NUNGCO® NUNGKit.



FOR THE AUDIO PERFECTIONIST

TUNERS

FM-5

FM MULTIPLEX STEREO

KIT \$164.95 **\$159.95** Wired \$254.95 \$249.95 WEST

AF-6 **NEW** AM and FM MULTIPLEX

KIT \$204.95 \$199.95 Wired \$304.95 \$299.95 WEST

Dynaco products have always had a reputation for superior specifications, but no matter how impressive any tuner's specs, they are of little value if they cannot be easily achieved in the normal tuning of a station. Where most tuners depend on the user's observation of meters of dubious precision, the unique Dynatune™ automated FM tuning logic circuit zeroes in on the exact center of channel faster and more accurately than any other tuner made, and continues to track this lowest distortion point, assuring perfect reception. Coupled with the smoothest, quietest muting circuit ever (which is effective on all listenable signals) the result is either each station in precise tune—or absolute silence. A signal strength meter is provided for proper antenna orientation. Silken-smooth flywheel tuning with automatic mono/stereo switching and an alternative high frequency blend stereo filter position for noisy stations. Exemplary performance in four-dimensional stereo is made possible by the extremely low distortion reception of out of phase signals (which carry the extra dimensional information) in addition to conventional measurements. High rejection of multipath and AM interference and 67 kHz SCA carriers, combined with exceptional ability to handle heavily over-modulated signals at low distortion, results in meaningfully improved reception of normal signals in typical listening situations. An auxiliary high level input is provided for future capabilities, and this may

be converted to accept a magnetic phono cartridge by adding the accessory \$30 phono preamp module PPM-5 inside the tuner. 1.75 μ v sensitivity; less than 0.5% THD and IM distortion; 40 dB separation; 65 dB signal-to-noise ratio; 3 FETs, 12 transistors, 8 integrated circuits and 8 ceramic filters for 1.5 dB capture ratio and 65 dB selectivity. The assembled, tested and aligned front end and two circuit boards contain all the active circuitry, and with the easy dial stringing enable 6 hour kit construction. 131/2" x 41/4" x 9" deep; Weight: 11 lbs.

To all of the performance specifications of the FM-5 above, the AF-6 adds an extraordinary AM section. The signal strength meter facilitates precise AM tuning, and where the signal is of high quality, the position of the unique audio bandwidth switch permits AM reception of unexpected quality. The remaining "normal" and "narrow" positions provide useable reception of less perfect signals. A broad band 12 section LC design IF filter, and broad band detector provide outstanding selectivity of 20 dB at 10 kHz and 55 dB at 20 kHz. An outstanding AGC characteristic provides easy listening to signals from 50 to 500,000 microvolts. 60 dB image rejection; 70 dB IF rejection; less than 2% distortion; 10 kHz notch filter. 8 hours assembly time, using the same circuit boards as the FM-5, plus a third AM board. $13\frac{1}{2}$ " x $4\frac{1}{4}$ " x 11" deep; Weight: 14 lbs.

AMPLIFIERS

SCA-80 Q

4-D 80 WATT **CONTROL AMPLIFIER**

KIT \$174.95 \$169.95 Wired \$254.95 \$249.95 WEST EAST

PAT-4

CONTROL PREAMPLIFIER

KIT \$ 99.70 \$ 94.95 Wired \$164.95 \$159.95 WEST EAST

STEREO 80

80 WATT POWER AMPLIFIER

KIT \$124.95 \$119.95 Wired \$164.95 \$159.95 WEST EAST

STEREO 120

120 WATT POWER AMPLIFIER

KIT \$164.95 \$159.95 Wired \$204.95 \$199.95 WEST

STEREO 400 NEW **400 WATT POWER AMPLIFIER**

KIT \$409.95 \$399.95 Wired \$509.95 \$499.95 WEST FAST

All Dynaco amplifiers have similar high performance standards, differing mainly in power output. The SCA-80Q has all the performance, and most of the features of the PAT-4, plus the Stereo 80's power, and built in 4-D decoding. Controls are simplified with single knob bass and treble controls, and a "narrow band" hi/low filter, but it includes a front panel power amp output for headphones. The SCA-80Q is very nearly the ideal amplifier for most users. You can connect two speakers for stereo now, or four speakers for Quad sound now, or later. Four preassembled circuit boards facilitate construction in 12 hours. 13½" x 4¼" x 11" deep. Weight: 18 lbs.

'In sonic quality, we would unhesitatingly say that the Dynaco PAT-4 is unsurpassed by any preamplifier we have seen . . . a remarkable unit and unmatched at anywhere near its low price" says Stereo Review. "(Sonically) we cannot see how any preamp, present or future, could surpass the PAT-4" reiterates Stereophile Magazine. This remarkably versatile control center exemplifies Dynaco's reputation for excellence achieved through innovation and a constant striving for simplicity in both engineering and operation. THD and IM distortion is below 0.05% at 2 volts, 600 ohm output; 4 tone controls provide continuous adjustment with a true "center-flat" position; 3-step high filter; rumble filter; 7 inputs; 600 ohm front panel output plus two pairs of audio outputs and tape output on the back; front panel input; 54 dB phono gain with noise 70 dB down from 10 mv input. $13\frac{1}{2}$ " x $4\frac{1}{4}$ " x 9" deep; Wt. 10 lbs.

The Dynaco reputation for "state of the art" performance at realistic prices was built on, and has been sustained by its power amplifiers. It is likely that more Stereo 120s have been purchased than all other solid state power amps put together. As High Fidelity magazine reported, "(The Stereo 120) is utterly uncolored and neutral; its ability to drive any speaker system self-evident. Truly, another "amplifier great" and at a very reasonable price on today's market." The Stereo 120's history is ample proof of the security of your investment. The Stereo 80 employs similar audio circuitry and most of the same components except for the Stereo 120's regulated power supply. With its conventional power supply and lower operating voltages, the Stereo 80 gains an added measure of reliability, yet it provides the same IHF music power as the Stereo 120, though lower continuous power. Each has electronic protection

and a unique bias system which markedly reduces low power distortion and eliminates the need for adjustments. Both are stable with all loads, including electrostatic loudspeakers. THD and IM distortion is below 0.5% from zero to full rms power (60 watts/channel for the Stereo 120; 40 watts/channel for the Stereo 80) into 8 ohms; noise 95 dB down; 1.3 volt sensitivity for 40 watts; $\frac{1}{2}$ % IHF power bandwidth 8-50k Hz. 5 hours assembly time. Stereo 80: $14'' \times 8'' \times 4''$ high; Weight: 15 lbs. Stereo 120: $13'' \times 10\frac{1}{2}'' \times 4''$ high; Weight: 20 lbs.

The new Stereo 400 amplifier is strikingly different from other high power amplifiers in two respects: over 1000 square inches of cooling surface permit continuous operation at full rated output of 200 watts per channel into 8 ohms; and the exclusive Dynaguard™ adjustable dynamic power limiter which permits full power capability for short term transient wave forms, but clamps sustained output above the selected level. The exclusive IC-controlled Dynabias™ circuit eliminates the crossover notch while assuring thermal stability with precise tracking of the quiescent current. The Stereo 400 delivers 300 watts per channel into 4 ohms, or its full complementary symmetry outputs can be switched to mono 600 watt output at 8 ohms, for a 70 volt line, too. THD and IM distortion is well below 0.25% from zero to full power, response at 200 watts is $\pm \frac{1}{4}$ dB, 20-20k Hz; at one watt +0, -1 dB, 10-50k Hz; noise 106 dB down; 1.6 volt sensitivity for 200 watts; switched 50 Hz and 15kHz filters; 500k ohms input impedance.

In addition to Dynaguard™, loudspeaker protection includes relay for delayed turn-on, clean shut-off, and DC load protection; volt-amp limiting for low impedance or reactive loads; and front panel speaker fuses which do not affect either damping factor or distortion. Amplifier protection includes volt-amp and dissipation limiting; thermal cutout with front panel indicator; B+ fuses; primary circuit breaker; and provision for optional fan cooling on the chassis. At levels up to several watts Class A operation assures absolutely no "crossover notch" for near-zero distortion. Front panel level controls do not affect performance below 100 kHz. The Stereo 400 is the culmination of extensive Dynaco research leading to what we believe is the cleanest-sounding, most reliable high power solid state amplifier available— and at a remarkably low cost per watt. 17" x 13" x 7" high; Shipping Weight: 65 lbs.

LOUDSPEAKER SYSTEMS

A-10 pair THE BEST BUY

> pair \$104.95 \$ 99.95 WEST

A-25

THE GREATEST VALUE

\$ 83.95 **\$ 79.95** WEST EAST

A-35 NEW THE MOST ACCURATE

> \$124.95 \$119.95 WEST EAST

A-50

THE DEEPEST BASS

\$184.95 \$179.95 WEST EAST

Since the introduction of the A-25 in late 1968, Dynaco loudspeakers have rapidly ascended to the front rank of popularity by virtue of unprecedented consumer appreciation of their outstanding value. All four models reflect identical design philosophy and exhibit markedly similar sonics. They are renowned for clarity, smoothness, precision, and above all, value. The sound of the four differs only in detail —greater power handling, plus deeper bass from the A-50; unexpectedly big sound from the little A-10; crisply defined detail in the new A-35. So subtle are the differences that the casual first listener could confuse any of these with the widely acclaimed A-25. It is the phenomenally popular speaker which Stereophile Magazine calls "quite probably the best buy in high fidelity today".

Dynaco's primary concern has always been literal translation of the original—verbatim reproduction and the success of each of these models is proof that such has been achieved to a high degree. All have the patented Dynaco aperiodic design which affords an unusually smooth impedance curve throughout the bass range, providing ideal amplifier matching and power transfer characteristics, and superior results when used in 4-D sound systems.

The A-10 and A-25 are externally vented through a special acoustic impedance system. The A-35 and A-50 have Dynaco's exclusive double cabinet con-

struction, with the woofer(s) in one section, which is internally vented to the second sealed compartment. This dual spectrum damping refines the aperiodic concept to provide its critical damping at resonance plus the low distortion benefits of the sealed enclosure at very low frequencies.

The woofers and tweeters in these models appear similar, but differ in detail. The A-10 uses a smaller woofer with an identical magnet structure to the 10 inch woofer in the A-25. All are two-way systems (though the A-50 has two woofers) with the advantage of lowered distortion through simplified crossovers and careful complementary driver design. As High Fidelity magazine described the A-50, "we soon found ourselves . . . listening to the program material rather than to the equipment.

Each design exemplifies Dynaco's value-conscious, no-nonsense approach to high fidelity—pure, articulate, balanced sound. All are supplied in oiled walnut wood finish with beige linen grille cloth; a five position high frequency control (except the A-10); and concealed wall mounting brackets for flush mounting (except the A-50). The optional stand for the A-50 is available from Dynaco for \$7.95.

A-10: $8\frac{1}{2}$ " x 15" x 8" deep; Weight: 30 lbs. per pair. A-25: 20" x $11\frac{1}{2}$ " x 10" deep; Weight: 24 lbs. A-35: $22\frac{1}{2}$ " x $12\frac{1}{2}$ " x 10" deep; Weight: 30 lbs. A-50: 28" x $21\frac{1}{2}$ " x 10" deep; Weight: 47 lbs.

4-DIMENSIONAL **QUADAPTOR**

QD-1

KIT \$ 20.95 \$ 19.95 Wired \$ 31.45 \$ 29.95 EAST WEST

Converting your present stereo system to 4-dimensional sound need not be expensive. Connect the Dynaco QuadaptorTM between your present stereo amplifier and four speakers. Dynaco's 4-D sound needs no second amplifier. The QD-1 provides up to 12 dB attenuation of the rear speakers if they are close to the listener, plus a null balance switch for correct separation adjustment, and switch-out of the back speakers for conventional stereo listening. Like the other matrix decoders, the Quadaptor

recovers properly processed front, rear, left and right signals from all sources—tape, records and FM stereo. Its striking advantage is its ability to recover more of the previously hidden ambient or directional information already on most conventional stereo signals, making them far more lifelike. Use your present stereo speakers up front, and add a pair of high quality 8 ohm back speakers which are similar in sound and efficiency (the A-10s are ideal) QD-1: 41/2" x 41/4" high x 7" deep; Weight: 21/2 lbs.

VACUUM TUBE **AMPLIFIERS**









MARK III **AMPLIFIER** KIT \$104.95 \$ 99.95 Wired \$134.95 \$129.95 EAST

SCA-35 CONTROL AMP KIT \$104.95 \$ 99.95

STEREO 70 AMPLIFIER KIT \$104.95 \$ 99.95

PAS-3X PREAMPLIFIER KIT \$ 83.95 \$ 79.95 WEST EAST

With hundreds of thousands of Dynaco tube amplifiers in use, there are many who continue to prefer them for reasons of flexibility, low cost, and reliability. The PAS-3X and Stereo 70 are probably still the most popular of all high fidelity combinations. On a performance versus price basis, transistorized designs cannot match the SCA-35. The Mark III is becoming increasingly popular with professional musicians and sound installers, where severe service applications favor use of tube equipment, as well as in laboratory and industrial applications.

Mark III: Mono 60 watts into 4, 8 or 16 ohms within 1 dB, 20-20k Hz, at less than 1% distortion; noise 90 dB down; 9" x 9" x 7" high; Weight: 28 lbs. SCA-35: 2 x 17.5 watts into 8 or 16 ohms within 1 dB, 20-20k Hz, at 1% distortion; 4 mv phono sensitivity; noise 70 dB below 10 mv input. 131/2" x $11'' \times 4\frac{1}{4}i''$ high; Weight: 20 lbs.

Stereo 70: 2 x 35 watts into 4, 8 or 16 ohms within 1 dB, 20-20k Hz, at less than 1% distortion; noise 90 dB down; $13'' \times 9\frac{1}{2}'' \times 7''$ high; Weight: 32 lbs.

PAS-3X: 2 volts output at less than 0.05% THD or IM distortion; 2 mv phono sensitivity with noise 74 dB below 10 mv input; high level noise 85 dB below 0.5 volt input; 1000 ohm output; frequency response \pm 0.5 dB, 10 Hz to 40k Hz; 3 low level and 4 high level inputs; $13\frac{1}{2}$ " x 9" x $4\frac{1}{4}$ " high; Weight: 11 lbs.

DETAILED SPECIFICATIONS ON ANY DYNACO PRODUCT FURNISHED ON REQUEST IMPARTIAL TEST REPORTS ON MANY OF THEM ARE ALSO AVAILABLE

All loudspeaker systems are available assembled only. All kits feature preassembled circuit boards of low loss FR4 fiberglass, pretested to assure proper operation without any adjustments when assembled in accordance with the simple, detailed, step-by-step instructions.

WOOD CABINETS

CAB-1S \$18.85 \$17.95 CAB-1D \$18.85 \$17.95 CAB-2S \$20.95 \$19.95 CAB-2D \$20.95 \$19.95 EAST

Low cost single and double-stacked oiled walnut veneer cabinets Single Short $14\frac{1}{2}$ " x 5" x $8\frac{1}{2}$ " 6 lbs. make your Dynakits look as good as they sound. The short ones fit Single Deep $14\frac{1}{2}$ " x 5" x 11" 6 lbs. the FM-5, PAT-4 and PAS-3X, which need no ventilation. The deep Double Short $14\frac{1}{2}$ " x $9\frac{1}{2}$ " x $8\frac{1}{2}$ " 7 lbs. ones have top vents for the SCA-80Q, and also accommodate the Double Deep $14\frac{1}{2}$ " x $9\frac{1}{2}$ " x 11" 7 lbs. AF-6, or separately, the SCA-35 or the FM-3 tube tuner.



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