



Philco J-1930 Prototype

This stereo is a prototype unit built in the Philco design department at "C" & Tioga in Philadelphia in August 1960. It was purchased by my uncle, Arthur Whitehair, who was director of industrial design at Philco at that time and has remained in the family ever since.

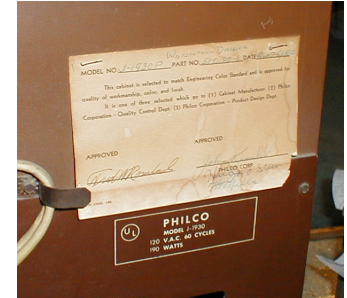
The tag on the back of the unit (pictured on the right) reads as follows:

Watson Division
MODEL NO. J-1930 PART NO. 51-0180-1 DATE Aug 25, 1960

This Cabinet is selected to match Engineering Color Standard and is approved for quality of workmanship, color, and finish.

It is one of three selected which go to (1) Cabinet Manufacturer (2) Philco Corporation - Quality Control Department. (3) Philco Corporation - Product Design Dept.

There are four signatures on the tag. I can't quite make out the writing, but I think they are Rosenbach, Kirsch, Steeb, and Phillos.



Interesting Features of the Unit

The system has a number of what were very advanced features for its time. These include the following:

- **Reverbaphonic Sound System** - The reverb unit, pictured to the right, consists of coil springs. They are used as an acoustic delay line. A transducer drives one end, and a pickup at the other end produces a signal which is mixed in with the audio to produce an echo effect that is intended to replicate a concert hall. One of the dials allows the amount of reverb to be selected. Electronic effects like this are common now, but this is the only example I know about of a mechanical system being used to do this. I had an opportunity to see the feasibility model of this unit. It was a slinky hung from a ceiling by threads, glued to a small loudspeaker at one end and attached to a microphone at the other.
- **Electrostatic Tweeters** - This technology never caught on. I believe Philco invented it and they are the only company I know of to have used it. The tweeter looks like a little radar antenna and is the upper portion of the satellite speaker shown to the right. An oval mid-range speaker is in the base. It produces extremely good high frequencies and has an outstanding transient response. I'd never heard anything like this in 1960.



- **Sub/Satellite speaker system** - In the center of the cabinet is a 15" dual voice coil subwoofer. Each channel drives one voice coil, and all the bass sound comes from the single



speaker. This was the first system I ever saw that employed this concept, but it has become quite common in the ensuing 40 years. The system has two satellite speakers, one of which is pictured on the previous page.



These can either be placed inside the cabinet as shown in the picture to the left, or removed from the cabinet and attached to the cables shown coiled on the back of the cabinet in the photo on the right. Each cable is about 15 feet long, so the satellites can be placed up to 30' apart. The connection is

very non standard due to the high voltages needed by the electrostatic tweeters.

- **AM/FM Stereo Simulcast Support** - The unit was manufactured before the FCC approved FM Stereo Multiplexing. Therefore it was built with independent AM and FM tuners to allow simultaneous reception of an AM and an FM station. At that time sister stations would sometimes broadcast in stereo using their FM station for one channel and the AM station for the other. People would get out two radios, one FM the other AM to be able to experience stereo. This unit is the only one I ever saw that could receive both at once. Of course the need for this was almost immediately made obsolete by FM Multiplexing. You can see the separate dials for AM and FM in the picture on the right.



- **Exotic Record Changer** - This changer is a mechanical marvel. The turntable stops when the record is dropping to avoid records sliding against each other. It



can intermix 7", 10", and 12" records (Many changers could intermix 10" and 12", it's the 7" that's unusual). In addition, it can be set to change speeds when it detects a 7" record. It then plays the 12" and 10" records at 33 1/3 RPM and automatically switches to 45 RPM when a 7" record drops. The fancy mechanism is the weak link in the system, and the turntable often needs a helping hand to get started.