

# Carver for 1990

*Powerful*

*Musical*

*Accurate*



### ● Magnetic Field Power Amplifier

**Technology** enables our amplifiers to deliver more current, more power and more voltage than competitively-priced designs while dealing with demanding, variable speaker impedances. While many amplifier designs claim "low impedance capability", their output voltage or current suffers in the process since all three specifications are interactive. Carver Magnetic Field Amplifiers are capable of delivering both high voltage and high current simultaneously into modern speaker designs which can swing as low as two ohms in certain frequency ranges.

Carver's patented power supply system is a fully regulated design normally used only in esoteric aerospace electronic instrumentation. It accesses more of each AC line voltage cycle and can draw 200% more current than conventional designs. With dynamic switching between three power "rails" depending on

demand, and a distributed capacitance system with extremely high energy storage capabilities, Magnetic Field amplifiers can deliver up to 500% more current during musical peaks. At impressive power outputs and into a wide range of both resistive and reactive speaker loads.

● Transfer Function Technology. The "T" in Magnetic Field Power Amplifier model numbers signifies the t-modification process which Bob Carver has perfected over the last two decades. A process which can give you many of the sonic characteristics of our \$17,500 Silver Seven tube amplifier in solid state designs costing a fraction as much. Every amplifier design exhibits a unique relationship between its input and output signals. Like human fingerprints, this transfer function is distinct, defining much of the sonic character of the design.

Bob has perfected the art of precisely measuring an ultra-expensive, esoteric amplifier's transfer function, and then closely duplicating it in a different amplifier design! This process is not magic and cannot turn a low quality design into an audiophile power amplifier. In fact, the amplifier being "t-mod-ed" must, in many ways, be the equal of the design whose transfer function is being replicated. Only after these parameters are met, does Bob Carver apply his t-mod wizardry to give you a warm, natural — and eminently affordable — sound.

● Sonic Holography<sup>®</sup> and Sonic Holography<sup>®</sup>-A/VP technologies recreate sound the way nature intended us to hear it. By definition, conventional stereo cannot. During a live performance, each ear hears just one sound arrival from a sonic event. At home, each ear receives two sound arrivals because both ears



**Carver Corporation** is one of the largest consumer audio manufacturers left in the United States. We employ over 300 people at our 75,000 square-foot facility in Lynnwood, Washington, just north of Seattle. All products are designed by Bob Carver and our team of dedicated electronic engineers, and all undergo rigorous quality control before shipment to our dealers across the nation.

**Carver's exclusive technology and how it benefits you.** When you consider the bewildering array of brands and models available today, it's easy to conclude that all audio equipment is pretty much alike. Unlike other companies, which have felt compelled to constantly release "me-too" products, Carver has deliberately set out to solve previously insoluble problems. Problems which can limit your musical enjoyment. Through painstaking research, innovative circuit engineering — and a deep love of music — we have produced totally new technologies which help our products stand out from the mass of electronics on your dealer's shelves.



**Bob Carver**, Chairman of The Board and Vice President of Advanced Research, is actively involved in the day-to-day development of Carver audio components. Physicist, circuit engineer, inventor and acknowledged expert on psychoacoustics, Bob provides the company with a single-minded innovative vision which is lacking in many conventional mass-technology audio manufacturers.

are exposed to both stereo speakers. Our brain's neural processing is confused; a collapsed sound field results. Sonic Holography® detects, analyzes and cancels spurious second sound arrivals, restoring the wide spacial sound field of a live performance. The performance seems to engulf the listener with a sound field that is higher, wider and deeper than the loudspeakers. Or, as one critic put it "...the effect strains credibility — had I not experienced it, I probably would not have believed it."

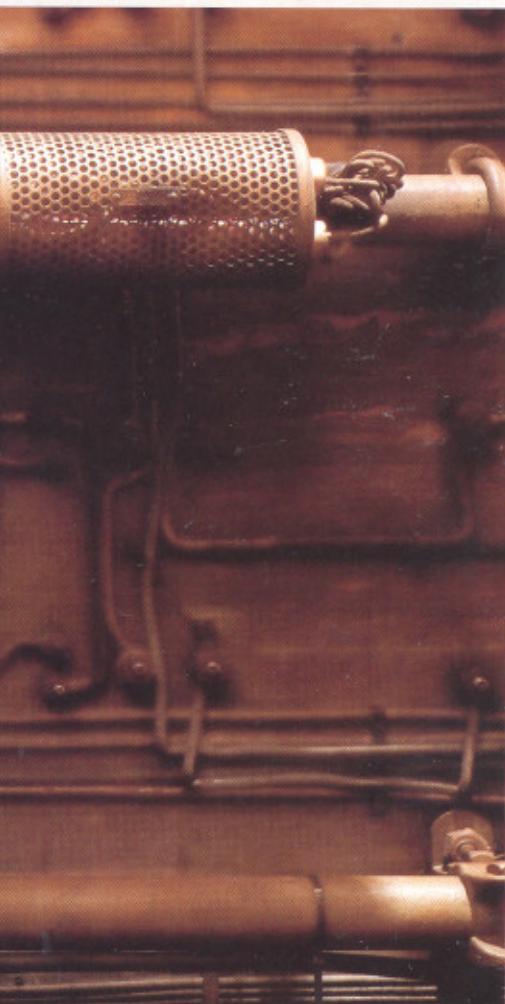
Our new Sonic Holography®-A/VP further enhances the multi-dimensional effect for home audio/video theater applications. A special *Precognition* circuit dynamically reacts to the amount of stereo and mono information in a movie soundtrack, expanding and narrowing the sound field to preserve dialog centering yet creating a spectacular, 3-dimensional sonic

image which can be enjoyed by a whole room full of people. A *Blend* control is also provided on selected Carver components which allows the listener to freely adjust the amount of stereo information in any sound source.

● **Asymmetrical Charge-Coupled FM Detection Technology.** Because FM stereo transmission is inherently prone to multipath interference, even the most "advanced" conventional tuner circuitry is forced to deal with a potentially flawed signal. Only Carver ACCD Tuner Circuitry is capable of restoring literally transforming a multipath-ridden FM station into a clean, clear signal. It separates the FM signal's stereo (L-R) and mono (L+R) components, rejecting up to 80% of the fragile, distortion-filled stereo signal. The 15%-20% of the signal that's "clean" is used to accurately recreate the rest of the stereo signal. You hear quiet, clear FM with accurate

frequency response, wide dynamics and ambient stereo information...even when a high portion of the L-R (stereo) FM signal is being ravaged by multi-path.

● **Digital Time Lens Technology.** A significant portion of analog-to-digital (AAD) compact disc releases exhibit audible differences when compared with well-mastered analog versions of the same recording. For various technical reasons, AAD discs often have 1) overall octave-to-octave energy balance shifted towards more midrange above 4kHz; 2) a significant reduction in the amount of L-R signal which provides crucial spacial information. Bob Carver's Digital Time Lens circuitry restores the spectral balance originally intended by the musician and recording engineer and restores ambient effects. The result is a warmer, more natural sound that places you in the same space with performers.



*The Silver Seven.* Considered by many critics and serious audiophiles to be the world's definitive reference power amplifier (reviews available upon request). \$17,500.00 per pair complete with granite base, separate power supply, hand-machined aluminum transformer end bells, Wonder Caps, Leitz wiring, pure silver solder and fifteen imported vacuum tubes per side.

## Power Amplifiers



**Silver Seven-t Mark II** Simultaneous High Current/High Voltage Monoblock Reference Magnetic Field Power Amplifier Sets new standards for sonic quality and robust output at any impedance • Silver Seven Transfer Function Modified • 550 watts into 8 ohms, 20-20kHz with no more than 0.5% THD • 900 watts into 4 ohms, 20-20kHz with no more than 0.5% THD • 1000 watts into 2 ohms, 20-20kHz with no more than 0.5% THD • Lighted analog power meter • Shock-isolation mounting • Black finish • 2 required for stereo • Capable of high output into very low impedance loads for sustained periods. We invite you to send for a free White Paper explaining simultaneous high current and high voltage and its sonic benefits.



**TFM-45 / TFM-42** Simultaneous High Current/High Voltage Magnetic Field Power Amplifiers Our most powerful stereo amplifier designs with your choice of power output displays, the TFM-42 and TFM-45 can bring any speaker system under tight, authoritative control, yet with a warmth that rivals tube designs • Silver Seven Transfer Function Modified • 375 watts RMS/channel into 8 ohms, 20-20kHz with no more than 0.5% THD • 500 watts RMS/channel into 4 ohms, 20-20kHz with no more than 0.5% THD • 1000 watts bridged mono • TFM-45 features analog power meters; TFM-42 employs a "ladder" LED display with clipping light



**TFM-25 / TFM-22** Simultaneous High Current/High Voltage Magnetic Field Power Amplifiers Eminently affordable and yet astonishingly powerful, the TFM-22 and TFM-25 are designed to drive many popular speaker designs whose overall impedance fluctuations can tax conventional amp designs • Silver Seven Transfer Function Modified • 225 watts RMS/channel into 8 ohms, 20-20kHz with no more than 0.5% THD • 350 watts RMS/channel into 4 ohms, 20-20kHz with no more than 0.5% THD • 600 watts bridged mono • TFM-25 features analog power meters; TFM-22 employs LED power overload/clipping indicators



**TFM-15** High Headroom/Low Feedback Stereo Power Amplifier Silver Seven Transfer Function Modified • 100 watts RMS/channel into 8 ohms, 20-20kHz with no more than 0.1% THD, 140 watts RMS/channel into 4 ohms, 20-20kHz with no more than 0.1% THD, 200 watts dynamic power into 2 ohms • Dual analog meters with level selection • A/B speaker switching • L/R input level controls



**AV-Sixty Four** 3/4-Channel Special Applications Magnetic Field Power Amplifier • Designed for surround sound, multi-room and satellite/subwoofer use • Built-in 2-way, 18dB/octave electronic crossover w/75Hz turnover point • 60 watts, 4 channels driven into 8 ohms, 20-20kHz with no more than 0.5% • 100 W x 4 into 4 ohms, 20-20kHz with no more than 0.5% • 3-ch. operation: 180 W ch. 1/2 bridged, 60Wx 2 ch. 3 & 4 output • Rear panel trim/balance controls

## Integrated Amplifier



**CM-1090** Remote Control Sonic Holography™ Integrated Amplifier with Transfer Function Modified Power Section • Silver Seven Transfer Function Modified • 100 watts/channel RMS into 8 ohms, 20-20kHz with no more than 0.1% THD • Analog power meters • 5 audio inputs • Motorized volume control • 3-band tone controls • Dual tape monitors w/dubbing • Pre/main outputs • Remote compatible w/Carver tuners and CD Players

## Preamplifier/Tuners



## Preamplifiers



## Receivers

**CT-17** Remote Control A/V Preamplifier/Tuner with Sonic Holography™, Dolby Pro Logic™ and ACCD • Dolby Pro Logic 5-channel surround sound processor • Variable Hall & Stadium ambience delay • Sonic Hologram Generator • 2 video inputs w/dubbing & TV monitor out • 5 audio inputs incl. CD direct • Full remote control including rear channel surround level • Motorized volume control • Asymmetrical Charge-Coupled FM Detector • 20 FM/AM presets w/preset scan, stereo/mono, auto/manual controls • Simulated stereo synthesis for mono video • 3-way tone controls • Dual tape monitors • High cut filter • Separate input/record selector & remote volume control for dual-zone room-to-room



**CT-7** Remote Control Preamplifier/Tuner with Sonic Holography™ and ACCD • Sonic Hologram Generator • 6 audio inputs • 27-button wireless infrared remote w/Carver CD player compatibility • Asymmetrical Charge-Coupled FM Detector • 18 FM/AM presets w/preset scan, stereo/mono, auto/manual controls • 3-way tone controls • Dual tape monitors w/dubbing • Mono button • Loudness equalization circuitry • Headphone monitor jack



**CT-6 PRO-PHILE™ Series Ultra-thin Preamplifier/Tuner with Sonic Holography™ and ACCD** • Just 1-3/4" tall (1 rack space) • 28-button remote control • 20 random AM/FM station presets • Asymmetrical Charge-Coupled FM circuitry • FM mono • Preset scan • Auto-scan/manual tuning • 3-level signal strength indicator • Sonic Hologram Generator • 4 audio inputs • 2 tape inputs w/dubbing • Bass/treble & loudness equalization • Balance control • Motorized volume control • 2 AC convenience outlets • Stereo headphone monitor jack



**C-19 Hybrid Vacuum Tube/Solid State Reference Preamplifier** • 4 6DJ8 tubes in phono, tone & output stages • 5 inputs incl. MM phono, MC phono & CD Direct • L/R tone controls w/variable turnover points • Spectral Tilt tone control • 2 ext. processor loops • 2 tape loops w/dubbing • Headphone jack w/speaker defeat switch • Infrasonic filter • Stereo/mono switch • Absolute phase switch



**C-16 Preamplifier with Sonic Holography™** • 5 audio inputs incl. MM and MC phono • Sonic Hologram Generator with Blend Control • Individual L/R tone controls w/variable turnover • Spectral Tilt full range tone control • Dual external processor loops • Dual tape monitors w/dubbing • Headphone output w/speaker defeat switch



**TX-11b Asymmetrical Charge-Coupled Detection FM + Stereo AM Tuner** • Ultra-High Performance Asymmetrical Charge-Coupled FM Detection circuit for dramatically reduced multipath and noise • 13 FM/AM presets • 3-week memory back-up • Preset scan • Auto/manual tuning • Wide/harmon FM band selection • New AM stereo circuitry • Full 20-15kHz frequency/-70dB noise in AM Stereo tuning mode • AM Gain and AM Noise Elimination circuits



**C-11 Preamplifier with Sonic Holography™-A/VP** • 5 audio inputs incl. MM and MC phono • Sonic Hologram Generator with audio/video Precognition circuitry • Individual L/R tone controls • Loudness equalization • Infrasonic filter • External processor loop • Dual tape monitors w/dubbing • Headphone output w/speaker defeat switch



**TX-12 Remote Control Asymmetrical Charge-Coupled Detection FM/AM Tuner** • Advanced, logic-controlled Asymmetrical Charge-Coupled FM Detection circuit for dramatically reduced multipath and noise • 20 FM/AM presets • Preset scan • Auto/manual tuning • Stereo/mono switch • Analog signal strength meter • Dual antenna inputs • 28-button multi-function remote control



**C-5 PRO-PHILE™ Series Ultra-thin Dual-zone Preamplifier with Sonic Holography™** • Just 1-3/4" tall (1 rack space) • 33-button remote control • Dual-zone feature provides 2 different output signals simultaneously for remote room sound systems (2 independent sets of outputs) with 2nd system source selection and volume control on both remote and C-5 front panel • Mini-phone remote sensor input for infrared relay systems • Sonic Hologram Generator • 6 audio inputs • 2 tape inputs w/dubbing • Bass/treble & loudness equalization • Balance control • Motorized volume control • 2 AC convenience outlets • Stereo headphone monitor jack



**TX-10 Asymmetrical Charge-Coupled Detection FM/AM Tuner** • Asymmetrical Charge-Coupled FM Detection for dramatically reduced multipath and noise • 20 FM/AM presets • Auto/manual tuning • LED signal strength meter



## Compact Disc Players



**TL-3300** 18-Bit/8X Oversampling Remote Control DTL Compact Disc Player • 352.8kHz 18-bit oversampling • Dual D/A converters • Digital Time Lens sound enhancement circuitry for improved tonal balance and ambience • 22-track programming • Search, repeat, skip, scan functions • Full-function random access remote control • Remote compatibility with Carver Sonic Holography® Receivers



**TL-3220** 18-Bit/8X Oversampling Remote Control DTL Compact Disc Player • 352.8kHz 16-bit oversampling • Dual D/A converters • Digital Time Lens sound enhancement circuitry • 32-track programming w/ 10-key front panel input • Random play • Delete programming • Intro scan • Search, repeat, skip, scan functions • Full-function, random access remote w/volume control • Remote compatibility w/Carver Sonic Holography® Receivers



**TL-3200** 16-Bit/8X Oversampling Remote Control DTL Compact Disc Player • 352.8kHz 16-bit oversampling • Dual D/A converters • Digital Time Lens sound enhancement circuitry • 32-track programming • Random play • Delete programming • Intro scan • Search, repeat, skip, scan functions • Full-function, random access remote w/volume control • Remote compatibility w/Carver Receivers



**TL-3100** 16-Bit/4X Oversampling Remote Control DTL Compact Disc Player • 176.4kHz 16-bit oversampling • Dual analog filters • Digital Time Lens sound enhancement circuitry • 22-track programming • Search, repeat, skip, scan functions • Full-function random access remote control • Remote compatibility w/Carver Receivers



**TLM-3600** Remote Control 10-CD Changer with 18-Bit/8X Oversampling and DTL • Uses Carver TLM-10 pop-in magazines • 32-track random programming • Intro Scan • Random Play • 352.8kHz 18-bit oversampling • Dual D/A converters • Digital Time Lens sound enhancement circuitry • Search, repeat, skip, scan functions • Full-function random access remote control

## RemoteSystemLink<sup>SM</sup>



**Carver RemoteSystemLink<sup>SM</sup>** lets you enjoy one stereo system all over your home. Any infrared remote controlled component in your main system can be activated from and enjoyed in any room. Since you don't need special stereo components, the system never becomes obsolete. Each RemoteSystemLink-equipped room features a wall-mounted infrared receiver with optional keypad (which fits in a standard switch or receptacle box) and a special power amplifier which can be mounted in a closet or cabinet. Use the remotes which came with your components along with a basic Carver RH-1 remote, or choose our convenient PRH-1 Universal Programmable Remote. Either way, RemoteSystemLink<sup>SM</sup> replaces complication with convenience. And you can even listen to a separate in-room source such as a portable CD player or VCR while other RemoteSystemLink<sup>SM</sup> zones enjoy a different musical program. Consult your Carver dealer for specifications and installation information.

## Cassette Decks



## Accessories



## Add-on Spacial Enhancement



## Amazing Loudspeaker Systems

**TD-1200** Cassette Deck • Dolby B/C • Dolby HX Pro for increased high frequency headroom • Adjustable bias • Adjustable tape equalization • Adjustable play trim • MPX FM taping filter • Feather touch logic transport controls • Dual fluorescent meters • Analog meters with peak LED • Metal tape capability

**TD-1400** Remote Control Cassette Deck • Dolby B/C • Dolby HX Pro • Adjustable bias • Adjustable tape EQ • Adjustable play trim • MPX FM taping filter • Feather touch logic transport controls • Dual analog meters with peak LED • 8-function remote control

**TDR-1500** Auto-Reverse Remote Control Cassette Deck • Quick-reverse optical sensor system • Dolby HX Pro • Dolby B/C NR • Adjustable bias • Dual fluorescent meters • Digital footage counter • High conductivity oxygen-free REC/PLAY head core • MPX FM taping filter • Auto tape EQ select • Memory rewind and repeat • Feather touch logic transport controls • Headphone jack • 8-function wireless remote control

**TD-1700** 3-Head Dual-Capstan Remote Control Cassette Deck • Closed loop dual capstan transport • Dolby HX Pro • Double Dolby B/C NR • Adjustable bias • REC level fine tuning • Dual fluorescent meters • Digital footage counter • High conductivity oxygen-free REC/PLAY head cores • MPX FM taping filter • REC mute • Memory rewind and repeat • Feather touch logic controls • Headphone jack • 8-function remote

**TDR-2400** Double-Auto-Reverse Dubbing Cassette Deck • Multi-function remote • Dual auto-reverse mechanisms • Continuous and relay play capability • High speed dubbing • Dolby HX Pro • Dolby B/C NR • Dual peak-reading LED meters • REC mute • Digital footage counter • Music Search • MPX FM taping filter • Auto tape EQ select • Memory rewind and repeat • Feather touch logic transport controls • Headphone jack • Stereo microphone input

**PRH-1** Universal Remote Control learns up to 126 infrared remote functions • Labeled buttons for all common CD, VCR, TV, tape, tuner, receiver remote functions, Pro Logic Surround Sound plus special Carver features such as DTL and Hologram • Easy-to-understand "plain English" manual

**MCT** Mirror-Image Geometry Moving Coil Transformer allows use of MC cartridges with preamplifiers or receiver which only have MM phono inputs • Fully passive dual transformer design • Oxygen-free windings • Seamless mu metal shielding • Switchable impedance • 24dB gain

**Z-1** Wide Band Speaker-To-Power-Amp Coupler converts receiver or integrated amp's speaker outputs to line level signal for power amplifier inputs. If it has speaker outputs, it can be used as a signal source to drive a powerful Carver Magnetic Field Amplifier

**H-9AV** Audio/Video Sonic Hologram Generator with Precognition Dynamic Video Sound Circuitry adds advanced, second-generation Sonic Holography™-A/V to any preamplifier, integrated amplifier or receiver w/tape monitor or external processor circuitry • Precognition circuitry for optimized video soundtrack Sonic Hologram Generation • Precognition level control • Vocal Zoom dialog processor • Additional L-R outputs for advanced multi-channel installations • Connects to any preamplifier/receiver/integrated amplifier tape monitor or external processor loop



### Platinum Edition Amazing Loudspeaker

• Available in natural oiled oak veneer or piano-lacquer black finishes • 60-inch full range ribbon driver • 4 specially-designed 12-inch long-excursion subwoofers • 23-40kHz frequency response ±3dB • 110 dBA maximum SPL • 750 watt power handling • 30" W x 66" H x 10" D

**Silver Edition** Amazing Loudspeaker • Available in natural oiled oak veneer or piano-lacquer black finishes • 48-inch full range ribbon driver • 3 specially-designed 12-inch long-excursion subwoofers • 23-40kHz frequency response ±3dB from reference level • 110 dBA maximum SPL • 600 watt power handling • 27-1/2" W x 54" H x 10" D

### Amazing Loudspeaker Planar/Ribbon technology

The Silver and Platinum Edition Amazing Loudspeakers are pure, uninterrupted line sources of proprietary ribbon drivers, edge-mounted in a specially shaped trapezoidal panel with a phalanx of state-of-the-art low mass subwoofer drivers delivering solid bass support. The infinitely detailed, electrostatic-like high end, pure midrange and sonorous high bass have a coherency and immediacy which is at once musical and yet totally transparent and uncolored. Yet at the same time a remarkable un-enclosed subwoofer system produces stunningly tight low bass — without a trace of the resonant boom normal enclosures can produce.

## Speaker Control



**ECS-U** Electronic Speaker Control System A 5-way "tool kit" which can add significant flexibility to the sound of any speaker system • 5 sonic enhancement/adjustment circuits • Line level signal processor loop operation • Sonic Hologram Generator optimized for planar or reflecting type loudspeakers • Adjustable Sub-Bass restoration • Gundee Perspective presence circuit • Variable Bass "Q" adjustment • High frequency trim • Connects to any preamplifier/integrated amplifier tape monitor or external processor loop

## Dolby Pro Logic Surround Sound

**DPL-33** Dolby Pro Logic Decoder/Spatial Processor/Amplifier (photo not available at time of brochure publication - call 1-800-CAVR for additional information) • Adds on to any stereo receiver, integrated amplifier or preamplifier/power amplifier combination via tape monitor or external processor loop • Dolby Pro Logic decoding with Automatic Balance Adjustment • Provides 25 watts amplification for rear left, rear right and CENTER Dolby Pro Logic channels • "Hall" delay processing for spacious effect from non-Dolby-encoded sound sources • 2 delay settings • 24-LED array provides output display for front left, front right, center and surround channels • Rear, center and motorized master volume controls • Full remote control • Additional tape monitor loop

## Specifications

### POWER AMPLIFIERS AND POWER AMP SECTIONS

	SS-1 Mark II	TFM-45/TFM-42	TFM-25/TFM-22	TFM-15	AV-64	CM-1090	HR-772	HR-752	HR-722	DPL-33
8-ohm FTC rated power/ch.	555 W	375 W	225 W	100 W	60 Wx4	100 W	140 W	100 W	60 W	25 W/ch.
4-ohm FTC rated power/ch.	900 W	500 W	350 W	140 W	100 Wx4	150 W	150 W	150 W	90 W	—
2-ohm dynamic power/ch.	1000 W	560 W	560 W	200 W	40 Wx4	80 W	100 W	80 W	80 W	—
Bridged mono power	—	1000 W	600 W	—	180 W (ch.1)	—	—	—	—	—
4/8-ohm FTC rated THD	0.5%	0.5%	0.5%	0.1%	0.15%	0.1%	0.1%	0.1%	0.1%	0.05%
Rated full power bandwidth	20-20kHz	20-20kHz	20-20kHz	20-20kHz	20-20kHz	20-20kHz	20-20kHz	20-20kHz	20-20kHz	20-20kHz
S/N-IHF A-Weighted,dB	>100	>100	>100	100	100	85	90	85	85	85
Dimensions (HxWxD inches)	7x11.5x14.5	4.25x19x10.5	4.25x19x10.5	3.5x19x12	4.25x19x10.5	4.5x19x13	19x5.5x18	4.25x19x14.5	4.25x19x14.5	(see below)
Comments	Mono	Stereo	Stereo	Stereo operation	3/4 ch. operation w/ built-in crossover	Integrated stereo amplifier	Stereo receiver	Stereo receiver	Stereo receiver	Provides power for center & rear surround ch.'s

### TUNERS AND TUNING SECTIONS

	TX-11B	TX-12	TX-10	CT-17	CT-7	CT-6	HR-772	HR-752	HR-722
IHF sensitivity mono/stereo,dBf	11.3/16.3	14.5/18.6	16.1/23.5	14.3/20.1	10.3/20.1	10.3/21.3	11.3/—	12.3/—	12.3/—
Capture ratio,dB	1.0	1.45	1.5	1.4	1.5	1.5	1.5	3.0	3.0
AM Suppression,dB	65	62	62	62	62	74	65	62	62
Alt. ch. selectivity,dB	35/90	60	58	72	72	72	72	72	72
Separation at 1kHz.,dB	45	42	42	46	50	48	46	46	46
THD at 1kHz, stereo	0.05%	0.02%	0.2%	0.1%	0.02%	0.15%	0.15%	0.15%	0.15%
Maximum S/N, stereo, dB	85	76	74	78	78	72	70	78	78
Station presets	13	20	20	20	16	20	20	20	20
Dimensions (HxWxD, inches)	3.5x19x12.5	3x19x8	3x19x8	3.5x19x12.25	3.5x19x12.25	1.75x19x10	(see Amp section) receiver	(see Amp section) receiver	(see Amp section) receiver
Comments	incl. AM stereo	remote control		preamp/tuner	preamp/tuner				

### PREAMPLIFIERS AND PREAMP SECTIONS

	C-19	C-16	C-11	CT-17	CT-7	C-5/CT-6	CM-1090	HR-772	HR-752	HR-722
Frequency response	1-60kHz ±0.-3dB	1-60kHz ±0.-3dB	1-60kHz ±0.-3dB	20-20kHz ±1dB	20-20kHz ±1dB	20-20kHz ±1dB	20-20kHz ±1dB	20-20kHz ±1dB	20-20kHz ±1dB	20-20kHz ±1dB
Maximum output	7V	7V	6V	7V	7V	8V	—	—	—	—
Total Harmonic Distortion	0.07%	0.01%	0.04%	0.04%	0.01%	0.1%	(see Amps)	(see Amps)	(see Amps)	(see Amps)
S/N-IHF A-weighted	85	97	96	98	98	74	(see Amps)	(see Amps)	(see Amps)	(see Amps)
Phono sens. for 0.5V@1kHz	1.5	1.5	1.5	1.5	1.5	1.5	1.5	2.5	1.5	1.5
MM Phono Overload mV	100	135	100	100	100	100	100	150	100	100
Phono input capacitance pF	150	150	Selectable	150	150	150	150	150	150	150
MM S/N A-wtd. 0.5V ref.	86	100	100	100	100	78	78	85	78	78
MC S/N A-wtd. 0.5V ref.	82	89	86	—	—	—	—	—	—	—
Tone Controls	Indiv. L/R 2-band	Indiv. L/R 2-band	Indiv. L/R	3-band	3-band	3-band	3-band	5-band	3-band	3-band
Inputs	Spectral Tilt	Spectral Tilt	2-band							
Dimensions (HxWxD, inches)	5x19x10	4.25x19x10	3.5x19x10	2 video/5 audio (See Tuners)	7 audio (See Tuners)	5/6 audio (See Amps)	2 video/5 audio (See Amps)	5 audio (See Amps)	5 audio (See Amps)	5 audio (See Amps)
Comments	6DJ8 tubes in 3 stages	Sonic Holography™ Holography™ w/Blend	Sonic Holography™ A/V/P	Dolby Pro Logic	Sonic Holography™	Sonic Holography™	Holography™	Sonic Holography™	Sonic Holography™	Sonic Holography™

### CASSETTE DECKS

	TD-1200	TD-1400	TDR-1500	TD-1700	TDR-2400
Frequency response w/best tape	30Hz-20kHz ±3dB	30Hz-20kHz ±3dB	20Hz-20kHz ±3dB	20Hz-20kHz ±3dB	20Hz-20kHz ±3dB
S/N w/best noise reduction	76	78	78	78	74
Noise reduction type	B/C/HX Pro	B/C/HX Pro	B/C/HX Pro	B/C/HX Pro	B/C/HX Pro
Wow & flutter A-weighted	0.05%	0.05%	0.065%	0.035%	0.08%
Dimensions (HxWxD, inches)	4.5x19x11.5	4.5x19x11.5	4.8x19x11.5	4.5x19x11.5	5.25x19x11.5
Comments	Remote control	Remote control	Remote control	Remote auto-rev.	Dubbing
	Analog meters	Auto-reverse	3-head		

### ADD-ON ENHANCEMENTS

	H-9AV	ECS-U	DPL-33
Frequency response	1-60kHz+0.-0.3dB	5-80kHz+0.-0.3dB	1-60kHz+0.-0.3dB
Maximum output	4V	4V	—
Total Harmonic Distortion	0.05%	0.1%	0.05%
S/N-IHF A-Weighted	90dB	90dB	85dB
Dimensions (HxWxD, inches)	1.75x19x3.88	2.5x9x7	3x19x10
Comments	Sonic Holography™-A/VP	Spkr. Ctl. Center	Dolby Pro Logic +amplification

### COMPACT DISC PLAYERS

	TLM-3600	TL-3300	TL-3220	TL-3200	TL-3100
Decoding system	18-bit/8X	18-bit/8X	18-bit/8X	16-bit/8X	16-bit/4X
Output filtration	Analog	Analog	Analog	Analog	Analog
Frequency response	5Hz-20kHz ±0.2dB	5Hz-20kHz ±0.2dB	5Hz-20kHz ±0.2dB	5Hz-20kHz ±0.2dB	5Hz-20kHz ±0.2dB
S/N-IHF A-weighted	110	100	100	100	96
Total Harmonic Distortion	0.005%	0.002%	0.003%	0.003%	0.005%
Disc capacity	10	1	1	1	1
Programmable selections	32	22	32	32	20
Dimensions (HxWxD, inches)	4.25x19x13.25	3.5x19x12	3.5x19x12	3.5x19x12	3.5x19x10
Comments	Magazine loading DTL	DTL,10-key on front panel	DTL, 10-key on front panel	DTL	DTL

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Because Carver constantly strives to integrate new technologies, materials and manufacturing methods, all product specifications are subject to change without notice, although they will always meet or exceed published figures.

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**About our power amplifier distortion specifications.** Why aren't they as low as some other brands? Because Carver is concerned with sound quality, not "specmanship". Ultra-low Total Harmonic Distortion numbers are easy to create by using excessive negative feedback in amplifier circuitry. The result is an impressive THD figure, but often a harsh, brittle sound as well. Extensive psychoacoustic tests have established that even critical listeners cannot detect distortion under 2%. However, excessive negative feedback is very audible. It is interesting to further note that super-low THD is not a priority among audiophile amplifier designers: The world's finest (and most expensive) power amplifiers, including our own Silver Seven, have between 0.5% and 1% THD!

# CARVER

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