



ENT-4D-SERVER-CTRL
INTEGRATED 4D SYSTEM SERVER
CONTROL PLATFORM

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Integrated 4D System Server Control Platform

Brand: TWT Technology

Model: ENT-4D-SERVER-CTRL

Application: 4D / 5D Cinema, motion theater, immersive entertainment systems

Product Overview

The ENT-4D-SERVER-CTRL Integrated 4D System Server Control Platform is the central control core for immersive theater environments, designed to manage content playback, motion seat control, and full theater effects coordination within a single integrated system. The platform combines show control software, playback management, seat motion control, and environmental effect management to deliver synchronized 4D/5D experiences with stable and accurate performance.

Developed for professional cinema and simulation applications, the system provides centralized control of both **seat-based effects** and **theater-wide effects**, allowing operators to run complete immersive programs from a unified server platform.

Key Features

- Integrated server-based control platform for 4D / 5D cinema systems
- Combines **playback, motion seat control, and effect management**
- Controls both seat effects and full theater environmental effects
- Supports DMX control
- Expandable with support for up to 10 I/O cards
- Compatible with multiple media input formats
- Supports SMPTE timecode synchronization
- Designed for centralized and professional show operation

Main Functions

- Content playback control
 - Motion seat synchronization and management
 - Environmental effects management
 - Centralized show programming and execution
 - DMX-based device control
 - Timecode-based synchronization for immersive playback
 - Multi-device integration for complete theater automation
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System Description

The ENT-4D-SERVER-CTRL acts as the primary show-control server in a 4D/5D theater system. It integrates the control software required for:

- Projection / playback system management
- Seat motion control
- Effect system management, including:
 - seat-installed effects
 - theater-wide environmental effects

This allows all motion and effect responses to be synchronized with media playback, creating a seamless immersive experience for the audience.

Technical Specifications

Parameter	Specification
Product Name	Integrated 4D System Server Control Platform
Model	ENT-4D-SERVER-CTRL
Brand	TWT Technology
Control Functions	Playback, seat motion control, theater effect management
Effect Scope	Seat effects and full theater environmental effects

Control Protocol	DMX
I/O Expansion Support	Up to 10 I/O cards
Media Compatibility	CD, DVD, MPEG-2 and similar input sources
Timecode Support	SMPTE timecode
Application	4D / 5D cinema, motion theater, immersive entertainment systems

Playback and Media Compatibility

The system is designed to work with multiple input media formats, enabling flexible integration into entertainment and theater environments.

Supported source compatibility includes:

- CD
- DVD
- MPEG-2
- Other compatible playback inputs within the show-control workflow

This allows the server platform to be used in different cinema and simulation configurations depending on project requirements.

Synchronization and Control

The ENT-4D-SERVER-CTRL supports SMPTE timecode, enabling precise synchronization between media playback and all connected effect systems. This is especially important in immersive projects where timing accuracy is critical for:

- motion seat actuation
- wind, snow, rain, smoke, and bubble effects
- strobe and lighting effects
- full-scene effect programming

The inclusion of DMX control further supports integration with professional entertainment equipment and theater automation devices.

I/O Expansion Capability

The platform supports up to 10 I/O cards, allowing the system to be expanded to match project scale and technical requirements. This provides flexibility for:

- additional control outputs
- external device interfacing
- expanded sensor and signal integration
- larger theater system configurations

This makes the ENT-4D-SERVER-CTRL suitable for both standard and more complex immersive entertainment installations.

Applications

- 4D Cinema
 - 5D Cinema
 - Motion simulation theater
 - Theme park attractions
 - Immersive entertainment venues
 - Centralized theater automation systems
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Technical Advantages

- Centralized control of playback, motion, and effects
- Synchronization through SMPTE timecode
- Professional DMX compatibility
- Expandable architecture with up to 10 I/O cards
- Supports both seat-level and theater-wide effects
- Suitable for commercial immersive entertainment projects



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