UNDERSTANDING RAB-2

An update to the Remote Audio card for iLive systems allows the new range of interface options to be used in the iDR-10 and iDR-0 MixRacks and in the iLive Surfaces. One immediate advantage is that Allen&Heath's ACE technology, which is fitted as standard in iLive T-series, can be used to link iLive Surfaces to Mixracks using 1 cat5 cable for audio and control, or 2 cables in redundant mode if this required.

Splitting and distributing signals between iLive and third-party systems, such as Front Of House / Monitors / Broadcast or Recording ,can now be done with various formats depending on the features needed.

The option cards include:

M-ACE-A up to 64 channels bi directional audio over CAT5 cable <120m (400ft). TCP/IP Ethernet bandwidth for 'tunnelling' control (inc iLive) down the cable. Redundant mode provides zero packet-loss changeover capability using a second cable.

M-ES-V2-A   64 channel bi-directional EtherSound audio networking, with network port for ES control. Note this module, like any other EtherSound compatible device will connect to iLive systems fitted or supplied with the earlier version.

M-MMO-A 64 output, multi-formats including 1x Aviom [16ch], 2 x ADAT [24ch] and 2 x iDR 8-buss [16ch] each with patch-bay source option.

M-MADI-A 64 channel MADI with redundant mode. AUX connector can be used as a through of MADI-1 inputs, a split of MADI-1 outputs, or alternatively, to provide word clock I/O for iLive-T systems without DARS

Customers with existing EtherSound AVD (M-ETH-A/B) modules can purchase the M-ES-V1-BASE mounting kit to adapt them to fit the front-loading option slots on RAB-2. All EtherSound devices will inter-connect in terms of 64 channel audio networking but some EtherSound features may vary depending on the type of EtherSound standard card fitted in your device.

There are two types of RAB-1 cards fitted to existing iLive systems:

The iLive surface RAB (M-RAB-A) this has only one option slot (port-A) often fitted with 1 x M-ETH-A card for audio link to the iDR MixRack and other EtherSound network devices.

The MixRack RAB cards have two option slots, port-A for the surface link often fitted with an EtherSound card (known as the ESA option), and port-B for system expansion and linking (often fitted with EtherSound card known as ESB option).
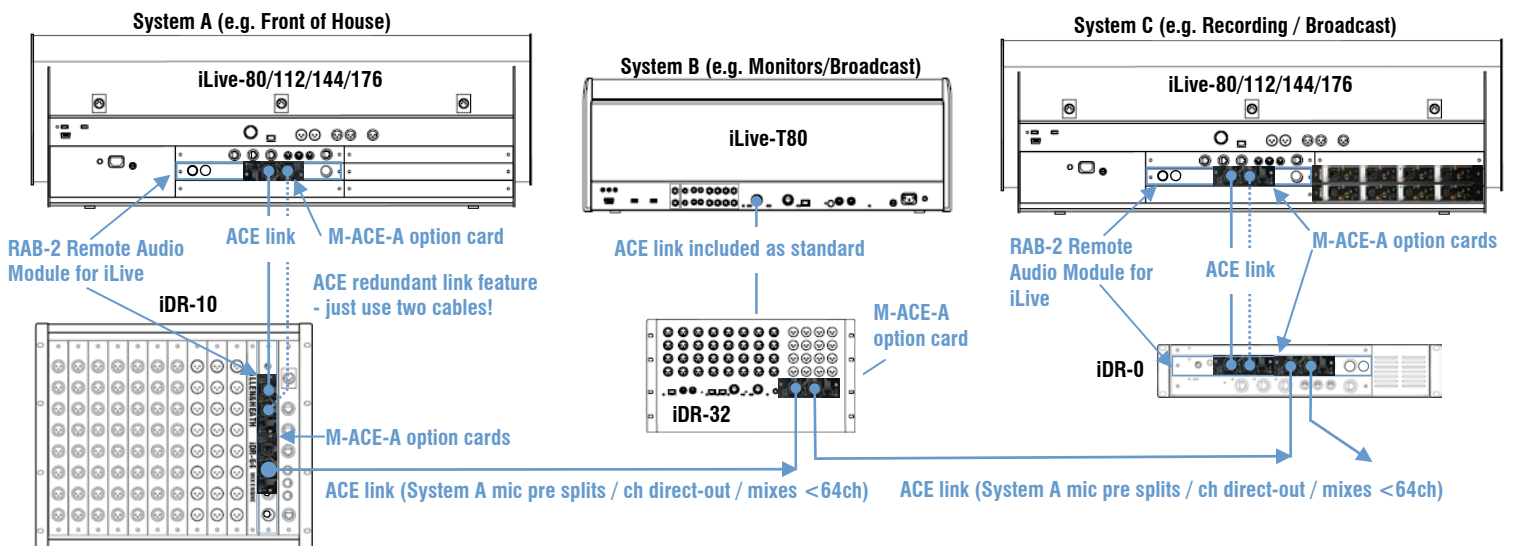
To fit the ESA or ESB option cards, the RAB-1 has to be removed and a kit of PCB, mountings, and connectors, is fitted from the inside.

The RAB-2 option modules are front-loading so the card does not have to be taken out of the MixRack, this is the same system as the port-B option slot on the iDR-32 and iDR-48 MixRacks currently shipped with T-series. There is only one type of RAB-2 card now for MixRacks and surfaces.

Surface / rack link will be port-A option which reserves 32 channels for I/O plus PAFL buss and TB.
Note the port-B slot will have limited use when the card is fitted to an iLive surface.

System Example using combination of iLive and iLive-T components and ACE

Notes:

- New iLive systems will be shipped with RAB-2 fitted and option cards as requested on the order code.
- There is an 'upgrade' price for customers with RAB-1 who wish to have RAB-2.
- There is an adapter kit to adapt earlier ESA/B M-ETH EtherSound modules to fit in the new RAB-2.
- RAB-2 allows iLive-T112 and T80 surfaces to be used with iDR-0 and iDR-10 MixRacks; T surfaces have with port-A ACE connection as standard, the MixRack will need RAB-2 with M-ACE-A card fitted in port-A.
- RAB-2 allows iDR-32 and iDR-48 MixRacks to be used with iLive 80/112/144/176 surfaces with a choice of I/O fitted in the rear (such as AES/EBU) iDR32/48 have the port-A ACE connection fitted as standard, the iLive surface will need RAB-2 with M-ACE-A fitted in port-A.
- RAB-2 allows ACE to be used in iLive systems (before we offered only EtherSound), MixRacks and surfaces will need RAB-2 and be fitted with M-ACE-A cards in port-A. Redundant (zero packet-loss) capability is available in this configuration; simply use a second cat5 cable to connect the M-ACE modules is redundancy is required.
- A RAB-1 surface with EtherSound module fitted will connect to an M-ES-V2-A EtherSound card fitted in an iDR MixRack with RAB-2. There is no need to upgrade the surface unless other RAB-2 options are required.
- iDR-0, iDR10, iDR-32, and iDR-48 MixRacks can now be linked using a variety of options: ACE with redundant cable option, EtherSound, or MADI. If EtherSound is used for digital signal split or linking (e.g. FOH > MONS) then RAB-1 systems can still be used, it is only necessary to adopt RAB-2 in iDR-0 & iDR-10 MixRacks if ACE or MADI is needed in the port-A slot.