

Digital Voice Recording System (DVRS)



The DVRS is an advanced digital recording system providing continuous and reliable recording capabilities for a wide range of purposes and clientele. The DVRS is the legal recording solution for Air Traffic Control (ATC), Emergency Fire and Rescue Services, Municipalities, and other government agencies. The Federal Aviation Administration (FAA) and the Department of Defense (DoD) have chosen DVRS as their solution for ATC recording into the 21st century. Over 600 DVRS systems have been fielded and are in operation today.

The DVRS advanced recording capabilities provide instant retrieval of thousands of hours of archived operator, telephone and radio traffic. The system is multi-user, multi-operational and scalable; enabling expansion to thousands of audio channels. The DVRS open-architecture exploits new technology, new products and enhances interoperability. The system design is scalable using LAN/WAN TCP/IP technology and an array of 19" rack mount Digital Recording Unit chassis expandable to the channel capacity desired. The DVRS provides simultaneous recording and

playback capabilities and audio "tagging" for quick access and instant playback of recorded sessions. Various playback scenarios can be used while the system maintains constant voice clarity. Time stamping of all recorded audio sessions and synchronization with outside time sources such as Global Positioning Satellite (GPS) technology is available. Secured access and authorization is embedded into the design. The DVRS uses a Windows-based Graphical User Interface (GUI) environment thereby simplifying operation, monitoring and maintenance tracking tasks.

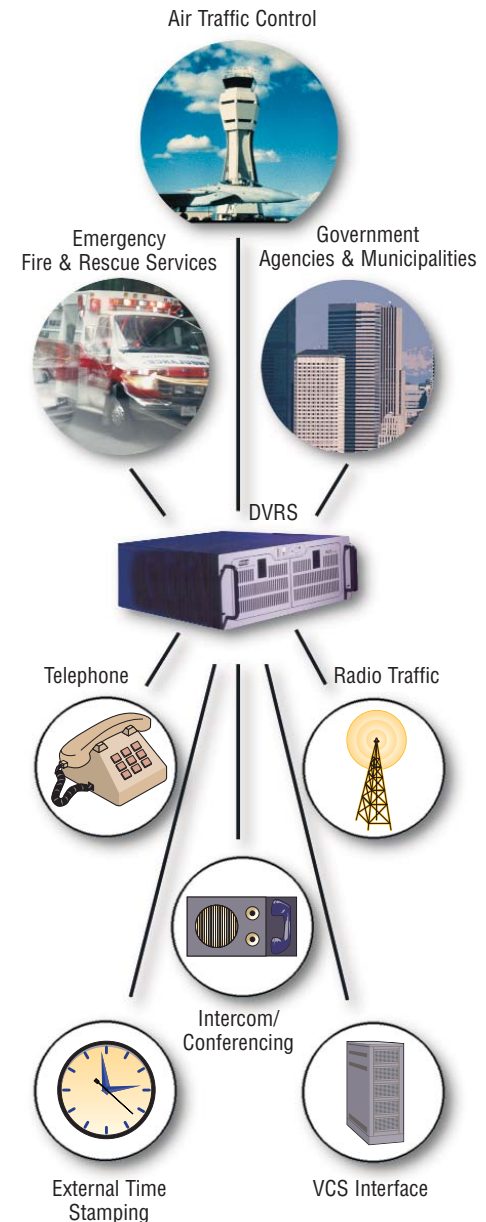
The DVRS is ideal for all types and sizes of ATC applications, including Control Towers, Radar Approach or Enroute Control Centers. The open and user friendly architecture provides an easy interface with Voice Communications Systems (VCS) and Air Traffic Management (ATM) systems.

Emergency Fire and Rescue Services, Municipalities, and other government agencies have found the DVRS ideal for all legal recording needs.

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PRODUCT SPECIFICATIONS

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| System Functions: | Digital Voice Recording for operator, telephone and radio communications |
| Recording Channels: | 16 to 48 analog input channels per chassis scalable upwards to thousands |
| Radio Line Interface: | Impedance = 600 Ohms |
| Telephone Line Interface: | Impedance > 30k Ohms |
| Digital Interfaces (optional) | T1, E1 |
| On-line Voice Storage: | 128 to 700 channel hours Database for voice information and retrieval 1 to 2 DDS (DAT) drive archiving Redundant DDS mirroring option 128 channel-hours per DAT cassette Search time: 30 seconds typical Continuous or redundancy mode operation |
| Voice Processing: | Sampling in accordance to CCITT G.711 & G.712 At 64 Kbps PCM (A-law) At 32 Kbps ADPCM (CCITT G.726) At 16 Kbps ADPCM (CCITT G.726) |
| Frequency Range: | 300-3400 Hz |
| Signal/Noise Ratio: | >40 dB for 64 Kbps sampling |
| Input Gain Control: | AGC (Automatic Gain Control) on playback |
| Audio Output: | Line Output connection to external speaker or headphones Telephone output-active connection to telephone line |
| Recording Triggers: | Energy detection, discrete line control |
| Playback Capabilities: | Up to 4 channels simultaneously, Playback while recording multiple-use access to multiple outputs, Random access, Tags, Play loop, Jump forward & backward |
| Std Communication Interface: | Ethernet |
| Supervision Functions: | Automatic Alarms, DDS database |
| System Administration: | Password Access Control |
| Time Synchronization: | Internal Clock, GPS (optional) |
| Communication Protocols: | TCP/IP Novel IPX, NetBios |
| Multi-Workstations: | 1-250 workstations over one LAN |
| Physical Dimensions: | Dimensions per 48 CH Chassis: Width: 19 inches (483 mm) Depth: 21 inches (520 mm) Height: 7.5 inches (185 mm) |
| Environmental Conditions: | Operating Temp: 5 - 40°C Storage Temp: 10 - 60°C Humidity: 85% RH (non-condensing) at 40°C |
| Power: | 115/220 Vac, 60/50 Hz, 300 Watt |



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