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Rane HAL1x Expandable Multiprocessor

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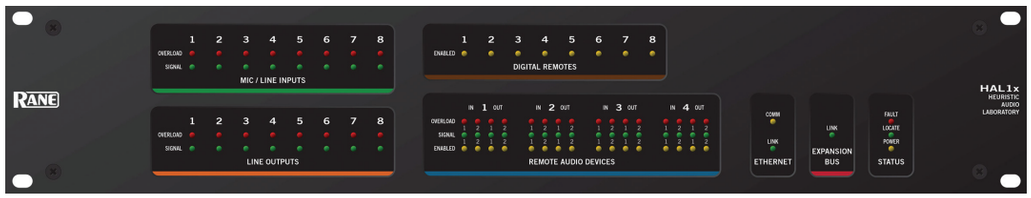
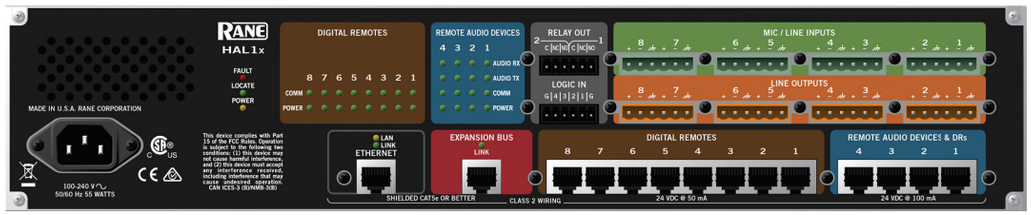
Four RAD ports convert digital to analogue & vice versa

512 in x 512 out audio channel potential





Supports 16 in x 16 out audio

9600 MIPS of processing power

Rane's HAL multiprocessors allow integrators to create a network of audio and paging zones.

The HAL1x Multiprocessor has 9600 MIPS of processing power and supports 16 in x 16 out audio, with 8 in x 8 out on balanced analog connections, and another 8 in x 8 out through RADs. It is unique among the HAL Multiprocessors because it carries an Expansion Bus, which can increase the I/O up to 512 in x 512 out by adding up to 32 daisy-chained Expanders to a single HAL1x. A few to hundreds of more gain-sharing mic inputs are possible with AM Automixers. HAL1x's DSP brain has over five times the DSP horsepower of Rane's RPM 88.

Why did you choose this product?

It is powerful, flexible and easy to program. The Rane configuration software is very easy to use while most of what is available in the market is complicated in terms of programming. Interfacing it with third-party systems like Crestron is also very simple. Both of these things mean we can save time on every project.

You also have an edge with HAL because not every manufacturer has remote input and output interfaces which Rane calls RADS. These are digital so you just connect one Cat5e shielded or Cat6 shielded cable to that RAD and there you go. You can connect analogue or digital inputs to different RADs and transmit up to two in + two out on one CAT5e/6 shielded cable which saves on cabling as well. What many others offer is Dante or CobraNet interfaces which are sending multi-channels of audio over Cat5e/6 but that is more expensive. If you need that with HAL you can still add a separate HAL/Dante module and have that in addition to your DSP.

What is also important for our market is that the products are made and shipped from the US. A lot of people in the Middle East prefer to deal with products made in the US or Europe.

What do you like about using it?

It is predictable and reliable. When an engineer goes to site he's not worried about whether or not it will work this time, or whether there are going to be problems with the programming or interfacing with third-party systems. They can easily estimate how long it will take them to do those tasks - there are no surprises.

What additional features would you like to see?

The only thing I would like to see is an expansion that could do both analogue inputs and analogue outputs.

In which applications are you using the product?

We have used the product in hotel ballrooms, conference halls and emergency/crisis management rooms.

A five star hotel installation in Amman was finished earlier this year. That used 18 RADs, plus a HAL DSP and two expansion units for the RADs.

A second large project in another five star hotel in Amman also includes many systems. This will use about 19 expansion units, plus five DSPs. This is going to be a big installation because in every area we have one DSP and many expansions. We used HAL in this case because it was easier to change to digital as the DSP accepts analogue and digital inputs and outputs. The core accepts digital so you can easily change all the analogue cables and inputs and outputs from normal mic/line cables to Cat6 shielded which makes it future-proof.