

## MODULAR BROADCAST CONSOLE RP 2000S



These three words sum up the RP2000S perfectly. This French made, top quality sound mixer is the result of years of development and experience which is recognised today by the professional broadcasting industry. Its strong points are, first of all, its top audio quality and, then, its total modularity. Each module (front panel and connector) can be taken apart separately. The RP2000S achieves perfection by using the most up to date technology. All input modules include a VCA (Voltage Control Amplifier), the sound does not go through the potentiometer nor the switches!

It adapts to all situations and to all requirements and is available for racks in units 11 and 14 and units of 15, 24 and 30 modules. Proof of its worth is the fact that most big French and European Broadcasting Companies already use the RP2000S.

An input module for digital source in AES/EBU or S/PDIF format, a digital output module in the AES/EBU and S/PDIF format with Sync input/output. More flexibility. No more compromises, the RP2000S, half-way between digital and analogue, uses the best of both technologies.

### THE LITTLE EXTRAS

Two ways of using channels and controls Start machine:

- with the key: the potentiometer set, by pressing the switch to open the channel.  
- with the fader: switch in on position, by setting the potentiometer (new function: fader turned down, the switch lights up when half on. With a simple glance the operator can now control the mode of all channels).

They can, also, be operated by remote control to allow, for example, the live broadcasting of an interview from a speak cabin.

- The mike module allows the control of 2 ON AIR, red/green, indicator buses:

1. to the speak cabin
2. to the controller

- The pre-monitoring can be done by remote control, you can send a command to the controller via the speak mike!

- The modules are connected by flexible ribbon cable to avoid bad contacts at the bottom of a rigid rack.

### THE BIG ADVANTAGE

The RP2000S is made up of 2 separate stereo main mix buses. Therefore, one can broadcast a programme at the same time as control a PGM2 recording (the pre-recording of a debate to be broadcast in the future or a telephone conversation without reducing the presenter's channel bandwidth).

The RP2000S offers not only a multitude of functions but forms the heart your equipment.

## INPUT MODULES

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### Common features :

2 inputs (selection on front panel), sensitivity control, balance control, 3 bandwidth EQ, 2 stereo AUX Sends pre/post fader, open channel control, CUE switch for pre-monitoring, input/output remote controls for the RP2000S and other equipment, a 100mm linear potentiometer and, above all, VCA gain control for clear perfect sound.

### LINE1/LINE2 [▶ Front and rear panel](#)

2 stereo line channel inputs of which one is balanced on XLR-3; the other being unbalanced on RCA. There are two options either with or without EQ.

### Applications

These channels allow maximum use of sources in a minimum of space and their balanced and unbalanced inputs mean that they are inevitably adapted to your source.

### LINE/MICRO [▶ Front and rear panel](#)

1 stereo line input balanced on XLR and 1 unbalanced mike input with phantom insert point and the adjustable level of mike or line inputs!

### Applications

Dedicated mike channel, this allows the connection of little used equipment without monopolising another channel.

### ANALOG/DIGITAL [▶ Front and rear panel](#)

Latest development: 1 balanced input on XLR and 1 digital AES/EBU or S/PDIF input. Sampling frequency display, 2 options with or without EQ.

### Applications

Direct digital connection of all your equipment (CD, MD, DAT, Sound Card...). Result: The wiring is simplified and the sound is more homogenous (the same converter for each source).

## OUTPUT MODULES

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The RP2000S is the answer to the most specific of needs and comes with 2 options for the output unit. The reduced size of Option 2 does not mean that it is a simplified version of Option 1. They are both complete units and are totally adapted for Broadcasting. For example, there is no need to dedicate a channel to the satellite return as the input is provided on both options.

Option D is an additional module which can be linked to either of the two units in order to give the mixer an extra digital output. Several additional modules can be built in to the same mixer thus increasing the amount of digital outputs.

### OPTION 1 [▶ Front and rear panel](#)

4 modules wide.

- Double insert control with conference function routed to bus ANT or PGM2, pre-monitor and on-line function.
- 2 cassette player inputs with START button.
- Stereo TUNER input.
- Stereo AUX Return.
- ON AIR output with Xfade for linking local/external programmes (EXT SAT balanced input with pre-monitor).
- PGM2 output routed to ON AIR bus (gain control by linear potentiometer and pre-monitor).
- Record output (routed to ON AIR bus or PGM2 or EXT SAT) pre-monitor.
- Studio output (routed to ON AIR bus or PGM2 or TUNER or CUE).
- Control room (routed to ON AIR bus or PGM2 or TUNER or CUE).
- 2 AUX outs
- Order mike routed to STUDIO output or to inserts and to additional Mono EXT output.
- Headphones output (C ROOM or CUE).
- Red/Green controller.

### OPTION 2 [▶ Front and rear panel](#)

2x1 module wide.

A concentration of functions in a minimum of space.

Nearly all the functions of the main unit have been maintained and if some of them have changed it is to improve the new functions.

- The order mike is routed to the EXT, INSERT and STUDIO outputs.
- Ext AUX input for the C. ROOM.
- DIM COMMAND influencing the Control Room level.

### Applications

Its low use of space allows you to build a console with a maximum of input modules in a minimum of space whilst maintaining all the functions which make the RP2000S a Broadcast Mixer.

### OPTION D [▶ Front and rear panel](#)

1 module wide.

- 2 digital outputs (one AES/EBU and the other S/PDIF).
- Source selection (1 out of 4) and the sampling frequency by internal Dip Switches.
- Word Clock input/output, video input for sync purposes.
- EXT analogue input on Sub-D.

Digital audio output: a top quality A/D 24 bit converters built into the channel.

### Applications

The ON AIR output is sent digitally directly to the satellite. A MD or DAT can be connected up quickly. The sound can be connected to a video source !

## OPTIONS AND ACCESSORIES

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- Linear potentiometers with carbon or plastic track.
- Script board (writing case size A4).
- Order mike.
- Stopwatch (automatic or manual start).
- Amplifier monitoring.
- Phase meter.
- Cipher selector 1 out of 10.
- Input channel remote control for Speak Table.

The RP2000S is powered by an external 19" 3U unit for 15, 24 and 30 modules. A 19" 2U front fixation is available for the powering of 11 and 14 modules.

### Vumeters :

- SIFAM with needles or LED bargraphs for units of 15, 24 and 30 - CUE or ON AIR or PGM2 OR TUNER.
- LED bargraphs for boxes 11 and 14 (satellite meters or rackable 19" 1U) - CUE and ON AIR switchable TUNER.

## BLOCK DIAGRAM

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[▶ block diagram](#)

## SPECIFICATIONS

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### Bandwidth

micro input : +0,-3dB 14Hz >35kHz  
line input : +0,-3dB 12.5Hz >47kHz

### Digital input

(Fs=48kHz) +0,-1dB 10Hz >22kHz  
(Fs=44.1kHz) +0,-1dB 10Hz >20kHz  
(Fs=32kHz) +0,-1dB 10Hz >15kHz

### Equalization

micro/line module : +/-12dB > 60Hz (LF), 3kHz (MF) & 9kHz (HF)  
other modules : +/-12dB > 75Hz (LF), 700Hz (MF) & 10kHz (HF)

### A Weighted SNR

micro input equivalent 130dB  
line input at clipping 106dB  
digital input at clipping 108dB

**Distortion** <0.03% > 1kHz / 0dB

### Level input / Impedance

micro insert ( Elect Bal ) -71dBu > -45dBu 2.4kOhm  
micro insert ( Unbal ) -14dBu > +12dBu 33kOhm  
line input ( Elect Bal ) -14dBu > +12dBu 15kOhm  
line input ( Unbal ) -14dBu > +12dBu 33kOhm  
digital input ( Floating Bal ) AES/EBU 110Ohm  
digital input ( Unbal ) S/PDIF 75Ohm

### Max Output Level / Impedance

Balanced Output (Elect.) +26dBu 100Ohm  
Unbalanced Output +20dBu 100Ohm

### Remote control

For each output, start / stop interface with relay, in hold or pulse mode.  
All inputs are set by dry loops.

### Supply

230 V +/- 10% 50-60 Hz

### 11 module

488 x 483 x 106 mm  
427 x 475 mm  
format Rack 19" 11U

### 14 modules

488 x 599 x 106 mm  
427 x 543 mm

### 15 modules

698 x 588 x 340 mm

### 24 modules

698 x 934 x 340 mm

### 30 modules

698 x 1165 x 340 mm