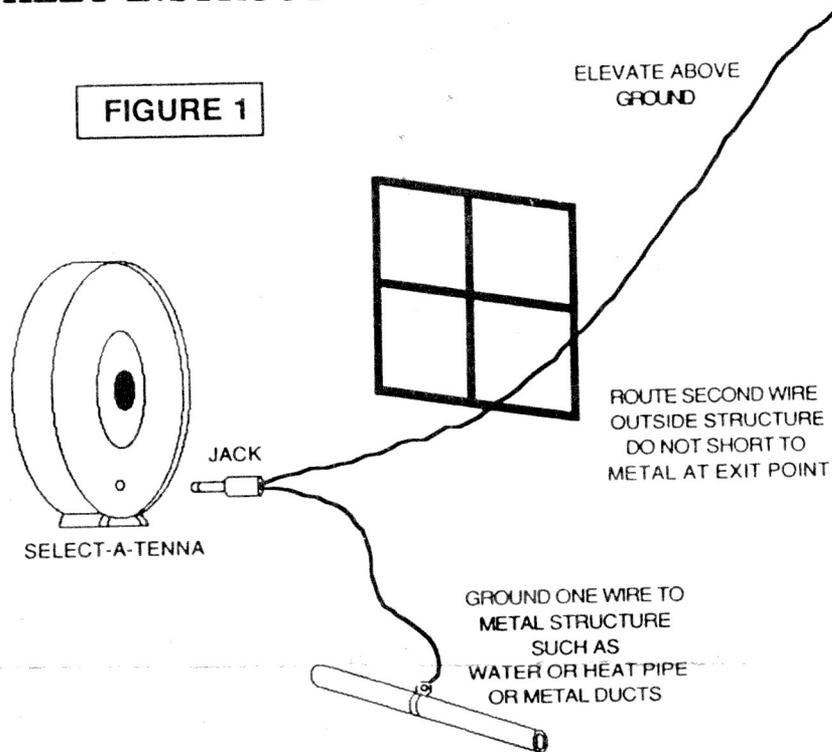
CAUTION: NEVER ATTACH WIRES TO AC POWER RECEPTACLES OR ROUTE NEAR OUTSIDE POWER LINES.

- 6. PLACE THE **SELECT-A-TENNA** NEAR THE RADIO AND PROCEED TO TUNE BOTH IT AND THE RADIO FOR BEST RESULTS. IF THE STRUCTURE IS INDEED WELL SHIELDED, THE EXTERNAL WIRE WILL BE THE ONLY SOURCE OF SIGNAL AND ORIENTATION OF THE RADIO AND **SELECT-A-TENNA** RELATIVE TO THE DIRECTION TO THE STATIONS WILL NOT BE A FACTOR.**

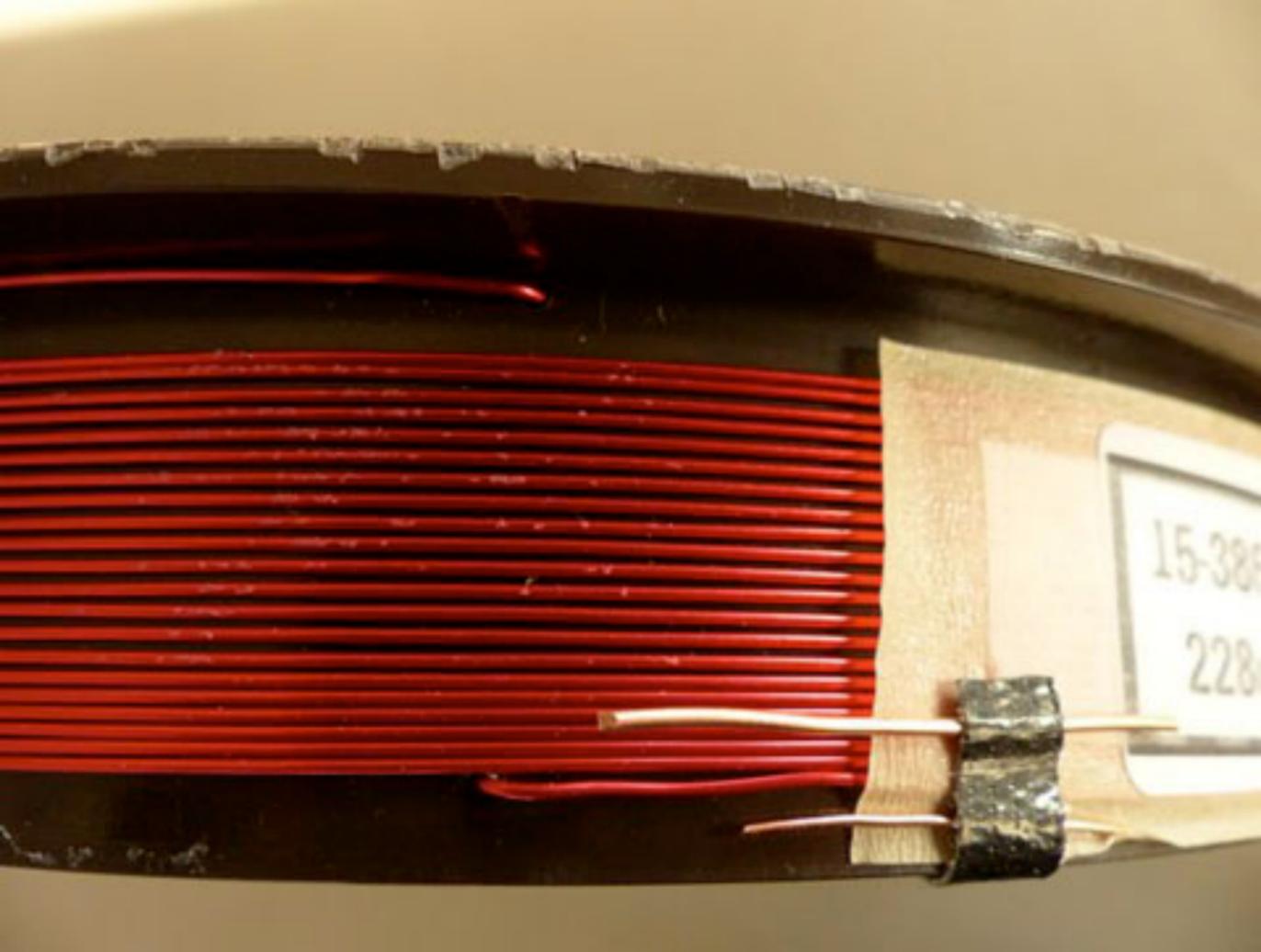
RADIOS WITHOUT BUILT-IN ANTENNAS

1. UNSCREW THE BLACK PLASTIC CAP FROM THE PHONE PLUG
2. ROUTE TWO WIRES OF ABOUT TWO TO THREE FEET IN LENGTH THROUGH THE PLASTIC CAP AND SOLDER ONE OF EACH TO EACH OF THE TWO TERMINALS ON THE PLUG. INSULATED DOOR BELL WIRE, OBTAINED AT ANY HARDWARE STORE, IS APPROPRIATE.
3. INSERT INSULATION BETWEEN THE TERMINALS TO INSURE THAT THEY DO NOT SHORT TOGETHER WHEN THE CAP IS INSTALLED. REPLACE THE CAP AND INSERT THE PLUG INTO THE JACK ON THE UNIT.
4. TWIST THE TWO WIRES TOGETHER THEN ATTACH ONE EACH TO THE ANTENNA AND GROUND TERMINALS OF THE RADIO RECEIVER. (FIG 2.)
5. PROCEED TO TUNE THE RADIO THEN THE *SELECT-A-TENNA* FOR BEST RESULTS. ORIENTATION OF THE DEVICE RELATIVE TO THE SIGNAL SOURCE WILL PERFORM SIMILAR TO THE MODEL 541 BUT ORIENTATION OF THE UNIT RELATIVE TO THE RADIO WILL NOT BE A FACTOR.

FOR OPERATION WITHOUT THE PLUG AND JACK REFER TO THE ENCLOSED SHEET INSTRUCTION *SELECT-A-TENNA* MODEL 541



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9.75" form

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