

EXPERIENCE  
**LIVE SOUND**

# Control | Pack

- ▶ Channel-based redundancy for playback systems and live processing
- ▶ Manual or logic-based switching and show control
- ▶ Compatible with all Thunder | Core products: AX64, AX Center and Core 256

# Control | Pack

## Playback Redundancy and Show Control

Control | Pack provides native redundancy switching between any set of input channels as well a manual switching of routing preset for show control applications when using Thunder|Core products.

Depending on the need for I/O capacity, AX64, AX Center or Core 256 interfaces can address applications in live music audio systems related to playback or insert of audio on computers for back-tracks and effects. Further, the routing capabilities can enable functionalities related to back-up switching and show control reconfiguration of the audio path and signal flow in live music audio systems.

### When latency and reliability are critical factors

In live sound, channel counts are massive, and with digital equipment latency can build up fast. There are many points in a complex variety of signal chains that must not only co-exist but also complement each other.

The Thunder|Core range has very high I/O capacity with 256 Thunderbolt 3 channels, up to 192 MADI channels, 256 Dante channels and 16 Channels on Lightpipe. The internal signal processing ensures a fixed, near-zero latency when routing audio from any input to any output of just 7 samples (72 microseconds @96 kHz) with absolute time and phase alignment between all output signals. If more units are interconnected via a DADlink optical fiber interface,



More info



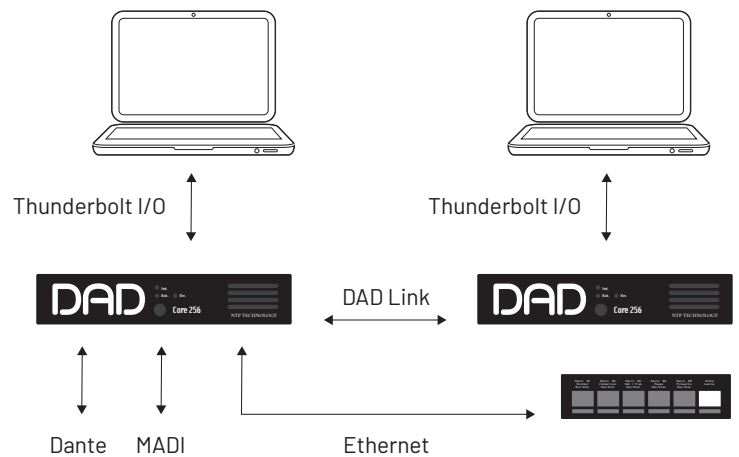
[digitalaudio.dk/control-pack](https://digitalaudio.dk/control-pack)

# Features

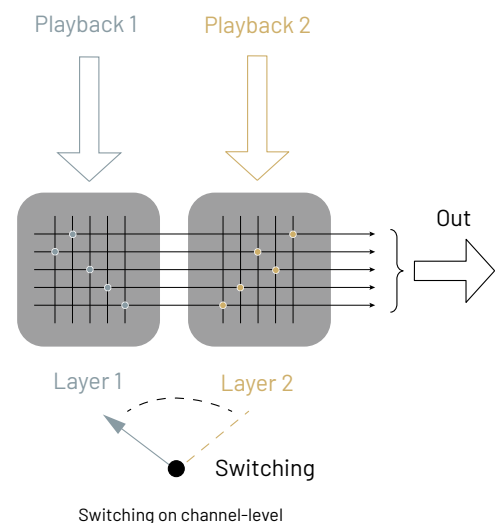
- ▶ Routing presets are defined via DADman to be loaded into the unit as a native configuration of preset 'buckets'.
- ▶ A total of 32 preset 'buckets' with any configuration of I/O interface and channels can be defined.
- ▶ A single preset 'bucket' can hold up to 4 layers each with up to 256x256 channels mapped.
- ▶ Switching of input layers in a preset 'bucket' can be done via signal triggers natively in the Thunder | Core interface, manually from DADman or via external control devices.
- ▶ All input channels in the Thunder | Core unit have built-in signal detectors for signal integrity. The signal trigger logic is configured via DADman.

- 2 x Thunderbolt 3 ports w/ 256 I/O ch. @ 48 & 96kHz
- 256 Dante I/O ch. @ 48kHz
- 64 MADI I/O ch. @ 48kHz
- 16 Lightpipe ch. @ 48kHz
- Optional module expansion: 2 x MADI or DADLink
- Optional card expansion: DAD I/O cards
- DADman for macOS and Windows
- Samplerate 44.1- 384kHz
- PRO|MON

- ▶ Signal detection on channels can be pilot tone triggers or an AE6 digital trigger. Further, signal detection can also be on port level for MADI and AES3.
- ▶ Built-in signal generators for sine wave or AE6 signals can be routed to any of one or more outputs.
- ▶ Switching time for a preset 'bucket' is less than 2 audio samples with logic-based switching.
- ▶ Switching time for a preset 'bucket' equals 0 audio samples with manual switching.
- ▶ Response time for signal detection/triggers and switching is less than 1ms.



Switching between Thunderbolt 3 ports



Live Sound



House of Worship



**DAD**  
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