

DITTON

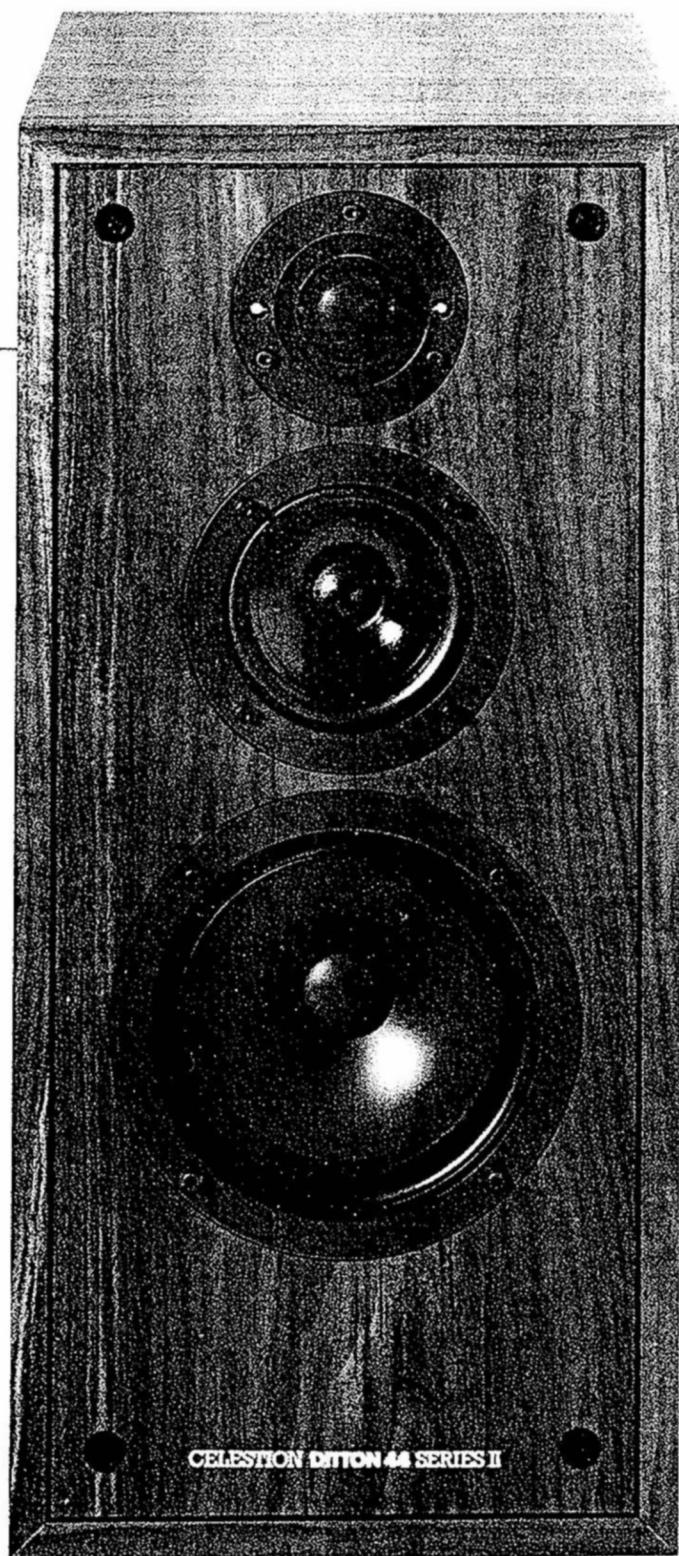
44

SERIES II

CELESTION DITTON 44 SERIES II

CELESTION  
INTERNATIONAL





# DITTON 44

## SERIES II

The Ditton 44 is a 3 way system with ABR (auxiliary bass radiator) designed to give competent power handling capability with today's wide range programme sources.

The transducer system incorporates many of the features of the Ditton 66 Series II including the reliable HF 2001 mylar dome tweeter with a  $\frac{3}{4}$  inch voice coil. However the mid range is handled by a 5" doped fibre cone and the bass range by a laser developed 8" bass unit, a product of Celestion's unique laser interferometry programme. The bass unit consists of a specially profiled cone, formed from vinyl homopolymer (VHP) with a 2" high temperature voice coil and a molecularly bonded roll surround.

The 3 way system coupled with the rearward facing ABR enables high levels of bass power handling, within the confines of a highly compact cabinet that fits comfortably into any home or studio.

	<b>DITTON 44</b>
Overall Dimension	H 660 m 26 0 ins W 308 m 12 1 " D 360 m 14 2 "
Internal Volume	46.7 litres 1 65 cu ft
Net Weight	16.8 kg 37 0 lbs
Impedance	8 ohms
Frequency Response	42 Hz-20 kHz $\pm$ 3dB
Crossover Frequency	700 Hz 4 0 kHz
Amplifier Requirements	20-120 watts per channel
Sensitivity	87 dB for 1 watt at 1 metre

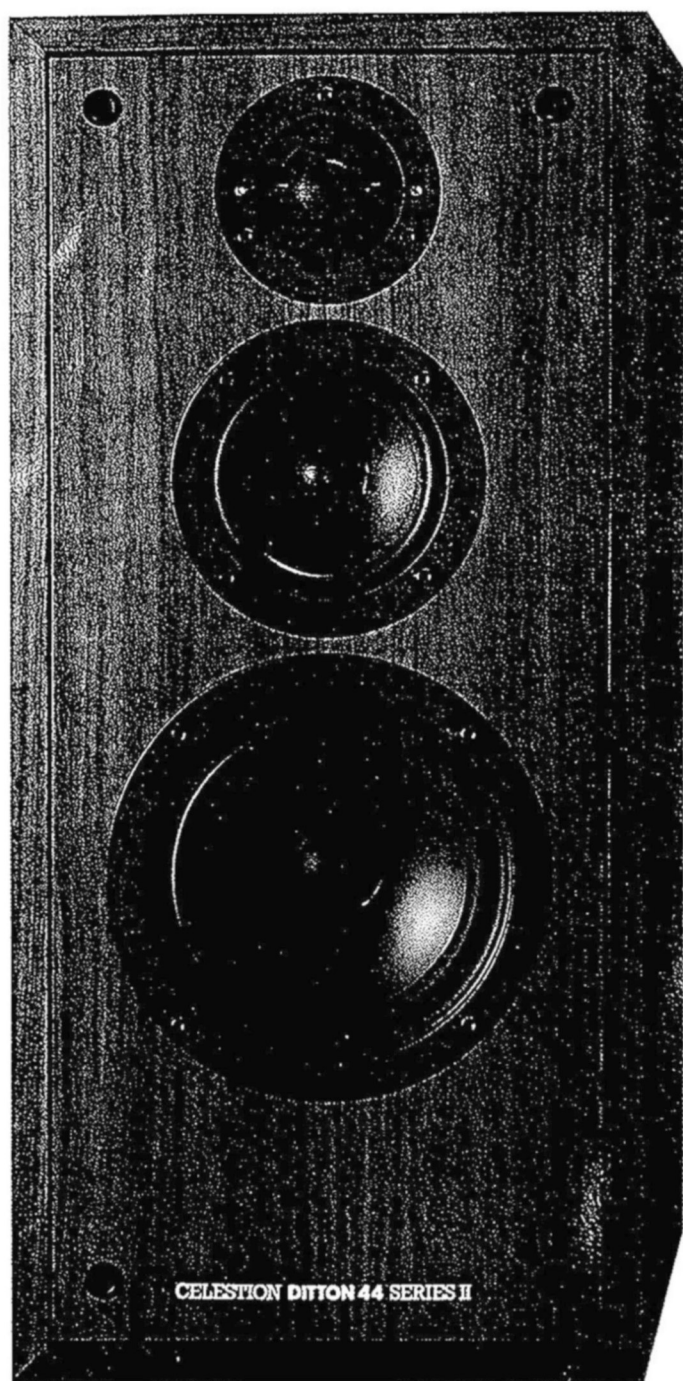
The information in this brochure was correct at the time of printing (August 1982). However Celestion are continually improving their products and reserve the right to change specifications without notice.

# DITTON 44

FORTY FOUR

SERIES II

by CELESTION



The Ditton 44 Series II is an elegantly designed, technologically superior loudspeaker.

A three way system, it has a rear loaded 10" ABR (auxiliary bass radiator) which enables higher levels of bass handling to be achieved within the confines of a compact real wood veneer cabinet.

It also incorporates all the quality features you'd expect from Celestion - including a reliable HF 2001 mylar dome tweeter, 5" doped fibre cone, and 8" bass units developed from Celestion's laser interferometry programme.

This powerful, yet refined Ditton 44 Series II model provides exceptional accuracy at high sound pressure levels, making it ideal for the larger or acoustically difficult room.

## SPECIFICATIONS

### 3 WAY SYSTEM

Dimensions Height 660mm, Width 308mm/  
Depth 300mm

Sizes above include:

Grille 28mm deep grille  
Bass 200mm (8") bass  
Mid 125mm (5") mid range  
Dome 19mm (3/4") mylar dome tweeter  
Crossovers: 700Hz and 40kHz  
Cabinet 10" ABR loading  
Finish Selected walnut real wood veneer  
Amplifier Requirements 20-120 Watts  
Sensitivity 87 dB/1 Watt-1 metre  
Frequency response  $\pm$  3dB 42Hz-20kHz  
Weight (each) 16.8kg (370lb)  
Internal Volume 46.7 litres  
Power Handling 120 Watts  
Impedance 8 Ohm  
Material High density particle board

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CELESTION DITTON 44 SERIES II

# CELESTION



Overseas Distributors in most countries of the world.

Lit no. 0176

All specifications correct as outlined at time of going to press.

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# DITTON 44



sound for perfection

Celestion



# Celestion Ditton 44 loudspeaker specification and data

Celestion's unequalled reputation for building Hi-Fi loudspeakers of exceptional quality is founded on half a century of loudspeaker design and production experience. Celestion design is total design, every individual component being developed within the research and development laboratories at the main Celestion factory for its specific function. Total quality control, every component being tested before and after assembly. Rigorous final testing of every loudspeaker, ensuring perfect performance, absolute reliability.

Outward beauty too—thoroughness in perfecting the active components alone is not enough—the highest quality in the tradition of cabinet making also is yours; acoustically correct, aesthetically pleasurable; perfect to the ear and perfect to the eye, the Celestion mark is your guarantee.

The Ditton 44 will provide analytical and sensitive reproduction equally at low listening levels and at high. Reference to the data will show that realistic listening volume levels will be produced with modest inputs of the order of 5 to 10 watts. The dynamic range capability is such that when very high volume levels are desired, continuous music inputs of 40 or 50 watts are possible, and an uncomfortable listening level will be reached well before the loudspeaker is in danger of being overdriven. Accordingly amplifiers from 10 to 100 watts per channel will be suitable; amplifiers having a reserve of power ensure proper reproduction of transients. Amplifiers in the centre of the power range mentioned here would be generally most satisfactory, i.e., 30 to 60 watts per channel.

Notwithstanding the array of sophisticated laboratory instrumentation employed by Celestion engineers during the lengthy design processes—which is as it should be—what is absolutely indispensable are the many hours of highly critical listening and evaluation carried out by musicians and sound specialists not only under controlled conditions in the Celestion building but also in a variety of typical locations. Thousands of pairs of Ditton 44's are now in use throughout the world, and the possessor of these fine loudspeakers is assured that we at Celestion have made every possible endeavour to ensure his entertainment is truly musical.

**Dimensions:** 76 cm x 37 cm x 25 cm

**Overall Frequency Response:** 30 Hz to 40 kHz  
Level within  $\pm 4$  dB 60 Hz –25 kHz –8 dB at 40 Hz  
Roll-off at 16 dB/octave below 60 Hz

**Impedance:** To match 4–8 ohm amplifiers  
(nominal 6 ohms)

**Maximum Continuous Input:** 44 watts (DIN)

**Input for 96 dB S.P.L. at one metre:** 5.5 watts

**Crossover Frequencies:** 500 Hz and 5000 Hz

**Total Harmonic Distortion at 96 dB level:**  
100 Hz 0.8%; 400 Hz 0.8%; 1 kHz 0.8%;  
4 kHz 1.4%; 10 kHz 1.1%; 15 kHz 0.9%

**Weight Nett:** 20.4 kg

**Weight including Retail Packing:** 22.7 kg

**Finish:** Teak or Walnut



# DITTON 44

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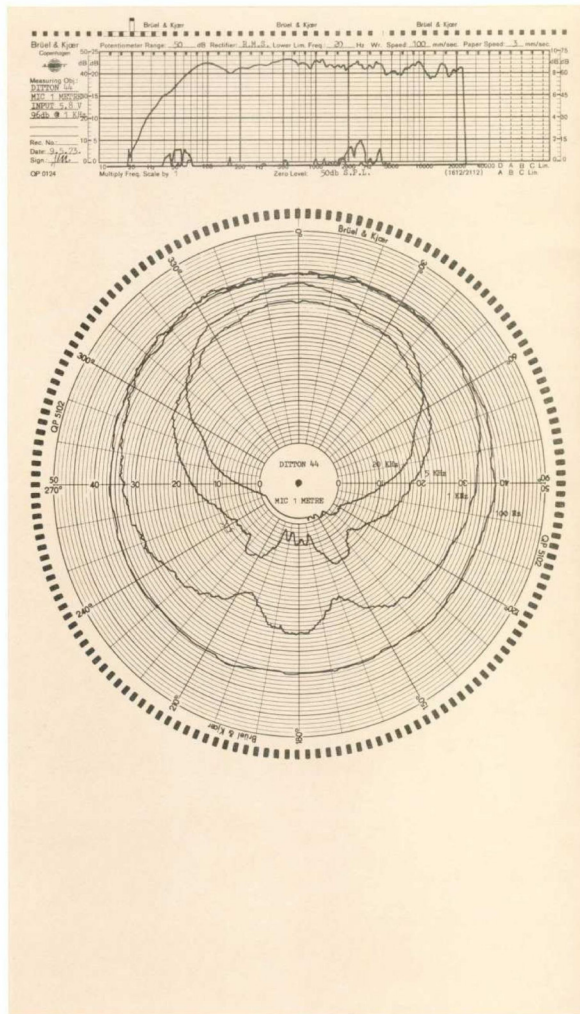
## Arranging your loudspeakers for good listening . . .

The optimum placement of your loudspeakers is somewhat dependent upon room acoustics and furniture siting. However, the basic arrangement for stereo reproduction is obtained by having the two speakers about three metres apart angled at approximately 45°. If your speakers are placed in the corners of your room this will tend to accentuate the bass notes. If the room acoustics tend to produce a stronger bass than required, a small plinth or stand allowing some space between the underside of the speaker and the floor may be preferred. Quadraphony: a pair of Ditton 15's would be an ideal match for the rear channel or if space is critical the miniature Ditton 11. It is suggested that the rear channel speakers be sited near ceiling height.

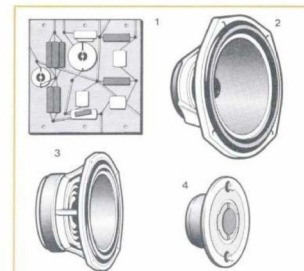
## Frequency response curve and polar dispersion diagram

These diagrams are reproduced for the interest of the technically minded; the diagram on the right shows frequency response: the uniformity of this curve speaks volumes for the excellence of the drive units and of the crossover developed by Celestion engineers. It is hardly surprising that Celestion pressure units are specified by the B.B.C. for both studio and domestic monitors and also incorporated by many manufacturers. The polar diagram below depicts the relative response at selected frequencies through a radius of 360°, obtained by rotating the loudspeaker in an anechoic chamber whilst applying precisely regulated input signals and recording the output from the loudspeaker using a fixed calibrated microphone and automatic curve tracing equipment. It will be noticed that even the highest frequencies are well maintained through an arc of 120°, ensuring an excellent stereo effect over a wide listening area. Meticulous design of the flush-mounted HF 2000 super tweeter along with precise integration with the FC 6 midrange unit ensures this exceptional performance.

# DITTON 44

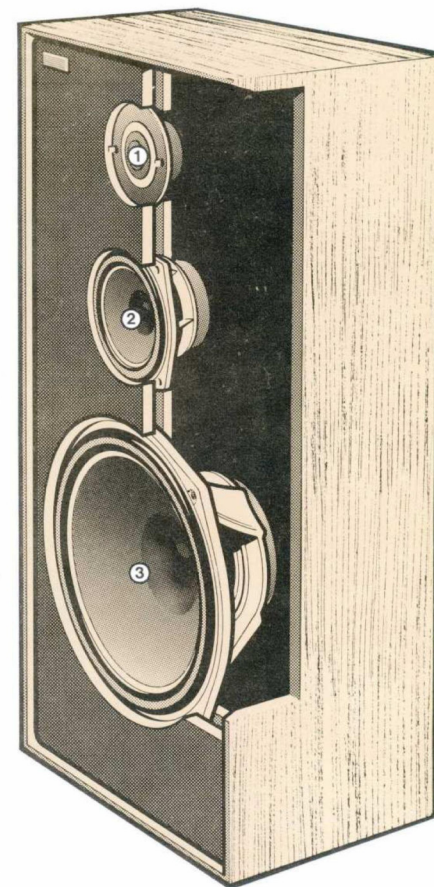


1. The HF 2000 super tweeter reproduces the upper region of the audio spectrum, functioning from the 5 kHz crossover point to well beyond audibility. Not only does this transducer have an exceptionally smooth and extended response but, equally important, displays outstanding dispersion characteristics as will be seen on examination of the polar response diagram below. Flush mounting of all units ensures absence of refraction or tunnel effects.
2. The FC 6 midrange unit has to deal faithfully with a complex signal, often at high energy levels. Accordingly, the voice coil assembly and plasticised fibre diaphragm are controlled by a Feroba II magnet, exerting 50,000 Maxwells total flux at the pole tip. Pressure waves at the rear are controlled by a damped "transmission line" which is hermetically sealed. The FC 6 functions from 5 kHz down to 500 Hz. Painstaking attention to the design has ensured beautifully detailed reproduction, having a moderately "forward" character certain to please the critical listener.
3. The FC 12 bass transducer is capable of exceptional quality bass reproduction. The diaphragm is formed from heavy fibre and plasticised to suppress resonances. The neoprene roll suspension permits considerable cone excursion when very low bass notes are being generated. The whole assembly is mounted in a heavy cast frame, the voice coil assembly being energised and critically damped by a massive Feroba II magnet. Cellular foam material provides optimum acoustic damping at operational frequencies from 500 Hz down to below 30 Hz.



A closer view of the Ditton 44 component units

1. Eleven element inductance-capacitance crossover network filters frequency bands to appropriate units.
2. FC 12 Bass loudspeaker a beautifully designed and massive unit.
3. FC 6 Midrange transducer showing plasticised cone and powerful magnet system.
4. HF2000 Super tweeter—a "state of the art" transducer also specified for B.B.C. and other monitors.



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Celestion



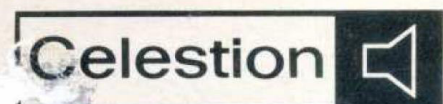
**The Press review the Ditton 44 . . .**

*The Gramophone—March 1973*

"The Ditton 44 Monitor speakers were used for several months under domestic conditions in a large lounge. I find that one of the best tests of any loudspeaker is its ability to reproduce male speech at normal volume level. Some loudspeakers have a chesty tone, others emphasise sibilant sounds, whilst the best should be as near as possible to the original sound. The Ditton 44 Monitor is completely free from the tendency to enhance output in the bass register, nor does it cause distress with sibilants. Over the months I have enjoyed a wide range of music under stereo conditions and one noticeable feature was the forward tone, missing in some enclosures. One felt that the performers were in front of the speakers instead of being heard from some distance behind. Whilst the Ditton 44 Monitor is somewhat lower in price than other Monitor speakers, the designers have aimed at first class reproduction, and in this they have succeeded. Harmonic and intermodulation distortion are not quite so low as in the stable companion, the Ditton 66 Studio Monitor, but this speaker will satisfy the most fastidious listener, and I have no hesitation in recommending it".

JOHN GILBERT

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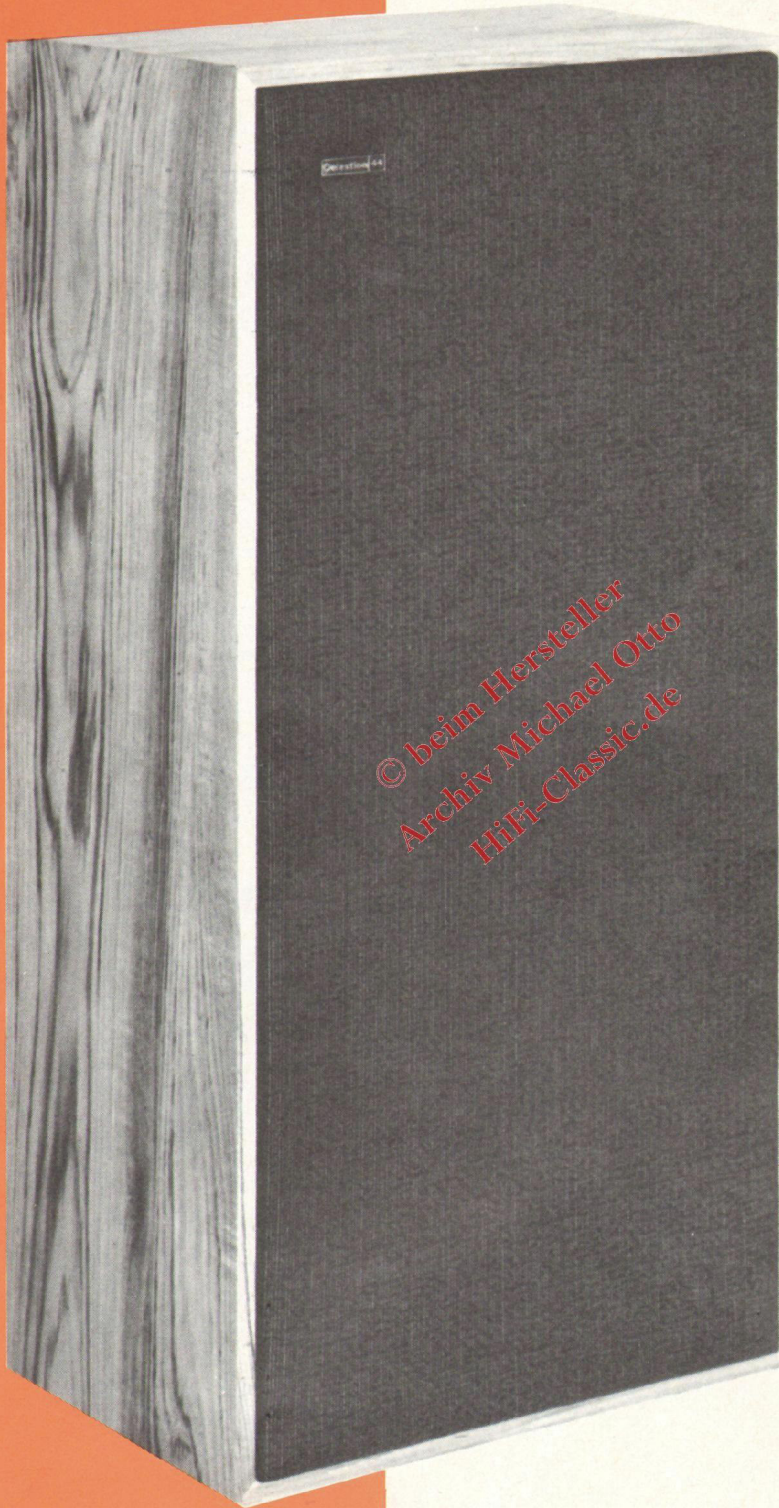


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Cables: Voicecoil Ipswich. Telex: 98365

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# Celestion

Studio  
Series



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Archiv Michael Otto  
HiFi-Classik.de

**DITTON 44**

**Die DITTON 44 ist die kleinste Standbox  
der international hoch geschätzten Celestion Studio Serie.**

**1. Weg      Frequenzbereich:      25 Hz bis 500 Hz**

CELESTION Langhub-Baßlautsprecher; Hub: 20 mm;  
32 cm Durchmesser, beschichtete Membran, gegossener  
Lautsprecherkorb, Eigenfrequenz 18 Hz

**2. Weg      Frequenzbereich:      500 Hz bis 5000 Hz  $\pm$  2 dB**

CELESTION Spezial-Mitteltöner; 12 cm Membrandurchmesser,  
gegossenes Lautsprecherchassis! ein besonders für diese  
Box entwickelter HiFi Lautsprecher in einem eigenen, resonanz-  
freien Gehäuse innerhalb der Ditton 44.

**3. Weg      Frequenzbereich      5000 Hz bis 30 000 Hz  $\pm$  2 dB**

Celestion Ultra-Kalotten-Hochtöner, Durchmesser 38 mm

bekannt durch seine klirrfreie Wiedergabe bis weit in den  
Ultraschallbereich.

#### Technische Daten:

Leistung	:	44 Watt (Sinus) DIN 45500, 50 Watt Musik
Impedanz	:	4 - 8 Ohm
Frequenzgang	:	25 Hz bis 30 000 Hz
Arbeitsweise	:	3-Weg-System
Maße	:	H x B x T    77 x 37 x 26 cm

**Generalvertretung: Dipl.-Ing. G. Hauser**  
3 Hannover · Stolzestraße 4-7 · Telefon (0511) 818606/818207

DIPL.-ING. GÜNTHER HAUSER · 3 HANNOVER · STOLZESTRASSE 4-7

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ROLA CELESTION LTD.   
GENERALVERTRETUNG · LAGER · SERVICE

DEUTSCHE BANK HANNOVER, KTO. NR. -54/12861  
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3 HANNOVER, DEN Februar 1972  
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TELEFON (0511) 818606 / 818207

ENTWICKLUNG UND VERTRIEB ELEKTRONISCHER GERÄTE · AKUSTIK · MESSTECHNIK

IHRE ZEICHEN

IHRE NACHRICHT VOM

UNSERE ZEICHEN

DATUM

H/Sc

Februar 1972

BETRIFFT:



-Information für unsere Geschäftsfreunde

Sehr geehrte Herren!

Wir können Ihnen heute eine **NEUE** HiFi-Lautsprecherbox von Celestion vorstellen, die die bekannte und beliebte Ditton-Serie sinnvoll ergänzt:

Die **DITTON 44** füllt eine Marktlücke in Qualität und Preis in der 800,-DM-Klasse.

#### Technische Daten

Leistung: 44 Watt Sinus (DIN 45500) - 50 Watt Musik  
Impedanz: 4 - 8 Ohm  
Frequenzgang: 25 Hz bis 40000 Hz  
Linearität: + 2,5 dB 38 Hz bis 30000 Hz  
Arbeitsweise: 3-Weg-System

30 cm Baß Langhub Lautsprecher (25 Hz bis 450 Hz)  
12 cm Spezial-Mitteltonlautsprecher (400 Hz bis 5500 Hz)  
in einem eigenen Gehäuse

38 mm Ultra-Kalottenhochtöner (5000 Hz bis 40000 Hz)  
Maße: B x H x T = 37 x 77 x 26 cm  
Verkaufspreis: DM 888,00

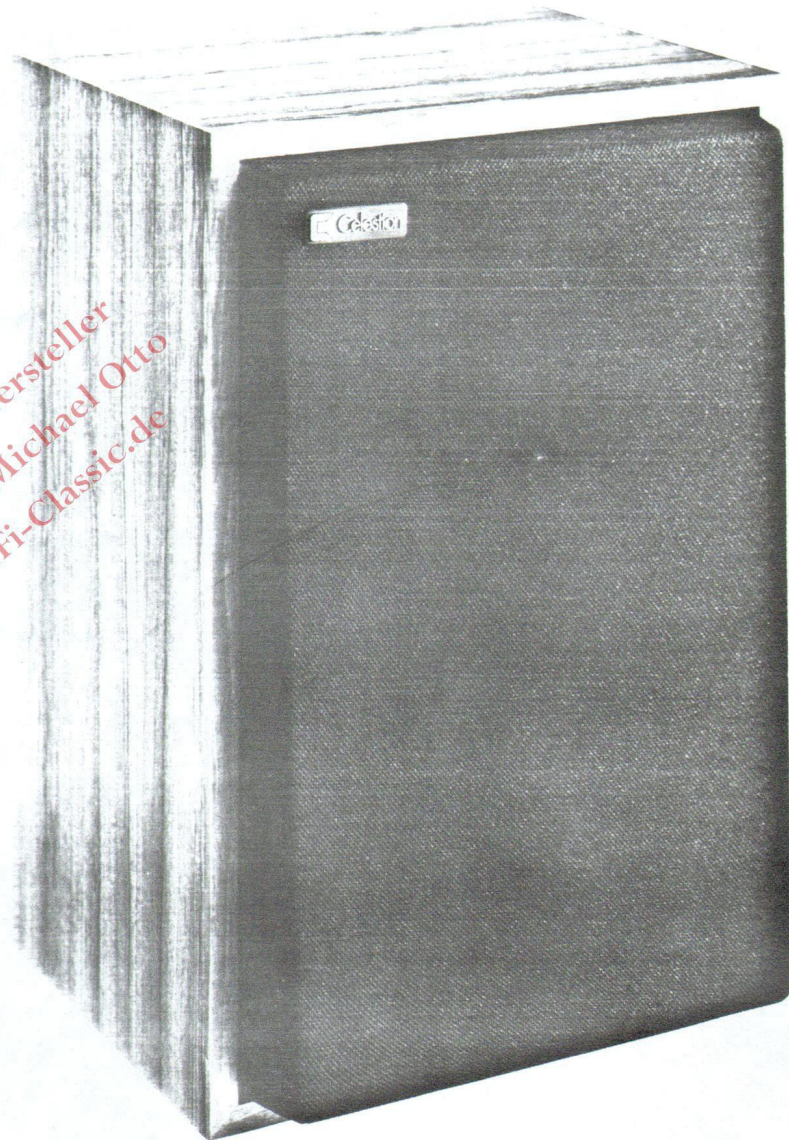
Mit freundlichem Gruß

  
(Hauser)

# HI FI LAUTSPRECHER SONDERLISTE 3/82

NETTOPREISE für CELESTION FACHHÄNDLER gültig ab 1.8.82

Ditton 120	
System	Zweiweg
Bestückung	1 Konus-Tiefton/ Mittelton 1 Konus-Hochton
Durchmesser Membran/Schwingspule	200/25 mm 50/20 mm
Übergangsfrequenz	4000 Hz
Frequenzbereich	60-18000 Hz
Nennbelastbarkeit (Gleitender Sinus)	9 V bis 4000 Hz 4,5 V bis 18000 Hz
Empfohlen für Verstärker- Ausgangsleistungen	10-40 Watt
Nennscheinwiderstand	8 Ohm
Gehäuseausführung	Nußbaum oder schwarz
Abmessungen (B x H x T)	26,5 x 39,5 x 23 cm



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Archiv Michael Otto  
HiFi-Classic.de

Nennleistung nach DIN

40/80 Watt

SONDERNETTOPREIS            DM / STÜCK

Lieferung zum Sonderpreis, nur solange Lagervorrat reicht.

# DITTON 44

FORTY FOUR

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A three way system, it has a rear loaded 10" ABR (auxiliary bass radiator) which enables higher levels of bass handling to be achieved within the confines of a compact real wood veneer cabinet.

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Dimensions Height 660mm, Width 308mm/  
Depth 300mm

Sizes above include:

Grille	28mm deep grille
Bass	200mm (8") bass
Mid	125mm (5") mid range
Dome	19mm (¾") mylar dome tweeter
Crossover	700Hz and 40kHz
Cabinet	10" ABR loading
Finish	Selected walnut real wood veneer
Amplifier Requirements	20-120 Watts
Sensitivity	87 dB/1 Watt—1 metre
Frequency response	± 3dB 42Hz-20kHz
Weight (each)	16.8kg (37.0lb)
Internal Volume	46.7 litres
Power Handling	120 Watts
Impedance	8 Ohm
Material	High density particle board

### ENGLAND

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