

Chapman

leads in
elegance & design

MADE IN ENGLAND



DERRITRON ULTRASONICS LIMITED

low and high power audio, radio and ultrasonic equipment

CHAPMAN DIVISION

24 UPPER BROOK STREET · LONDON W1 · ENGLAND

cable address: DERRITRON · LONDON telephone: HYDE PARK 2291/2/3/4 telegrams: DERRITRON · AUDLEY · LONDON
SERVICE AND SPARES ENQUIRIES: WORKS · CHAPEL LANE · HIGH WYCOMBE · BUCKS telephone 2474



FM 90 Switched V.H.F. F.M. FEEDER

Sensitivity	... Better than 2 micro volts for 20 dB quieting and 75 Kc/s deviation
Output	... 1v Cathode Follower
Consumption	... 2 A at 6.3v, 40 m/a at 250v
Connections	... 3 core coloured cable for Heaters and HT+ and HT- with 2-pin socket for Aerial input and separate cable for tuner output
Controls	... Station Selector: Light, Third, Home and Aux.
Dimensions	... 5" x 4½" x 6½" deep
Escutcheon	... Attractive finish in Gold and Black (not illustrated)
Weight	... 2½ lbs (1.13 kilos)
Finish	... Chassis cadmium plated, escutcheon Gold and Black
Valves used	... 2 x ECF80, EF85, EB91, EF80



FM 1000 V.H.F. F.M. TUNER

Sensitivity	... Better than 2 micro volts for 20 dB quieting
Output	... Almost constant at 250 mv. Low impedance emitter follower
Consumption	... 3 watts approx.
Connections	... 2 core mains cable, output sockets and aerial socket
Mains Voltage	... 100—125v or 200—250v, 50/60 c/s. To be specified at time of ordering
Controls	... Tuning, on/off/function
Dimensions	... 14½" x 3½" x 7½" deep
Weight	... 7 lbs. (3.175 kilos)
Semi-conductors	... AF102-1, AF115-1, AF116-3, OA79-4, OA81-2, OC71-2, Z105-1
Finish	... Cast escutcheon finished with knobs in ivory and gold. Cabinet semi-matt black, fully tropicalised throughout
Range	... 87.5—108 mcs

Note. Full provision has been made to enable Multiplex Adaptor to be internally fitted when available.



306 INTEGRATED STEREO AMPLIFIER

Input	... 4.0 mv at 1000K ohms RIAA curve, Gram: 40 mv at 100K ohms flat, Tape: 100 mv at 1000K ohms Radio and Aux.
Tape outlet	... 75 mv
Low pass filter	... 5 Kc, 10 Kc, 20 Kc and out, at approx. 12 dB octave
Treble and Bass Controls	... Fully variable
Power Output	... 8 watts — 0.5 dB 36 c/s—20 Kc including roll off filters
Frequency range	... 0.5 dB 36 c/s—20 Kc including filters at 1 watt level (25 c/s—25 Kc without filters)
Distortion	... Harmonic at 8 watts less than 0.1% at 1 Kc, intermodulation less than 1% with mixed frequencies
Hum and Noise	... Main Amp—75 dB, Radio tape and aux.—60 dB, gram—50 dB
Output Matching	... 3 ohms and 15 ohms
Mains Voltage	... 200—250v, 50 c/s
Consumption	... 120 watts average
Spare power available	... 250v at 30 ma, 6.3v 2½ a
Valves	... 2 x EF86, 2 x ECC83, 4 x ECL86, 1 x EZ.81
Dimensions	... 14½" x 5½" x 9½" deep
Weight	... 21 lbs (9.526 kilos)
Finish	... Cast escutcheons finished with knobs in ivory and gold. Cabinet semi-matt black, fully tropicalised throughout



FM 1005 AM/FM TUNER

Sensitivity	... FM better than 2 microvolts for 20 dB quieting. AM better than 4 microvolts for 20 dB signal/noise ratio
Output	... FM and AM 250 mv approx. Low impedance emitter follower
Consumption	... 3 watts approx.
Mains Voltage	... 100—125v or 200—250v, 50/60 c/s. To be specified at time of ordering
Connections	... 2 core mains cable, output sockets and aerial sockets
Controls	... Wave change, volume, on/off/AM/FM
Dimensions	... 14½" x 5½" x 7½" deep
Weight	... 8 lbs (3.629 kilos)
Semi-conductors	... AF102-1, AF115-1, AF116-3, OA79-4 (2), OA81-2, OC71-2, Z105-1, AF114-1, AF115-2, AF117-2
Finish	... Cast escutcheons and knobs finished in black and gold. Cabinet semi-matt black, fully tropicalised throughout
Range	... AM—16-50m; 50-195m; 195-550m; 800-1000m. FM—87.5-108 mc/s

Note. Full provision has been made to enable Multiplex Adaptor to be internally fitted when available.



S6BS MkII TUNER Six stage A.M. Bandspread

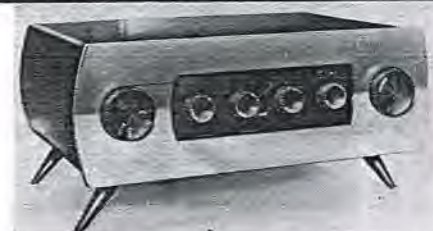
Output	500 mv approximately in 100,000/500,000 ohms
Sensitivity	2 microvolts for 20 dB signal/noise ratio
Wave Range	11m, 13m, 16m, 19m, 25m and 31m bands in six bandspread ranges 13m-43m, 43m-140m, 175m-570m displayed on a large scale.
Consumption	1½ amps at 6.3v 30/40 ma at 250v DC or 50 watts at 110v and 200/250v when self powered
Connections	2 pin sockets for aerial/earth and gramophone inputs, miniature co-axial socket for tuner output, and either 2 core red/black mains cable, or 4 core coloured cable for heaters, HT and earth
Controls	Tuning, wave range/Gram. Volume/Off, variable selectivity and A.M. sensitivity
Dimensions	13½" × 8½" × 11" deep
Weight	Unpowered 13½ lbs (6.57 kilos) powered 18 lbs (8.16 kilos)
Finish	Chassis cadmium plated, escutcheons plated and lacquered in gold with knob operation silk screened
Valves	3 × EF89, ECH81, EBF80, EM84, EZ80



S6BS/FM MkII TUNER Six stage A.M. Bandspread and high gain F.M.

(The finest tuner in our range)

Output	500 mv approximately into 100,000/500,000 ohms
Sensitivity	AM 2 microvolts for 20 dB signal/noise ratio FM 2 micro volts for 20 dB quieting
Wave Range	AM 11m, 13m, 16m, 19m, 25m and 31m in six bandspread ranges. 13-43m, 43-140m, 175-570m. FM 88-108 mcs
Controls	Variable selectivity/FM, Tuning, Volume/Off, wave change and AM sensitivity
AM Rejection	FM only—3 microvolts input 32 dB. 300 microvolts 40 dB
Connections	2 pin socket for AM aerial, 3 pin socket for FM aerial, 2 co-axial sockets for normal output and multiplex output on VHF only
Consumption	65 watts at 110v and 200-250v 40-60 c/s AC
Dimensions	13½" × 8½" × 13½" deep
Weight	18 lbs. net (8.165 kilos)
Finish	Chassis and brackets cadmium plated, escutcheons plated and lacquered in gold with knob operation silk screened
Valves	3 × EF89, ECH81, EBF80, EM84, EZ80, EF85, ECF80, 2 × EF80, EB91



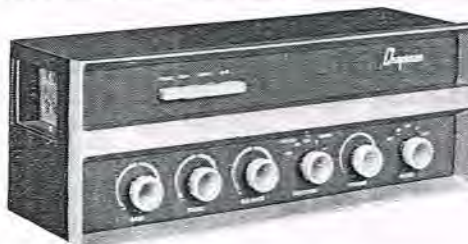
'Tranquillo' 105 COMPLETE AMPLIFIER

Input sensitivities	Pick up 1; 10mV at 100K ohms—Pick up 2; 10mV at 100K ohms. Radio: 100mV at 100K ohms—Tape: 100mV at 100K ohms
Tape outlet	500mV not affected by volume or tone controls
Low Pass filter	Operates at 5K, 10K and 20K c/s 12-15 dB/octave
High Pass filter	Fixed roll-off at 30 c/s to reduce motor rumble
Treble and Bass controls	Fully variable
Record Playback Characteristics	RIAA, AES, Col LP
Loudness control	Three position switch with pre-set contours
Power output	10 watts over the range 30-20,000 c/s
Frequency response	Within 0.2 dB 30-20,000 c/s without filters
Distortion	Harmonic at 10 watts, less than 0.1% at 1,000 c/s. Intermodulation at 10 watts, less than 1% with mixed frequencies
Hum and Noise	Down 80 dB referred to 10 watts
Output Matching	15 ohms and 3 ohms
Mains voltage	200 to 250v 50-60 c/s or 110v 60/50 c/s
Consumption	60 watts excluding spare supplies
Spare power available	250v 30m/a HT and 6.3v 2A LT
Valves	EF86, 2 × ECC83, 2 × EL84, EZ81
Dimensions	12" × 4½" × 8½" deep
Weight	18 lbs (8.16 kilos)
Finish	Cast escutcheon and knobs finished in Black and Matt Gold. Cabinet metal plated and covered in Vynyl. Plated chassis. Fully tropicalised throughout



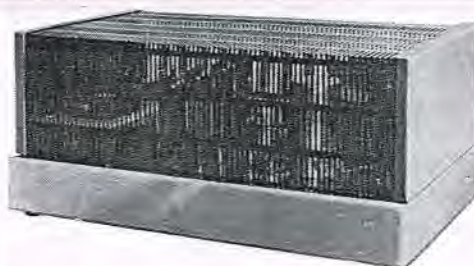
205 AMPLIFIER

Power output	30 watts from 20 c/s to 20,000 c/s
Power response	Within 0.5 dB of 1K/c level at 20 watts from 20 c/s-20Kc
Frequency response	(1 watt level) within 1 dB of 1Kc/s level 2 c/s-100 Kc
Harmonic distortion	0.05% at 20 watts, 0.1% at 30 watts
Intermodulation distortion	0.7% at 20 watts, 1% at 30 watts
Hum and noise	Down 90 dB relative to 20 watts
Sensitivity	220mV for 20 watts output
Damping Factor	50
Output matching	15 ohms and 3 ohms
Spare power available	220v 30 m/a HT and 6.3v 2A LT
Valves	EF86, ECC83, 2 × EL34, GZ34
Mains voltage	Fully tapped from 100-250 volts 40/60 c/s
Dimensions	14" × 7½" × 8½" deep
Weight	40 lbs (18.14 kilos)
Finish	Gold chassis and black transformer covers



305 MkII STEREO CONTROL UNIT

Input	Pick-up 4.0mv at 100K ohms RIAA curve, gram 40mv at 100K ohms flat, tape 100mv at 100K ohms Radio and aux.
Tape Outlet	75mv
Low pass filter	5Kc, 10Kc, 20Kc and out, at approx. 12 dB octave
Treble and Bass Controls	Fully variable
Output per channel	400mv
Controls	Selector: for Tape, Radio, Gram, Aux. Function: for Stereo reverse, Channel A, Channel B, Off. Volume: Ganged. Balance: To off, on each channel. Bass: Fully variable. Treble: Fully variable. Filter: Four positions 5Kc, 10Kc, 20Kc, out
Valves	2 × EF56, 2 × ECC83
Frequency Response	Within 0.2 dB 30-20,000 c/s, without filters
Distortion	Less than 0.1% total
High Pass Filter	Fixed roll off at 30 c/s to reduce motor rumble
Hum and noise	Down 50 dB on all channels
Consumption	10 m/a at 250v and 1.5A at 6.3v
Dimensions	14½" × 5½" × 4½" deep
Weight	5 lbs (2.27 kilos)
Finish	Cast escutcheon with knobs in ivory and gold. Cabinet semi-matt black, fully tropicalised throughout



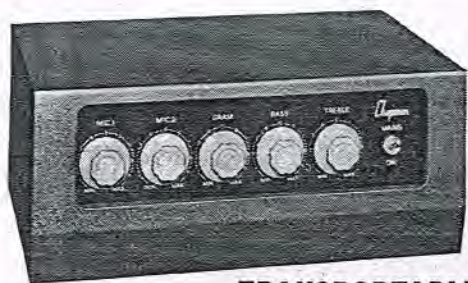
305 STEREO MAIN AMPLIFIER

Input sensitivity	350 mV RMS for 8 watts output
Frequency response	Within 0.2 dB 30-20,000 c/s
Power output	8 watts over the range 30-20,000 c/s
Distortion	Harmonic at 8 watts, less than 1% at 1Kc/s. Intermodulation at 8 watts less than 1% with mixed frequencies
Hum and noise	Down 80 dB referred to 8 watts
Output matching	15 ohms and 3 ohms
Mains voltage	200 to 250V. 50/60 c/s or 100/120V. 50/60 c/s
Consumption	100 watts excluding spare supplies
Spare power available	250V 30 m/a HT and 6.3V 2 A LT
Valves	2 × ECC83, 4 × EL84, EZ81
Dimensions	12" × 7" × 5" deep
Weight	15 lbs (6.71 kilos)
Finish	Steel chassis sprayed matt gold with black ventilated cover

The Chapman Stereo control unit is designed for direct connection

Chapman

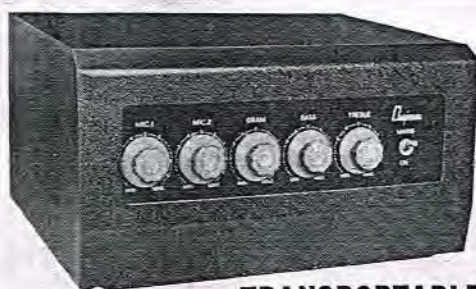
PUBLIC ADDRESS EQUIPMENT



**15 WATT
TRANSPORTABLE AMPLIFIER**

Type SR315

Valve Combination	GZ 34, 2 x EL 84, ECC 83, 6BR8
Inputs	1. Microphone (Dynamic or Ribbon) 20/30 ohms; 2. Microphone (Dynamic or Ribbon) 20/30 ohms; 3. Pick-up Crystal 600K ohms
Output	10-15 watts into 100V Line
Regulation	5 dB from full load to no load at full power
Frequency Response	50 c/s-12 Kc/s $\pm$ 1 dB at 1 watt level
Negative Feed Back	From tertiary winding ensuring unconditional stability
Power Response	50 c/s-12 Kc/s $\pm$ 1 dB at 10 watts into 1000 ohms load
Distortion	Less than 2% at 14 watts
Sensitivity	Mic. 1, 120 microV; Mic. 2, 120 microV; Gram. (or Radio) 0.4V
Hum & Noise	Gram full gain better than -60 dB; Mic. full gain better than -45 dB
Controls	All three inputs electrically mixed; BASS: -15 dB at 50c/s (Microphone only); TREBLE: -15 dB at 10 Kc/s (Pickup or radio tuner only)
Mains Supply	Adjustable tapplings, 100/125V or 200/250V 40-60 c/s
Mains Cable	3 core tough plastic
Fuses	Mains, 3A cartridge; HT., 250 mA cartridge
Dimensions	15 ins. (38.1 cm.) x 7 ins. (17.78 cm.) x 9 1/2 ins. (24.13 cm.) deep
Weight	Complete, 24 lbs. (10.9 kilos)



**30 WATT
TRANSPORTABLE AMPLIFIER**

Type SR330

Inputs	1. Microphone (Dynamic or Ribbon) 20/30 ohms; 2. Microphone (Dynamic or Ribbon) 20/30 ohms; 3. Pick-up Crystal 250K ohms
Output	30 watts continuous sine wave into 100V Line
Regulation	4 dB from full load to no load at full power
Negative Feed Back	From tertiary winding ensuring unconditional stability
Frequency Response	30 c/s-20 Kc/s $\pm$ 1 dB at 1 watt level
Power Response	30 c/s-20 Kc/s $\pm$ 1 dB at 30 watts into resistive load
Distortion	Less than 2% at 30 watts
Hum & Noise	Gram Full Gain -64 dB; Mic. Full Gain -54 dB
Sensitivity	Mic. 1, 0.240 mV; Mic. 2, 0.240 mV; Gram. 350 mV
Controls	All inputs electrically mixed
Bass	-20 dB at 50 c/s
Treble	-18 dB at 10 Kc/s
Mains Supply	Full tapped 100/125v and 200/250v, 50 c/s
Fuses	Mains 3 Amp. in adjustable plug H.T. 250 m/a cartridge
Mains Cable	3 core tough plastic
Dimensions	14 1/2" x 7 1/2" x 12" deep
Weight	Complete, 32 lbs. (14.53 kilos)
Valves Used	GZ 34, 2 x EL 34, 2 x ECC 83, EF 86



**50 WATT
TRANSPORTABLE AMPLIFIER**

Type SR350

Inputs	1. Microphone (Dynamic or Ribbon) 20/30 ohms; 2. Microphone (Dynamic or Ribbon) 20/30 ohms; 3. Pick-up Crystal 250K ohms
Output	50 watts continuous sine wave into 100V Line
Regulation	4 dB from full load to no load at full power
Negative Feed Back	From tertiary winding ensuring unconditional stability
Frequency Response	30 c/s-20 Kc/s $\pm$ 1 dB at 1 watt level
Power Response	30 c/s-20 Kc/s $\pm$ 1 dB at 50 watts into resistive load
Distortion	Less than 2% at 50 watts
Hum & Noise	Gram Full Gain -64 dB; Mic. Full Gain -54 dB
Sensitivity	Mic. 1, 0.240 mV; Mic. 2, 0.240 mV; Gram. 350 mV
Controls	All inputs electrically mixed
Bass	-20 dB at 50 c/s
Treble	-18 dB at 10 Kc/s
Mains Supply	Fully tapped 100/125v and 200/250v, 50 c/s
Fuses	Mains 3 Amp. in adjustable plug H.T. 500 m/a cartridge
Mains Cable	3 core tough plastic
Dimensions	19" x 7" Panel 12" deep over handles
Weight	Panel mounting 50 lbs. (22.7 kilos) In cabinet 62 lbs. (28.15 kilos)
Valves Used	GZ 34, 2 x KT 88, ECC 82, 2 x ECC 83



*Rack Mounting Model Illustrated
(Free Standing Version Available)*

**MICROPHONE MIXER 5-CHANNEL
FULLY TRANSISTORISED AND TROPICALISED**

Model SRM5

Input	30 ohm balanced line
Input level	Normally about 250 microvolts
Output	30 ohms balanced and isolated
Output level	Normally 650 microvolts. Maximum output available about 10 milli-volts before overload occurs.
Noise	Very low. Will depend upon the number of channels in use, level etc. Normally well below ambient when used with microphones
Power Supply	100-120v and 200-250v 50 c/s (Alternatively 9 volt internal dry battery supply can be arranged to order)
Frequency Response	Within $\pm$ 1 dB from 130 cycles to 14 Kc/s reference 1 Kc, using 30 ohm resistive load

HIGH POWER PUBLIC ADDRESS AND RELAY AUDIO FREQUENCY AMPLIFIERS

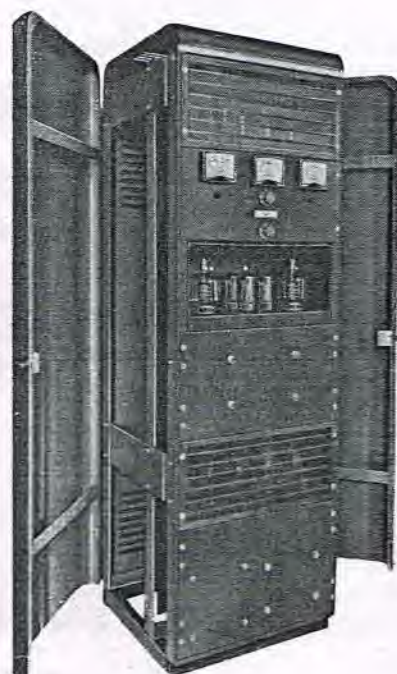
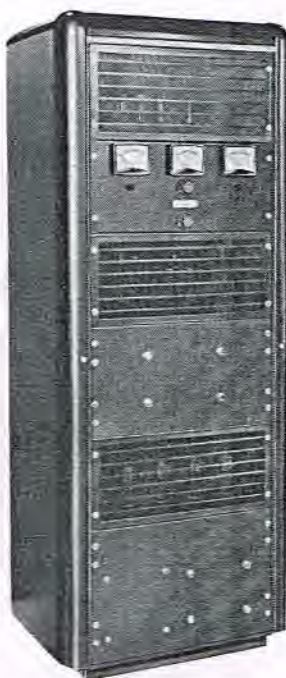
1 KILOWATT

AMPLIFIER Type 1 KWAF

Using advanced design technique the Chapman 1 Kw Amplifier is unconditionally stable and will deliver a power output of 1 Kw continuous sine wave.

A number of these amplifiers can be used with series-connected outputs when a multiple of the power output is required. Hinged side and rear doors provide extremely easy access to all components and wiring; all the valves are accessible from the front of the rack behind removable grilles, and adequate protective devices are incorporated in the various circuits.

Maximum Power Output ...	1,000 watts
Frequency Range ...	40-12,000 c/s (Low frequency version available—5 c/s to 3,500 c/s)
Output Voltage ...	25, 50 or 100v
Output Impedance ...	0.625 ohms, 2.5 ohms or 10 ohms
Total Harmonic Distortion at 1 Kw and 1,000 c/s ...	1%
Sensitivity ...	100 m/v into 600 ohms for 1 Kw output
Mains Supply ...	200/250v at 50-60 c/s
Dimensions ...	A fully enclosed 5' high metal cabinet with hinged side and rear doors measuring 24½" × 20" deep
Finish ...	Silver Black Hammertone
Valves Used ...	ECC83, 2 × EL84, 4 × EL34, 2 × TY3-250, 2 × GZ34, 4 × RR3-250



100 WATT

AMPLIFIER Type 100 WAF

Power output ...	100 VA
Frequency range ...	40-12,000 c/s
Output voltage ...	100v or as specified
Distortion ...	Less than 2% at 400 c/s at 100 watts
Input ...	Less than 1.5 volts at 10,000 ohms unbalanced
Mains supply ...	100-125 volts, 200-250 volts 50-60 c/s
Consumption ...	Approx. 1 amp at 250 volts
Valve complement ...	2 × TY2-125, 2 × EL34, 2 × ECC83, 1 × ECC82
Dimensions ...	Fully enclosed standard 19" cabinet
Finish ...	Dark silver grey hammertone enamel
Special features ...	Convection cooled. All power supplies use silicon rectifiers

250 WATT

AMPLIFIER Type 250 WAF

Power output ...	250 VA
Frequency range ...	40-12,000 c/s
Output voltage ...	100v or as specified
Distortion ...	Less than 2% at 400 c/s at 250 watts
Input ...	10,000 ohms unbalanced less than 1.5 volts for 250 VA output
Mains supply ...	100-125 volts, 200-250 volts 50-60 c/s
Consumption ...	Approx. 2 amps at 250 volts
Valve complement ...	2 × TY3-250, 2 × EL34, 2 × ECC83, 1 × ECC82
Dimensions ...	Fully enclosed standard 19" cabinet
Finish ...	Dark silver grey hammertone enamel
Special features ...	Convection cooled. All power supplies use silicon rectifiers

The 100 W.A.F. and 250 W.A.F. Amplifiers have been designed as lower powered units for any applications within their rated frequency and output.