

NEW 1932

NATIONAL

5-TUBE SHORT WAVE CONVERTER

Range 16 to 185 Meters

This Converter is designed to occupy the same place in the Converter field as the well-known SW5 Thrill Boxes have in the Short-Wave Receiver field. It is also designed to give results regardless of the type of broadcast receiver used. This is accomplished by including enough inherent amplification in the Converter itself so that it will give very satisfactory results even with insensitive receivers.

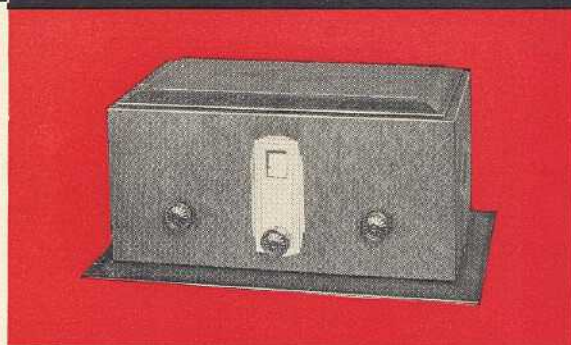
The circuit comprises a stage of high frequency amplification automatically resonated by means of the new NATIONAL harmonic-tuned input circuit, an exclusive feature of this Converter. Then there is the usual first detector-oscillator combination and finally, the stage of high-gain 575 K. C. intermediate frequency amplification to make up for the deficiency in gain obtained when the Converter is used with some types of broadcast receivers.

Of course, there is also the built-in power supply using the UX-280 rectifier.

NO PLUG-IN COILS

A unique feature in the design is the R-39 combination coil mounting and switching panels located at each end of the chassis. These panels also contain the built-in "padding" condensers for making the oscillator and first detector circuits track.

The coil forms, likewise, are molded of R-39, the special low-loss material, developed for exclusive use in NATIONAL shortwave products. The coils are so mounted as to prevent any inter-coupling and thus all "dead" spots in the tuning range are conspicuous by their absence. Thus, all the flexibility of the plug-in type Converter, without any of its inconveniences, is available in this new instrument.



A novel and attractive feature is the manner of indicating the particular pair of coils in the circuit at any one time. As the wave changing switch is turned to throw the different pairs of coils into the circuit, the color of the illumination of the main dial light also changes and thus serves as an indicator of the frequency range to which the receiver is adjusted.



INTERLOCKING AND DEAD SPOT ELIMINATION

Due to very thorough shielding, as well as wide separation of the first detector and oscillator circuits, there is no tendency to interlock and thus extremely stable operation is obtained over the wide range of from 16 to 185 meters.

By means of special "grounding arms" on the range shifting device, the dead spots normally encountered in the tuning range of a converter are completely eliminated. These arms are automatically operated by the same mechanism that controls the coil switches.

EASY TO CONNECT AND USE

Simply connect the antenna to the NC-5 and the NC-5 by its lead to the antenna post on your set. The NC-5 has its own built-in power supply. Plug its power cable into the baseboard receptacle alongside the one from your set and it is ready. Turn the switch when you want to receive broadcasts in the usual way. It is unnecessary to disconnect in any way.

The general construction and appearance, as well as the quality of material employed, of the NATIONAL Converter, is the same as the SW5 Thrill Boxes.

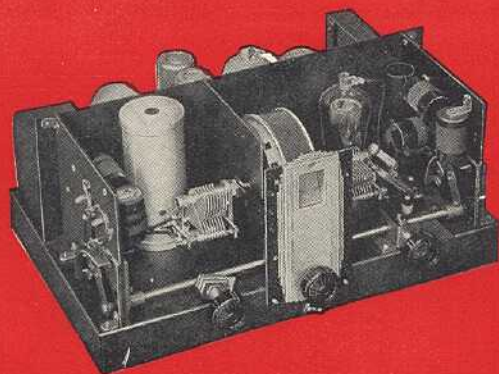
The tubes employed are an UY-224, two UY-235, an UY-227 and an UX-280.

The Converter is available for 110 volts, 50-60 cycles; 220 volts, 50-60 cycles, and 110 volts, 25-40 cycles.

DE LUXE MODEL

In hand-rubbed, mahogany finished case with genuine inlay on front panel. A fitting companion for the most beautiful radio set. Chassis identical with standard model.

<i>Catalog Symbol</i>	<i>List Price</i>
NC5	NATIONAL 5-Tube Shortwave Converter, completely wired and laboratory tested (less tubes) in Metal Cabinet \$75.00
NC5M	NATIONAL 5-Tube Shortwave Converter, completely wired and laboratory tested (less tubes) in Mahogany Finish Cabinet \$85.00
	Above prices are on units for use on 105-120 Volt, 220-230 Volt, 50-60 Cycle, A. C. current. When desired for 110 Volt, 25-40 Cycle, A. C. current add to List price..... \$5.00



**NATIONAL COMPANY INC.
ENGINEERS & MANUFACTURERS
61 SHERMAN ST., MALDEN, MASS.**