



COMMERCIAL AUDIO PUBLIC ADDRESS
COMPONENTS AND SYSTEMS

NEW PRODUCTS 2011

the rules of sound



UP 8501

500 W DIGITAL POWER AMPLIFIER

UP 8502

2 X 250 W DIGITAL POWER AMPLIFIER

UP 8504

4 X 125 W DIGITAL POWER AMPLIFIER



- Class D amplifier and double switching AC-DC power supply, transformer-less galvanic insulated speaker output
- Pro audio performance
- Selectable 70 – 100 V output per channel
- Double input per channel
- Active full protections on amplifier and power supply
- Stand-by, priority and fault remote commands
- Activity and status indicators
- Volume knobs on front panel with disablement facility
- Light-weight 1 U 19" rack enclosure



The new 8000 series power amplifiers are designed around an innovative RCF power supply and amplification technology. The full digital technology used in these new products allows extremely high efficiency both with AC and DC power supply operation, Pro-Quality audio reproduction and compactness: all the three models are built-in a single 19" Unit. The switching mode power supplies include an independent DC 48 V section that guarantees extra redundancy to the possible failure of the units. Each channel is provided with two inputs and dedicated priority circuit to get mix/mute and exclusive priority operation. The amplifiers are suitable for 70/100 V applications, using a unique RCF technology that allows to eliminate the line output transformer. Several status LEDs on front panel give a complete feedback on amplifier status, a DIP switch on rear panel allows to disable the frontal volume controls in order to avoid misuses. All connectors are removable screw terminals.

SPECIFICATIONS	UP 8501	UP 8502	UP 8504
NO. CHANNELS X OUTPUT POWER (RMS)	1 X 500 W	2 X 250 W	4 X 125 W
FREQUENCY RESPONSE	20 HZ ÷ 20 KHZ		
BAND-PASS FILTER (12 DB / OCT)	200 HZ ÷ 8 KHZ (PASSBAND)		
THD AND NOISE (AT MAX. POWER)	MAX. 0.3%		
SIGNAL / NOISE RATIO (IEC-A)	86 DB		
INPUT 1 SENSITIVITY	0 DBU (775 MV, MAX. 7 V)		
INPUT 2 SENSITIVITY	0 ÷ -20 DBU (775 ÷ 78 MV, MAX. 7 V)		
IN TEST SENSITIVITY	0 DBU (775 MV)		
INPUT IMPEDANCE	10 KΩ		
MINIMUM LOAD IMPEDANCE OF EACH 70 V LINE	10 Ω	20 Ω	40 Ω
MINIMUM LOAD IMPEDANCE OF EACH 100 V LINE	20 Ω	40 Ω	80 Ω
OVER SIGNAL LIMITER	20 DB		
OPERATING VOLTAGE	MAINS: 115 – 230V AC ±10%, 50 – 60 HZ (INTERNAL VOLTAGE SELECTOR) BATTERIES: 48 V DC ±10%		
POWER CONSUMPTION, AC STAND-BY	3 W		
POWER CONSUMPTION, DISABLED AMP.	13 W	15 W	20 W
POWER CONSUMPTION, NO INPUT SIGNAL	25 W	36 W	50 W
POWER CONSUMPTION, MUSICAL SIGNAL	160 W		
POWER CONSUMPTION, MAX. OUTPUT POWER	650 W		
POWER CONSUMPTION, MAX. OVERLOAD	800 W		
OPERATING TEMPERATURE	0 ÷ 55 °C (32 ÷ 131 °F), REL. HUMIDITY: MAX. 90%		
STORAGE TEMPERATURE	-10 ÷ 70 °C (14 ÷ 158 °F)		
DIMENSIONS (W, H, D)	482 MM, 44 MM, 375 MM (ONE 19" RACK UNIT)		
NET WEIGHT	5.1 KG	5.3 KG	5.5 KG

UP 2082

POWER AMPLIFIER



- UP 2082 is devices with 2 separated and independent digital 80 W power amplifiers, each having 2 audio inputs, of which one with priority function through a closing contact.
- Both the audio inputs are at 'line' level: for pre-amplified signals or music sources (e.g. CD players, tuners, etc.).
- Each amplifier output is available either for low impedance loudspeakers (min. 4 Ω) or a 100 – 70 V constant voltage line (for loudspeakers having 100 – 70 V transformers).

On each amplifier:

- The input 1 can get the priority, which mutes the input 2, through an external command connected to the PRIOR IN.1 contact.

Each amplifier has its BASS and TREBLE tone controls. Front panel LEDs indicate the device state (ON), protections (PROT), the priority activation (PRIOR) and the signal / peak level (SIG/PK) of the respective amplifier.

SPECIFICATIONS

UP 2082

OUTPUT POWER	80 + 80 W
FREQUENCY RESPONSE	50 HZ ÷ 16 KHZ
DISTORTION (THD+N)	< 0,3% @ 1 KHZ
SPEAKER OUTPUTS	100 V, 70 V, 4 Ω
SIGNAL TO NOISE RATIO	> 80 DB
SUPPLY VOLTAGE	115-230V / 50-60 HZ
POWER CONSUMPTION	350 W MAX.
INPUT CONNECTORS	2 X TERMINAL
OUTPUT CONNECTORS	SCREW TERMINALS FOR CONSTANT VOLTAGE LINES

BM 3022

PRE-AMPLIFIED DESK TOP MICROPHONE



- Gooseneck microphone with hi-quality unidirectional electret capsule
- Direct connection to power amplifiers input through CAT5 cable
- Adjustable line output with RJ45 connector
- Switchable automatic gain control (AGC)
- Up to 30 BM 3022 paging microphones can be linked in a 'daisy-chain'
- Selectable mixing, interlocking or priority mode among devices
- When activating a microphone, the announcement can be preceded by a chime.

BM 3022 is a pre-amplified desk-top paging microphone with an electret capsule. Its output audio signal level (balanced and adjustable through a trimmer) allows its direct connection to "line" inputs of mixer-amplifiers, even for long distances (up to 1 km / c. 3300 ft) through CAT5 cable.

SPECIFICATIONS

BM 3022

MICROPHONE TYPE	ELECTRET
IMPEDANCE	47 KΩ
FREQUENCY RESPONSE	100 HZ ÷ 12 KHZ
SIGNAL / NOISE RATIO	> 82 DB
SENSITIVITY	- 65 DB ± 3 DB (0 DB = 1 BAR @ 1 KHZ)
POWER SUPPLY	24 V DC, THROUGH INCLUDED ADAPTER (RCF AC AD2405)
CONNECTORS	RJ 45

PLF 30

PAINTABLE FLUSH MOUNTING CEILING SPEAKER



- Particularly suitable for business music applications
- Extra-wide dispersion over 160°
- 3" wide-range transducer with flat diaphragm
- Program / RMS power: 24W / 12 W
- Sound Pressure Level: 83 dB @ 1W/1m
- Built-in multi-tapped transformer for 100/70V constant voltage connection
- Body in self-extinguishing plastic
- Front paintable flat cone in white
- Clips or Spring-type mounting systems provided

PLF 30 is a flush-mount ceiling 3" loudspeaker. It has an internal transformer that allows direct connection to 100 V constant voltage lines. The transformer has 2 inputs for power tapping: 6 – 12 W. The false-ceiling installation is made through 2 spring clips without using tools and other additional attachment components.

SPECIFICATION	PLF 30
INPUT VOLTAGE	100 V
POWER	12 – 6 W
FREQUENCY RESPONSE	150 HZ ÷ 7 KHZ
SENSITIVITY	88 DB (1 M / 1 W)
MAX. SOUND PRESSURE LEVEL (12 W)	100 DB (1 M)
TRANSDUCER	3"
ENCLOSURE	AUTO-EXTINGUISHING PLASTIC, UV RESISTANT 'SIGNAL WHITE' RAL 9003
DIMENSIONS	Ø MAX. 102 MM, P.: 120 MM
NET WEIGHT	0.9 KG (WITHOUT SPRING CLIPS)

PL 50

FULL RANGE FLUSH MOUNTING CEILING SPEAKER



- Suitable for paging and background music applications
- 6" wide band loudspeaker
- Program / RMS power: 10W / 6 W
- Sound pressure level at music power: 91 dB @ 1W/1m
- Built-in multi-tap line transformer, 100V and 70V constant voltage connection
- Body in self-extinguishing plastic, white colour
- Spring-type mounting system

PL 50 is a flush-mount ceiling 6" (dual-cone) loudspeaker. It has an internal transformer that allows direct connection to 100 V constant voltage lines. The transformer has 2 inputs for power tapping: 6 – 3 W. The false-ceiling installation is made through its 2 spring clamps without using tools and other additional attachment components.

SPECIFICATION	PL 50
INPUT VOLTAGE	100 V
POWER	6 – 3 W
FREQUENCY RESPONSE	100 HZ ÷ 20 KHZ
SENSITIVITY	91 DB DB (1 M / 1 W)
MAX. SOUND PRESSURE LEVEL	99 DB (1 M / 6 W)
TRANSDUCER	6" DUAL-CONE
ENCLOSURE	AUTO-EXTINGUISHING PLASTIC, UV RESISTANT 'SIGNAL WHITE' RAL 9003
GRILLE MATERIAL	PLASTIC
DIMENSIONS	Ø 186 MM, 65 MM DEEP
NET WEIGHT	0.49 KG

DMW 20A

ACTIVE SPEAKER CABINET



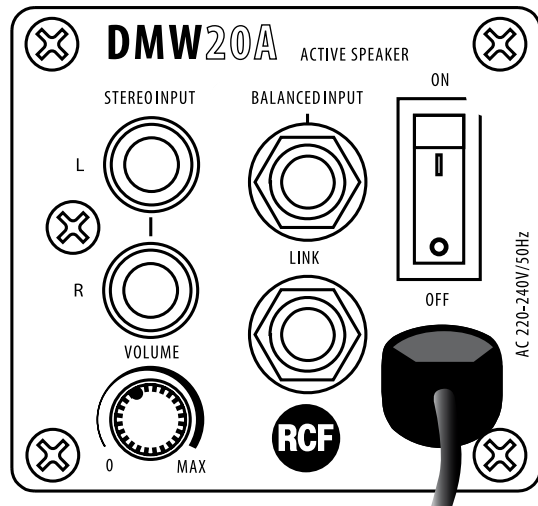
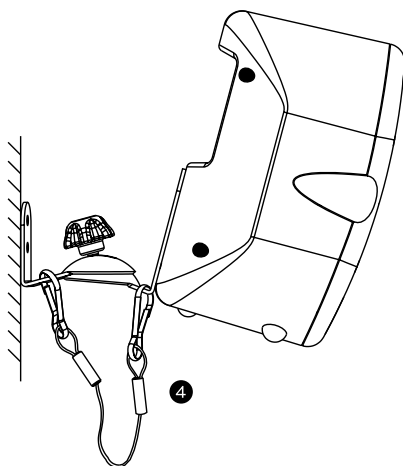
- Compact, lightweight perfect for multimedia application
- High quality reference sound
- 20 watts built-in stereo power amplifier
- AC power input with switch ON/OFF
- Two-way speaker design
- Volume control knob on the rear panel
- Wall or ceiling mount with mounting brackets included

DMW 20A is a compact active loudspeaker designed for multi-media and indoor public address sound systems. It can be simply placed on a table or wall-installed thanks to its included mounting bracket. Its internal 'class-D' amplifier RMS power rating is 20 W. Its audio input is available as a dual RCA socket and a 1/4" TRS jack socket. A balanced parallel output ('LINK', useful to link other active loudspeakers) is available as 1/4" TRS jack socket.

SPECIFICATION

DMW 20A

POWER RATING	20 W
SPEAKER	3" PAPER CONE, 0.8" VOICE COIL DIAMETER
MAX SPL	98 DB (@ 20 W)
POWER SUPPLY	220÷240 V / 50 HZ
INPUT CONNECTORS	RCA AND 6.3 MM JACK BALANCED
OUTPUT-LINK CONNECTORS	6.3 MM JACK BALANCED
EXTERNAL CONTROLS	VOLUME, POWER SWITCH
DIMENSIONS (WXDXH)	115 X 107 X 175 MM (4.5" X 4.2" X 6.9")
WEIGHT	1.34 KG (2.96 LBS)



TX 2006

UHF DIVERSITY SYSTEM - HAND HELD TX

TX 2006 kit consists of:

- a **RX 2006** receiver (with AC / DC adapter and a 1.5 m cable with 1/4" jack plugs)
- a **TX 2000** transmitter / handheld dynamic microphone



PX 2106

UHF DIVERSITY SYSTEM - POCKET TX

PX 2106 kit consists of:

- a **RX 2006** receiver (with AC / DC adapter and a 1.5 m cable with 1/4" jack plugs)
- a **PX 2100** body pack transmitter
- a **LA 2004** 'Lavalier' (tie-clip) electret microphone



TX 2006 and PX 2106 are UHF wireless microphones.

Each receiver has 2 antennas for smart switching diversity control (the higher level radio signal is automatically selected), greater reliability and coverage, reduced risks of breakdowns and interferences. 16 different frequencies / channels are available. It is possible to use up to 6 channels simultaneously (when having 6 wireless microphone kits).

Channels can be manually selected on all transmitters and receivers.

SPECIFICATION	TX 2006 - PX 2106
CHANNEL	SINGLE
TYPE	(PLL) UHF, 'DIVERSITY' RECEIVER
FREQUENCY BAND	UHF, 798 ÷ 827 MHZ
FREQUENCY RESPONSE	50 HZ ÷ 50 KHZ (± 3 DB)
FREQUENCY STABILITY	± 0.005 %
MODULATION MODE	FM (F3E)
DYNAMIC	> 100 DB
RX 2006 RECEIVER	
T.H.D	< 1%
AUDIO OUTPUT	280 MV @ ± 15 KHZ DEVIATION
S/N RATIO	> 90 DB
RF SENSITIVITY	- 100 DBM / 30 DB SINAD
POWER SUPPLY	THROUGH EXTERNAL 12 V DC (0.5A) ADAPTER
DIMENSIONS	130 MM (W), 44 MM (H), 201 MM (D)
NET WEIGH	0.37 KG
TX 2000 TRANSMITTER / HANDHELD MICROPHONE	
RF OUTPUT POWER	10 MW
T.H.D.	< 0.8 %
tone FREQUENCY	32.768 KHZ
CURRENT ABSORPTION	< 150 MA
MAX. DEVIATION	± 35 KHZ
BATTERIES	2 X 'AA' TYPE (1.5 V, NON RECHARGEABLE)
MICROPHONE CAPSULE	DYNAMIC
LENGTH	220 MM
NET WEIGHT	0.16 KG
PX 2100 BODY PACK TRANSMITTER	
RF OUTPUT POWER	10 MW
T.H.D.	< 0.8 %
tone FREQUENCY	32.768 KHZ
CURRENT ABSORPTION	< 150 MA
MAX. DEVIATION	± 35 KHZ
BATTERIES	2 X 'AA' TYPE (1.5 V, NON RECHARGEABLE)
DIMENSIONS	65 MM (W), 111 MM (H), 31 MM (D)
NET WEIGHT	0.11 KG
INCLUDED MICROPHONE	LA 2004 'LAVALIER' (TIE-CLIP) ELECTRET MICROPHONE

TX 4016

UHF TRUE DIVERSITY SYSTEM - HAND HELD TX

TX 4016 kit consists of:

- a **RX 4016** receiver (with AC / DC adapter, 2 antennas and a 1.5 m cable with 1/4" jack plugs)
- a **TX 4000** transmitter / handheld dynamic microphone



PX 4116

UHF TRUE DIVERSITY SYSTEM - POCKET TX

PX 4116 kit consists of:

- a **RX 4016** receiver
- a **PX 4100** body pack transmitter
- a **LA 2004** 'Lavalier' (tie-clip) electret microphone



TX 4016 and PX 4116 are UHF wireless microphones.

Each receiver has 2 antennas for smart switching diversity control (the higher level radio signal is automatically selected), greater reliability and coverage, reduced risks of breakdowns and interferences. The operating frequency of the transmitter can be automatically searched thanks to the receiver auto-scan function. Of course, it is possible to match the transmitter channel to the receiver one manually. 144 channels are available (12 groups, each with 12 different frequencies). It is possible to use up to 16 channels simultaneously (when having 16 wireless microphone kits).

SPECIFICATION

CHANNEL	TX 4016 - PX 4116
TYPE	SINGLE (OUT OF 144 FREQUENCIES)
FREQUENCY BAND	(PLL) UHF, 'DIVERSITY' RECEIVER
FREQUENCY RESPONSE	UHF, 798 MHZ ÷ 827 MHZ
FREQUENCY STABILITY	50 HZ ÷ 50 KHZ (± 3 DB)
T.H.D.	± 0.005 % (-10 ÷ 50°C)
MODULATION MODE	< 0.8% (1 KHZ)
DYNAMIC	FM (F3E)
	> 100 DB
RX 4016 RECEIVER	
BALANCED AUDIO OUTPUT	1 V, ± 35 KHZ DEVIATION
UNBALANCED AUDIO OUTPUT	750 MV, ± 35 KHZ DEVIATION
S/N RATIO	> 90 DB
RF SENSITIVITY	- 100 DBM / 30 DB SINAD
POWER SUPPLY	THROUGH EXTERNAL 15 V DC (0.5A) ADAPTER
DIMENSIONS	210 MM (W), 44 MM (H), 155 MM (D); (8.2" X 1.7" X 6.1")
NET WEIGHT	0.99 KG
TX 4000 TRANSMITTER / HANDHELD MICROPHONE	
RF OUTPUT POWER	1 - 3 - 10 MW
FREQUENCY RESPONSE	90 HZ ÷ 12 KHZ (± 3 DB)
MICROPHONE CAPSULE	DYNAMIC, CARDIOID
TO NE FREQUENCY	30-33 KHZ
MAX. DEVIATION	± 35 KHZ
BATTERIES	2 X 'AA' TYPE (1.5 V, NON RECHARGEABLE)
DIMENSIONS	277 MM (L), Ø 36.5 MM; (10.9" X Ø 1.44")
NET WEIGHT	0.25 KG
PX 4100 BODY PACK TRANSMITTER	
RF OUTPUT POWER	1 - 3 - 10 MW
FREQUENCY RESPONSE	50 HZ ÷ 15 KHZ (± 3 DB)
LA 2004 MIC. FREQ. RESP.	100 HZ ÷ 12 KHZ (± 3 DB)
TO NE FREQUENCY	30-33 KHZ
MAX. DEVIATION	± 35 KHZ
BATTERIES	2 X 'AA' TYPE (1.5 V, NON RECHARGEABLE)
DIMENSIONS	97 MM (W), 68 MM (H), 22 MM (D); (3.82" X 2.68" X 0.87")
NET WEIGHT	0.01 KG
INCLUDED MICROPHONE	LA 2004 'LAVALIER' (TIE-CLIP) ELECTRET MICROPHONE



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