



Wilmslow Audio

the firm for loudspeakers

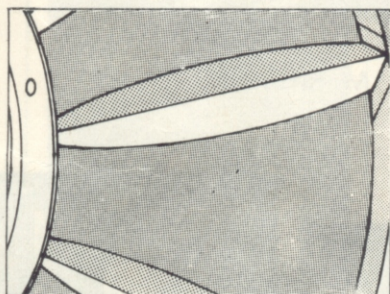
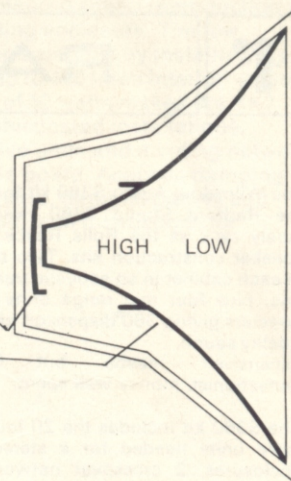
BAKER
BOWERS & WILKINS
CASTLE
CELESTION
DECCA
E.M.I.
EAGLE
ELAC
FANE
GAUSS
GOODMANS
HELME
JORDAN WATTS
KEF
LEAK
LOWTHER
PEERLESS
RADFORD
RICHARD ALLAN
S.T.C.
TANNOY
VIDEOTONE
WHARFEDALE



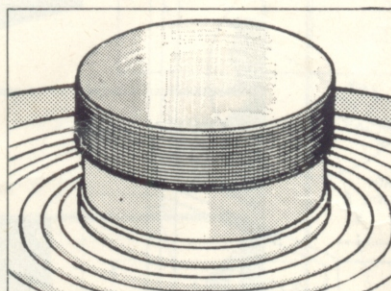
Two into one will go!
A unique system of two separate
(high and low frequency)
loudspeakers in a single assembly,
fed by a special crossover network.

High frequency diaphragm and coil

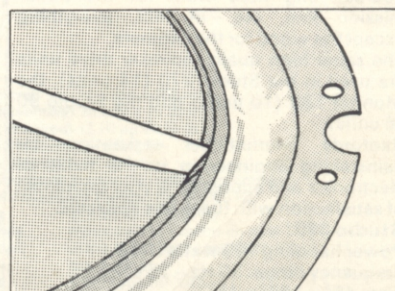
Low frequency cone



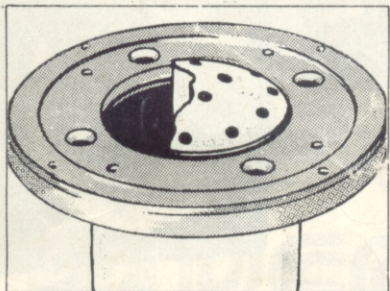
The Girdacoustic Cone
improves frequency and transient
response, gives much increased power
handling capacity and greater mechanical
stability.



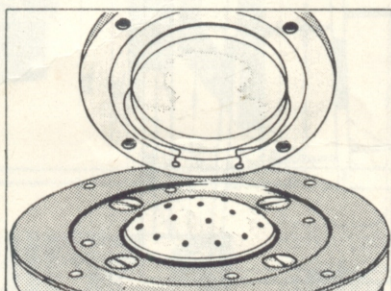
The High Temperature Voice Coil
assures absolute climatic stability and
great mechanical strength together with
much improved power handling capacity.



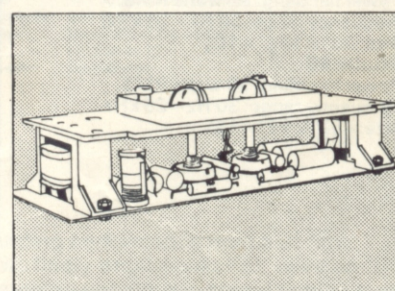
The Tanoplas Surround
gives low bass resonance with excellent
mechanical stability and freedom from
edge reflections.



Patented Magnetic Shunt
combined with specially treated and
selected steel gives maximum magnetic
flux in the unique Tannoy twin gap
system. Improves sensitivity and damping.



Unique High Frequency Unit
with separate diaphragm and voice coil
coupled to the horn by a 19 element
phase-matching system.



High Power Crossover Unit
with solid dielectric condensers
throughout, combined with treble energy
and roll-off controls.

technical specification

Model	385 (15")	315 (12")	295 (10")
Frequency response	20 - 20,000 Hz	20 - 20,000 Hz	22 - 20,000 Hz
Polar Distribution for 60° inc. Angle	-4dB at 10,000 Hz	-3dB at 10,000 Hz	-2dB at 10,000 Hz
Power Handling Capacity	85 W	60 W	50 W
Sound pressure at 1 metre for 1 watt input*	92dB	90-5dB	90-5dB
Impedance via Crossover Network	8Ω (5Ω min)	8Ω (5Ω min)	8Ω (5Ω min)
H.F. Voice Coil Diameter	2" (50.8 mm)	2" (50.8 mm)	2" (50.8 mm)
L.F. Voice Coil Diameter	2" (50.8 mm)	2" (50.8 mm)	2" (50.8 mm)
Intermodulation Products	Less than 2%	Less than 2%	Less than 2%
Bass Resonance	20 Hz	20 Hz	22 Hz
Magnet Assembly Weight	13 lb (5.9 kg)	7½ lb (3.4 kg)	7½ lb (3.4 kg)
Magnet Material	Alcomax 5	Alcomax	Alcomax
Crossover Frequency	1,000 Hz	1,000 Hz	1,000 Hz
Overall Diameter of Frame	15¼" (38.73 cm)	12¾" (31.43 cm)	12¾" (31.43 cm)
Overall Depth	9" (22.86 cm)	7½" (19.05 cm)	7½" (18.415 cm)
Fixing Holes P.C.D.	14½" (36.83 cm)	11¾" (29.84 cm)	11" (27.94 cm)
Crossover Network and Switch Panel Weight	1 lb 13 oz (.821 kg)	1 lb 13 oz (.821 kg)	1 lb 13 oz (.821 kg)
Total Weight in Carton (approx.)	31 lb (14 kg)	31 lb (14 kg)	18 lb (8.17 kg)

*In minimum size cabinet in 2,000 ft³ (56 m³) room.

The Monitor H.P.D. represents a further outstanding improvement and refinement of a loudspeaker system which has become regarded as a quality standard over the last 25 years by Recording, Broadcasting and Television Studios throughout the world. There is a very good chance that your favourite records and tapes were monitored on Tannoy Dual Concentric Loudspeakers, and to select these superbly engineered, individually hand assembled speakers for your home music system assures you of the same professional performance. The Tannoy Organisation has been continuously engaged in the manufacture of specialised high quality loudspeakers for nearly 50 years. This unequalled experience, combined with one of the most modern loudspeaker factories in Europe, is your guarantee of satisfaction.



RADFORD

The Wilmslow Audio S360 kit for building the Radford Studio S360 design must surely rank as the Rolls Royce of loudspeaker construction kits. Two bass units in each cabinet in an acoustic transmission line, plus four mid range units and four tweeters giving 360° dispersion of fabulous quality sound. Expensive? - maybe, but for the perfectionist, money well spent.

The S360 kit includes the 20 loudspeaker drive units needed for a stereo pair of enclosures, 2 crossover networks, drive unit mounting plates, wiring distribution boards, long fibre wool for the transmission line, etc. - in fact, everything except the wood for the cabinets. The same high quality speaker drive units are used in the Studio 270 (14 units), the Monitor 180 (10 units) and the Studio 90 (6 units).

Radfords international reputation for painstaking engineering in the fields of electronics and acoustics is your guarantee of satisfaction with these fine speakers.

Studio 360:

Power handling 100 watts RMS.
Frequency range: 30 Hz - 25 kHz.
Size: 45" x 18 3/4" x 15".

Studio 270:

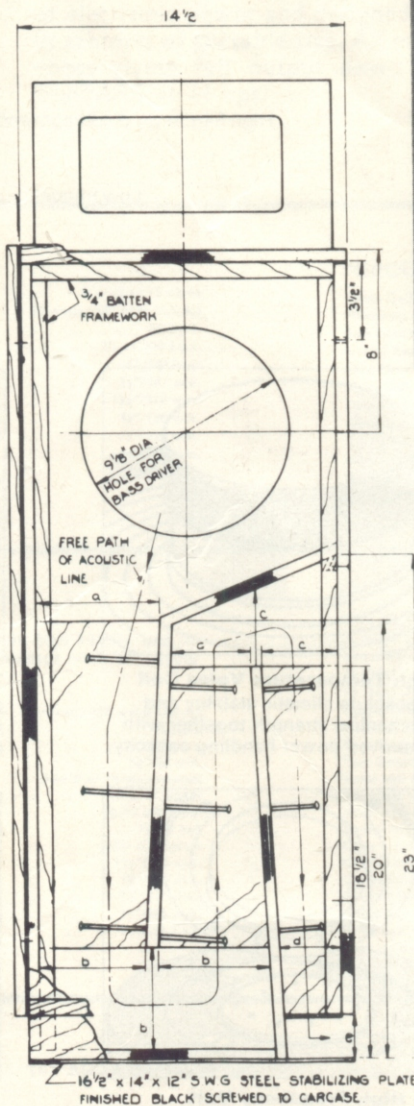
Power handling: 50 watts RMS.
Frequency range: 40 Hz - 25 kHz.
Size: 38" x 17 1/2" x 12 1/2"

Monitor 180:

Power handling: 50 watts RMS.
Frequency range: 50 Hz - 25 kHz.
Size: 30" x 13 1/2" x 10 1/2"

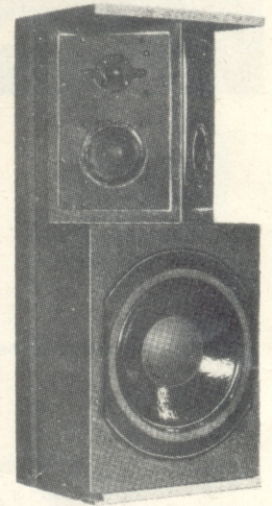
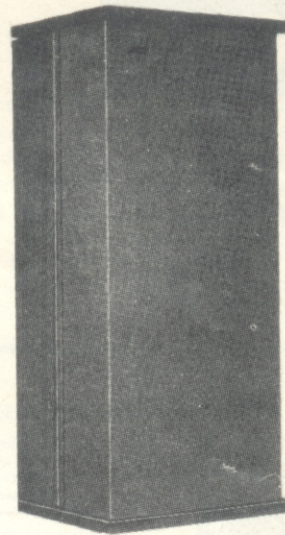
Studio 90:

Power handling: 50 watts RMS.
Frequency range: 30 Hz - 25 kHz.
Size: 45 1/2" x 17" x 15"

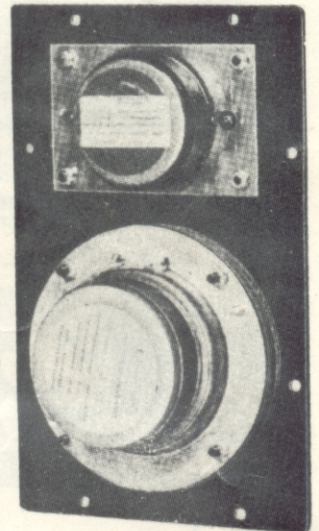
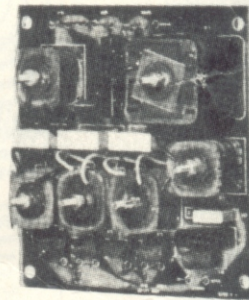


SIDE OF CARCASE, NOT REMOVABLE.
DRAWN WITH SIDE REMOVED TO
SHOW ACOUSTIC LINE SECTION.

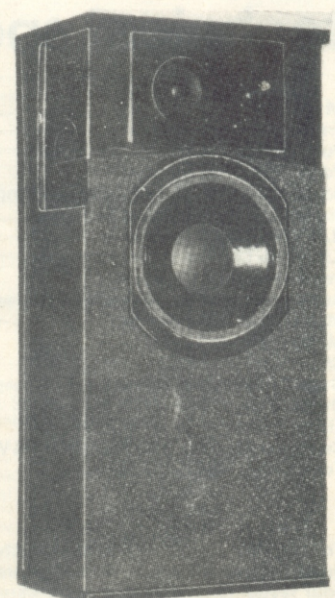
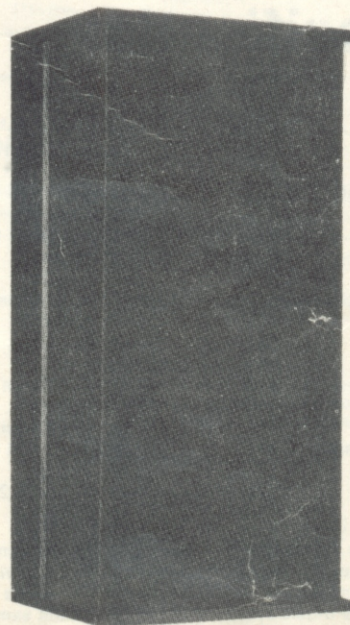
GENERAL ASSEMBLY
SIDE SECTION VIEW.



Monitor 180



Studio S.360

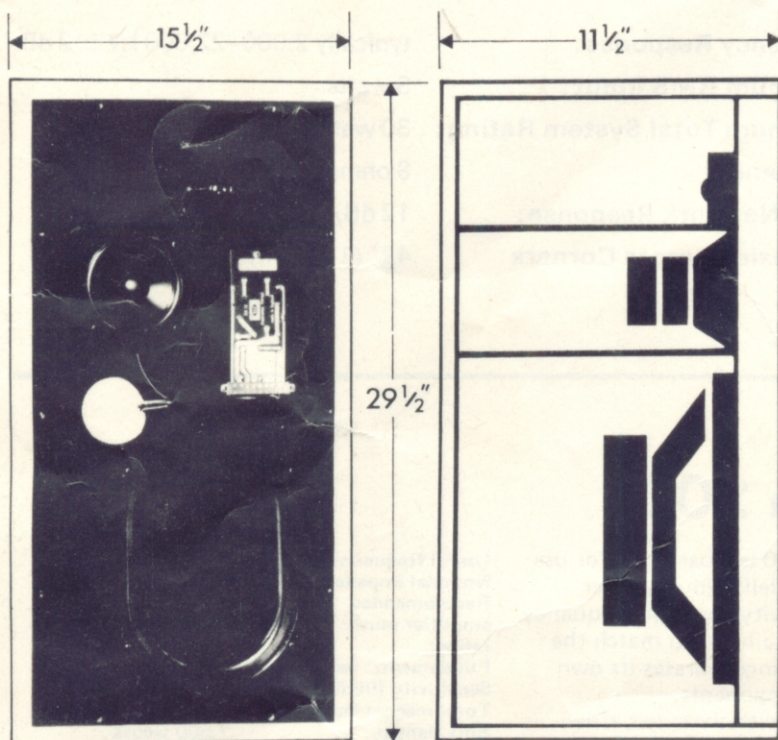


Studio 270

KEF KEFKIT 3

KEFKIT 3 offers smooth, uncoloured sound reproduction from a compact 65 litre, floor standing enclosure. The low frequency performance can be extended by installing the reflex baffle into enclosures up to 150 litres internal volume. The power handling capacity of 50 watts makes the KK3 ideally suited to the most sophisticated installations. The kit provides three KEF drive units and dividing network installed and tested on a baffle board. Acoustic damping material, grille cloth, sealing strip, terminal panels and fixing screws are also included, with instructions for enclosure construction.

Floor standing speaker

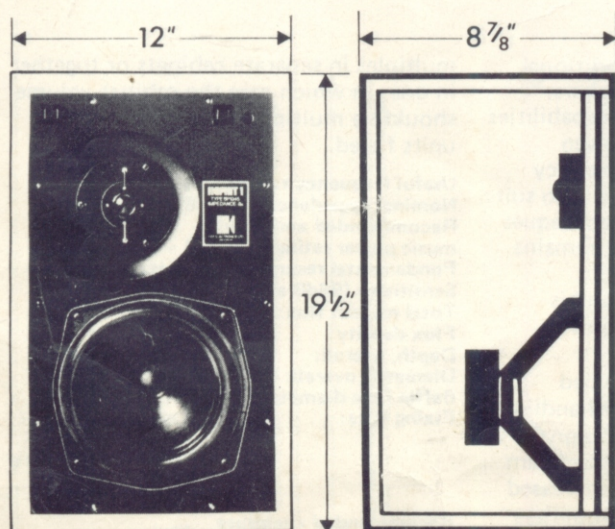


Dimensions: 711 x 356 x 260 mm
(baffle assembly) 28 x 14 x 10.25 in
Weight: (Packed) 12.70 kg 27.99 lb
Internal Volume: 60-150 litres
Nominal Impedance: 8 ohms
Rated Maximum Power: 50 watts programme
Nominal Frequency Range: 25 - 40,000 Hz
Specific Frequency Response: ±3 dB 35-30,000 Hz measured at 1 metre on axis of the H F unit in anechoic conditions
L F Unit: B139 Type SP1044
M F Unit: B110 Type SP1003
H F Unit: T27 Type SP1032
Dividing Network: DN 12 Type SP1004 dividing frequency 400 and 3,500 Hz
Sensitivity: 9.5 w into nominal 8 ohms produces 96 dB at 1 metre
Amplifier Requirements: into 8 ohms 15 - 50 watts per channel
Room Size: Up to 280 cubic metres (10,000 cu ft)
Grille Cloth: Dark Brown

KEF KEFKIT 1

Kefkit 1 gives outstanding performance from a 21 litre enclosure. With its two finely-engineered KEF drive units, it is capable of giving a natural, uncoloured sound quality over a wider frequency range than usually associated with such modest-sized enclosures. The kit provides two drive units ready connected and tested with a printed circuit dividing network, mounted on a new rigid polyurethane foam baffle. As an extra convenience, the grille comes as a completed assembly, ready for fitting. Despite its size, Kefkit 1 will give excellent performance in medium to large rooms, from an amplifier rated at up to 25 watts per channel. As a kit, it is also capable of being built into a wide variety of locations where space is at a premium. Pre-formed blocks of acoustic damping foam, sealing strip, terminal panels, screws and complete, step-by-step instructions, are also included.

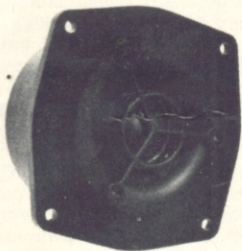
Shelf mounting speaker



Dimensions: 454 x 264 x 100 mm
(baffle assembly) 17.9 x 10.4 x 3.9 in
Weight: 10.09 kg 22.24 lb
(Packed, per pair)
Recommended Enclosure Size: 495 x 305 x 216 mm
Internal Volume: 21 litres
Nominal Impedance: 8 ohms
Rated Maximum Power: 25 watts programme
Nominal Frequency Range: 35-40,000 Hz
Specific Frequency Response: + 3 dB 50 - 30,000 Hz measured at 1 metre on axis of the HF unit in anechoic conditions
L F Unit: B200 Type SP1014
H F Unit: T27 Type SP1032
Dividing Network: DN13 Type SP1046
Network: dividing frequency 3,500 Hz
Sensitivity: 17 w into nominal 8 ohms produces 96 dB at 1 metre
Amplifier Requirements: into 8 ohms 15 - 25 watts per channel
Room Size: Up to 140 Cubic metres (5,000 cu ft)
Grille Cloth: Dark Brown



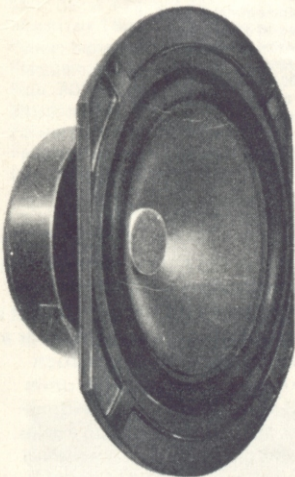
Axent 100



A state-of-the-art high frequency radiator of negligible distortion designed with built-in crossover unit. Stable, heavily damped, synthetic fabric dome in a phase correcting throat permits excellent phase frequency response and transient performance.

Frequency Response:	typically 2,000–22,000 Hz ± 2 dB.
Maximum RMS Input:	3 watts.
Maximum Total System Rating:	30 watts.
Impedance:	8 ohms.
Filter Network Response:	12 dB/octave below 3,000 Hz.
Dimension across Corners	4 $\frac{3}{8}$ " (112 mm).

Audiom 200



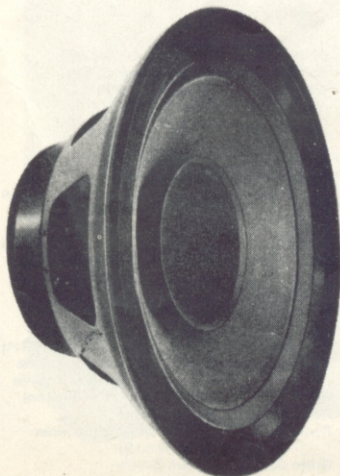
The Audiom 200 is a bass unit for use in two-way high fidelity loudspeaker systems. Its sensitivity and high frequency roll-off have been tailored to match the Axent 100, which incorporates its own crossover filter components.

A system built with these two drive units will perform satisfactorily with amplifiers that have music power ratings in the range of 10 to 40 Watts.

The Audiom 200 will, however, handle the undistorted output of amplifiers with a 60 Watt music power rating if used with suitable alternative high frequency components.

Useful frequency range:	30–3,000 Hz
Nominal impedance:	8 ohms
Recommended amplifier music power rating:	10-60 Watts
Fundamental resonance:	24 Hz
Sensitivity (96dB at 1m):	7 Watts
Total magnet flux:	68,750 Maxwells
Flux density:	7,500 Gauss
Depth, overall:	96mm
Diameter, overall:	313 x 264mm
Baffle hole diameter:	234mm
Fixing data:	4 equally spaced chassis holes of 8mm diameter on a circle of 298.5mm diameter.
Recommended enclosure volume:	35 litres

Axiom 402



The 402 is the latest in a traditional line of Axiom 12 inch loudspeakers.

It has the same high power capabilities of its predecessor the 401 but even greater sensitivity and high frequency response. Re-engineered primarily to suit the contemporary scene of discotheques and high level sound studios, it remains perfectly satisfactory for home entertainment where a free sound is required from a relatively low power source.

When fitted in its recommended enclosure the 402 is capable of handling continuously music and speech signals from amplifiers rated up to a maximum of 40 Watts music power. For increased sound levels or higher power amplifiers the loudspeakers may be used in

multiples in separate cabinets or together in one, in which case the cabinet volume should be multiplied by the number of units fitted.

Useful frequency range:	40–11,000 Hz
Nominal impedance:	8 or 15 ohms
Recommended amplifier music power rating:	4 – 40 Watts
Fundamental resonance:	30 Hz
Sensitivity (96dB at 1m):	2 Watts
Total magnet flux:	164,750 Maxwells
Flux density:	14,500 Gauss
Depth, overall:	142mm
Diameter, overall:	311mm
Baffle hole diameter:	278mm
Fixing data:	4 equally spaced chassis holes of 8mm diameter on a circle of 298mm diameter
Recommended enclosure volume:	60 litres

Goodmans

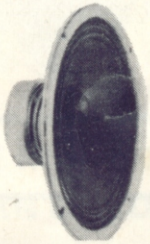
Goodmans POWER RANGE AUDIOMS

POWER RANGE LOUDSPEAKERS are for professional use, where reliability has to complement the total sound performance. The listed uses are typical, not an exhaustive detailing. Power range loudspeakers are found in such diverse situations as acoustic research, pest control and alarm systems. Popular examples are shown for ease of selection.

8P

SPECIFICATION

Nominal Power Rating: 15 watts.
 Fundamental Resonance (Typical): 85 Hz.
 Flux Density (Typical): 12,500 gauss.
 Voice Coil Diameter: 1" (25 mm).
 Impedance: 8 or 15 ohms.
 Overall Diameter: $8\frac{3}{8}$ " (204 mm).
 Suitable Sealed Enclosure Volume (per loudspeaker): 1,300 cu.ins (20 lts).



10P

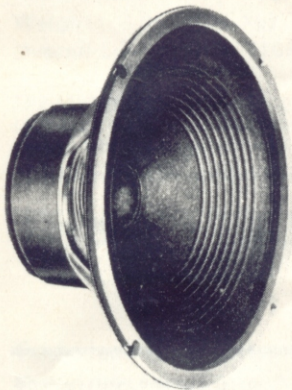
SPECIFICATION

Nominal Power Rating: 15 watts.
 Fundamental Resonance (Typical): 85 Hz.
 Flux Density (Typical): 12,500 gauss.
 Voice Coil Diameter: 1" (25 mm).
 Impedance: 8 or 15 ohms.
 Overall Diameter: $10\frac{1}{6}$ " (259 mm).
 Baffle Hole Diameter: 9" (229 mm).
 Suitable Sealed Enclosure Volume (per loudspeaker): 2,000 cu.ins (30 lts).

12P

SPECIFICATION

Nominal Power Rating: 50 watts.
 Fundamental Resonance (Typical): 85 Hz.
 Flux Density (Typical): 14,000 gauss.
 Voice Coil Diameter: $1\frac{3}{4}$ " (44 mm).
 Impedance: 8 or 15 ohms.
 Overall Diameter: $12\frac{1}{2}$ " (311 mm).
 Baffle Hole Diameter: 11" (279 mm).
 Suitable Sealed Enclosure Volume (per loudspeaker): 3,000 cu.ins (50 lts).



15P

SPECIFICATION

Nominal Power Rating: 50 watts.
 Fundamental Resonance (Typical): 56 Hz.
 Flux Density (Typical): 15,000 gauss.
 Voice Coil Diameter: $1\frac{3}{4}$ " (44 mm).
 Impedance: 8 or 15 ohms.
 Overall Diameter: $15\frac{1}{6}$ " (383 mm).
 Baffle Hole Diameter: 13" (330 mm).
 Suitable Sealed Enclosure Volume (per loudspeaker): 4,800 cu.ins (80 lts).

18P

SPECIFICATION

Nominal Power Rating: 100 watts.
 Fundamental Resonance (Typical): 45 Hz.
 Flux Density (Typical): 13,500 gauss.
 Voice Coil Diameter: 3" (76 mm).
 Impedance: 8 or 15 ohms.
 Overall Diameter: $18\frac{1}{6}$ " (459 mm).
 Baffle Hole Diameter: $16\frac{1}{4}$ " (413 mm).
 Suitable Sealed Enclosure Volume (per loudspeaker): 7,000 cu.ins (120 lts).

		8P	10P	12P	12P-D	12P-G	15P	18P
Public Address	Indoors	X	X		X			
	Outdoors		X	X		X		
Musical Instrument Amplification	Pop organs			X		X	X	
	Pop Guitars		X	X		X		
	Bass Guitars			X		X		X
Discotheques Theatres, Clubs	Low Power	X						
	High Power				X			

Audiom 12P-G

SPECIFICATION

Nominal Power Rating: 50 watts.
 Impedance: 8 or 15 ohms.
 Fundamental Resonance: 70 Hz.
 Flux Density: 14,750 gauss.
 Voice Coil Diameter: 45 mm.
 Depth: 140 mm ($5\frac{1}{2}$ ").
 Diameter: Overall 311 mm ($12\frac{1}{4}$ ").
 4 Equally-spaced Fixing Holes in Chassis: 8 mm ($\frac{5}{16}$ ") diameter on a Circle of 298 mm ($11\frac{3}{4}$ ") diameter.



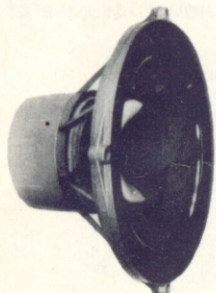
Audiom 12P-D

SPECIFICATION

Nominal Power Rating: 50 watts.
 Impedance: 8 or 15 ohms.
 Fundamental Resonance: 55 Hz.
 Flux Density: 14,750 gauss.
 Voice Coil Diameter: 45 mm.
 Depth: 142 mm ($5\frac{5}{8}$ ").
 Diameter: Overall 311 mm ($12\frac{1}{4}$ ").
 4 Equally-spaced Fixing Holes in Chassis: 8 mm ($\frac{5}{16}$ ") diameter on a Circle of 298 mm ($11\frac{3}{4}$ ") diameter.

Goodmans

Twinaxiom 8



This model, the smallest of the range is ideally suited to budget enclosures, having small physical size and ability to provide full frequency reproduction at 15 watts. It is sensitive enough to be used at 4-5 watts with adequate volume.

Frequency Range: 40-18,000 Hz.

Nominal Power Rating: 15 watts DIN.

Fundamental Resonance: 35 Hz.

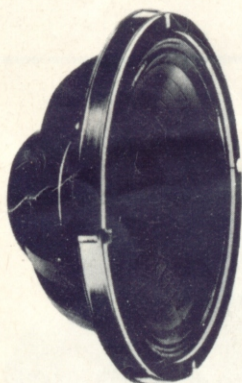
Impedance: 8 or 15 ohms.

Flux Density: 13,500 Gauss.

Overall Diameter: 8 $\frac{1}{2}$ " (205 mm).

Suitable Enclosure Volume: 2,000 cu.ins. (30 lts.).

Twinaxiom 10



For larger cabinets than the Twin Axiom 8, where space does not permit the use of our 12" speakers. The same excellent design features as used in the Twin Axiom 8 are employed giving smooth full-range response.

Frequency Response: 40-18,000 Hz.

Nominal Power Rating: 15 watts DIN.

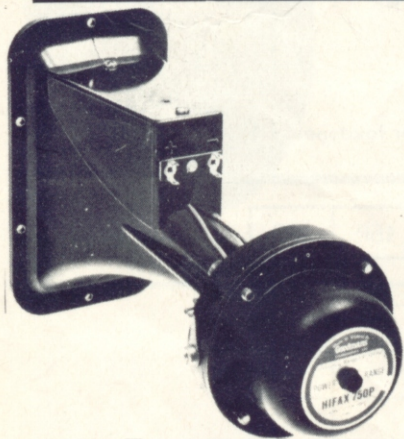
Fundamental Resonance: 40Hz.

Impedance: 8 or 15 ohms.

Flux Density: 13,500 Gauss.

Overall Diameter: 10 $\frac{1}{2}$ " (266 mm).

Recommended Enclosure Volume: 3,000 cu.ins. (45 lts.).

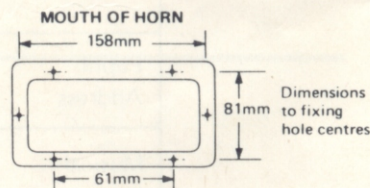


Hifax 750P

The Hifax 750P is a high power high frequency unit with an integral filter, that operates over the upper octaves of a 50 Watt system when used with Goodmans Power Range loudspeakers.

In high power systems one Hifax 750P is required for each nominal 50 Watts of the total power available.

Impedance:	For use with systems rated at 8 or 15 Ohms
Nominal power handling:	systems rated at 50 Watts
Frequency range:	1.4 - 12 KHz
Depth, overall:	242 mm
Baffle hole:	143 x 65 mm
Fixing hole diam:	6 of 4 mm
Fixing hole centres:	see diagram



DIN 20 High Fidelity Loudspeaker Kit

All the electrical components required by the enthusiast to build a high fidelity speaker system in his own cabinet. Kit includes bass and HF speakers, crossover unit, port tube and terminal board together with foam padding, wiring, fixing screws and cabinet template.

Drive Units: 8" Bass, HF Dome radiator.

Crossover Frequency: 4,000 Hz.

Nominal Power Rating: 20 watts DIN.

Frequency Range: 45-22,000 Hz.

Impedance: 4 ohms.

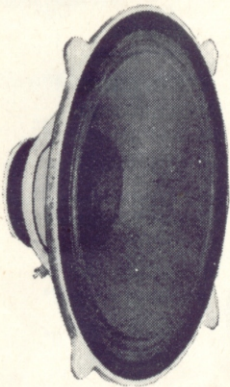
Recommended Cabinet Size: 19 $\frac{1}{4}$ " x 10 $\frac{1}{2}$ " x 9 $\frac{1}{4}$ ".

Recommended volume: 22 litres.

Celestion "POWER" RANGE

HEAVY DUTY CONE AND PRESSURE TYPE LOUDSPEAKERS

Manufactured to the most exacting standards, the "Power" range of loudspeakers is specifically designed for heavy duty public address and electronic musical instrument applications (guitars, organs, etc.). Ferroba II ceramic magnet systems, employed throughout the range, ensure exceptional efficiency and control. Voice coil leads are specially terminated to eliminate the possibility of fracture and all moving parts are housed in rugged chassis to ensure permanent alignment.



SPECIFICATIONS

Model	Power (Watts) RMS	Resonance (Hz)	Response (Hz)	Voice Coil Diameter		Magnet Weight		Total Flux (Maxwells)	Weight		Dia. ins.	Enclosure internal volume*
				in	mm	lbs	kg		lbs	kg		
G12M	25	75	40-8000	1.75	44	2.5	1.13	145,000	8	3.63	12	2,500 cu"
G12H	30	75	40-8000	1.75	44	3.5	1.58	180,000	11	4.9	12	2,500 cu"
G15C	50	55	30-8000	2	51	3	1.36	180,000	12.5	5.65	15	5,000 cu"
G18C	100	35	25-5000	3	76	5	2.26	285,000	22	10.00	18	8,000 cu"

Impedance 8 and 16 ohms for all models.

THE MH1000 MIDDLE/HIGH RANGE HORN LOADED PRESSURE UNIT

CELESTION

SPECIFICATION

Frequency Range: 800-10,000 Hz.

System Power Handling Capacity: 25 watts.

Impedance: 8 or 15 ohms.

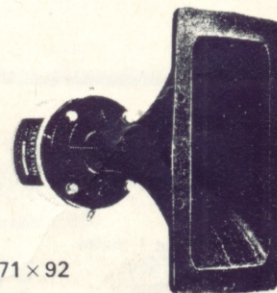
Flare Opening: $5\frac{1}{2}'' \times 2\frac{1}{2}''$ (140 x 635 mm).

Weight: 3 lbs. (1.36 kg).

Overall Length: $6\frac{3}{8}''$ (168 mm).

Diameter of Magnet Cover: 3" (76 mm).

Outside Dimensions of Horn: $6\frac{1}{4}'' \times 3\frac{3}{8}''$ (171 x 92 mm).



The MH1000 has been designed for use in systems where the middle/high frequencies require reinforcement. A self-centering diaphragm and phase corrected throat assembly is fitted to the high sensitivity pressure type drive unit and coupled to an exponential horn.

The HF1300 Mk II

Technical specification

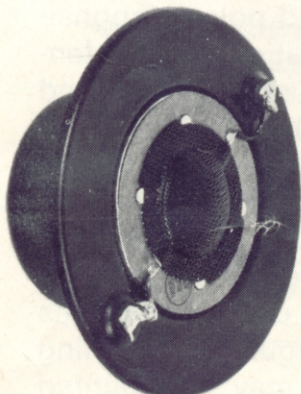
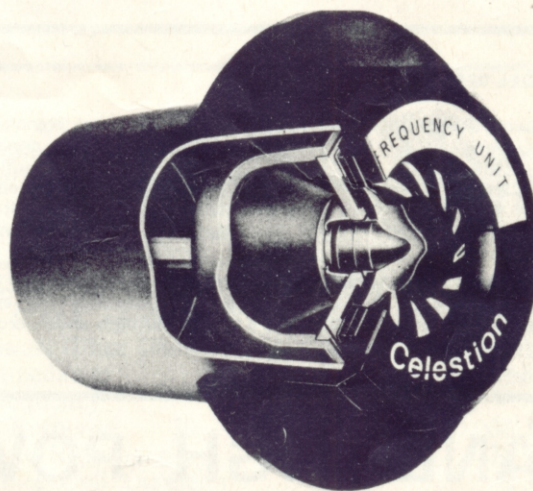
Frequency response: * 2kHz to 15kHz \pm 2dB.

Impedance: 15 ohms or 8 ohms.

Power handling capacity: 5W RMS. (continuous sine wave) For use with systems rated at 20W rms - 40W peak.

Nett weight: 17 oz. (482 gms).

*Recommended crossover frequency: 3kHz.



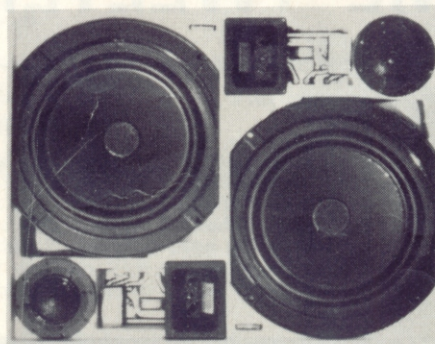
CELESTION HF2000 SUPER TWEETER

Frequency Response: 5 kHz - 38 kHz.

Impedance: 6 ohms.

Power Handling: Systems up to 80 watts. Din

Crossover Frequency: 5 kHz or above.



Goodmans MEZZO Twinkit

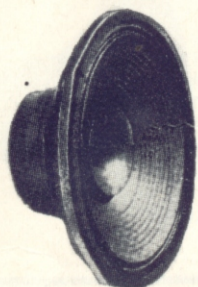
Freq. Range 40-20000 Hz

Power Handling (Din 45 : 500): 50 Watts

Recommended Amplifier Music Power: 10-60 Watts

Bass Units: 250mm

Tweeters: 38mm



Type	Music Watts	RMS Watts	Freq. Range	Main Resonance	Diameter ins	Flux Density Gauss	Weight lbs	Speech Coil
†POP 15	20	15	40 Hz to 18 kHz	50 Hz	12	11,000	4	1"
†POP 25/T	50	25	40 Hz to 15 kHz	70 Hz	12	13,000	5	1"
POP 33/T	66	33	40 Hz to 16 kHz	70 Hz	12	13,000	5	1½"
*POP 50	100	50	50 Hz to 8 kHz	75 Hz	12	13,000	7	2"
*POP 55	120	60	50 Hz to 9 kHz	70 Hz	12	15,000	10½	2"
*POP 60	120	60	45 Hz to 5 kHz	70 Hz	15	14,000	9	2"
*POP 70	140	70	45 Hz to 8 kHz	55 Hz	15	17,000	10½	2"
*POP 100	200	100	20 Hz to 5 kHz	55 Hz	18	14,000	22	3"

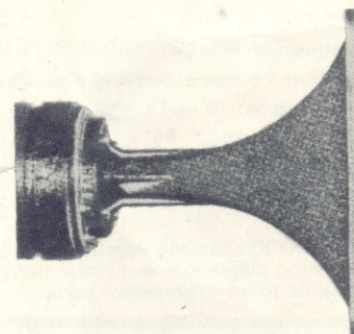
Mounting diameter - 12" = 11¾", 4 holes ¼" ø
 Mounting diameter - 15" = 14.67", 4 holes ¼" ø
 Mounting diameter - 18" = 17¼", 8 holes ⅝" ø

†With twin cone. Not intended for bass instruments or organs.
 *Single cone. May be used with any instrument.

MODEL 910 Mk II

Frequency Range	2000 to 18000 Hz	Horn Cut-off	924 Hz
Power rating - Watts RMS	above 3000 Hz 50 watts	Recommended crossover	Fane HPX 1
Sound level at 1 metre for 1 watt input	105 dB at 3 KHz	Mouth of horn	16.8 cm x 9.1 cm
Input Impedance	8-15 ohms	Overall depth	16.5 cm
		Nett Weight	1.1 kg

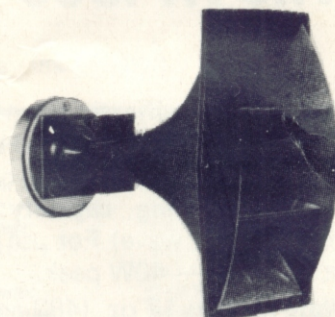
Model 910 is a sensitive high power tweeter which may be used to supplement the high frequency response of a 12" or 15" speaker for use with a guitar, electronic organ, or similar application.



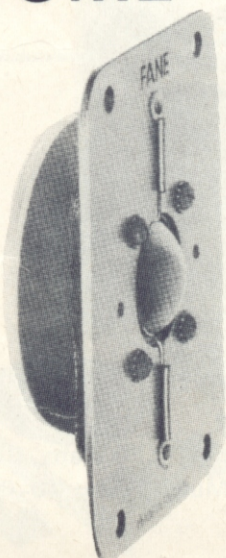
MODEL 920 Mk II

Frequency Range	1000-18000 Hz	Recommended crossover	Fane HP X 1
Power rating - Watts RMS	100	Mouth of horn	35.5 cm x 20.3 cm
Sound level at 1 metre for 1 watt	107 dB at 3 KHz	Overall depth	38.1 cm
Input Impedance	8-15 ohms	Depth in cabinet	33 cm
Horn Cut-off	469 Hz	Nett Weight	5 Kg

Model 920 is a very sensitive high power tweeter which may be used to supplement the high frequency response of any high power bass speaker for the reproduction of voice or instruments. It should be operated with the HPX1 3000 Hz high power crossover



FANE HIGH POWER DOME TWEETER

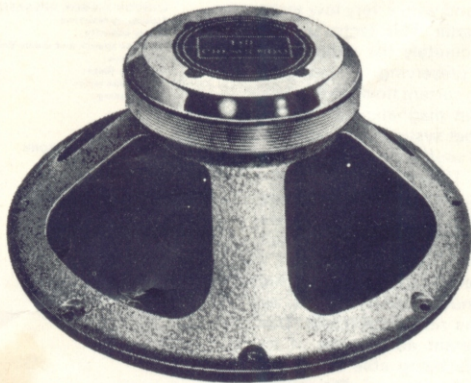


MODEL PH50

RECOMMENDED CROSSOVER TYPE HPX1

The FANE MODEL PH50 is a 1" soft dome high frequency unit with excellent frequency and polar response characteristics. It is intended for use in P.A. and guitar loudspeaker cabinets to supplement the higher frequencies and to add more definition and attack to the sound, especially vocal. The unit incorporates a rectangular mounting plate and may be mounted in an existing 50 Watt cabinet assembly.

CRESCENDO '18'



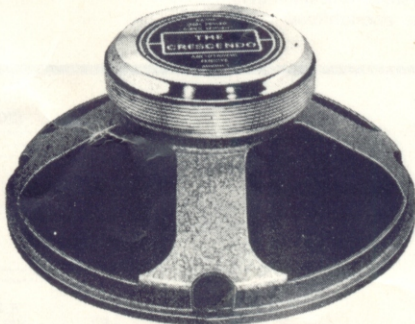
Cabinet volume 7,000 cubic ins. for a single loudspeaker

An ultra high power, high sensitivity 18" unit with a wide frequency response for this size of speaker.

Eminently suitable for all bass instruments.

Gauss (Flux Density)	20,000 lines
Impedance	8 or 15 ohms
Frequency Response	30 — 5,000 Hz.
Bass Resonance	45 Hz.
Voice Coil Diameter	3 ins.
Power Rating	150 watts R.M.S. cont.

CRESCENDO '15'

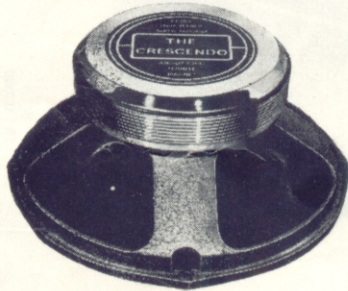


Cabinet volume 4,500 cubic ins. for a single loudspeaker

A super sensitive, full frequency range, 15" high power unit. Suitable for use singly or in multiples, for Bass Guitar, Electronic Organ, Lead and Rhythm Guitar, Vocalists, etc., etc.

Gauss (Flux Density)	20,000 lines
Impedance	8 or 15 ohms.
Frequency Response	30 — 13,000 Hz.
Bass Resonance	50 Hz.
Voice Coil Diameter	2 ins.
Power Rating	100 watts R.M.S. cont.

CRESCENDO '12'



Cabinet volume 3,200 cubic ins. for a single loudspeaker

An exceptionally sensitive 12" high power unit available in two versions. Type 'A' for general purposes to be used either singly or in multiples. And Type 'B/L' which has a plastic treated linen surround to be used in pairs (min.) for Bass Guitar or Electronic Organ.

Power Rating —	Type 'A'	Type 'B/L'
R.M.S. continuous	100 watts	100 watts
Gauss (Flux Density)	20,000 lines	20,000 lines
Impedance	8 or 15 ohms.	8 or 15 ohms
Frequency Response	30 — 16,000 Hz.	40—10,000 Hz.
Bass Resonance	70 Hz.	70 Hz.
Voice Coil Diameter	2 ins.	2 ins.

"WHAT IS THE SIGNIFICANCE OF 'GAUSS'?"

When an amplifier is connected to a loudspeaker, generally, for a given power input — THE HIGHER THE GAUSS (Flux Density) } With same diam.
THE HIGHER THE SOUND OUTPUT } of pole piece

Normally, loudspeakers used for Public Address, Musical Instruments and Vocal amplification, have magnets providing flux densities of 10,000 to 17,000 lines. IT SHOULD BE NOTED THAT OUR 'CRESCENDO' MODELS HAVE AN EXCEPTIONAL FLUX DENSITY OF 20,000 LINES. As an increase of only 1,000 lines results in noticeably louder sound output, the efficiency of the 'CRESCENDO' types is considerably higher than even our very efficient 17,000 line models. Other audible advantages of higher flux densities are increased definition, 'attack' and brighter sound due to the effect on the upper frequency range.

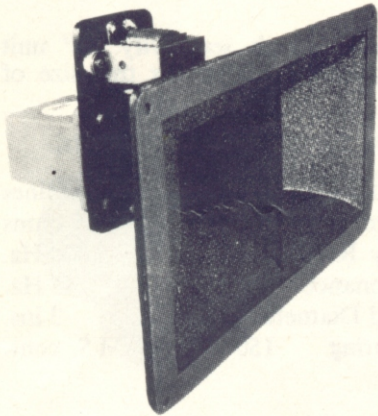
IMPORTANT

Where more than one loudspeaker is used in a cabinet they can be wired in series or parallel or series/parallel to obtain the required resultant impedance matching. POLARITY MUST BE OBSERVED. i.e. For parallel connections terminals indicated by red dot should be joined together and for series, the terminal marked red on one speaker should be connected to the plain terminal at the next speaker.

DECCA LONDON RIBBON SPEAKER

What makes the ribbon speaker different?

The answer lies in the ribbon itself (only 1/10th the thickness of a human hair), which, being the only moving part of the speaker, and with a very low mass has, therefore, very low inertia. This factor allows the ribbon to reproduce accurately the middle and top frequencies, while still preserving the transient characteristic. An alternating current flowing through this ribbon produces its own magnetic field which reacts with that of the magnet system. The resultant mechanical force is applied uniformly and in phase over the whole diaphragm. This ensures a remarkably smooth response, free from resonance, quite unlike conventional moving coil type tweeters where the force is applied only at the line of contact between the voice coil and the diaphragm. The new London High Frequency Speaker is the latest result of the continuous development by Decca of speakers using the ribbon principle. This unit possesses all the inherent advantages of its predecessor the DK30 while being able to handle frequencies from 1000Hz to beyond the audio range. Now bass speakers specifically designed for handling only the low frequencies (previously only usable with the ribbon speaker in conjunction with a mid range unit) can be used with the London Ribbon Speaker in a two unit system. This eliminates the added phasing problems encountered with three-speaker systems.

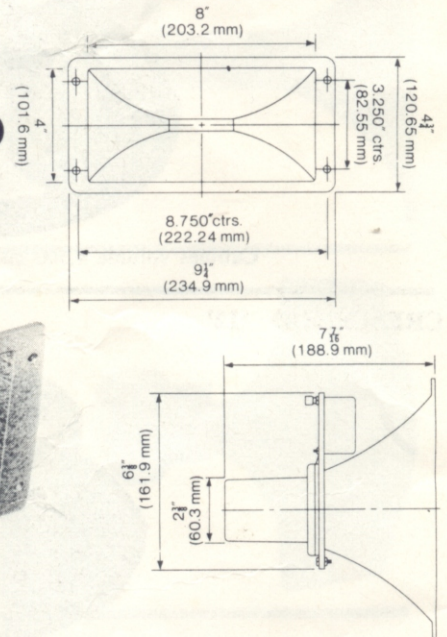
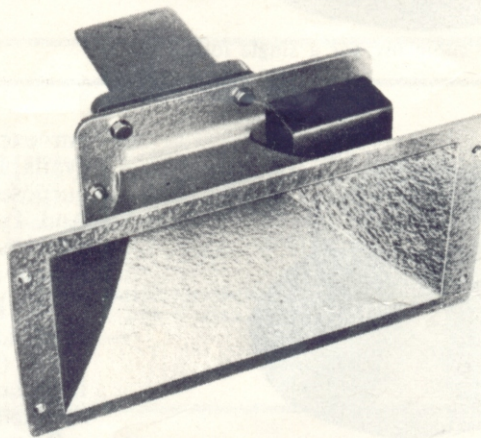


Technical Specifications

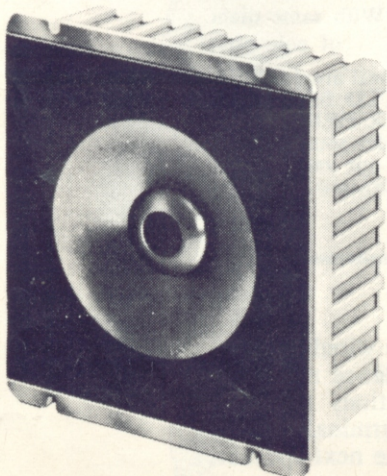
LONDON RIBBON SPEAKER	1,000 to 25,000 Hz
Frequency response:	
Power capacity:	30 watts max.
(Average speech and music Brit. Stand.)	875 ohms
Impedance:	10 milligrams
Dynamic Mass:	7-10 ⁷ dynes per gram per watt
Force/Mass ratio:	Resistive above 1,000 Hz
Horn loading:	750 Hz cut-off
Distortion:	Less than 1.7% at 2,500 Hz with 30 watts input
CROSSOVER NETWORK	1,000 Hz
Crossover Frequency:	12dB per octave
Low Pass Slope:	Initially 12 dB per octave, and final slope 45 dB per octave, attenuation at frequencies below 700 Hz greater than 40 dB
High Pass Slope:	Less than 1 dB in pass band 8 ohms constant
Insertion Loss:	
Impedance:	

The Decca Ribbon HF Loudspeaker DK 30

Frequency response	2,500 to 25,000 Hz
Power Capacity (Average speech and music British Standard)	30 watts max.
Impedance	8 ohms
Dynamic Mass	10 milligrams
Force/Mass Ratio	7 x 10 ⁷ dynes per gram per watt
Horn loading	Resistive above 2,500 Hz. 1,000 Hz cut-off
Distortion	Less than 1.7% at 2.5 KHz with 30 watts input
Dimensions	240 x 114 x 190 mm
Weight	2.5 Kg (5½ lbs)



JORDAN WATTS



Jordan-Watts loudspeakers can cover the entire audible range of frequencies from 20 Hz to 20,000 Hz at an extremely low distortion level due to their unique driving unit of single metal diaphragm construction that eliminates the need for crossover networks. Power requirements from a fraction of a watt upwards can be met by using these modules singly or in multiple arrays. Low frequency response is determined by the enclosure and is independent of the number of units used.

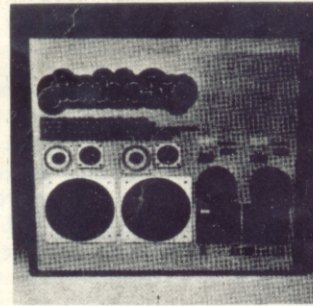
Dimensions are 6" x 6" square and 2" deep (15.2 x 15.2 x 5.0 cms.) plus 3/8" flanges on two sides. For fixing use four bolts 2BA or 3/16" dia. (5mm.) spaced 6½" x 4" apart (16.5 x 10.1 cms) between centres. Diaphragm 4" (10 cms) diameter of metal alloy, capable of a total excursion of 0.25 inches (6.5 mm.)

Fundamental resonance 41 Hz. Total Weight 8 lbs. Power handling 15 watts rms. (30 watts USA Rating). Frequency range on axis: 30-17,000 Hz ± 3 dB 25-20,000 Hz ± 6 dB Frequency range 30° off axis: 30-17,000 Hz ± 6 dB Impedance suitability: 4, 8, or 16 ohms.

Enclosure construction details free on request.



Speaker Kits



Speaker Kits

A real sound saving. Our hi-fi speakers in simple unit kit form. These kits incorporate all the technical excellence of Wharfedale Hi-Fi cabinet systems, and are

ready for you to assemble in your own cabinet enclosure, to the guidelines set out in the comprehensive instruction manual supplied with each kit.

SPECIFICATIONS

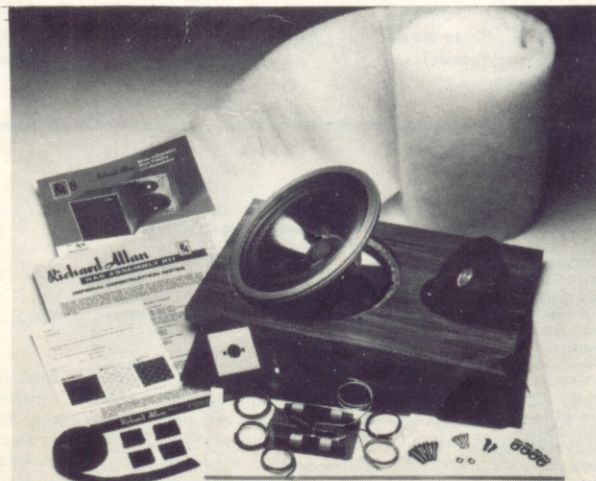
	Linton 2	Glendale 3XP	Dovedale 3
Maximum Input	20 Watts DIN	40 Watts DIN	50 Watts DIN
Impedance	6 Ohms nominal	6 Ohms nominal	6 Ohms nominal
Frequency Response:			
Maximum Size:	55 Hz – 18,000 Hz ±4dB	40 Hz – 20,000 Hz DIN ±4dB	35 Hz – 22,000 Hz ±4dB
Minimum Size	70 Hz – 18,000 Hz ±4dB	50 Hz – 20,000 Hz at -3dB points	40 Hz – 22,000 Hz ±4dB
Bass Speaker	200 mm diameter	250 mm diameter	300 mm diameter
Mid Range Speaker	—	100 mm diameter	130 mm diameter
Mid Range/Treble Speaker	50 mm diameter		
Treble Speaker	—	30 mm diameter	25 mm diameter
Crossover Frequencies	1,200 Hz	800 Hz and 4,000 Hz	600 Hz and 5,000 Hz
Enclosure Type	Acoustic Suspension	Acoustic Suspension	Acoustic Suspension
Maximum Size	H. 533 mm × W. 299 mm × D. 241 mm	H. 610 mm × W. 356 mm × D. 305 mm	H. 743 mm × W. 425 mm × D. 305 mm
Internal Volume	37.5 litres	66 litres	90 litres
Minimum Size	H. 355 mm × W. 248 mm × D. 222 mm	H. 565 mm × W. 305 mm × D. 265 mm	H. 610 mm × W. 356 mm × D. 305 mm
Internal Volume	20 litres	30 litres	66 litres

Richard Allan

The New RA range

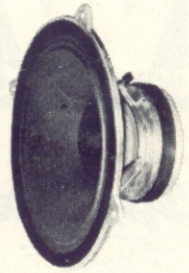
Three sophisticated kits which include polished baffle boards, drive units, crossover networks, acoustic material, etc. (Everything except wood for cabinets.)

- RA8** Power handling: 20 watts RMS.
Size: 15½" × 10½" × 9¾"
Bass unit: 8" Bextrene cone, PVC surround.
Treble unit: ¾" dome type.
Frequency response: 90 Hz – 20 kHz ± 3dB.
Loading: I.B.
- RA82** Power handling: 45 watts RMS.
Size: 21½" × 11" × 9¾"
Bass unit: 8" Bextrene cone, PVC surround.
Treble unit: ¾" dome type.
Frequency response: 60 Hz – 20 kHz ± 3dB.
Loading: Isothermal Acoustic Suspension.
- RA82L** Power handling: 45 watts RMS.
Size: 28½" × 13½" × 11½"
Bass unit: 8" Bextrene cone, PVC surround.
Treble unit: ¾" dome type.
Frequency response: 40 Hz – 20 kHz ± 3 dB.
Loading: Dissipative Transmission Line.





After tests with leading Groups we have produced loudspeakers robustly constructed to stand up to long periods of electronic power and designed to give good tonal quality in cabinets of portable size. All models are fitted with heavy cones giving full output down to the E-string of BASS GUITARS at 41 cps.



"GROUP 25" 12 inch

Voice Coil Impedance	...	...	3 or 8 or 15 ohms
Maximum Power	...	...	25 watts (50 watts U.S.A.)
Bass resonance	...	...	55 c.p.s.
Useful Response	...	...	30-13,000 c.p.s.
Flux density	...	...	12,000 lines
Voice coil	...	...	1 1/4"/38 mm.
Overall diameter	...	...	12 1/4"/310 mm.
Overall depth	...	...	4 1/2"/120 mm.
Fixing holes diagonal	...	...	13"/330 mm.
Baffle aperture	...	...	11"/280 mm.
Nett weight	...	...	5 lbs./2.3 kg.

"GROUP 35" 12 inch

Voice Coil Impedance	...	...	3 or 8 or 15 ohms
Maximum Power	...	...	35 watts (70 watts U.S.A.)
Bass Resonance	...	...	55 c.p.s.
Useful Response	...	...	30-13,000 c.p.s.
Flux Density	...	...	14,000 lines
Voice coil	...	...	1 1/4"/38 mm.
Overall diameter	...	...	12 1/4"/310 mm.
Overall depth	...	...	4 1/2"/120 mm.
Fixing holes diagonal	...	...	13"/330 mm.
Baffle aperture	...	...	11"/280 mm.
Nett weight	...	...	6 lbs./2.7 kg.

The REGENT 12 inch

An inexpensive unit for the beginner in high fidelity and for general purposes. May be used to advantage with any Radio Amplifier or Television receiver.

Maximum Power	...	...	15 watts (30 watts U.S.A.)
Bass Resonance	...	...	45 c.p.s.
Flux Density	...	...	12,000 gauss
Voice Coil diameter	...	...	1 1/4"/38 mm.
Voice Coil impedance	...	...	3 or 8 or 15 ohm models
Voice Coil material	...	...	Copper
Useful response	...	...	45-13,000 c.p.s.
Cone surround	...	...	Paper roll
Chassis material	...	...	Solid aluminium
Overall diameter	...	...	12 1/4"/310 mm.
Overall depth	...	...	4 1/2"/120 mm.
Fixing holes diagonal	...	...	13"/330 mm.
Baffle aperture	...	...	11"/280 mm.
Nett weight	...	...	5 lbs./2.3 kg.

The SUPERB 12 inch

A high quality loudspeaker, its remarkable low cone resonance ensures clear reproduction of the deepest bass. Fitted with a special copper drive and concentric tweeter cone resulting in full range reproduction with remarkable efficiency in the upper register.

Maximum Power	...	...	20 watts (40 watts U.S.A.)
Bass Resonance	...	...	25 c.p.s.
Flux Density	...	...	16,500 gauss
Voice coil diameter	...	...	1 1/4"/38 mm.
Voice coil impedance	...	...	8 or 15 ohms
Voice coil material	...	...	Copper
Useful response	...	...	20-17,000 c.p.s.
Cone surround	...	...	Plastic
Chassis material	...	...	Solid aluminium
Overall diameter	...	...	12 1/4"/310 mm.
Overall depth	...	...	5"/130 mm.
Fixing holes diagonal	...	...	13"/330 mm.
Baffle aperture	...	...	11"/280 mm.
Nett weight	...	...	10 lbs./4.5 kg.

The AUDITORIUM 12 inch

A full range reproducer for high power, Electronic Guitars, public address, multi-speaker systems, electronic organs. Ideal for Hi-Fi and Discotheques.

Maximum Power	25 watts (50 watts U.S.A.)
Bass Resonance	35 c.p.s.
Flux Density	15,000 gauss
Voice coil diameter	1 1/4"/38 mm.
Voice coil impedance	8 or 15 ohms
Voice coil material	Copper
Useful response	25-16,000 c.p.s.
Cone surround	Paper roll
Chassis material	Solid aluminium
Overall diameter	12 1/4"/310 mm.
Overall depth	5"/130 mm.
Fixing holes diagonal	13"/330 mm.
Baffle aperture	11"/280 mm.
Nett weight	10 lbs./4.5 kg.

The AUDITORIUM 15 inch

A high wattage loudspeaker of exceptional quality with a level response to above 8,000 cps. Ideal for Public Address, Discotheques, Electronic instruments and the home.

Maximum Power	35 watts (70 watts U.S.A.)
Bass Resonance	35 c.p.s.
Flux Density	15,000 gauss
Voice coil diameter	2"/51 mm.
Voice coil impedance	8 or 15 ohms
Voice coil material	Copper
Useful response	20-14,000 c.p.s.
Cone surround	Paper roll
Chassis material	Solid aluminium
Overall diameter	15 1/4"/390 mm.
Overall depth	6"/153 mm.
Fixing holes diagonal	16 1/2"/417 mm.
Baffle aperture	14"/360 mm.
Nett weight	15 lbs./6.8 kg.

"GROUP 50" 15 inch

Voice Coil Impedance	...	...	8 or 15 ohms
Maximum Power	...	...	50 watts (100 watts U.S.A.)
Bass Resonance	...	...	45 c.p.s.
Useful Response	...	...	30-13,000 c.p.s.
Flux Density	...	...	15,000 lines
Voice coil	...	...	2"/51 mm.
Overall diameter	...	...	15 1/4"/390 mm.
Overall depth	...	...	6"/153 mm.
Fixing holes diagonal	...	...	16 1/2"/417 mm.
Baffle aperture	...	...	14"/360 mm.
Nett weight	...	...	15 lbs./6.8 kg.

"GROUP 50/12" 12 inch

Voice Coil Impedance	...	...	8 or 15 ohms
Maximum Power	...	...	50 watts (100 watts U.S.A.)
Bass Resonance	...	...	55 c.p.s.
Useful Response	...	...	30 16,000 c.p.s.
Flux Density	...	...	15,000 lines
Voice Coil	...	...	1 1/2"/38 mm
Overall diameter	...	...	12 1/4"/310 mm
Overall depth	...	...	4 1/2"/120 mm
Fixing holes diagonal	...	...	13"/330 mm
Baffle aperture	...	...	11"/280 mm
Nett weight	...	...	10 lbs/4.5 kg.

The MAJOR 12 inch

This model has a more powerful magnet for use where higher outputs are desired in the home, public address, Discotheques, etc. Built-in concentric tweeter cone.

Maximum Power	...	...	20 watts (40 watts U.S.A.)
Bass Resonance	...	...	40 c.p.s.
Flux Density	...	...	14,000 gauss
Voice coil diameter	...	...	1 1/4"/38 mm.
Voice coil impedance	...	...	3 or 8 or 15 ohms
Voice coil material	...	...	Copper
Useful response	...	...	30-14,500 c.p.s.
Cone surround	...	...	Paper roll
Chassis material	...	...	Solid aluminium
Overall diameter	...	...	12 1/4"/310 mm.
Overall depth	...	...	4 1/2"/120 mm.
Fixing holes diagonal	...	...	13"/330 mm.
Baffle aperture	...	...	11"/280 mm.
Nett weight	...	...	6 lbs./2.7 kg.

The DE LUXE Mk. II 12 inch

This loudspeaker is especially designed to provide full range reproduction at an economical cost. Suitable for use with any high fidelity system. Built-in concentric tweeter cone.

Maximum Power	...	...	15 watts (30 watts U.S.A.)
Bass Resonance	...	...	30 c.p.s.
Flux Density	...	...	14,000 gauss
Voice coil diameter	...	...	1 1/4"/38 mm.
Voice coil impedance	...	...	8 or 15 ohms
Voice coil material	...	...	Copper
Useful response	...	...	25-16,000 c.p.s.
Cone surround	...	...	Plastic
Chassis material	...	...	Solid aluminium
Overall diameter	...	...	12 1/4"/310 mm.
Overall depth	...	...	4 1/2"/120 mm.
Fixing holes diagonal	...	...	13"/330 mm.
Baffle aperture	...	...	11"/280 mm.
Nett weight	...	...	6 lbs./2.7 kg.