PULTEC

MODEL PC-10

RECORD COMPENSATING SYSTEM

PULTEC

STANDARD PROGRAM EQUIPMENT
Model EQP-1 Program Equalizer
Model EQH-2 Program Equalizer
Model HLF-3 Program & Sound Effects Filter
Model MB-1 Microphone and Booster Amplifier

CUSTOM TYPE EQUIPMENT
Pre-Emphasis Recording Equalizers - No Loss
High and Low Level Mixers
Automatic Stepping Oscillators
One to Twenty Frequency Oscillators
Unit Filters and Equalizers

PULSE TECHNIQUES, INC.
1411 PALISADE AVE., WEST ENGLEWOOD, NEW JERSEY
CABLE ADDRESS: PULTEC

TEANECK 7-2575
The PULTEC Model PC-10 Record Compensating System operates with any magnetic cartridge, either high or low impedance, and provides the necessary amplification, gain control and record compensation curves for the precise reproduction of phonograph records. It provides line level output and has self-contained power supply.

The Model PC-10 has many unusual and valuable features:

1- **LINE LEVEL OUTPUT** from any standard magnetic cartridge such as ESL, Fairchild, G.E., Pickering, etc.

2- **LOW IMPEDANCE TRANSFORMER OUTPUT** (600/300/150/50 ohms) for easy integration into the professional system.

3- **TRANSFORMER INPUT GAIN PLUS TUBE GAIN** before record compensation losses, when using Low Impedance cartridges, to assure maximum signal-to-noise ratio.

4- **TUBE GAIN** before compensation losses, when using High Impedance cartridges, assures maximum signal-to-noise ratio.

5- **PASSIVE NETWORK** to provide record compensation curves (RIAA, NAB, etc.). This network is Accurately Calibrated and is isolated between tube stages, thereby making the curve shape independent of cartridge L-C-R parameters.

6- **PASSIVE VERNIER EQUALIZATION** controls correct for differences between individual cartridges. Low Frequency Boost and Attenuate: 4 db at 30 cps. High Frequency Boost and Attenuate: 5 db at 10 kcs.

7- Available with either:

   (a) **CONTROL BOX** having 5 compensation curves: FLAT, EUROPEAN, RIAA, NAB, NOISY. 30" plug-in cable.

   (b) **FIXED PLUG-IN COMPENSATOR** having one curve. Curve may be any one of the above, or a custom characteristic to your specifications.

8- **OBsolescence PROOF:**

   Cartridge - Change the type of cartridge, including whether high or low impedance, at any time by simply restrapping the input plug to select either transformer input or tube input. The compensation curves do not change, because they are independent of the type of cartridge used.

   Compensation Curve - Should the industry standard be changed, or if for any reason a different curve is desired, simply order the required fixed compensator or control box.
9- GAIN CONTROL permits adjusting the output to the exact level desired.

10- POWER SUPPLY is self contained.

11- DISTORTION -- 0.5% at plus 20 dbm into 600 ohms.

12- FREQUENCY RESPONSE -- +1 db from 30 cps to 20 kcs; -2 db at 20 cps.

13- NOISE at output is more than 60 db below +10 dbm with RIAA compensation and gain set to give +10 dbm from RCA 12-5-49 LP Test Record.

DESCRIPTION OF CURVES

The FLAT curve provides an RIAA response below 1000 cps and flat frequency response above 1000 cps.

The EUROPEAN curve provides a 250 cps turnover on the low end and 6 db of attenuation at 10 kcs on the high end.

The RIAA curve is officially defined by the Record Industry Association of America, Inc. It also is accepted as the NARTB standard, and is identical to the AES standard.

The NAB curve is the lateral curve plotted as Fig. 2 in "NARTB Recording and Reproducing Standards" as adopted 1942 and amended April 1949 and June 1950.

The NOISY curve provides an RIAA response below 2500 cps. The high end is sharply attenuated above 3500 cps.

When used in conjunction with the Model PC-10 Record Compensating Amplifier, the RIAA and NAB playback curves introduced by the C2 Control Box will deviate less than ±1 db from the official curves at any point.

The gain of the system at 1000 cps will vary less than ±1 db as the selector switch is operated from RIAA to any other position.

DIMENSIONS

PC-10 AMPLIFIER Chassis - including Power Supply and Vernier Equalization. 17" long x 5" deep x 6" high.

Can be supplied as 5½" x 19" rack mount. Price on request.

C2 CONTROL BOX 2½" x 3" x 5¼" high.

3¼" diameter engraved dial. 30" cable and plug.

C4 thru C9 COMPENSATOR 1½" x 1½" x 3½" high.
A partial list of users of PULTEC Program Equipment:

- Atlantic Records
- Audiosphere, Inc.
- Audio-Video Recording Co.
- Badie Films
- Calvin Company
- Capitol Records
- CBS Radio
- Cinesound, Ltd.
- Circle Record Co.
- Coastal Recording Studios
- Columbia Records
- Columbia University
- Concert Hall Society
- Cuban Plastics & Record Corp.
- Decca Records
- Dumont Broadcasting Corp.
- ERC Recording Corp.
- Empirical Recording
- Federal Bureau of Investigation
- Fine Recording
- High Fidelity Recording Co.
- King Records
- Langlois Filmusic
- London Records
- Mercury Records
- MGM Records
- Moss Recording Studios
- Movielab Theatre Service
- Nat'l Assoc Educ B'destrs
- NBC - TV
- Olmstead Sound Studio
- Radio Recorders
- RCA Victor
- RKO-Pathe
- RKO-Unique
- Societe Francaise Du Son
- University of Michigan
- Universal Recording Corp.
- U.S. Information Agency
- U.S. Naval Schl Av. Mdcne
- U.S. Recording Co.
- Westminster Records
- WLS
- Yale University

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**PRICES OF MODEL PC-10 RECORD COMPENSATING SYSTEM**

<table>
<thead>
<tr>
<th>MODEL</th>
<th>DESCRIPTION</th>
<th>NET*</th>
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<tbody>
<tr>
<td>PC-10</td>
<td>Record Compensating Amplifier</td>
<td>$243.50</td>
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<tr>
<td></td>
<td>Control Box - FLAT, EUROPEAN. RIAA, NAB, NOISY</td>
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</tr>
<tr>
<td>C2</td>
<td>FLAT Compensator</td>
<td>7.50</td>
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<tr>
<td>C4</td>
<td>RIAA Compensator</td>
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<tr>
<td>C5</td>
<td>EUROPEAN Compensator</td>
<td>7.50</td>
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<tr>
<td>C6</td>
<td>NAB (old curve) Compensator</td>
<td>7.50</td>
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<tr>
<td>C7</td>
<td>NOISY records Compensator</td>
<td>15.00</td>
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<tr>
<td>C8</td>
<td>VERTICAL Compensator</td>
<td>15.00</td>
</tr>
<tr>
<td>Special</td>
<td>Any Special Curve</td>
<td>On request</td>
</tr>
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* Prices are F.O.B. West Englewood, N.J.

This amplifier is licensed under patents of the Western Electric Co.
The Model HLF-3 is a very wide range Program and Sound Effects Filter. It has been designed specifically as an effective aid in the production of good music and dramatic presentations.

As a Program Filter, the wide range of the Pultec makes it possible to remove rumble and hum as well as hiss and harmonic distortion components with a minimum loss of program content.

As a Sound Effects Filter, the Pultec includes the frequencies that have proven most useful in the past, plus several intermediate frequencies; thus making it ideal for the creation of such effects as telephone conversations, midget radios, sounds from “outer space”, etc.

Shielded toroid coils minimize hum pickup. Switches are clickless. An “off” position on each selector switch provides full frequency transmission. A key switch permits pre-set low and high filter selections to be thrown in and out of the circuit on cue.

LOW CUT-OFF: Eleven positions—
OFF, 50, 80, 100, 150, 250, 500, 750, 1000, 1500, 2000 cps.

HIGH CUT-OFF: Eleven positions—
1, 1.5, 2, 3, 4, 5, 6, 8, 10, 12 kcs and OFF.

IN-OUT KEY:
Permits cutting the filter “in” and “out” on cue.

IMPEDEANCE: 500-600 ohms; input and output.
Space to mount transformers for other impedances.

INSERTION LOSS: Zero.

CIRCUIT: Constant “K”.


POWER REQUIRED: None.

DIMENSIONS: Standard rack panel 3 1/2 x 19 inches.
Depth behind panel 7 1/2 inches.

PANEL FINISH: Pultec blue-gray baked enamel. Engraved.

NET WEIGHT: 9 3/4 pounds.

PRICE: $232.50 Net.

Pulse Techniques, Inc.
1411 Palisade Ave., West Englewood, New Jersey
Cable Address: Pultec

Teaneck 7-2575