75th Anniversary





Dual products 1975/76

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Make your sound system a Dual — the equipment that gives you sound that's absolutely true to the original. You'll find a perfect choice in every price range, for both stereo and quadraphonic sound. Because Dual offers a comprehensive, advanced selection of audio equipment: single units, complete systems, components in all power output categories, accessories . . . with almost limitless possibilities for system combinations.

The Dual name is well-known on all continents. Known for high manufacturing standards, technical precision and very reasonable prices. This is confirmed by independent laboratory tests conducted by leading international audio publications, where year after year, Dual equipment scores with the best product ratings. Advanced engineering principles and meticulous inspection mean that from concept to finished product, a Dual is made for true-to-life sound reproduction.

Use this catalog as an introduction to Dual HiFi equipment and as a basis for discussions with your dealer. Your dealer can then given you additional information and also provide valuable listening demonstrations.

Dual Gebrüder Steidinger D-7742 St. Georgen/Schwarzwald Federal Republic of Germany

Dual Turntables, Dual Cassette Deck



Many listeners who are knowledgeable about music and about HiFi equipment are finding more enjoyment from their records by using a Dual turntable. The clear, faithfully reproduced sound they hear confirms the Dual concept of quality — and quality at a reasonable price.

Several types of turntables and the high performance Dual stereo cassette deck introduce our HiFi line. On the next pages you'll find Dual turntables (designated »CS«) that are ready for connection to an amplifier. These models come complete with cartridge, base and cover, and can be connected to stereo and quadraphonic amplifiers, receivers and radios.

The Dual auto/reverse cassette deck is a HiFi recording and playback unit for use with compact tape cassettes. The deck has been developed by Dual, and is manufactured by Dual in Germany for the international HiFi market. Its special features and precision performance make it the choice of audiophiles throughout the world.

Dual turntables and the cassette deck meet the standards set by DIN 45 500 for HiFi home studio equipment, and even surpass these requirements in several important respects. So look into a Dual HiFi unit for your home. You'll be joining discerning music lovers throughout the world — listeners who rely on Dual for true high fidelity reproduction.

Dual CS 7, Dual 430 Turntable Dual CS 1224, Dual 1224 Automatic Turntable

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Dual CS 7 walnut finish
Dual CS 7 W white

Ready-to-install turntable module with Dual 430, Dual K 12 base and Dual H 12 cover.

Dimensions: 310 x 116 x 235 mm (W x H x D) Weight: 3.2 Kg

Dual 430 — Semi-Automatic Stereo Turntable

- Dual single-phase induction motor
- Laminated steel platter
- $-33^{1/3}$ and 45 rpm
- Counterbalanced tubular aluminum tonearm
- Dual CDS 660 stereo ceramic cartridge with Duplo sapphire stylus
- Cue control with automatic shut-off on tonearm return

Dual 430 - Chassis

Dimensions: 280 x 205 mm (W x D)

Weight: 2.3 Kg

Technical data: Page 66

Dual CS 1224 walnut finish
Dual CS 1224 W white
Dual CS 1224 S black
Ready-to install automatic turntable

module with Dual 1224, Dual K 16 base and Dual H 14 cover.

Dimensions: 364 x 146 x 312 mm (W x H x D) Weight: 5.5 Kg



Dual 1224 — Manual and Automatic Single-Play Turntable with Multi-Play Facility

- Dual single-phase induction motor
- Laminated steel platter
- $-33^{1/3}$ and 45 rpm
- Pitch control with calibration
- Counterbalanced tubular aluminum tonearm
- Continuously adjustable tracking force of 0-5.5 grams
- Dual CDS 660 stereo ceramic cartridge with Duplo sapphire stylus
- Continuously variable antiskating system
- Automatic start/stop
- Viscous-damped cue control

Dual 1224 - Chassis

Dimensions: 329 x 274 mm (W x D)

Weight: 3.9 Kg



Dual CS 1225 walnut finish
Dual CS 1225 W white
Dual CS 1225 S black

Ready-to-install HiFi automatic turntable module with Dual 1225, Dual K 16 base and Dual H 14 cover.

Dimensions: 364 x 146 x 312 mm (W x H x D) Weight: 5.7 Kg



Dual 1225 — Manual and Automatic HiFi Single-Play Turntable with Multi-Play Facility

- Dual 4-pole induction motor
- Laminated steel platter
- 33¹/₃ and 45 rpm
- Pitch control with calibration
- Counterbalanced tubular aluminum tonearm
- Low capacitance tonearm leads for CD 4 quadraphonic reproduction
- Continuously adjustable tracking force of 0–5.5 grams
- Dual DMS 210 magnetic cartridge
- Continuously variable antiskating system
- Automatic start/stop
- Viscous-damped cue control

Dual 1225 - Chassis

Dimensions: 329 x 274 mm (W x D)

Weight: 4.1 Kg

Technical data: Page 66

The Dual 1225 surpasses the requirements in DIN 45 500 for HiFi home studio equipment.



Dual CS 1226 walnut finish
Dual CS 1226 W white enamel
Dual CS 1226 S black

Ready-to-install HiFi automatic turntable module with Dual 1226, Dual CK 17 base with automatic tilt-hold and Dual CH 6 cover.

Dimensions: 420 x 148 x 365 mm (W x H x D) Weight: 7.3 Kg



Dual 1226 — Manual and Automatic HiFi Single-Play Turntable with Multi-Play Facility

- Dual 4-pole induction motor
- 1.8 Kg die-cast platter
- $-33^{1/3}$ and 45 rpm
- Pitch control with calibration
- Counterbalanced tubular aluminum tonearm
- Low capacitance tonearm leads for CD 4 quadraphonic reproduction
- Continuously adjustable tracking force of 0–5 grams
- Shure M 75 Type D magnetic cartridge
- Continuously variable antiskating system
- Automatic start/stop
- Viscous-damped cue control

Available only as Dual CS 1226 complete with base and cover.
Technical data: Page 66

The Dual 1226 surpasses the requirements in DIN 45 500 for HiFi home studio equipment.



Dual CS 1228 walnut finish
Dual CS 1228 W white enamel
Dual CS 1228 S black

Ready-to-install HiFi automatic turntable module with Dual 1228, Dual CK 17 base with automatic tilt-hold and Dual CH 6 cover.

Dimensions: 420 x 148 x 365 mm (W x H x D) Weight: 7.4 Kg



Dual 1228 — Manual and Automatic HiFi Single-Play Turntable with Multi-Play Facility

- Compact top-quality HiFi automatic turntable
- Dual synchronous 4-pole motor
- 1.8 Kg die-cast platter
- $-33^{1/3}$ and 45 rpm
- Variable pitch control with calibration
- Illuminated strobe for exact speed control
- Counterbalanced tubular aluminum tonearm with 4-point gimbal suspension
- Low capacitance tonearm leads for CD 4 quadraphonic reproduction
- Continuously adjustable tracking force of 0-5 grams, operable from 0.5 gram
- Shure M 95 G-LM magnetic cartridge
- Continuously variable antiskating system
- Tracking angle selector
- Automatic start/stopViscous-damped cue control

Dual 1228 - Chassis

Dimensions: 329 x 274 mm (W x D)

Weight: 4.5 Kg

Technical data: Page 66

The Dual 1228 surpasses the requirements in DIN 45 500 for HiFi home studio equipment.



Dual CS 40 walnut finish Dual CS 40 W white enamel

Ready-to-install HiFi turntable module with Dual 1229, Dual CK 21 base, with adjustable height to accommodate multi-play spindle under closed cover; Dual CH 21 cover.

Dimensions: 420 x 192 x 372 mm (W x H x D) Weight: 10.4 Kg



Dual 1229 — Manual and Automatic HiFi Single-Play Turntable with Multi-Play Facility

- Professional quality HiFi automatic turntable
- Dual Continuous-Pole/synchronous motor
- 3.1 Kg die-cast platter, 305 mm diameter
- 331/s, 45 and 78 rpm
- Variable pitch control, range up to approx. 1 semi-tone
- Illuminated strobe for exact speed control
- Precision tubular aluminum tonearm
 with 4-point gimbal suspension
- Low capacitance tonearm leads for CD 4 quadraphonic reproduction
- Continuously adjustable tracking force of 0-3 grams, operable from 0.25 gram
 Shure DM 103 M-E magnetic cartridge
- Continuously variable antiskating system

- Mode Selector for maintaining correct vertical tracking angle
- Automatic start/stop
- Viscous-damped cue control

Dual 1229 — Chassis Dimensions: 376 x 308 mm (W x D) Weight: 7.2 Kg Technical data: Page 66

The Dual 1229 surpasses the requirements in DIN 45 500 for HiFi home studio equipment.



Dual CS 40 walnut finish
Dual CS 40 W white enamel

Ready-to-install HiFi turntable module with Dual 1229, Dual CK 21 base, with adjustable height to accommodate multi-play spindle under closed cover; Dual CH 21 cover.

Dimensions: 420 x 192 x 372 mm (W x H x D) Weight: 10.4 Kg



Dual 1229 — Manual and Automatic HiFi Single-Play Turntable with Multi-Play Facility

- Professional quality HiFi automatic turntable
- Dual Continuous-Pole/synchronous motor
- 3.1 Kg die-cast platter, 305 mm diameter
- 33¹/₃, 45 and 78 rpm
- Variable pitch control, range up to approx. 1 semi-tone
- Illuminated strobe for exact speed control
- Precision tubular aluminum tonearm
 with 4-point gimbal suspension
- Low capacitance tonearm leads for CD 4 quadraphonic reproduction
- Continuously adjustable tracking force of 0-3 grams, operable from 0.25 gram
- Shure DM 103 M-E magnetic cartridge
- Continuously variable antiskating system

- Mode Selector for maintaining correct vertical tracking angle
- Automatic start/stop
- Viscous-damped cue control

Dual 1229 - Chassis

Dimensions: 376 x 308 mm (W x D)

Weight: 7.2 Kg

Technical data: Page 66

The Dual 1229 surpasses the requirements in DIN 45 500 for HiFi home studio equipment.



Dual CS 601 walnut finish
Dual CS 601 W white enamel
Dual CS 601 S black

Ready-to-install HiFi automatic turntable module with Dual 601, Dual CK 24 base with automatic tilt-hold and Dual CH 6 cover.

Dimensions: 420 x 148 x 365 mm (W x H x D) Weight: 7.6 Kg



Dual 601 — Manual and Automatic HiFi Turntable with Belt Drive System

- Professional quality HiFi automatic turntable
- Ultra-quiet Dual synchronous 8-pole motor
- Precision belt-drive system
- Die-cast aluminum platter,
 305 mm diameter
- $-33^{1}/_{3}$ and 45 rpm, with automatic tonearm indexing coupled to speed selection
- Pitch control with Vario-Pulley
- Illuminated strobe for exact speed control
- Counterbalanced tubular aluminum tonearm with 4-point gimbal suspension
- Low capacitance tonearm leads for CD 4 quadraphonic reproduction
- Continuously adjustable tracking force of 0-3 grams, operable from 0.25 gram
- Dual M 20 E magnetic cartridge

- Continuously variable antiskating system
- Switchable continuous play mode

Available only as Dual CS 601 complete with base and cover.
Technical data: Page 66
The Dual 601 surpasses the requirements in DIN 45 500 for HiFi home studio equipment.

For more information, request Dual's special folder, 601 W 241.

Dual CS 701 walnut finish
Dual CS 701 W white enamel
Dual CS 701 S black

Ready-to-install HiFi automatic turntable module with Dual 701, Dual CK 24 base with automatic tilt-hold and Dual CH 6 cover.

Dimensions: 420 x 148 x 365 mm (W x H x D)

Weight: 10.9 Kg

Dual 701 — Manual and Automatic HiFi Turntable with Electronic Direct Drive System

- Dual EDS 1000 electronically controlled DC motor for direct drive of platter
- Dynamically balanced die-cast platter,
 305 mm dia., entire rotary mass of drive system 4.4 Kg
- 331/3 and 45 rpm
- Separate pitch control for each speed, adjustment range 10 %
- Speed fluctuation $<\pm 0.03$ %, rumble > 70 dB
- Illuminated strobe for exact speed control
- Counterbalanced tubular aluminum tonearm with 4-point gimbal suspension
- Low capacitance tonearm leads for CD 4 quadraphonic reproduction
- Continuously adjustable tracking force of 0-3 grams, operable from 0.25 gram
- Tonearm counterbalanced with two antiresonance filters to improve signal-tonoise ratio and tonearm pickup properties
- Shure V 15 Type III magnetic cartridge
- Continuously variable antiskating system

Dual 701 - Chassis

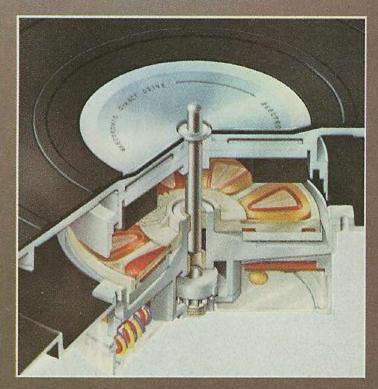
Dimensions: 376 x 308 mm (W x D)

Weight: 8.0 Kg

Technical data: Page 66

Dual EDS 1000 Motor — The EDS 1000 Motor has been designed specially for the Dual 701. It is electronically controlled and offers numerous advantages: vibration-free drive of the turntable is assured, with no pole effect or pole jerk, no hysteresis or eddy current losses and no interfering ripple frequencies. Ultra-high speed consistency and ultra-low rumble are therefore inherently achieved.

For more information, request Dual's special folder, 701 W 233.









Dual C 901 walnut finish Dual C 901 W white enamel

HiFi 4-track cassette deck, complete with base and accessories for vertical operation and for wall mounting.

Dimensions: 420 x 122 x 281 mm (W x H x D) Weight: 7.1 Kg

HiFi Stereo 4-Track Cassette Deck

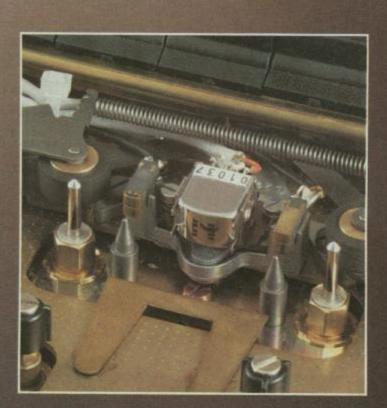
- Recording and playback in both directions of tape travel
- Dual Continuous-Pole/synchronous motor with radial elastic suspension and extremely high flywheel mass
- Separate drives for capstans and cassette take-up
- Durable, friction-resistant hard permalloy
 4/4 track recording and playback head
- Automatic track and direction changeover (autoreverse)
- Automatic shutoff system, with defeat for continuous play
- Automatic bias switching for standard and chromium dioxide (CrO₂) tapes
- Dolby* noise suppression system to reduce tape background noise during recording and playback
- Switchable, automatic level control (ALC)
- Photoelectric tape motion monitoring for improved tape travel
- Top quality tapeheads for both recording and playback

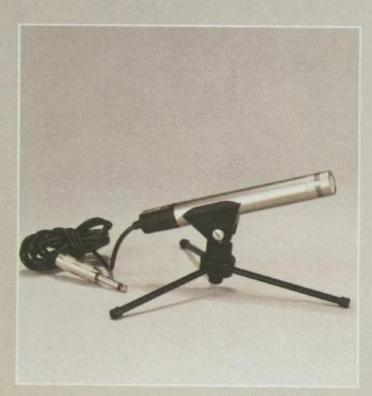
The hard permalloy 4/4 track recording and playback head used in the Dual C 901 is extremely durable, with other advantages as well: optimum electro-mechanical characteristics and resistance to head magnetization and dust build-up, for higher overall performance.

The Dual C 901 HiFi cassette deck surpasses the requirements in DIN 45 500 for HiFi home studio equipment.

For more information, request Dual's special folder, 901 W 234.

* Dolby is a registered trademark of Dolby Laboratories, Inc.





Low and medium impedance microphones (200-700 Ohms) are suitable for connection with the Dual C 901.

Particularly suitable: the Dual MC 312

HiFi capacitor microphone. For stereo recordings, two similar microphones, or a special stereo microphone, will be required.





Tape speed 4.75 cm/s
Deviation from correct speed < 1 %
Flutter and Wow:
according to DIN 45 507 < 0.12 %
W.R.M.S. < 0.09 %
Frequency response
with standard (STD) tape 30-14,000 Hz
with chromium dioxide (CrO₂) tape
30-16,000 Hz
Dynamic range evaluated according to

Dynamic range evaluated according to IEC curve A > 51 dB with Dolby system > 60 dB Distortion ref. to 0 dB VU at 333 Hz < 2 % Oscillator 85 kHz, push-pull oscillator Erasure > 70 dB

Channel separation between directions > 60 dB between stereo channels > 30 dB 2 x microphone (1/4 in. coaxial plug) 0.22 mV Radio: 1 x DIN connector 0.22 mV 2 x RCA jacks 65 mV Outputs 1/4 in. coaxial jack for headphones. Radio: 1 x DIN 0.75 V, 2 x RCA 0.75 V. Fast Winding Time 60 seconds for C 60 cassette Semiconductor Complement 4 IC's, 3 FET's, 31 transistors, 38 diodes Line voltage 110-117 V, 220-240 V Line Frequency 50 or 60 Hz, switchable Power consumption approx. 60 W



Outstanding Dual portable record players — they're practical, compact and contemporary, styled with a professional, »technical« look. And, of course, they're complete with retractable handles for easy carrying.











Great to use everywhere — at home for garden parties, on vacation, for school . . . wherever you need quality sound reproduction in portable form.

And since the demands for equipment are varied, Dual offers a choice of four different single-play and automatic units. All ready for connection at any time. With all the ingredients for successful sound reproduction.

All moving parts inside each unit are carefully protected to resist damage — designed for travel and rugged wear. So you can safely carry your Dual portable in the car or on the train . . . bus . . . or plane, and when you reach your destination, your record player will be in top condition.

Dual portable record players are just what you need for more sound enjoyment, throughout the year, at home and away. Simply plug in your portable and you're ready for great sound. Sound you'll enjoy now and for years to come!



Dual P 22

Handy portable record player with Dual 430 turntable and Dual CDS 660 ceramic cartridge. Complete with four-stage, 6 watt transistor amplifier; 6 watt wide range speaker with removable cover; loudness compensation; separate bass and treble controls; connection jack for tape deck or separate stereo amplifier. Two-tone case with cord compartment and retractable carrying handle.

Dimensions (with cover): 350 x 125 x 265 mm (W x H x D) Weight: 5.1 Kg

Technical data: Page 67





Dual P 51

Portable record player with Dual 430 turntable and Dual CDS 660 ceramic cartridge. Complete with four-stage, 6 watt transistor amplifier; built-in 6 watt wide range speaker; loudness compensation; separate bass and treble controls; connection jack for tape deck or separate stereo amplifier.

Charcoal finish case with metal grille, cord compartment and retractable carrying handle.

Dimensions: $373 \times 160 \times 350 \text{ mm}$ (W x H x D) Weight: 7.2 Kg

Dual P 55 Portable Record Player Dual P 60 Portable Stereo Record Player

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Dual P 55

Portable record player with Dual 1220 automatic turntable and Dual CDS 660 ceramic cartridge. Complete with fourstage, 6 watt transistor amplifier; built-in 6 watt wide range speaker; loudness compensation; separate bass and treble controls; connection jack for tape deck or separate stereo amplifier; speaker output jack and switch contact for switching off the built-in speaker.

Charcoal finish case with metal grille, cord compartment and retractable carrying handle.

Dimensions: 373 x 160 x 415 mm (W x H x D)

Weight: 8.9 Kg

Technical data: Page 67





Dual P 60

Portable stereo record player with Dual 1224 automatic turntable and Dual CDS 660 ceramic cartridge. Unique styling, with speakers also forming the lid of the unit. Complete with four-stage, 6 watt stereo transistor amplifier; two speakers, each with one 6 watt wide range speaker; loudness compensation; separate bass and treble controls; balance control; stereo/mono switch; connection for tape deck; front panel headphone jack.

Charcoal finish case with metal grille, cord compartment and retractable carrying handle.

Dimensions: $370 \times 188 \times 335 \text{ mm}$ (W x H x D) Weight: 10.2 Kg

Dual Home Systems



Dual's compact home systems provide realistic music reproduction — full fidelity from your favorite records, with every musical nuance true to the original. The home systems include a Dual turntable and stereo amplifier, with two

speakers perfectly matched to the system. Connection jacks for a tuner, tape or cassette deck also allow for future expansion of the system. The Dual HS 130, Dual HS 141 and Dual HS 151 are all provided with a variable speaker matrix and four speaker connection jacks for four-channel reproduction; or for a remote pair of speakers in stereo. In addition to these features, the Dual HS 141 and Dual HS 151 are also compatible with all of today's advanced quadraphonic reproduction systems.



Dual HS 27 walnut finish
Dual HS 27 W white enamel
Reasonably priced stereo home system
with Dual 430 turntable. Complete with
2 x 6 watt amplifier; 2 Dual CL 101 speakers
(page 46); Dual H 12 cover.
Dimensions (with cover):
304 x 143 x 252 mm (W x H x D)
Weight (with cover): 5.2 Kg
Dimensions of speakers:
each 197 x 300 x 105 mm (W x H x D)
Weight: each 1.8 Kg

- 4-stage, 2 x 6 watt transistor amplifier
- Connections for tape deck or tuner and 2 speakers
- Dual 430 turntable –
 description on pages 4 and 66

For the Dual HS 27 walnut finish, the speakers are supplied with walnut finish grille (as illustrated on page 19).



Dual HS 130 walnut finish Dual HS 130 W white enamel Compact stereo home system with Dual 1224 automatic turntable. Complete with 2 x 6 watt amplifier; 2 Dual CL 101 speakers (page 46); Dual H 14 cover. Dimensions (with cover): 357 x 180 x 325 mm (W x H x D) Weight (with cover): 7.5 Kg Dimensions of speakers: each 197 x 300 x 105 mm (W x H x D) Weight: each 1.8 Kg

- 4-stage stereo transistor amplifier
- Input selector switch for phono, tuner, and tape or cassette deck
- Built-in speaker matrix with quadraphonic/stereo selector switch
- Connection jacks for 4 speakers for quadraphonic reproduction
- Dual 1224 automatic turntable description on pages 4 and 66

For the Dual HS 130 W in white enamel. the speakers are supplied with matching grille colors (as illustrated on page 18).

For expanding the Dual HS 130 stereo home system into a full HiFi stereo system, the Dual CT 8 all-band tuner is recommended - description on page 40. The units match each other in both performance and styling.

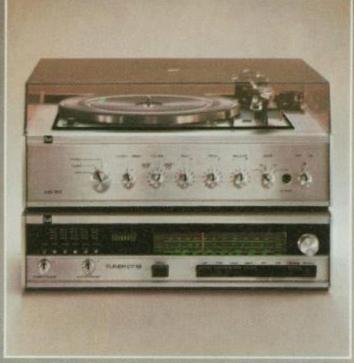


Dual HS 151 walnut finish
Dual HS 151 W white enamel
HiFi stereo home system with Dual 1226
HiFi automatic turntable. Complete with
HiFi amplifier, two Dual CL 138 HiFi 2-way
speakers (technical data similar to Dual
CL 144, page 48); Dual CH 6 cover and
base with automatic tilt-hold.
Dimensions (with cover):
420 x 180 x 385 mm (W x H x D)
Weight (with cover): 11.4 Kg
Dimensions of speakers:
each 230 x 363 x 162 mm (W x H x D)
Weight: each 4.3 Kg

For the Dual HS 151 in walnut finish, the speakers supplied are walnut finish with dark brown baffle cloth.

- 4-stage, 2 x 30 watt HiFi transistor amplifier and 2-stage equalizerpreamplifier
- Input selector switch for phono, tuner, and tape or cassette deck
- Built-in speaker matrix for quadraphonic effect reproduction
- Front panel quadraphonic/stereo selector switch
- Jacks for 4 speakers
- Jacks for quadraphonic decoder and decoder-amplifier
- Dual 1226 HiFi automatic turntable description on pages 6 and 66

Technical data: Page 67



For expanding the Dual HS 151 HiFi stereo home system into a full HiFi stereo system, we recommend the Dual CT 19 HiFi stereo tuner — description on page 41. The units match each other in both performance and styling.







Dual HS 141 walnut finish
Dual HS 141 W white enamel
HiFi stereo home system with Dual 1225
HiFi automatic turntable. Complete with
2 x 15 watt HiFi amplifier; two Dual CL 116
HiFi speakers (page 49); Dual CH 6 cover
and base with automatic tilt-hold.
Dimensions (with cover):
420 x 180 x 385 mm (W x H x D)
Weight (with cover): 10.7 Kg
Dimensions of speakers:
each 230 x 363 x 110 mm (W x H x D)
Weight: each 3.2 Kg

For the Dual HS 141 W in white enamel, speakers are supplied with aluminum metal grille (as illustrated on pages 20/21).

2 x 15 watt HiFi amplifier and 2-stage equalizer-preamplifier

- Input selector switch for phono, tuner, and tape or cassette deck
- Built-in speaker matrix for quadraphonic effect reproduction
- Quadraphonic/stereo selector switch
- Jacks for 4 speakers, quadraphonic decoder amplifier and headphones
- Dual 1225 HiFi automatic turntable description on pages 5 and 66

Dual HS 140 walnut finish
With black front panel and Dual 1226 HiFi
automatic turntable; Dual CH 21 cover.
Otherwise similar to Dual HS 141.
Technical data: Page 67

For expanding the Dual HS 141 HiFi stereo home system to include radio reception, we recommend the Dual CT 18 or Dual CT 19 HiFi stereo tuner (description on page 41).

