



ALF-SC61E
 MULTI-INPUT PRESENTATION SOLUTION WITH AUDIO AND CONTROL

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 HDMI
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 LAN
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 DANTE
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 USB 30
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 USB 2.0
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 USB-C
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 HDBT
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 SPEAKER
- 
 AUDIO

The Solution

This solution provides a flexible multi-input presentation and audio distribution system designed for seminar rooms, training spaces, classrooms, and lecture venues. At the centre of the system is the ALF-SC61E presentation switcher, which manages multiple video sources, integrates audio processing, and provides control capabilities for connected room equipment.

The ALF-SC61E allows users to connect a variety of presentation sources including laptops, room PCs, and other HDMI devices, enabling presenters to easily switch between content during seminars, training sessions, or lectures. The system supports multiple wired input sources, making it suitable for environments where several presenters or participants may need to share content.

Video signals are transmitted to the room display or projector using an HDBaseT extender system, allowing the display device to be located at a distance from the equipment rack while maintaining reliable high-quality signal transmission. This supports flexible room layouts and clean installations while ensuring stable video delivery to the main presentation display.

Audio from microphones and presentation sources is routed through the ALF-MA15075D mixer amplifier, which provides amplification and distribution to the installed ALF-C606 ceiling speakers. This ensures clear speech reinforcement and even audio coverage throughout the room. The system supports both gooseneck microphones and wireless microphones, allowing presenters and participants to be heard clearly during lectures, training sessions, and interactive discussions.

Control of the system is provided through a wall-mounted control keypad, allowing users to easily manage source switching, display control, and other room functions without needing to access the equipment rack.

A PoE network switch connects the system components, enabling reliable communication between network-enabled devices while simplifying system infrastructure.

Together, these components create a fully integrated presentation solution that combines video switching, audio amplification, microphone integration, and room control into a unified system, delivering a simple and reliable platform for seminars, training sessions, classroom teaching, and lecture presentations.

ALF-IP6 Overview

The ALF-IP6 is a programmable wall-mounted keypad controller designed for simple and intuitive AV system control. Featuring six configurable buttons, it allows users to manage key room functions such as display power, input selection, volume control, and system on/off. The unit communicates over IP and includes RS-232 and dual IR ports for flexible integration with displays, switchers, and amplifiers. Its clean, low-profile design makes it ideal for meeting rooms, training spaces, classrooms, and hospitality environments requiring reliable, straightforward control.

ALF-SC61E Overview

The ALF-SC61E is a multi-format presentation scaler switcher designed for seminar rooms, training spaces, classrooms, and lecture venues. It allows users to connect and switch between multiple presentation sources such as laptops and room PCs, while automatic switching enables seamless source selection when a new device is connected.

The unit features built-in video scaling, ensuring all input signals are optimised to match the resolution of the display or projector for consistent image quality. It also de-embeds HDMI audio, allowing audio to be routed separately to external amplification systems, making it a flexible and reliable solution for modern presentation environments.

ALF-MA15075D Overview

The ALF-MA15075D is a compact 1U Class-D digital mixing amplifier designed for both low- and high-impedance systems. It delivers 2 × 75W at 4/8Ω or 150W at 70/100V, making it ideal for distributed commercial audio applications. Its Class-D design ensures energy efficiency, low heat output, and reduced inrush current, with automatic standby to minimize power consumption. It features Dante, optical, balanced analogue inputs, and two microphone inputs with phantom power support, along with stereo low-impedance, 70/100V, and balanced line-level outputs. Integrated DSP includes a five-band graphic EQ, TCP/IP web control, trigger input, and front-panel status LEDs, ensuring flexible control and efficient system integration.

ALF-TPUK150-RS Overview

The ALF-TPUK150-RS is an 18Gbps HDMI-over-HDBaseT extender set that transmits 4K60 (4:4:4) video, audio, RS-232, and bi-directional IR up to 100m for 4K and 150m for 1080p over a single CAT6 cable, featuring HDCP 2.2 support, HDR formats, an HDMI loop-out for local monitoring, analog audio de-embedding on the receiver, PoC for simplified installation, and compact hardware ideal for professional long-distance AV signal distribution.

ALFC-606 Overview

The ALF-C606 is a 2-way 6" in-ceiling loudspeaker with integrated backbox, designed for distributed audio in seminar rooms, classrooms, training spaces, and lecture venues. It delivers clear sound for both speech and background audio and supports 70V/100V constant-voltage systems with selectable power taps of 30W / 15W / 7.5W, as well as 30W at 8 Ω. The speaker provides a frequency response of 70Hz–20kHz with 90dB (1W/1m) sensitivity, ensuring consistent and reliable audio coverage while maintaining a discreet, low-profile ceiling installation.

Solution Bill of Quantities

- 1 x ALF-SC61E Scaler switcher
- 1 x ALF-MA15075D Amplifier
- 1 x ALF-IP6 Keypad Controller
- 1 x ALF-TPUK150-RS HDMI extender kit
- 6 x ALFC-606 Ceiling Loudspeakers
- 4 x ALF-HDMI 6ft HDMI Cables

Third Party Equipment

- 1 x Displays
- 1 x Display mounting bracket
- 1 x PoE Network Switch
- 1 x Gooseneck microphone
- 1 x Wireless microphone - transmitter and receiver

Solution Use Cases

1. Seminar Rooms – Multi-Presenter Content Sharing

In seminar environments where multiple speakers present during a session, the ALF-SC61E allows presenters to easily connect laptops or other devices and switch between sources during presentations. The built-in auto-switching capability automatically selects the active source when a new device is connected, simplifying operation and reducing the need for manual control. Audio from the presentation sources can be routed to the room amplification system, ensuring clear sound through the installed ceiling speakers.

2. Training Rooms – Instructor-Led Sessions

In training rooms, instructors often need to display content from different devices such as laptops, training PCs, or media players. The ALF-SC61E enables quick switching between these sources while its scaling capability ensures all video signals are optimised to match the display resolution, maintaining consistent image quality regardless of the source device. This allows instructors to focus on delivering content without worrying about compatibility or display issues.

3. Classrooms – Interactive Teaching

In classroom environments, teachers and students may share content during lessons or group activities. The ALF-SC61E allows multiple input sources to be connected simultaneously, enabling easy switching between teacher presentations and student devices. With integrated HDMI audio de-embedding, audio from videos or presentations can be distributed through the room speaker system, ensuring all students can clearly hear multimedia content.

4. Lecture Venues – Reliable Presentation Control

In lecture halls where presentations must run smoothly and reliably, the ALF-SC61E provides a central switching platform for managing multiple presentation inputs. Lecturers can quickly change between presentation sources while the system automatically scales incoming signals for consistent display performance. The simplified control and automatic switching make it easy for presenters to operate the system without requiring technical assistance, ensuring efficient and uninterrupted lectures.