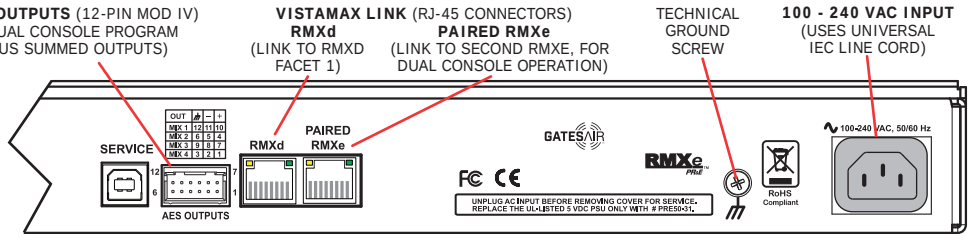
PRE99-1538 RMXENGINE, FOR RMXDIGITAL CONSOLES

Quick Guide

LINK CABLE WIRING	
T568A END	**T568B END**
PIN 1 (WHT/GRN)	PIN 3 (PAIR 3)
PIN 2 (GREEN)	PIN 6 (PAIR 3)
PIN 3 (WHT/ORG)	PIN 1 (PAIR 2)
PIN 6 (ORG)	PIN 2 (PAIR 2)

AES OUTPUTS SIGNALS
MIX 1 = PGM 1 SUM (10, 11, 12)
MIX 2 = PGM 2 SUM (4, 5, 6)
MIX 3 = PGM 3 SUM (7, 8, 9)
MIX 4 = PGM 4 SUM (1, 2, 3)



RMXENGINE, REAR VIEW

INSTALLATION AND CONNECTIONS

The RMXengine (RMX*e*) is a 1 RU rack-mounted device that expands the functionality of networked RMX*digital* consoles running 600-series or later VistaMax system code. The RMX*d* DSP card PROMs must be 21-349-1 rev F or later (earlier revision DSP PROMs will not work with the RMX*e*).

The RMX*e* has an internal +5 volt DC supply with a detachable IEC AC cord. There is no power switch on the unit since it's designed for 24/7 operation. A front panel bezel lights up red to indicate the +5 volts is good.

The RMX*e*'s main connection is between the **RMXd** jack and Facet 1 on the RMX*d* console. A customer-supplied CAT6 cross-over cable (max. length 100 meters) ties these two RJ45 jacks together. Both the yellow and green LEDs light up solid, on both RJ45 jacks, when a Link cable is properly connected.

The **PAIRED RMXe** jack (RJ45) and the **AES OUTPUTS** jack (12-pin MOD IV) are active only when two RMX*d* consoles are summed together for Dual Console Operation. This requires each console to have an RMX*e*. The summed Program buses (PGM 1 - 4 SUM) are then available for routing or directly from the four AES Outputs (Mix 1 - 4) on either RMX*e*.

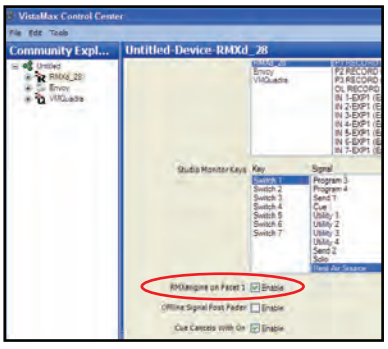
The USB connector (Service) is unused on this product.

APPLICATION & CONFIGURATION

The RMX*e* has two main functions: to create on-the-fly subtractive mix-minus signals for every DSP-hosted fader (the left-most eight, sixteen, or twenty-four faders, depending upon console frame size) and to create four new caller/remote record outputs. When the RMX*e* is also used for Dual Console Operation, with another RMX*d* and RMX*e*, the four summed stereo Program buses create the PGM 1 - 4 SUM outputs.

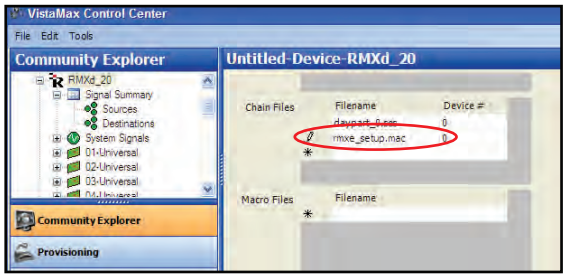
VMCC v2.2 (build 50 or later) is required to add the RMXe signals to the console include list. Check mark the option **RMXengine on Facet 1**.

The RMXe signals (signal numbers 65 - 128) are then added to the Signal Summary Source and Destination lists.



In VMCC, check mark RMXengine on Facet 1 to add the RMXe signals

The rmxe_setup.mac file sets up the signal routing between the RMX*d* console and the RMX*e*. A setup macro for each size RMX*d* console can be downloaded from any GatesAir Radio Studio Products download site. To setup the console simply save the appropriate rmxe_setup.mac file to the SesFiles folder on the RMX*d* console. Adding its filename to the Chain Files entry in VMCC will ensure that it runs automatically whenever the init.mac file is run.



Chainging the rmxe_setup.mac file to run whenever the INIT.MAC file runs

USING THE RMXE

The RMX*e* is completely software-controlled. All of its input and output signal numbers are listed in VMCC at the top of the console's Signal Summary Lists (the RMX*e* signals are 65 - 128). In most applications, the routes to the RMX*e* are made by the rmxe_setup.mac file.

Signals from the RMX*e* (the up-to 24 mix-minus signals, four remote and caller record buses, and the four program bus sum signals when Dual Console Operation is used) are routed using any standard route commands: in a session or by a Protected Destination macro file; by manually taking the signal using a source selector; by VMCS commands from an audio server; by using an admin macro route, etc.

The channel's mix-minus signals are named: MME1 - 24 (MME = Mix-Minus Engine). Their signal numbers are from 65 (MME1) up to 112 (MME24R). The "left channel" is an IFB feed while the "right channel" is a clean feed (no IFB). The four remote and caller record feeds are signals 113 (P1 Record), 115 (P2 Record), 117 (P3 Record), and 119 (OL Record). The four Program Sum outputs are signals 121 (PGM 1 Sum), 123 (PGM 2 Sum), 125 (PGM 3 Sum), and 127 (PGM 4 Sum). **Note:** the PGM Sum signals are only active when two RMX*d* consoles, and two RMX*engine*s are Linked for Dual Console Operation.

For additional assistance, contact Wheatstone technical support at: techsupport@wheatstone.com or call 252-638-7000.

THIS DOCUMENT APPLIES TO PRE99-1538

TITLE: INSTRUCTION SHEET, RMXENGINE SIGNAL PROCESSOR FOR RMXDIGITAL CONSOLES

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DESIGNS BY PACIFIC RESEARCH & ENGINEERING

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RLM	August 22, 2014	71-1538	B
SHEET: 1 OF 1	APVD.		