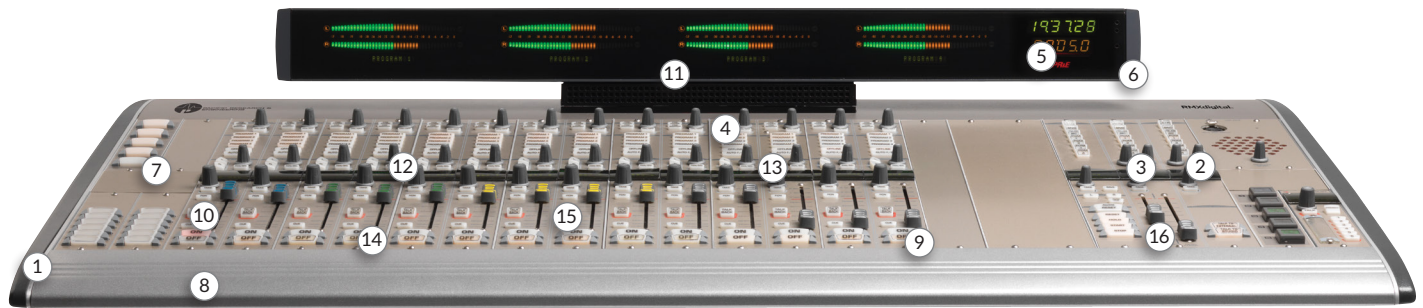


# PR&E RMXdigital™ Networked Digital Console



## Options and Installation

One of the PR&E VMConnected Network™ enabled, high-performance radio broadcast consoles, the PR&E™ RMXdigital® system features a cost-effective, compact design that offers high reliability, excellent performance, operational flexibility, easy-to-use controls, and robust construction. In addition to rotary source selectors and take buttons, all input modules are equipped with 10-character alphanumeric displays and status LEDs to show the active or next input.

Being the first choice of major-market stations and programmers, the RMXdigital console includes a number of industry firsts, including universal modules for unprecedented broadcast versatility, switchable analog or digital inputs, four program buses, six mix-minuses and frame sizes with up to 28-input module capacity.

The RMXdigital console includes onboard setup/storage for snapshot sessions, with automated recall and extensive logic functionality. Hot-swappable panel modules and instant access to all connections via the tilt-up rear panel contribute to quick and simple installation and maintenance. Radio stations with sophisticated programming requirements can step into the future without turning their backs on the full-featured operation they've come to expect from past analog designs.

While the RMXdigital system is an excellent choice for standalone console applications, the PR&E VMConnected Network audio/logic networking system allows advantageous use of networked power on any time frame. The VMConnected Network shares audio resources across a facility, without the need for time consuming and costly wiring. This creates a flexible operation, while at the same time enabling a quick, simple, and cost-effective installation.

The RMXdigital console can be networked with any PR&E VMConnected Core frame, as well as with PR&E NetWave® and Oasis™ consoles, throughout the facility.

You're invited to take a closer look at the RMXdigital – a console with features and functionality that will exceed your expectations. See also the full line of PR&E studio systems accessories to complement your PR&E RMXdigital installation.

- |                              |                                       |
|------------------------------|---------------------------------------|
| ① Headphone Jack             | ⑨ Flexible Phone & Codec System       |
| ② Studio Monitoring          | ⑩ Input Mode Selection                |
| ③ Control Room Monitoring    | ⑪ Metering                            |
| ④ Cue System speaker         | ⑫ Pan & Balance                       |
| ⑤ Time of Day Clock          | ⑬ Bus Assign Switches                 |
| ⑥ Event Timer                | ⑭ Function Key                        |
| ⑦ Open Accessory Panel Space | ⑮ 10 Character Display & Input Select |
| ⑧ Channel ON/OFF             | ⑯ Console Session Control             |

## Features

- An all-digital design to accomplish everything from program mixes to the talkback channels.
- Four Program busses, each with digital and analog outputs. Program 1 and 2 digital outputs can be set to either 44.1 kHz or 48 kHz sampling rates.
- One Send bus, with digital and analog outputs. Send assignments can be sourced post-fader, pre-fader and/or pre-switch. The Send digital output can be set to either 44.1 kHz or 48 kHz sampling rates.
- With the optional RMXengine, automatic mix minuses are available on every fader of the RMXd. Standard features also offer six standard simultaneous Telco/Codec inputs, each supported by a mix-minus output with automatic On-Line/Off-Line switching. Each mix-minus or split telco-record bus can of course be routed to any digital or analog output on the RMXd or within the VMConnected Network.
- Meter panel assembly with two (RMXd 12) or four (RMXd 20 and 28) stereo bar graph meters: The last meter is selectable to monitor any bus or signal within the facility, digital clock and timer. Meters can be set by the user to display Average with Peak or Average Only. Each meter is also equipped with a separate, high-brightness Peak flash indicator that can be set by the user at FSD (full-scale digital) or up to 6 dB before FSD.
- TCP/IP network connectivity to support interactivity with automation systems and servers.



## RMXdigital: The Details Make the Difference

### User-Friendly Operation

Bright LED-illuminated buttons angle toward the operator and feature permanent laser-marked legends. Off, Talkback and Meter/Monitor selector switches have standard accessory clear lens caps to allow customer installation of source labels.

### Extensive Control

Fully isolated logic connections allow for complete control of sources located in the studio, remotely and via the VMConnected Network system. The RMXdigital console also provides TCP/IP connectivity for control of and interaction with automation systems. The powerful array of logic control options ensures operators have the flexibility they need and the simplicity they demand.

### Connected

Like all PR&E consoles, the RMXdigital system features separate connectors for each audio and logic function, eliminating the need for costly wiring fan-outs. Wiring changes can be made by simply plugging in additional connections.

### Instant Access

The RMXdigital console's top rear panel allows instant tilt-up access to all console connections for quick and simple installation.

### Simple Repairs

Critical console modules and sub-assemblies are easily disconnected and reconnected for easy maintenance. Hot-pluggable, front-panel modules and I/O cards allow for quick swap-out for repair.

### Digital Event Timer and Clock

Event timer displays in tenths of a second and allows for start, stop, hold, and reset of event timer. Clock display can be autonomous or synchronised to ESE TC89, TC90, or SPMTE time code.

### Documentation & Tools

Every PR&E console comes with a detailed manual, connector kit and special tools.

### Embedded VMConnected Network Capability

The RMXdigital console features built-in support for VMConnected Network to share 128 channels, and simultaneous, bi-directional sources with embedded logic via simple CAT-5E cables or fiber connections. Ethernet connectivity is included for connection to the VMConnected Network supervisory network and the outside world.

### Power Supply Redundancy

The RMXdigital console includes a built-in power supply coupler to support dual power supplies simply by adding an optional 99-1205 power supply.

### Input Modules — Easy to Learn, Easy to Use

In addition to router control rotary source selectors and take buttons, all input modules are equipped with 10-character alphanumeric displays and status LEDs showing both the active and alternate/standby inputs. Any module can also be used for Telco/Codec inputs with direct talkback to the source via the foldback (IFB).

### Setup Simplicity, On-the-Fly Module Exchange

Exchanging a module is as simple as plugging it in.

- Hot-swappable panel modules
- Console session setup, with onboard storage for snapshot sessions and automated preset recall

## Specifications

*(Specifications and designs are subject to change without notice)*

Analog Line Inputs	
Input Impedance	>60 k ohms, balanced
Input Level Range	Selectable, -10 dBV, +4, +6, +8 dBu
Input Headroom	20 dB above nominal Input
Analog Main Outputs	
Output Source Impedance	<3 ohms, balanced
Output Load Impedance	600 ohms minimum
Nominal Output Levels	Program, Send: +4 dBu
Maximum Output Levels	Program, Send: +24 dBu
Digital Inputs and Outputs	
Reference Level	+4 dBu (-20 dB FSD)
Digital I/O	Through digital input and digital Program, Send, Telco/ Codec Mix-Minus outputs
Signal Format	AES-3, S/PDIF (input only)
AES-3 Input Compliance	24-bit sample rate conversion
AES-3 Output Compliance	24-bit
Digital Reference	Crystal (internal) or AES-3 (external) at 48 kHz ±100 ppm
Internal Sample Rate	48 kHz
Output Sample Rates	48 kHz or 44.1 KHz available on selected outputs
Processing Resolution	24-bit fixed with extended precision accumulators Conversions A/D 24-bit, Delta-Sigma, 128x oversampling on all digital inputs; D/A 24-bit, Delta-Sigma, 128x oversampling
Latency	<1.6 ms, line in to monitor out
Monitor Outputs	
Output Source Impedance	<3 ohms, balanced
Output Load Impedance	600 ohms minimum
Output Level	+4 dBu nominal, +24 dBu maximum
Frequency Response	
Line Input to Program Output	+0 dB/-0.5 dB, 20 Hz to 20 kHz
Dynamic Range	
Analog Input to Analog Output	104 dB referenced to FSD, 107 dB 'A' weighted to FSD
Analog Input to Digital Output	105 dB referenced to FSD
Digital Input to Analog Output	110 dB referenced to FSD, 113 dB 'A' weighted to FSD
Digital Input to Digital Output	125 dB
Total Harmonic Distortion + Noise	
Analog Input to Analog Output	<0.003%, 20 Hz to 20 kHz, +18 dBu input, +18 dBu output, 22 kHz filter bandwidth
Digital Input to Digital Output	<0.0005%, 20 Hz to 20 kHz, -6 dB FSD input, -6 dB FSD output, FS/2 filter bandwidth
Digital Input to Analog Output	<0.003%, 20 Hz to 20 kHz, 0.001% Typical @ 1kHz, -6 dB FSD input, +18 dBu output, FS/2 filter bandwidth
Crosstalk Isolation	
Adjacent Analog Inputs and Outputs	>95 dB, 20 Hz to 20 kHz
Stereo Separation	
Analog Program Outputs	>86 dB, 20Hz to 20 kHz
Power Supply	
Output to Console	+48 VDC at 6.25 amp, redundant operation optional AC Input IEC power cord, one per plug-in power supply
DC Output	Keyed multi-pin connectors