



iLive FAQ

iLive is an evolving system. Through software upgrades, new features and capability compatible with existing hardware are scheduled to be added over time..

About the system:

Q: Is iLive an all-in-one mixer?

A: No, iLive is a system of components including separate mix rack and control surface providing the benefit of much greater system flexibility with distributed control and audio.

Q: What is the iDR-64?

A: iDR-64 refers to the DSP module that provides all the audio processing needed for 64 input channels mixing to 32 output buses. As part of the separate iDR10 or iDR0 MixRack it is the mix engine, the heart of the system.

Q: What is the iDR-64 'RackExtra' module?

A: iDR-64 DSP module introduced with iLive provided 2 internal effects engines. The more recent iDR-64 RackExtra module has updated hardware to support up to 8 effects engines. It can be thought of as a virtual rack with 8 slots available to be configured from a selection of effects and processing devices. Existing systems can be upgraded by replacing the original iDR-64 module with the iDR-64 RackExtra module.

Q: What is the iDR10?

A: iDR10 is the model number for the 9U rack that holds the iDR-64 mix engine, RAB module, and the CPU module. It is called '10' because it also has 10 card slots available for any combination of input or output modules to be fitted. The rack is more than simply a box of I/O. With the DSP and control built in it is the mixer itself. That is why we refer to it as the 'Mix Rack'.

Q: What is the iDR0?

A: iDR0 is the same as the iDR10 but in a smaller 2U frame as it does not have any audio I/O card slots available. It is known as the MiniRack. It is the mixer 'brain' getting its audio via the EtherSound network. It provides an affordable solution as part of a FOH/Monitor system using EtherSound as a digital mic splitter, or matched with an iLive surface fitted with local I/O can function as a compact small format mixer.

Q: What does the 144 mean in iLive-144?

A: iLive-144 is the model number of one of several control surfaces available. The 144 refers to the number of fader control strips available to the user. This is the number of physical faders multiplied by the 4 layers. The iLive-144 has 36 faders each with 4 layers so providing 144 strips which may be



configured by the user to control input channels, mix masters, DCA masters and more. Similarly the compact iLive-80 has 20 faders x 4 layers, iLive-112 comes with 28 faders x 4 layers, and the larger iLive-176 has 44 faders x 4 layers.

Q: Where is the audio processed?

A: In the iDR-64 module. The DSP is in the rack not the surface. This means that the audio is processed at source on stage. This maintains very low latency as the audio does not need to be transported to the iLive surface and back. It also means that the mixer is independent of the surface and may be controlled by some other means such as a laptop.

Q: How does the iLive surface control the iDR-64 mix engine?

A: Standard Ethernet (TCP/IP network) control over a CAT5 cable is used. The rack, iLive surface and the touch screen controller built into the surface each have their own IP address to identify them on the network. The rack and surface each include a 3 port network switcher so that additional network controller devices may be connected, for example a laptop PC running the iLive System Manager software. *The PC software needed to support this application is not yet available and is part of the ongoing development of the iLive system.*

Q: Can the iDR10 rack be used on its own as a 64x32 matrix mixer?

A: Yes, the I/O, DSP, control ports and power supplies are built into the rack. Just like the Allen & Heath iDR-8, the iDR-64 can be configured and controlled in many different ways, for example you could use one or a network of laptops or PL-Anet remote controllers instead of an iLive surface. This will make the iDR-64 suited to many other installed sound applications. *The firmware and PC software needed to support this application is not yet available and is part of the ongoing development of the iLive system.*

Q: How many mic inputs can I load into the iDR10 rack?

A: There are 10 input or output card slots available. Each slot handles 8 signals. An input or output module may be fitted to each position providing either 8 inputs or 8 outputs. Up to 8 input cards would typically be loaded providing from 0 to 64 local mic/line inputs at the iDR-64 leaving the remaining slots loaded with additional inputs for insert returns and bus external inputs, output modules or blanks.

Q: How many mic inputs can I load into the iDR0 rack?

A: None, there are no I/O slots in the iDR0 MiniRack. Instead the iDR0 interfaces its audio with other devices via the EtherSound network.

Q: Is there any audio at the i-Live surface?

A: Yes, there can be if required. Up to four 8-channel input or output cards may be fitted in a card frame built into the rear of the surface. These provide combinations of inputs and outputs up to 32 maximum for local audio such as walk-in music, sound effects players, additional effects and inserted processing. The audio is not processed in the surface. It is transported to and from the iDR-64 mix engine and other devices via EtherSound. The ES connection also transports the PAFL and talkback mic signals.

Q: Are the I/O modules for the surface and rack the same?

A: Yes, they are interchangeable. Note that they should not be 'hot plugged'.

Q: What I/O modules are available?

A: Six options are available at the time of print: 8-input analog mic/line preamp, dual input 8 channel mic/line preamp allowing connection of 16 sources, 8-output XLR analog line output, 8-input digital, and 8-output digital. The digital cards provide four pairs of SPDIF, AES3 or optical signals. There is also a two slot wide multi-out digital module providing 16 signals in a variety of industry standard digital formats (Adat, Aviom, Hearback, IDR expander).



Q: What about an interface to the Aviom personal monitoring system?

A: A 16-channel multi-output digital module is available. This takes up two slot positions in the rack and provides interfaces compatible with Aviom and Hearback personal monitoring systems as well as ADAT and the Allen & Heath 8-output iDR expander unit.

Q: What is the RAB module?

A: RAB stands for **R**emote **A**udio **B**oard. It is the module that provides the interface for distributing networked digital audio between the rack and remote locations such as the surface or breakout boxes. The EtherSound options are fitted here. The module also provides the PAFL and headphones signals. A RAB module is needed at each end of the network. The surface RAB module is different to the rack RAB module.

Q: Do I need two iDR-64 equipped racks for split FOH/monitors using two iLive surfaces?

A: Yes, because the DSP is built into each rack and not each surface. However, you only need to load up one set of mic preamps because they can be shared between FOH and monitors. These are linked to the second rack using EtherSound as a digital mic splitter. Blank panels are fitted in place of the input cards on the iDR10 second rack, or you can use the more compact iDR0 rack which has no I/O slots.

Q: Can I do split FOH/monitors using two iLive surfaces and one iDR-64?

A: No, multi-surface operation is not supported yet. You need separate DSP for the FOH and monitor channels (see above).

Q: Can I have two iLive surfaces controlling one iDR-64 for distributed control?

A: No, multi-surface operation is not supported yet. It will become possible with future firmware.

Q: Can I control the iDR-64 with an iLive surface and a laptop at the same time?

A: Yes, both the surface and the rack have network switchers built in so that multiple controllers can access the system over the same network at the same time. Changes are immediately reflected on all controllers, for example, a level adjusted using the laptop results in the fader moving to the new position on the surface. *The firmware and PC software needed to support this application are not yet available and are part of the ongoing development of the iLive system.*

Q: Can I link iDR-64 racks together to expand the number of inputs?

A: Not yet, but in time racks may be linked via two CAT5 cables - Ethernet (control) and EtherSound (audio). This is the digital equivalent of the Allen & Heath analog console Sys-Link expander option. Two linked racks would provide 128 DSP channels. Note that systems with separate FOH and monitor systems expanded in this way may not link more than 64 channels via EtherSound. *The firmware needed to support this application is not yet available and is part of the ongoing development of the iLive system.*

Q: Can I work with more than 64 mic/line sources?

A: Yes, either by linking two MixRacks to expand the number of channels to 128 (*not available yet*), or by using DUAL MIC/LINE input modules which let you select between A and B inputs for each preamp. This is a cost effective solution for situations where you do not need to mix more than 64 channels at the same time.

Q: If I link iDR-64 racks can I expand the number of mixes controlled from one surface?

A: No, the maximum number of buses available is 32.

Q: How many inserts are available?

A: An insert is available for every input and output. The number used is limited only by the number of physical sockets you have available. The inserts can be mapped to any of these sockets at the rack or surface or via EtherSound to and from other breakout boxes.



Q: Where is the headphones socket?

A: There is one headphones socket on the front of the rack RAB module. There are two headphones sockets on the iLive surface under the front armrest. One is a ¼" TRS jack, the other a 3.5mm mini-jack, useful for plugging in other earpieces such as those used for IEM. There is an additional XLR stereo local monitor line output on the rear of the console for connecting to monitor wedge or nearfield speaker systems. The iLive surface has an XLR stereo PAFL line input on the rear panel for patching in the monitoring signal using analog cables from the rack instead of EtherSound.

Q: If I am using iLive for monitors, is there a cue wedge facility?

A: Not yet, but future firmware will let you assign the PAFL mix to a surface strip giving you a fader master, and route it to one (mono) or two (stereo) XLR line outputs. This is the digital equivalent of the Allen & Heath analog console 'wedge mode'. *The firmware needed to support this application is not yet available and is part of the ongoing development of the iLive system.*

Q: Is there a dual PAFL monitor for wedge/IEM monitoring?

A: Not yet, but future firmware will let you assign any mix PAFL to either a wedge or IEM monitor output. Each has its own fader master strip. *The firmware needed to support this application is not yet available and is part of the ongoing development of the iLive system.*

Q: How many internal effects are there?

A: The original iDR-64 mix engine provided two stereo multi-effect units. The more recent iDR-64 RackExtra module configures more DSP to provide up to 8 high quality internal effects engines for reverb, delay and modulation effects. Systems with the earlier DSP may be upgraded by replacing the module.

Q: Can I change the channel strip LCD backlight colors?

A: Yes, the ability to color code the strips according to channel type or simply to highlight certain channels is a major feature. The color is associated with the iDR-64 channel, not the surface strip, therefore that color appears anywhere the channel is mapped. Use the touch screen NAMES & COLOUR function or access it from the channel processing view using the SEL key..

Q: Is there a flight case available?

A: Yes, all but the smallest iLive-80 are shipped as standard with touring grade flight cases with handles and wheels. The 80 is available with flight case or carton. The rack is fitted into a shock mounted case. The iLive surface has a small footprint 3-part flight case. Both can be operated while in their cases. The iLive surface case cover and front nose piece are removed for normal operation.

Q: Can you connect a large monitor to the system to show additional information?

A: No, but you can connect a PC or laptop with external monitor running the iLive System Manager software via the network. Note that the optional VGA port on the rear of the surface duplicates the information shown on the touch screen. *The iLive System Manager software needed to support this application is not yet available and is part of the ongoing development of the iLive system.*

Q: Are the banks of faders dedicated to specific inputs or outputs?

A: No, they can be freely assigned by the user. This lets the user 'design' a console layout that suits their particular application or preferred way of working. Three banks (two on the 80) with four layers each are provided to help the user assign a logical layout of inputs, masters and DCA control strips.

Q: Is there any removable storage media to save board configurations?

A: Yes, a USB memory stick can be used to save and load the processing libraries and show memories. A show memory stores all the system settings including current settings, all the scenes, libraries and user preferences.

Q: Where are the settings stored?

A: The mix engine settings are stored in the iDR MixRack, and surface settings are stored in the iLive surface.



Q: How are the memories structured?

A: There are 4 types of memory – Libraries, Scenes, Shows and User Profiles: Libraries store user settings for the EQs, compressors, gates, FX and other processing blocks. Up to 250 Scene memories can store combinations of channel processing, mix levels, strip settings and many other mixing parameters. These are typically used for recalling scenes during a show or settings for different bands during a festival. Show memories store all the console parameters including the current settings, all the scenes, the mix and surface configuration. User Profiles store the permissions for up to 8 users including the Administrator who has full rights and can apply passwords and lock out certain functions for guest users. Note that User Profiles are not stored as part of the Show memories.

Q: Is there a way of isolating channels from scene recall?

A: Yes, a quick access Safe system lets the user protect selected channels and mix masters from being overwritten by scene recall.

Q: Can I lock the surface when it is left unattended?

A: Yes, a surface lock function is available within the screen UTILITY menu. The surface restores all settings and fader positions when it is unlocked. If the current user has a password set then this is used to enter or exit locked mode.

Q: Can I restrict certain users from accessing certain functions?

A: Yes, the surface includes a 'User Profiles' facility which lets an 'Administrator' lock out certain functions for up to 7 'guest' users. User access may be password protected if required.

Q: What happens if a cable between surface and stage box is unplugged during a performance?

A: If the Network cable is unplugged the MixRack retains its settings and will continue to process audio. Only control from the surface will be lost. With the current version of firmware the surface needs to be rebooted once the network cable is re-plugged. This does not affect audio at the MixRack but audio routed via the surface cards will be temporarily lost. If the EtherSound cable is unplugged then audio routed via the surface is lost but is restored as soon as the cable is plugged back in. For redundant backup a third party cable or fiber optic system may be used.

Q: Is there a backup 'redundant' power supply?

A: Yes, both the rack and the surface have their own mains power supplies. The iDR10 MixRack may be fitted with one or both internal PSU modules. The smaller iDR0 MiniRack has an internal supply and includes a socket for plugging in the Allen & Heath iPS10 external 2U power unit for redundant backup. The surface has one internal PSU module and includes a socket for plugging in the iPS10 backup supply.

Q: Can I copy and paste settings?

A: Yes, dedicated copy, paste and reset keys are provided. Pressing a SEL or MIX key anywhere on the surface while holding down one of these keys copies or resets the related parameters. It is an instant function that does not require access to complicated screen menus.



About EtherSound:

Q: What is EtherSound?

A: EtherSound is an industry standard high quality audio networking system based on standard network (Ethernet) hardware. It uses a CAT5 cable to connect audio over a long distance (up to 100m /330 feet). It transports 128 audio signals, 64 channels of bi-directional audio, and features high reliability and very low latency. EtherSound (ES) equipped audio devices may be daisy chained to distribute the audio between them. The technology is owned by Digigram who provide additional information and support from their web site.

Q: Is EtherSound easy to use?

A: As with any network system there is a lot to learn about EtherSound. However, for standard point to point connection between the iLive Surface and MixRack, for expansion linking two iLive systems, and for multitrack recording, EtherSound is very easy to configure using the patchbays and audio network configuration options accessible via the TouchScreen. For more advanced applications working with third party ES devices on a distributed audio network it is important that you have a good understanding of how EtherSound works, and connect a PC running an EtherSound setup program such as Auvitrans ES-Monitor to configure the network settings.

Q: Is EtherSound an option?

A: Yes. You do not need EtherSound if you transport your iLive surface audio (PAFL and talkback) via standard mic cables or a regular copper multi-core. Analogue connections are provided on the rear of the surface to do this. Two independent ES networks may be fitted – ESA and ESB. Use the ESA option if you want EtherSound audio transport to and from your surface and other networked ES devices. Fit the ESB option if you want to expand or link iLive systems, or connect to an ES equipped multitrack recorder such as a PC fitted with the Digigram LX6464 PCI card.

Q: Do I need EtherSound for audio at the surface?

A: Networked audio such as EtherSound offers the convenience of a single CAT5 cable replacing the traditional multi-core over long distances. However, you could use standard mic cables to connect to an existing multicore or run a small dedicated multi-core to the surface for local audio and interface to the PAFL and talkback signals. In this case ESA is not used and the RAB module is therefore not needed at the surface. A RAB module is still needed at the rack but it does not need the ESA option fitted.

Q: What audio is available over EtherSound?

A: EtherSound carries 128 signals = 64 channels of bi-directional audio (to and from the rack). It is configured for 'loop back' so 64 signals are available, configured as any combination of sends and returns. The input and output slots on the rear of the iLive are mapped to the first 32 channels of the ESA network. The surface PAFL (headphones) and talkback signals use channels 63-64. The remaining signals may be routed to/from external breakout boxes or ES equipped processors and devices. The ESB network is used when linking racks to expand the number of channels, for FOH/monitor operation or for multitrack recording to an ES equipped recorder.

Q: Will Allen & Heath offer EtherSound breakout boxes?

A: Possibly in the future as the system develops. Note that the iLive system can interface with third party EtherSound breakout boxes or devices. Several are available now and it is likely many more will become available in time.



How to:

Q: How are the 32 buses assigned?

A: These may be assigned in any combination of groups, auxes, main mix and matrix. Some rules apply. Only even numbered combinations are allowed. For example, if you configure a 3-way main mix such as L, R, Sub then a fourth bus is allocated but not available for you to use. Two buses are used for PAFL. You can assign up to 30 buses if you do not include matrix, or up to 32 if you do include matrix as there are 32 channels of output mix processing available. Note that the internal effects do not use mix outputs so you can achieve a configuration with up to 40 buses used, for example if you include 8 FX and 10 matrix. The MIX SETUP screen tells you if you attempt to exceed the maximum number available.

Q: How do I insert regular outboard gear at the iLive surface?

A: For local inserts use sockets on the input and output cards fitted to the rear of the surface. You can also map the inserts to remote locations via EtherSound. The sockets can be mapped to the insert points within the channel and mix signal paths. The inserts do not use up any of the 64 processing channels.

Q: How are the graphic EQs controlled?

A: Using the touch screen or a 'flip to faders' function. You can use your finger, a stylus or rotary encoder to control the GEQ on the screen, or flip control to the faders. All frequency bands are simultaneously available when flipped to the faders (except the compact iLive-80 surface which use two layers of faders). The frequency and dB values can be displayed on the strip LCDs while in fader mode.

Q: How do I select the processing (EQ, dynamics etc) for a channel or mix master?

A: Press the green SEL key on the channel or master fader strip. Make sure the TouchScreen is not in any setup mode, and that all its screen keys are off if you want to view the channel parameters on the screen as well.

Q: How do I control the aux mix levels?

A: You can work in two ways using the fader strips – mix view or channel view. Press the blue MIX key on the aux master fader strip. Depending on the setting in the Routing screen for that mix, either the faders or the rotary controls become the aux sends to that master. For channel view press the input channel MIX key. This lets you adjust all sends from that channel using the master strip faders or rotaries.

Q: How do I assign channels to a group?

A: Press the blue MIX key for that group master, hold down the ASSIGN key and then press the channel MIX keys to toggle those channels in or out of that group. The assignment status is displayed using the ON icons in the fader strip LCDs. To quickly assign all channels hold ASSIGN and press the group master MIX key to toggle all on or all off. Alternatively use the touch screen ROUTING function to view and assign to any destination from one channel.

Q: How do I change the aux mix pre/post fader settings?

A: Press the blue MIX key for that aux master, hold down the PRE/POST key and then press the channel SEL keys to toggle those channels pre or post fader. The status is displayed using the PRE icons in the fader strip LCDs. To quickly set all channels pre or post hold down PRE/POST and press the aux master SEL key to toggle all on and all off.

Q: Can I control the send levels and assignments from the screen?

A: Yes, with the screen ROUTING page selected you can view all the levels and assignments for the selected channel. In this mode, selecting the channel by pressing its SEL key presents all its processing on encoders, and all its routing via the screen.

Q: Where in the channel signal path are the aux sends?



A: Using the screen ROUTING page for each aux master you can view and change the sends source from any point within the channel signal path. A drop down menu presents several options, for example post-gate/pre-EQ or post-EQ/pre-compressor.

Q: Where is the POST-FADER signal taken from?

A: The POST setting is really 'follow fader' rather than 'post-fader'. This gives you the advantage of being able to source the send from anywhere in the channel signal path while having it follow the channel fader level. Refer to the iLive System Block Diagram to view the options. Such flexibility is not available on analogue consoles.

