

Liviau R is a single-unit solution for control of AV presentations in meeting rooms, boardrooms, lecture theatres – or indeed any location where there is a need for a simple and elegant solution to fully control lighting, video and audio sources.

Liviau R combines the functions of an audio/video switcher, a file server, an internet browser, a Wi-Fi hub, a lighting controller, a stereo power amplifier and an audio recorder in a single, compact and elegant unit. The user interface is a 10.1" multi-touch screen, which displays a series of simple, icon-based pages. Each of these is deliberately designed to offer only the options required at any one time. The touchscreen display may be mirrored to other portable devices using the onboard Ethernet port or Wi-Fi connection,

allowing the system to be controlled from elsewhere in the room.

Liviau R connects to a projector or flat screen display using HDMI, with control of the display device being via either RS-232 or infra-red. If the presentation programme is a computer file, it may be sourced from a file stored in Liviau itself, or from elsewhere in the organisation via a standard Ethernet network connection, from a USB memory device or even wirelessly from another device (e.g., a laptop, tablet, or smartphone) using the integrated screen casting application MirrorOp. An external source of HDMI video (and audio) such as a DVD player or DVR may alternatively be selected. Providing the network connection is Internet enabled, web pages may also be accessed and displayed, using Liviau R's internal browser.

PRELIMINARY DATASHEET



Liviau R's audio performance is exemplary: the unit provides six balanced analogue inputs (two mic, four line), six balanced analogue audio outputs, a fully assignable audio mixing matrix and a high quality 50 W/channel stereo power amplifier. A 4-band parametric equaliser is included on every input and output, and additionally, each output has a limiter and crossover facility, thus permitting the use of high quality bi-amped loudspeakers. Master control of volume is always available with a virtual fader on all screen pages. Liviau R also has an integral 48 kHz/24-bit digital audio recorder, which can be used to record the proceedings of meetings (approx. 500 hours capacity) or other programme material, either internally or on a USB memory device.

In addition to the RS-232 and infra-red outputs, an industry-standard DMX 512 port is fitted, permitting the unit to interface directly to many common lighting control systems. A dedicated page is included on the touchscreen which allows control of individual lighting groups, colour definition and recall of preset lighting scenes. Master control of lighting level is always available with a virtual fader on all screen pages. There are also four GPOs, two GPIs and two GP ports that may be defined at installation as either inputs or outputs. These may be used to control other room functions, such as blinds, projector lift, projection screen, etc.

The touchscreen pages include a number of additional "soft" keys, whose precise function can be defined at installation. Possibilities include automatic generation of emails, access to a room scheduler with Gmail integration and communication with reception or other parts of the organisation.

Liviau R can be installed as a free-standing unit, integrated into furniture or wall-mounted. It is built in a very stylish, custom aluminium enclosure, and includes an ambient light sensor to adjust screen brightness and a proximity sensor to wake the system. Liviau R is silent in operation (no fans) and is powered by a separate external 24 V PSU (supplied).

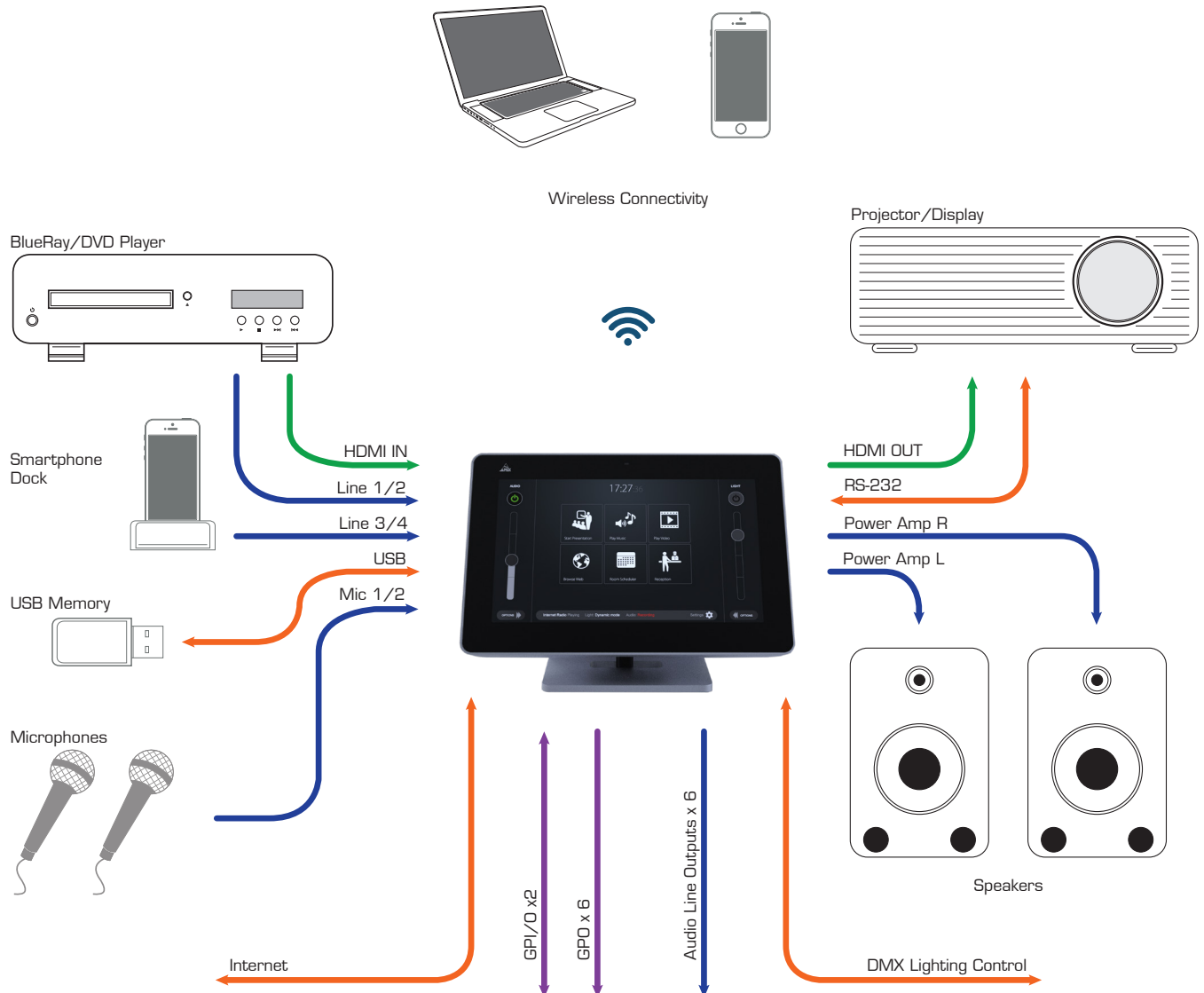
Primary Details

- "All-in-one" unit – no separate processor
- Extremely simple in use
- Cost-effective solution
- Contemporary design, ideal for today's working environment

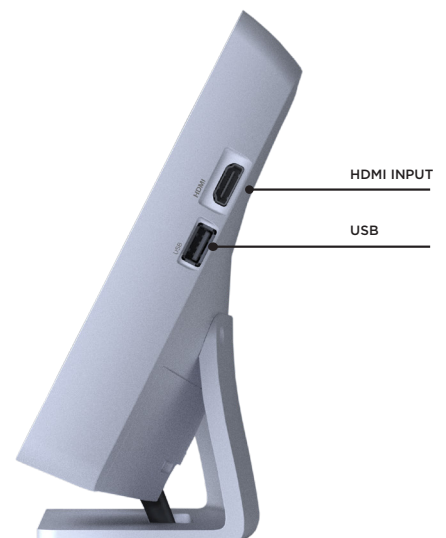
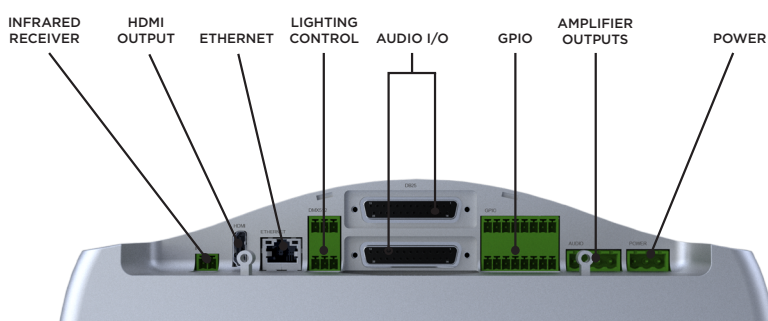
Features

- Internal memory for commonly-accessed data
- USB port
- Wi-Fi enabled
- Skype™ and MirrorOp integration
- Network port
- HDMI input and output
- Control support for all common projectors and flat screen displays
- Very high level of audio performance
- Balanced audio inputs for mics and line sources
- Balanced audio outputs
- Integral 50 W/ch stereo amplifier
- Powerful audio DSP section
- DMX 512 control for lighting
- RS-232, IR and GPIO ports
- Silent in operation: very low power consumption

Example System Diagram



Connector Diagram

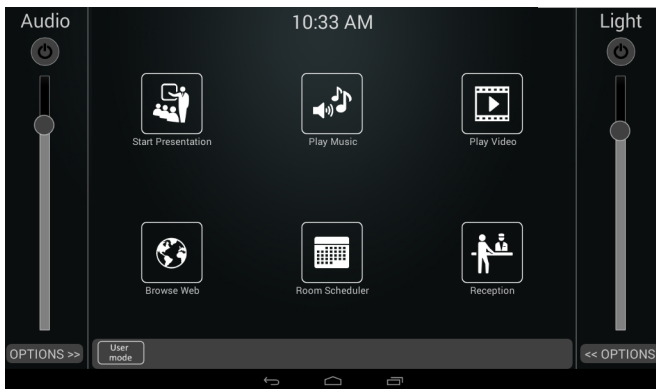


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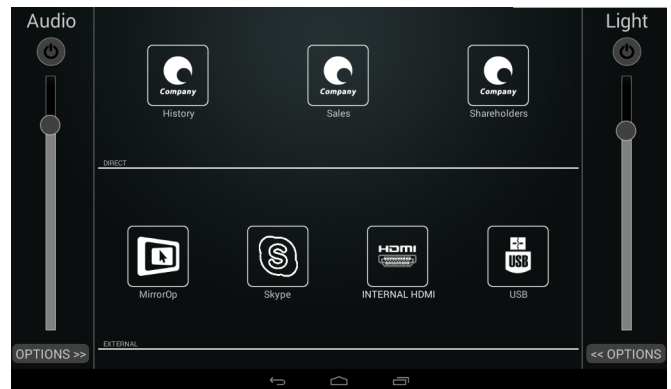


Sample Control Displays

Home Screen



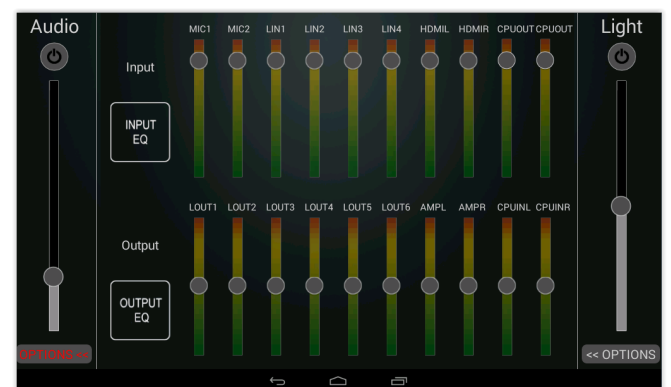
Presentation Selection Screen



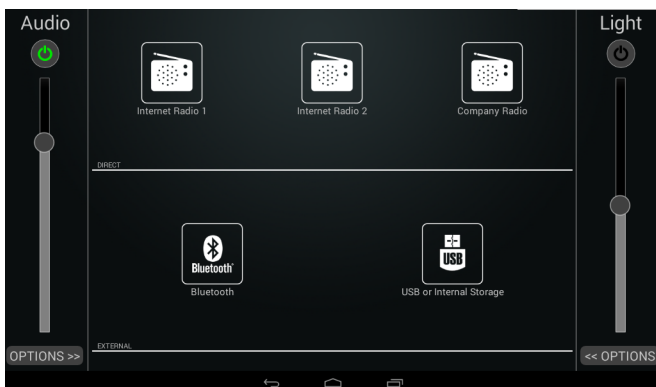
Lighting Control



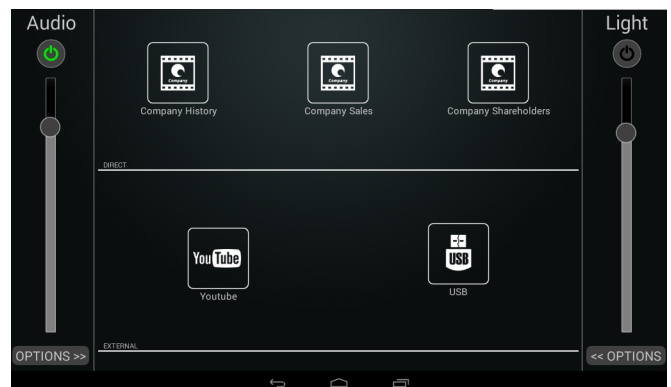
Audio Mix Control



Music Source Selection



Video Source Selection



Technical Specifications

General	
Display	10.1" multi-touch capacitive screen; ambient light sensor for backlight control
Cooling	Passive
Processor	Quad core Cortex A9
Comms	
Network	Gigabit Ethernet port
USB	1 x USB Type 'A'
Wi-Fi	Compliant with 802.11 a/b/g/n, 2.4/5.0 GHz MIMO
Video	
Input	1 x HDMI 1.4a, 1920 x 1080p
Output	1 x HDMI 1.4a
Audio - I/O	
Mic inputs - type	2 x balanced, $Z_{in} > 10 \text{ kohms}$
Line inputs - type	4 x balanced, $Z_{in} > 5 \text{ kohms}$
Max input level	+18 dBu (mic and line)
Line outputs - type	6 x balanced, $Z_{out} < 50 \text{ ohms}$
Max. output level	+18 dBu (line outs)
Power amplifier outputs	2 x 50 W into 4 ohms
Audio - processing	
Sample rate	96 kHz
Matrix	6 x 6
EQ	4-band parametric on all inputs and outputs
Limiters	On all outputs
Crossovers	On all outputs
Recorder	24-bit, 48 kHz; 128 kbps AAC. Max duration approx. 500 hours (internal)
Other I/O	
Lighting control	DMX 512
GPOs	Four, volt-free, 24 V @ 100 mA
GPIs	Two, volt-free, 24 V
GPIOs	Two, configurable as inputs or outputs
Serial port	RS-232C, bi-directional
Infra red port	1 x IR, for standard IR LED emitter
Other	
Wake up	By proximity sensor
Power requirements	24 V dc @ 6 A max., via supplied AC PSU
Dimensions (w x h x d)	273 mm x 177 mm x 60 mm (without stand)

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* Apex, Apex Liviau and Apex Liviau R are brands of GiVa Audiovisual Technologies