The Radio by Proton

Now there is a table radio so advanced, no thousand-dollar receiver can match it.

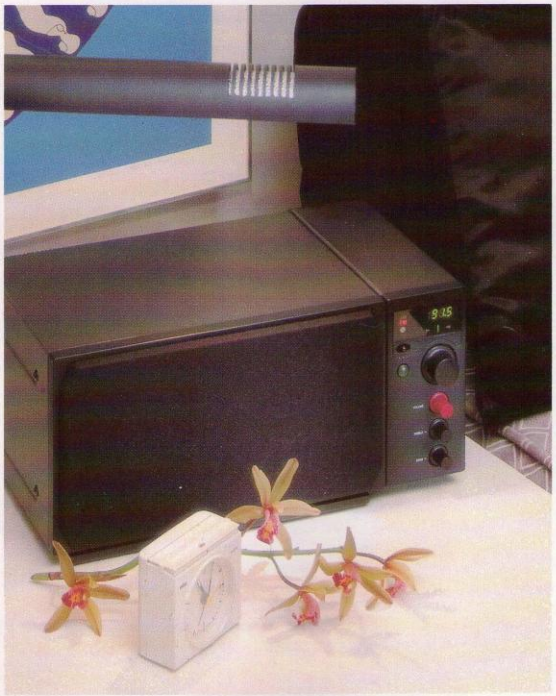
We looked at the state of the art. Then we reinvented the radio.

nside the tun ng circuitry of the Radio is a device called the Schotz Variable Bandwidth PLL Detector* It's so revolutionary, no other audio designers even dreamed of it. The effect on reception is so dramatic they wish they had And it's only one of the nnovations combined n this new kind of musical receiver

High fidelity that doesn't get lost in a high-rise.

Bu ldings and environmental obstructions reflect and distort an FM signal so many ways that it's hard for a receiver to separate the primary signal from all its multipath ghosts. To clean up this fuzzy reception the Radio achieves a capture ratio of better than 1.0 decibels, locking tightly to the desired signal and rejecting its nterfering echoes at the same frequency. The unique tuner circuit designed by Larry Schotz also mproves FM sensitivity and selectivity, while enhancing AM noise rejection and min mizing distortion Weak distant stations become listenable even n difficult environments ike high-rises.

*Patent pending



What other radio has two amplifiers; one for treble, one for bass?

Even the most expensive table radios have just one speaker and only 1 to 4 watts. To achieve uncompromising fidelity with plenty of power the Radio employs two separate amplifiers with a total of 25-watts One 20-watt amplifier powers the 4½ nch woofer and a second 5-watt amp drives the efficient 1¾ inch dome tweeter Such bi-amplification is an unusual feature even in large audio systems, let alone a table radio Since each amplifier is designed to function best within its own assigned portion of the frequency spectrum

FM music is scrambled with noise and interference when the FM signal is reflected off of buildings, wires, hills, and other obstructions.

Unlike all other FM radios, The Schotz Detector in the Radio is able to retrieve the original signal out of those false reflections. The music comes through clean, solid and pure.

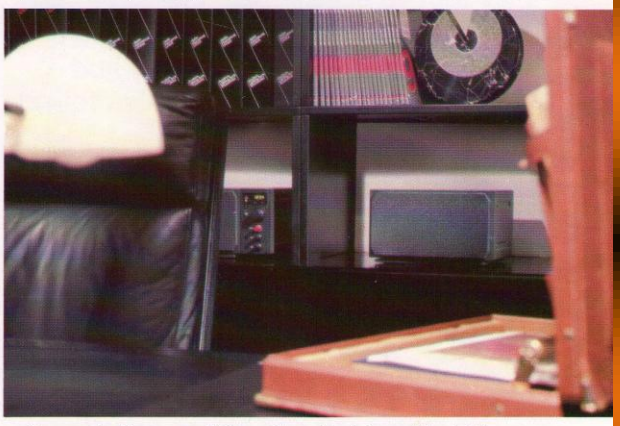
the Radio's 25-watts is used more efficiently for clearer treble and stronger bass. The bass is distinct and solid at very low volumes, and when you turn it up the sound stays crisp and clean The effect is equivalent to over 40 watts from a conventional amplifier Never before has a table radio offered frequency response from 60 to 20 000 Hertz, plus or minus 3 decibels Or even anyth ng close.

The Powered Speaker: stereo in ten places at once.

The Powered Speaker is a separate unit that has all the unusual capabilities of the Radio's bi-amped speaker section One Powered Speaker alone, when connected to the Radio becomes the second channel for fu stereo operation with over 50-watts RMS total power And additional pairs of Powered Speakers can provide stereo music n up to ten different rooms at the same time.

The more you ask of it, the more it delivers.

Unlike any conventional stereo with multi-speaker capacity, the Radio grows more powerfu



with each Powered Speaker that is added Because each speaker contains its own pair of amplifiers, the total system gains 25 watts of power each time another Speaker is attached A normal hi-fi would destroy itself trying to drive ten pairs of speakers, yet when the Radio is teamed with the Powered Speaker the result is even *more* spectacular sound up to 500 watts' worth

And each Powered Speaker contains volume level and tweeter controls to tailor your sound room-by-room to different isten ng environments

The Radio and the Powered Speaker are sophisticated audio components made easy to ive with They are not nexpensive But like al Proton products, their value is no less remarkable than their performance

product Design. Reinhold Weiss Design /Chicago

The Radio. It's unlike any other radio in history.

Filling a room with magnificent sound has always meant losing space to elaborate audiophile components But now there is a singular exception the Radio, a synthesis of advanced electronic designs no larger than an ordinary table radio, and as easy to use Elegantly understated in appearance, it contains patented Schotz tuning circuitry and a sophisticated bi-amplified speaker found in combination nowhere else.

Designed to offer the essential versatility of component systems without the clutter, the Radio provides uncompromising AM and FM reception as well as connections for recording and playback from an external tape deck Stereo capability exists with an optional second speaker Additional pairs of speakers may be added to bring stereo to as many as 10 different locations at once And it's all controlled simply and accurately from the front of the Radio

High fidelity without complexity.

Simple operation is fundamental to the design of the Radio Non-essential controls are located out of sight, easy to set when needed, out of mind the rest of the time. The understated front panel compliments any room, yet contains a digital frequency readout, LED tuning and signal strength ndicators, as well as the few controls needed for day-to-day use

The Radio puts music wherever you want it. Its small size and self-contained design make a variety of locations practical throughout homes, offices, and suites And because it's easy to transport, it's an excellent choice for vacation homes as well

Wherever there's room for music in your life, there's room for the Radio

the Radio

Specifications of the Radio.

FM tuner section.
Sensitivity: 1 microvolt.
Separation: Greater than 40 decibels.
Capture ratio: 1 decibel.
Selectivity: Greater than 60 decibels.
Signal-to-noise ratio: 80 decibels, mono; 77 decibels stereo.
Total harmonic distortion: Less than 1 percent mono, less than 15 percent stereo.
AM Suppression: Greater than 60 decibels.
JFET radio frequency amplification.
Digital tuning display.
Phase lock loop tuning.

AM tuner section.
Sensitivity: 250 microvolts.
Selectivity: 30 decibels.
Phase lock loop tuning.
Digital tuning display.

Audio section.
Bi-amplification.
Butterworth electronic crossover filters, crossover frequency: 2.5 kiloHertz
Power output: 25-watts, root mean square (20-watts bass, 5-watts treble).
Frequency response: 60 through 20,000 Hertz, plus-or-minus 3 decibels, as measured in a typical user environment (bookshelf).
Total harmonic distortion: .03 percent.
Speaker drivers: 1¾ inch ferro-fluid cooled tweeter. 4½ inch woofer.
Controls: Volume, tuning, bass, treble, balance, FM mute, stereo/mono, function, tweeter level, power on-off
Connections: Tape-in, tape-out, remote speaker, preamp-out, AM and FM antenna connectors.

Specifications of the Powered Speaker.

Self-contained bi-amplification.
Butterworth electronic crossover filters, crossover frequency 2.5 kiloHertz.
Power output: 25-watts, root mean square (20 watts bass, 5-watts treble).
Frequency response: 60 through 20,000 Hertz, plus-or-minus 3 decibels, as measured in a typical user environment (bookshelf).
Total harmonic distortion: .03 percent.
Speaker drivers: 1¾ inch ferro-fluid cooled tweeter. 4½ inch woofer.
Controls: Tweeter level, input level.
All units operate on standard 110 volts alternating current.

Warranty.
Limited warranty: One year, parts and labor (see complete warranty statement).

For more details on our unusual circuitry and design ask us for our technical specifications brochure.
Specifications quoted are subject to change.

Proton 100: The miniature expression of the Proton philosophy.

Each Proton product is conceived to answer the needs of the most discriminating ears and minds. Rather than offer a redundant line of similar products, Proton creates a limited number of products that distinguish themselves through technical nnovation and quality construction standing out as unquestionably the finest. Each at once creates, defines, and is the ultimate example n its field The definition of a classic.

The Proton 100 is the first and smallest expression of this ideal It is the only pocket-size FM receiver that compares to the finest home stereos, because like the Radio it ncludes a Schotz detector circuit. You'll find the performance of the Proton 100 simply astonish ng

Where can you get Proton products?

Call us at (213) 325-5010 through 5019 for the location of the Proton dealer nearest you.

PROTON
Expect to be astonished.

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