# **Technical Data**



**WATKINS-JOHNSON** 

September 1995

**Equipment Frame**WJ-9902A



### **Description**

The WJ-9902A is a half-rack equipment frame designed to hold up to two WJ-8607A or WJ-8607 *Minceptor* Receivers with or without frequency extenders. The frame includes an integral AC power supply for the receivers. It may also include an optional Front Panel Unit (FPU) and an optional Host Interface.

The optional Host Interface allows users to choose either: IEEE-488, RS-232C or RS-422A. The Host Interface mounts inside the frame and converts the interface protocol to a Hewlett Packard Interface Loop (HPIL) used by the *Miniceptor* Receivers. If an optional Host Interface is used with WJ-8607A Receivers, each receiver must include the WJ-8607A/HPIL option. The Host Interface also includes a WJ Receiver NET interface that allows access to the receivers in the frame by WJ NET *controllers*.

The standard WJ-9902A front panel has no keypad or display. The Host Interface option adds a front-panel jack that permits *control* of the receivers by a remote WJ-9605 FPU.

The FPU option requires a Host Interface. The optional integral FPU allows an operator to control the receivers mounted in the frame and adds:

- 8-line by 40-character, backlit, Supertwist LCD
- Numeric keypad
- Parameter adjust encoder
- Tuning encoder
- Softkeys
- Headphone jack and volume control

With an FPU option, the operator may control either of the receivers contained in the frame. As a receiver is selected, its audio is routed to the headphone jack of the FPU. The FPU also permits control of other receivers connected to the WJ Receiver NET.

### **Features**

- Up to 2 Miniceptor Receivers in a 3.5 by 8.25 in (8.89 by 20.95 cm) half-rack chassis
- Integral AC power supply
- Optional host interface (IEEE-488, RS-232C, RS-422A)
- Optional integral front-panel unit
- Mounting compatible with other WJ halfrack equipment

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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.

### **Specifications**

Max Power Consumption	60 W, nominal (fully loaded with 2 receivers, FPU &
	host interface)
Cooling Method	Fan-forced air
Operating Temperature	. 0 to 50°C

Height*	Width*	Depth*	Weight**
3.5 in (8.89 cm)	8.25 in (20.95 cm)	20 in (50.80 cm)	10 lb (4.52 kg)

<sup>\*</sup>Excluding connections & handles

## **Frame Inputs/Outputs**

- AC power 110/220 volts, 47 to 400 Hz
- Optional host interface (IEEE-488, RS-232C, RS-422A) includes WJ NET interface (RS-485) & HPIL
- Unless ordered with the FPU option, Host Interface adds WJ-9605 control jack
- Switched audio output (BNC)
- FPU option includes the Host Interface without the WJ-9605 control jack
- External reference input (BNC)
- Receiver signals (1 per receiver installed)
  - -- Antenna input (SMA)
  - -- Signal monitor output or Wideband Output option (BNC)
  - -- Selected 21.4-MHz IF output (BNC)
  - -- Auxiliary multipin connector (9-pin D connector)

COR TTL output signal

Spectrum invert TTL output signal

-- Auxiliary serial I/O, use dependent on receiver firmware (9-pin D connector)

Serial I output RS-232C

Serial I input RS-232C

Serial input/output RS-485 differential

-- FM monitor output (BNC)

Table 1. Options

	<u> </u>	
WJ-9902/488 (IEEE-488 Host Interface)	<ul> <li>Allows host control of receivers</li> <li>Performs HPIL conversions</li> <li>Allows control of receivers by WJ Receiver NET Controller</li> <li>Permits operation with FPU</li> </ul>	<ul> <li>Via IEEE-488 interface</li> <li>Includes WJ Receiver NET interface</li> <li>WJ-9605 control jack (unless unit is ordered with a WJ-9902/FPU)</li> </ul>
WJ-9902/232 (RS-232C Host Interface	Same as WJ-9902/488	Same as WJ-9902/488, except via RS-232C interface
WJ-9902/422 (RS-422A Host Interface)	Same as WJ-9902/488	Same as WJ-9902/488 except via RS-422 A interface
WJ-9902/FPU (Front-panel Unit)	Permits operator control of receivers or compatible devices	<ul> <li>Adds front-panel display &amp; keypad</li> <li>Requires either RS-488, RS-232C or RS-422A Host Interface option</li> </ul>

<sup>\*\*</sup>Nominal (frame w/host interface & FPU)