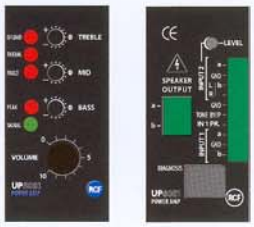
RCF Flexa Modular Integrated System

The 'FLEXA' system is a new innovative Modular PA system which will gradually evolve into a complete electronics series to comply with IEC 60849 Voice Alarm Applications. Furthermore the true flexibility will allow System Integrators to even put together standard Commercial Audio Zoned Systems in an extremely cost effective efficient methodology.
UP 6000 series power amplifiers are the first 'building blocks' of this innovative concept and approach that use new RCF exclusive topology to offer reliable, compact, high quality-high efficiency fully protected power amplifiers. 'Flexa' uses new transformerless output technology that guarantees the same galvanic insulation of the speaker line exactly as you have when using a true output transformer. RCF are using advanced technology quartz switching power supplies that provide lightweight and compactness, full electronic protection of all power supply functions are standard.

POWER HAS NEVER BEEN SO FLEXIBLE AS IN 'FLEXA' MODULAR AMPLIFIERS.

FLEXA is a new way to think about amplifier loading. In a 100V line system FLEXA allows you to decide and balance the power you need easily for your loudspeaker circuits, compact and cost effective.

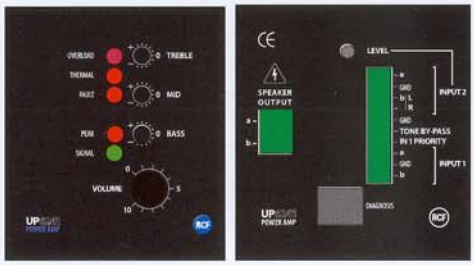
First you decide what is the MAXIMUM power you need for a certain speaker line. Secondly you choose the suitable size amplifier module, thirdly you decide the correct power supply/supplies plus the mainframe(s) suitable to provide the total power that you actually need. Each mainframe is 2U 19" and has 10 FLEXA-slots. In each mainframe for instance you could fit 8 amplifier modules UP 6081 and one power supply PS 6320 allowing you to get a total power of 320W with 80W limit for each line: So, say for example you need two amplifiers each taking 80 watts of speaker loading, you will then have available for the other six amplifiers a total loading capability of 160 watts All in just two rack units of space.



UP6081

80W Power Amplifier

- 80W (1 FLEXA slot)
- High audio quality for superb intelligible sound
- Class H Three Step High Efficiency Amplifier Topology
- Auto cut-out system that isolates a faulty unit from the rest of the system so as not to affect other devices
- 2 BALANCED -UNBALANCED Inputs on screw terminals
- Twin Input circuits with Priority on Input One (for alarm circuits)
- Level control and mono-stereo facility on INPUT 2
- Volume and Equalization controls on front panel (volume has removable knob, tone controls have by-pass command)
- LED indicators for level/peak and status (OVERLOAD, THERMAL, FAULT)
- Euro-block removable connectors
- RJ connector for digitally controlled diagnosis interface with FLEXA VOICE EVACUATION SURVEILLANCE UNITS



UP6241

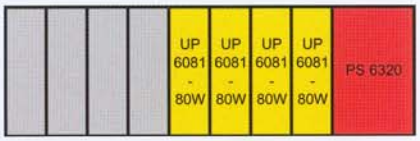
240W Power Amplifier

- 240W RMS (2 FLEXA slot)
- High audio quality for superb intelligible sound
- Class H Three Step High Efficiency Amplifier Topology
- Auto cut-out system that isolates a faulty unit from the rest of the system so as not to affect other devices
- 2 BALANCED -UNBALANCED Inputs on screw terminals
- Twin Input circuits with Priority on Input One (for alarm circuits)
- Level control and mono-stereo facility on INPUT 2
- Volume and Equalization controls on front panel (volume has removable knob, tone controls have by-pass command)
- LED indicators for level/peak and status (OVERLOAD, THERMAL, FAULT)
- Euro-block removable connectors
- RJ connector for digitally controlled diagnosis interface with FLEXA VOICE EVACUATION SURVEILLANCE UNITS

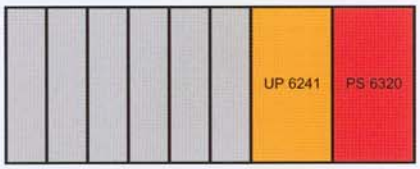
PS6320

320W Power Supply

- 320W (audio) power supply capacity (2 FLEXA slot)
- High efficiency quartz synchronized design to avoid interference among power supplies installed close each other
- Fully protected with Auto cut-off to isolate from the rest of the system so as not to affect other devices.
- LED indicators for OVERLOAD, THERMAL, FAULT
- Switch and indicators for AC ON - Stand-By
- MAINS switch on rear panel
- Ready to work with 24VDC adapter/battery charger/battery test (1 SLOT)
- RJ connector for digitally controlled diagnosis interface with FLEXA VOICE EVACUATION SURVEILLANCE UNITS

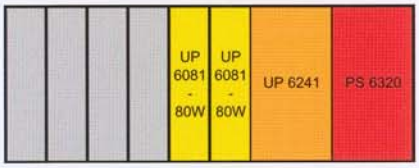


4 modules 80W power amps(=320W audio power), one 320W power supply.
Power supply allows you to source 80W from each amplifier, 320W total.
This configuration allows you to source all the power that each amplifier can deliver.

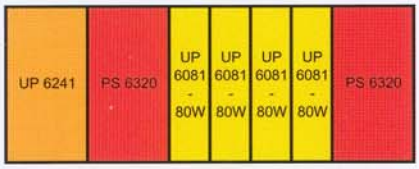


1 module 240W power amp, one 320W power supply. Power supply allows you to source all the 240W from the power amp leaving room for additional 80W spare power supply for future extension. This configuration allows you to source all the power that each amplifier can deliver, spare power supply is available for future extension.

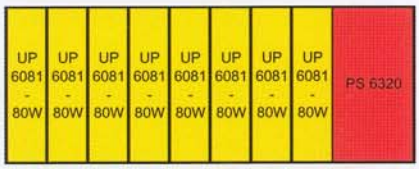
2 modules 80W power amps + 2 modules 240W power amps (=640W audio power), two 320W power supply (=640W power supply). This configuration allows you to source all the power that each amplifier can deliver.



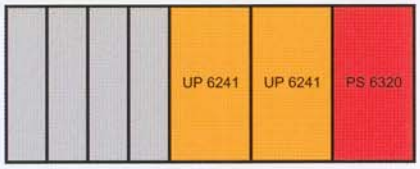
2 modules 80W power amps + 1 module 240W power amp(=400W audio power), one 320W power supply. Power supply allows you to source, 320W total. It means that you can source from each module the power that the module can deliver to you (80W for UP 6081 or 240W for UP 6241), with a total power of 320W. I.E. Speaker line connected to the 240W module engages it for 180W, the 140W left (=320W-180W) can be shared between the two 80W amps, no matter in which proportion but with a limit of 80W/each. In this case the power supply limits the total power that the power amp modules can deliver.



4 modules 80W power amps + 1 module 240W power amp(=560W audio power), two 320W power supply (=640W power supply). It means that you can source from each module all the power that each module can deliver (80W for UP 6081 and 240W for UP 6241) since the power supply available is more than audio power. In this case the power supply does not limit the audio power, spare power supply is available for future extension.



8 modules 80W power amps (=640W audio power), one 320W power supply. Power supply allows you to source 320W total. It means that you can source from each module the power that the module can deliver to you (80W for UP 6081), up to a total audio power of 320W. I.E. Speaker line connected to first module absorbs 80W, the one connected to the second module absorbs 60W, the other 6 lines feed 20W speaker lines each for a total audio power of 260W. The 60W left (=320W-260W) can be shared between the 8 modules (additional speaker extensions) no matter in which proportion but with a limit of 80W/each. In this case the power supply limits the total power that the power amp modules are able to deliver.



2 modules 240W power amps (=480W audio power), one 320W power supply. Power supply allows you to source 320W total. It means that you can source from each module the power that the module can deliver to you (240W for each UP 6241), with a total power of 320W. I.E. Speaker line connected to the 1st 240W module engages it for 180W, the 140W left (=320W-180W) can be used on speaker line connected to the 2nd amp. In this case the power supply limits the total power that the power amp modules together can deliver.

Audio Power = RMS Power that Power Amps can deliver (80W for UP 6081 and 240W for UP 6241)
Power Supply = RMS Power available that can be really used/absorbed from the Power Amplifier modules inside the mainframe

SPECIFICATIONS	UP 6081	UP 6241	PS 6320
Type	80 W - Mono - 1 Flexa slot	240 W - Mono - 2 Flexa slot	Power supply iunit- 2 Flexa slot
Output power nominal	80 W RMS	240 W RMS	320 W
Maximum	120 W (10 msec ON - 0,1 sec OFF)	360 W (10 msec ON - 0,1 sec OFF)	
Frequency response	50 - 18.000 Hz (±3 dB)	50 - 18.000 Hz (±3 dB)	
Distortion	≤0,05 % (1 kHz - nominal power)	≤0,05 % (1 kHz - nominal power)	
Signal/noise ratio	≥90 dB	≥90 dB	
Inputs / Sensitivity-Impedance	775 mV - 100 kΩ (bal.) 50 kΩ (bal.)	775 mV - 100 kΩ (bal.) 50 kΩ (bal.)	
Outputs for speakers	100 V	100 V	
Tone controls	Bass: ±12 dB - 80 Hz Mid: ±12 dB - 1000 Hz Treble: ±12 dB - 12 kHz	Bass: ±12 dB - 80 Hz Mid: ±12 dB - 1000 Hz Treble: ±12 dB - 12 kHz	
Controls	1 master volume control 1 treble tone control 1 medium tone control 1 bass tone control	1 master volume control 1 treble tone control 1 medium tone control 1 bass tone control	Mains switch Stand-by switch
Power supply	From PS 6320	From PS 6320	115/230 Vac 50/60 Hz - 500 VA
Absorption in dc (24 V)			15 A
Max. ambient temperature	55°C	55°C	55°C
Dimensions	1 slot	2 slots	2 slots
Weight	0.8 kg	1.5 kg	1.3 kg
Accessory	**MF 6000** 2U Mainframe for FLEXA modules (10 slots) code no. 121.35.020 **BP 6010** blank panel kit for MF 6000 code no. 123.20.027 **AR 1052-N** 19" Rack mounting kit for MF 6000 code no. 173.10.059		
Code no.	121.35.022	121.35.021	121.35.023