



# **ENT-4D-AIR-SYS**

**AIR PRESSURE REGULATION &  
PNEUMATIC HOSE SYSTEM**

# ENT-4D-AIR-SYS

AIR PRESSURE REGULATION & PNEUMATIC HOSE SYSTEM

*For 4D / 5D Cinema Effects*

Brand: TWT Technology

Model: ENT-4D-AIR-SYS

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## Product Overview

The ENT-4D-AIR-SYS is a complete air control and distribution solution designed for 4D/5D cinema special effects systems.

The system integrates air pressure regulation, filtration, safety components, and pneumatic hose distribution to ensure stable, precise, and synchronized air delivery for various effects such as air jets, wind, and pneumatic actuators.

With a modular architecture, the system supports flexible installation across multiple seats and effect zones, ensuring efficient operation and easy scalability.

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## Key Features

- Integrated air regulation and distribution system
  - Multi-stage pressure control for stable performance
  - High-quality air filtration and moisture removal
  - Flexible pneumatic hose system with modular layout
  - Fast-response control via solenoid valves
  - Built-in safety and protection mechanisms
  - Easy installation and maintenance
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## 1. AIR PRESSURE REGULATION SYSTEM

**System Model: ENT-4D-AIR-REG-SYS**

Parameter	Specification
Working Pressure	6 – 8 bar
Max Pressure	10 bar
Air Quality	Filtered & dry
Control	DMX / relay control
Safety	Pressure relief + manual shut-off

## System Components & Part Numbers

No	Component	Model	Specification
1	Main Pressure Regulator	ENT-4D-REG-PR-01	0–10 bar adjustable
2	Secondary Pressure Regulator	ENT-4D-REG-PR-02	0–6 bar
3	Air Filter Regulator (FR)	ENT-4D-FR-01	5 micron filter
4	FRL Unit	ENT-4D-FRL-01	Full treatment set
5	Solenoid Valve	ENT-4D-SV-01	24V DC
6	Manual Valve	ENT-4D-MV-01	Brass / stainless
7	Pressure Relief Valve	ENT-4D-PRV-01	Safety release
8	Pressure Gauge	ENT-4D-GAUGE-01	0–10 bar
9	Air Manifold	ENT-4D-MANIFOLD-01	Multi-output
10	Check Valve	ENT-4D-CV-01	Anti-backflow

## 2. FLEXIBLE PNEUMATIC HOSE SYSTEM

### System Model: ENT-4D-AIR-HOSE-SYS

Parameter	Specification
Material	PU / PE / Reinforced PVC
Pressure Rating	8 – 15 bar
Temperature Range	-10°C to 60°C
Connection	Quick push-in
Layout	Modular per seat

## System Components

No	Component	Model	Specification
1	Main Air Hose	ENT-4D-HOSE-PU-10	Ø10mm
2	Secondary Hose	ENT-4D-HOSE-PU-08	Ø8mm
3	Micro Tube	ENT-4D-HOSE-PU-06	Ø6mm
4	Reinforced Hose	ENT-4D-HOSE-HP-01	Up to 15 bar
5	Straight Connector	ENT-4D-QC-STR-01	Push-in
6	Elbow Connector	ENT-4D-QC-ELB-01	90°
7	Tee Connector	ENT-4D-QC-TEE-01	3-way
8	Bulkhead Connector	ENT-4D-QC-BH-01	Panel mount
9	Hose Clamp	ENT-4D-CLAMP-01	Stainless
10	Protection Sleeve	ENT-4D-HOSE-SLV-01	Anti-abrasion
11	Quick Coupler	ENT-4D-COUPLER-01	Male/Female
12	Flow Control Valve	ENT-4D-FCV-01	Speed control

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## Performance Description

- The ENT-4D-AIR-SYS ensures stable and synchronized air delivery across all 4D/5D effect systems.
- The pressure regulation module maintains precise air pressure levels, while the hose system distributes air efficiently to each effect point. The integration of filtration, safety valves, and control components enhances system reliability and protects connected equipment.
- Its modular design allows flexible configuration, making it suitable for various theater layouts and installation requirements.

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## Applications

- 4D Cinema
- 5D Cinema
- Air-based special effects systems
- Immersive entertainment environments
- Theme park installations

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## **Technical Advantages**

- Complete air system solution in one package
- Stable and precise pressure control
- Flexible and scalable distribution system
- Reliable and safe operation
- Easy integration with control systems



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