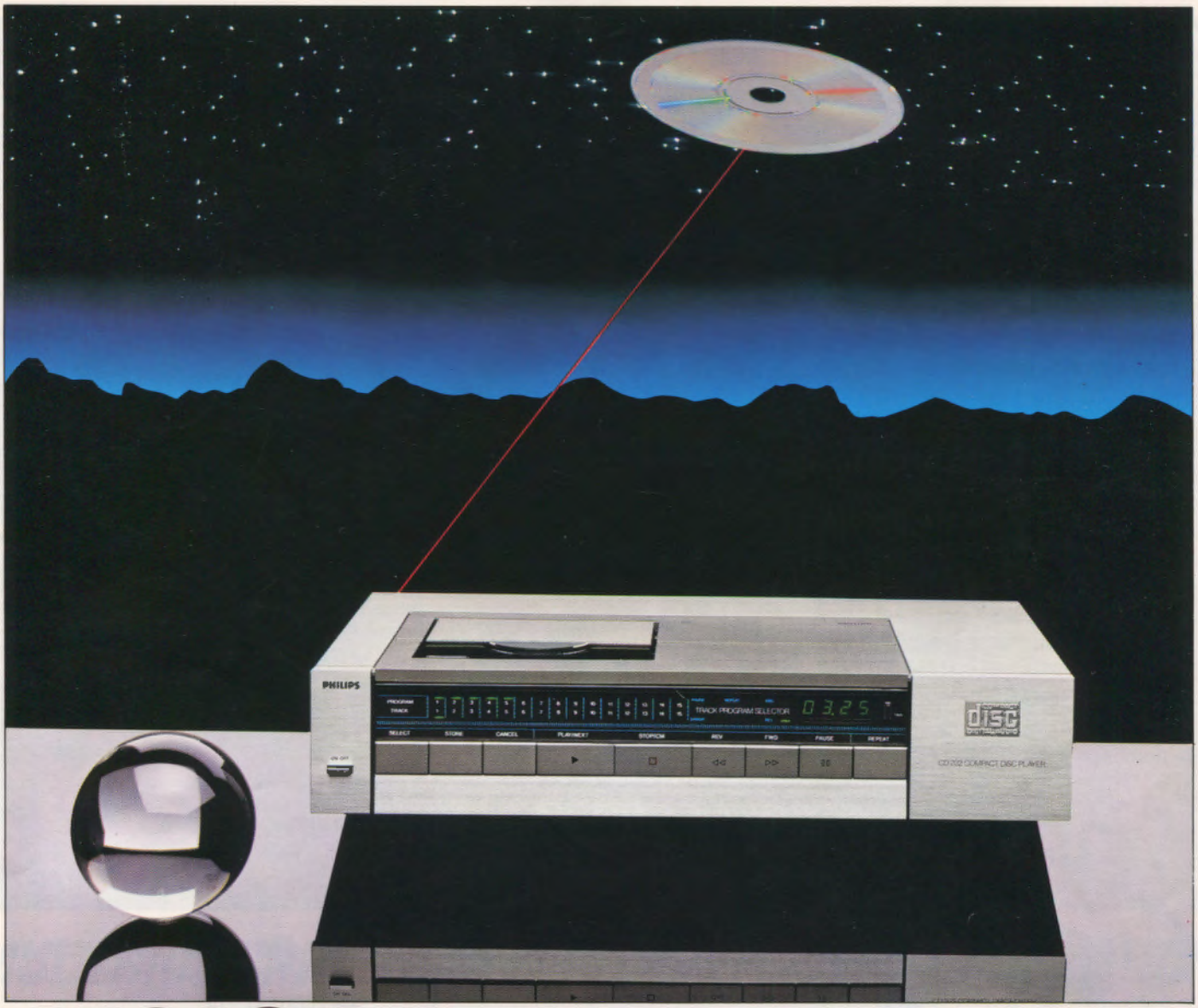
COMPACT DISC PLAYER **CD 202**



CD202 SLIMLINE CD PLAYER

- From the Compact Disc system originators – the most advanced player design
- Pure, Perfect Sound-Forever
- Maximum ease of operation
- Uniquely convenient Philips multimode programming
- Digital 'Total' or 'Track' Elapsed Time Display
- Direct access to any music track
- No disc wear, and no microphony
- Rack top or free-standing model
- Connects directly to any HiFi system
- Comprehensive owner information pack featuring free disc

PHILIPS

THE CD202 – AHEAD FROM TH

THE ARRIVAL OF COMPACT DISC

The time has come.

Compact Disc Digital Audio is here.

The new "miracle" system for enduringly better sound and computer-age operating convenience.

PURE, PERFECT SOUND

Compact Disc Digital Audio is a totally new sound source: fully digital, and astonishingly accurate.

From the master recording right through to the stereo signal that feeds the audio amplifier – nothing is added, nothing is taken away.

From the lowest frequencies to the highest levels, the sound that is heard is an exact copy of the sound that was recorded; no detectable noise, no measurable wow and flutter.

Dynamic range is exceptional, frequency response is mirrorflat, and overall channel separation and phase linearity are extremely good.

In a word, Compact Disc sound is purer – and you can certainly hear the difference.

SOUND IN SHINING ARMOUR

The digital recording is sealed inside the shining silver disc – safe from scratches, fingerprints and dirt.

The pick-up is a laser beam. It could not wear out a disc if it ran for a hundred years.

Special modulation (EFM) and error correction (CIRC) systems optimise signal handling and further suppress the effects of marks and scratches.

Thus, pure Compact Disc sound is everlasting sound. In normal use, CD recordings far outlast any conventional record.

AUTOMATIC CONTROL AND DIRECT ACCESS

Compact Disc introduces a totally new concept of ease, convenience and programmability. The digital codes on the record, detected in the player, ensure near-perfect playback under fingertip control, and introduce unprecedented programming potential. Philips use this potential to great effect in the CD202

PLENTIFUL SOFTWARE

Compact Disc already has big support from the recording studios. Many familiar labels appear on these shining silver discs, so that a wide choice of music from the world's leading artistes is available. And choice will expand fast as more and more CD players come into use.

THE BEST SOUND EVER

Here, without any doubt, is the sound source of the future.

Every aspect of Compact Disc is geared to reproducing better quality sound than ever before.

THE BEST OF THE BEST

The CD202 is more than just a Compact Disc player; it offers the highest sound quality, the greatest operating ease and facility, and the best reliability – because Philips have the priceless advantage of the longest experience in Compact Disc technology.

RACK TOP OR FREE-STANDING

The slimline CD202 is 420 mm wide – the standard width of most of today's system components. So it makes a perfectly fitting crown for a HiFi rack.

Alternatively, it is an exciting focus of attention as a free-standing HiFi component.

CONNECTS TO ANY SOUND INSTALLATION

The CD202 connects directly to any sound installation with a line input (CD/TV, AUX, TAPE or TUNER).

It will bring the very best out of any installation, but the better the system, the bigger the advantage gained.

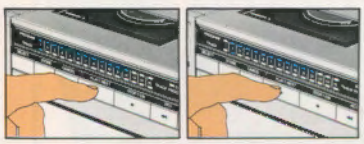
E START

MULTIMODE PROGRAMMING FOR EASIEST OPERATION

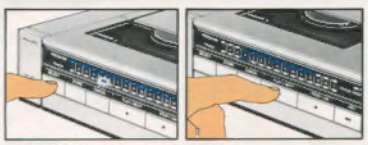
Fingertip Facility
The CD202 is easy to use because it does most of the work itself. After the disc is loaded, only a few touch-key operations are needed to programme and control all aspects of play.

Loading
The disc compartment cover rises gently at a touch. Position the disc, close the cover – and all is ready.

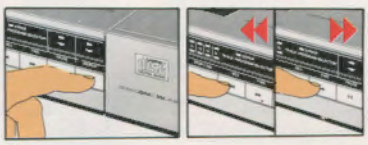
Play
Touch 'Play' and the CD303 reads the Disc index section, then indicates the tracks available on the Programme Display. Play starts, the Track Display shows the track in play, and the Elapsed Time Display gives the time run, for the track, or the complete side.



Next Track
Touch the Play key again, and the laser moves to the next track. So it's easy to leave out unwanted tracks.



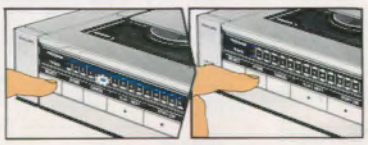
"Go-To"
It's nearly as easy to select wanted tracks. Press the Select button until the Track display reaches the track chosen.



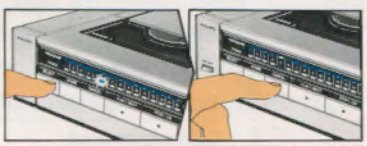
Search
A passage within a track is easy to find with the Search Fwd and Rev keys.

Repeat
A touch on the Repeat button, and the same programme plays over and over – until it is stopped.

Pause
Press the Pause key, and play stops (the player motor keeps spinning). Touch the Pause key again, and the music re-starts,, exactly where it stopped.



Memory Programmes
Unique CD202 memory programming works in two modes. Pressing the Select and Store buttons puts a list of up to 15 tracks into microcomputer memory, ready for play. In this mode, only selected tracks are played – a handy way of choosing favourite tracks from a disc.



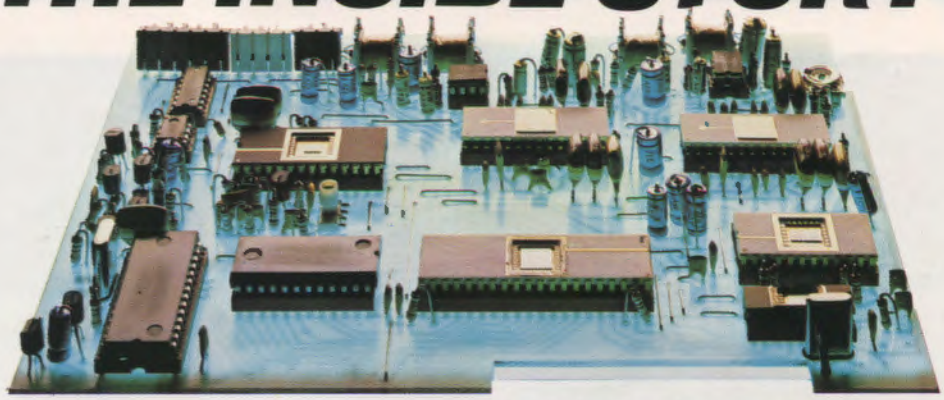
Pressing the Select and Cancel buttons puts another list into memory – the tracks to be left out of the programme – an imaginative facility for missing out unwanted tracks from a disc.

The Info Pack
The CD202 is really easy to use. But, for the fullest enjoyment with the greatest ease, a comprehensive information pack is supplied with each player, with clear, fully illustrated operating instructions, handy maintenance material, information booklets on lasers and digital technology, a catalogue of disc titles – and a full-length complimentary disc. A disc that demonstrates, more clearly than words, the quality of the sound from the superlative Philips CD202.

COMPACT disc DIGITAL AUDIO

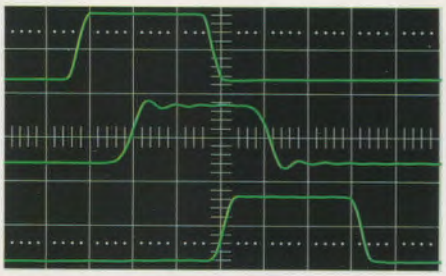
CD202–THE INSIDE STORY

CD202 performance owes much to the advantages of the Compact Disc system – but more to the Philips genius for translating technological sophistication into direct gains in performance. It is this built-in factor that so clearly distinguishes the CD202 from other Compact Disc players.



FIVE WAYS TO BETTER PERFORMANCE

Digital filtering. The audio signal filtering – on which sound quality ultimately depends – is digital. Far more precise, stable and compact than an equivalent analogue filter. And unique to Philips.



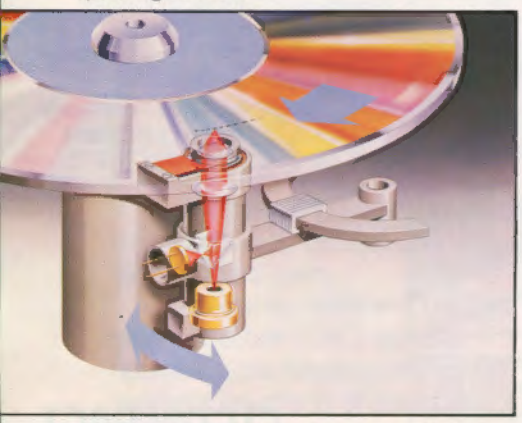
PHILIPS HIGH-PRECISION DIGITAL FILTERING
THESE OSCILLOGRAMS SHOW THE CLEAR ADVANTAGE OF PHILIPS DIGITAL FILTERING.
A. AUDIBLE TEST SIGNAL, AS RECORDED.
B. NOTICEABLY DISTORTED OUTPUT FROM THE USUAL CD ANALOGUE FILTER.
C. MUCH PURER OUTPUT FROM PHILIPS CD DIGITAL FILTER.

High-stability digital-to-analogue conversion for true 16-bit performance. The Philips digital-to-analogue converter is a 16-bit unit with digital oversampling filter, noise shaper, D/A chip, and simple analogue filter.

Laser pick-up with non-polarising, interference-free beam. Automatic electronic focussing and track following, and wear-free no-contact track scanning. Quality Philips optical components lead to maximum simplicity in the beam direction system – and more tolerance for disc imperfections.

Single stage servo tracking keeps the laser beam exactly on track by automatic adjustment of one single control variable. Cutting out complexity to maximise precision and reliability.

Soft muting ensures increased concealment of drop-outs and smoother switching of operating controls.



HIGH COMPONENTS INTEGRATION FOR TOP PERFORMANCE AND RELIABILITY

Electronic circuit and player functions, integrated to the highest degree of modern solid-state technology, use the minimum of discrete components and interconnections. This high-integration design achieves an exceptional degree of protection against scratches, fingerprints and disc imperfections. It also means efficient, space saving design, consistent performance and highest reliability.

Energy-saving low power dissipation. The advanced techniques used substantially reduce power dissipation. This leads to cooler operation, increased reliability and savings in energy.

DIRECT DRIVE MOTOR SERVO

The servo-controlled direct drive motor synchronises disc rotation to the data pattern on the disc itself.

STATE-OF-THE-ART SEMICONDUCTOR LASER

Long-life ambient temperature semiconductor laser with infra-red beam. Absolutely safe in operation with very low power output, wide-angle focus, completely enclosed (under disc) beam, and power interruption when the disc compartment door is opened.

STANDARD PRODUCT INFORMATION CD202

Playback System	Compact Disc Digital Audio
Audio performance (20 Hz - 20 kHz unless otherwise stated)	
Frequency range	20 Hz - 20 kHz, ± 0.3 dB
Phase linearity	± 0.5°
Signal to noise ratio (dynamic range)	> 90 dB (B = 20 kHz)
Channel separation	> 90 dB (at 1 kHz)
T.H.D. (incl. noise)	< 0.005 % < 0.004% (at 1 Hz)
Intermodulation distortion	< – 86 dB (at max. output level)
Out-band rejection (frequencies 24 kHz)	> 50 dB
Wow and flutter	Quartz control precision
Optical read-out system	
Laser type	Semiconductor Al Ga As
Numerical aperture	0.45
Wave length	800 nm
Output	
Max. output level (at MSB)	2 V rms, typical
Output impedance	< 100 Ω
Minimum load impedance	10 k Ω
Power supply	
Mains voltages	220 V AC, with service solution for 110, 127 and 240 V*)
Mains frequencies	50 and 60 Hz
Power consumption	27 W approx.
Electrical requirements	IEC
*) Voltage adaptor under investigation	
Cabinet, general	
Material/finish	polystreme, with extruded aluminium profile
Dimensions (w x h x d) cabinet with lid closed cabinet with lid opened	420 x 86 x 300 mm 420 x 192 x 300 mm
Connection cable	with moulded Cinch plugs
Weight	6 kg approx

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