

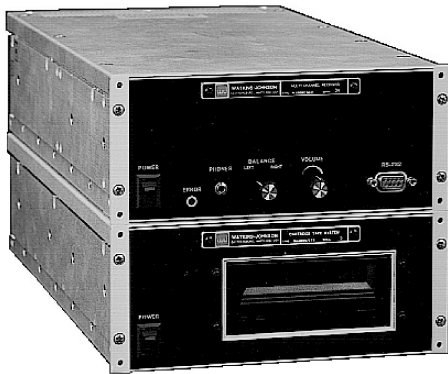
# Technical Data



WATKINS-JOHNSON

October 1996

## DAT Playback System WJ-866X Family



**WJ-866X/RPS**



**WJ-866X/PPS**



The WJ-866X Digital Audio Tape (DAT) Playback System (PS) uses sophisticated search and playback algorithms to provide a compact, flexible system that plays back and analyzes signals recorded by the WJ-866X Multichannel Receiving Systems. The system is adaptable to various operating environments, and comes in a portable (PPS) or rack-mountable (RPS) configuration.

WJ-866X PSs are specifically designed for the WJ-866X Series Receiving Systems. The standard WJ-866X Applications Program Software allows an operator to playback and analyze previously recorded files. The software includes fast, flexible algorithms that search for specific conversations by mobile-identification, serial, or dialed number, or by priority.

The PS automatically recognizes and plays back uncompressed or  $\mu$ -LAW-compressed WJ-866X audio files. The system can play up to 20 tracks simultaneously with 14 audio outputs (12-channel audio outputs and headphones).

The PS offers a variety of control options:

- Full remote control through RS-232 interface
- Optional Ethernet interface

### Features

- ❑ Full system in rack-mountable or portable configuration
- ❑ Simultaneous playback of up to 20 tracks of voice & SRI data
- ❑ 14 separate audio outputs
- ❑ Flexible tape search by mobile-ID, serial, dialed, or priority number
- ❑ Flexible playback of selected conversations
- ❑  $\mu$ -LAW Audio Decompression
- ❑ Local control via notebook PC
- ❑ Built-in test capability

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All International sales of WJ equipment are subject to USA export license approval.

This material provides up-to-date general information on product performance and use. It is not contractual in nature, nor does it provide warranty of any kind.

## WJ-866X DAT Playback System

Except for headphone volume and DAT ejection, an operator can control the PS from a PC/AT- compatible notebook computer (NBC) via the WJ-866X Applications Program.

Four option slots within the system's playback controller allow additional post processing of any voice channel playback, which makes it easy to meet customer needs. Two slots are occupied with:

- 12-channel Audio Reconstruction module (AUD)
- Small Computer System Interface (SCSI) to playback audio and Signal-Related Information (SRI) from a Cartridge Tape Subsystem (CTS)

Other options include primary level CEPT and T1 PCM data streams. See the WJ-866X Options Matrix Data Sheet.

### WJ-866X/PPS

The WJ-866X/PPS is a capable self-contained system, packaged in a convenient ABS-molded carrying case that includes:

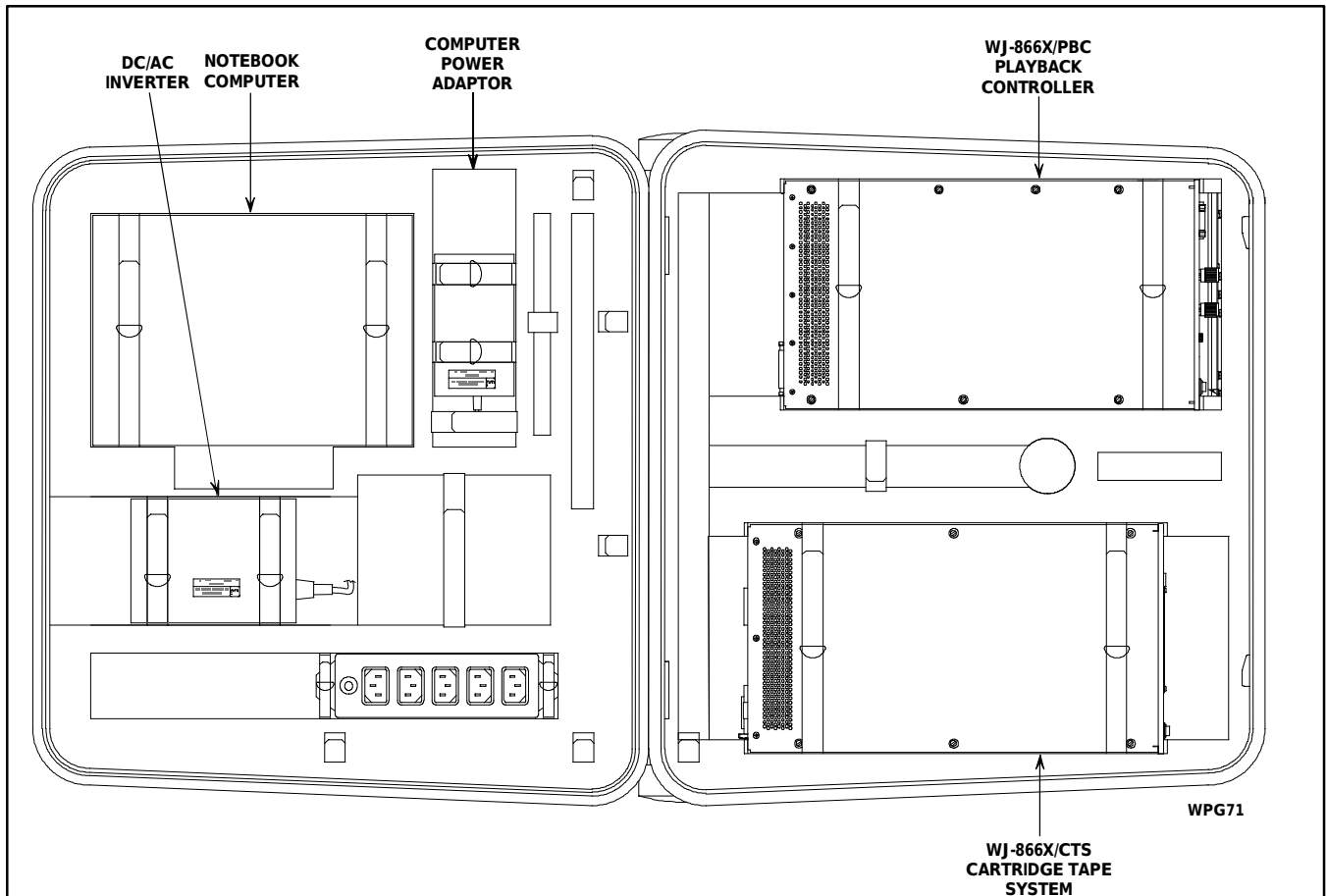
- WJ-866X Playback Controller (PBC)
- WJ-866X/AUD

- WJ-866X/CTS
- DC/AC converter for an AC or DC power
- WJ-866X/NBC

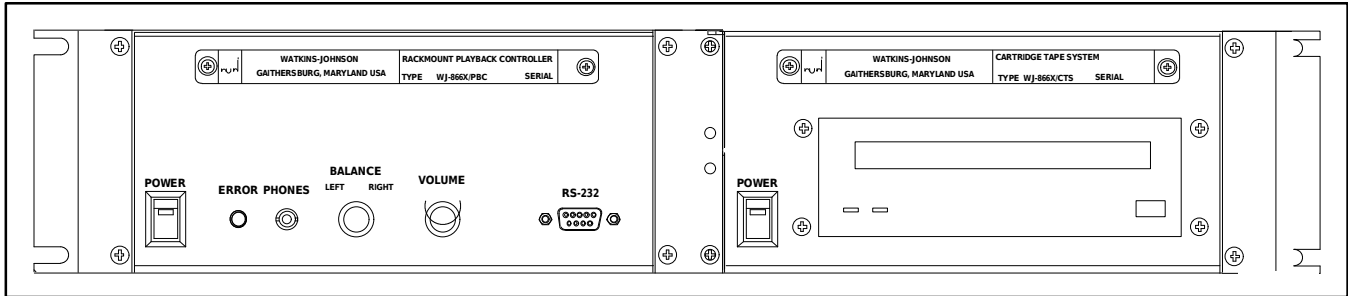
The interior of the main carrying case contains foam inserts specifically designed to the dimensions of the installed equipment, which ensures minimal movement during transport. An operator can use the system right inside the case, which further protects the equipment and reduces setup time.

### WJ-866X/RPS

The WJ-866X/RPS is a rack-mountable PS that can operate as a stand alone device or as part of a larger system requiring playback capabilities. The major components of the RPS are the PBC and CTS. Both units are provided in 3.5-inch (8.89 cm), half-rack packages. They can also mount side-by-side in a standard 19-inch (48.26 cm) equipment rack.



WJ-866X/PPS Portable Playback System



WJ-866X/RPS Rackmount Playback System

WPG71A

Specifications

<b>Output Characteristics of WJ-866X/PBC</b>	
Digital TDM Output .....	Parallel TDM data bus; 16-bit linearly-coded audio data with work & framing clocks
Frequency Response .....	175 to 3825 Hz (-3dB)
Bandpass Ripple .....	±0.35 dB, max (600 to 3400 Hz)
Adjacent Channel Rejection .....	60 dB, min (at 300 & 3700 Hz)
Total Harmonic Rejection .....	0.1%, max (820-Hz test tone at nominal output)
Residual Noise .....	57 dB, min below nominal output
Noise Power Ratio (NPR) .....	50 dB, min (600-channel noise load -7 dBm)
Differential Group Delay .....	75 µsec, max (400 to 3825 Hz)
Incidental FM .....	1.0-Hz rms (0 to 15 MHz tuned frequency) 1.25-Hz rms (15 to 20 MHz tuned frequency)
Headphone Audio .....	Toll-quality stereo; independent channel selection & volume control for each side
Output Impedance .....	600 ohms, unbalanced
Nominal Output Level .....	Adjustable up to 8 dBm into 600 ohms
Control .....	RS-232 standard. Software package containing application program provided as an accessory.
<b>Frequency Reference</b>	
Internal Reference Stability .....	±3 x 10 <sup>-7</sup> , max
Internal Reference Aging .....	±3 x 10 <sup>-9</sup> drift per day, max
External Reference .....	Accepts 1, 2, 5, or 10 MHz (±PPM) 200-mV peak-to-peak min into a high-impedance load; automatically switches to external reference upon application of signal
Reference Output .....	10-MHz 0-dBm nominal into 50 ohms

Physical Environment

Specification	WJ-866X/PPS	WJ-866X/RPS
<b>Temperature Range</b> Operating Meets All Specifications	0 to 50°C 10 to 40°C	0 to 50°C 10 to 40°C
<b>Power Requirements</b>	115/230 Vac ±10% (48 to 72 Hz, 380 to 420 Hz) 10 to 16 Vdc	115/230 Vac ±10% (48 to 72 Hz, 380 to 420 Hz)
<b>Power Consumption</b>	100 W approx (ac input) 115 W approx (dc input)	85 W approx

Weights & Dimensions

Model #	Height	Width	Depth	Weight
<b>Complete WJ-866X/PPS</b>	10.5 in <sup>1</sup> (26.67 cm)	24 in <sup>1</sup> (60.96 cm)	22.62 in <sup>1</sup> (57.45 cm)	47 lbs <sup>2</sup> (21.15 kg) 57 lbs Approx <sup>3</sup> (25.65 kg)
<b>WJ-866X/PBC</b>	3.47 in (8.81 cm)	8.32 in (21.13 cm)	17.62 in (44.75 cm)	9 lbs (4.05 kg)
<b>WJ-866X/CTS</b>	3.47 in (8.81 cm)	8.32 in (21.13 cm)	17.05 in (43.30 cm)	7 lbs (3.15 kg)

1. Closed
2. Excluding NBC
3. Including NBC