

May 1997

Independent Collection Equipment (ICE) Tactical Manpack DF System WJ-8991/SYS



The WJ-8991 (ICE) DF system is a complete manpack Direction Finding and Intercept system based on the WJ-8996-1 Correlative Vector DF Processor. The flexibility of the ICE system allows for deployment on a variety of platforms. Available options (see table) allow customization to particular system requirements.

The basic manportable system consists of:

- a WJ-8996-1 DF Processor
- a WJ-9887 VHF/UFH DF Antenna with Compass
- an 8996/HHC Handheld Controller
- Tripod
- Audio Headphones
- System Cables

This system is also extremely compact and fits in an optional ALCE-type backpack. Weighing less than 50 pounds, the basic system is easily transported by a single person or DF team. The ICE system operates as a stand-alone DF/intercept system or as an element in a DF-net configuration, intended to conduct emitter location operations.

Features

- Light weight
- Compact
- Stand-alone or netted operations
- Flexible configuration
- Frequency coverage:
20 to 1200 MHz
(1200 to 2000 MHz with reduced performance)
2 to 30 MHz with HF Array
- CE certification

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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-8991/SYS

Specifications

Frequency	20 to 1200 MHz (see options for HF) 1200 to 2000 MHz with reduced performance
Accuracy	5° rms, with antenna on tripod 3° rms, with antenna on mast
Sensitivity	<10 µV/m, typical
DF Processor	WJ-8996-1 (see separate data sheet)
DF Antenna	WJ-9887 (see separate data sheet)
Power Consumption	<20 W, typical
Power Requirements	Internal - BA-5590/U External - 11 to 36 Vdc
Operating Temperature	-20 to +60°C
Storage Temperature	-40 to +70°C
Shock & Vibration	Contact Factory
System Weight	<50 lbs (22.62 kg)

Options

Model #	Functions	Physical Characteristics
8991/ASU Antenna Switch	<ul style="list-style-type: none"> Allows simultaneous connection of both the WJ-9887 VHF/UHF DF Antenna and the WJ-9886 HF DF Array. 	<ul style="list-style-type: none"> External Unit
9881/SYS/BP	<ul style="list-style-type: none"> ALCE-type Backpack 	
WJ-8986 HF DF Array	<ul style="list-style-type: none"> Monopole Array provides coverage from 2 to 30 MHz. 	<ul style="list-style-type: none"> See Separate Data Sheet
WJ-9887* VHF/UHF DF Antenna	<ul style="list-style-type: none"> Provides DF coverage from 20 to 1200 MHz. Includes compass for alignment. 	<ul style="list-style-type: none"> See Separate Data sheet
9887/Tripod*	<ul style="list-style-type: none"> Deploys antenna in low profile covert platform. 	
9887/MAST	<ul style="list-style-type: none"> Deploys to 35 ft. (10.67 meters), allowing improved sensitivity and DF accuracy. Includes binoculars with integrated compass for antenna alignment. 	<ul style="list-style-type: none"> Stored Dimensions: <ul style="list-style-type: none"> - 5.4 ft. (1.65 meters) - 6 in. (15.24 cm) diameter Additional storage bag for guy wires, stakes, and hammer Weight: <ul style="list-style-type: none"> -22 lbs (9.96 kg) -40 lbs (18.10 kg) with accessories
8996/AC	<ul style="list-style-type: none"> Allows operation from a single-phase 47 to 63 Hz, 63 Hz, 90 to 264 Vac power supply. 	<ul style="list-style-type: none"> External Unit
8996/WCS	<ul style="list-style-type: none"> User Interface Software in a Windows Environment with License. 	<ul style="list-style-type: none"> 486 or higher computer running Windows 3.1
8996/NBC	<ul style="list-style-type: none"> Laptop Computer running 8996/WCS software (included) 	<ul style="list-style-type: none"> Standard Laptop 486 or higher processor
8996/HDPH*	<ul style="list-style-type: none"> Audio Headphones 	<ul style="list-style-type: none"> Connects to J9 of the WJ-8996-1 DF Processor
8996/HHC*	<ul style="list-style-type: none"> Handheld Controller Interface. Low-power system system interface for tactical scenarios 	<ul style="list-style-type: none"> Ruggedized low-power handheld computer.
8996/HHA Handheld DF Antenna	<ul style="list-style-type: none"> Provides DF coverage from 2 to 520 MHz for homing operations 	<ul style="list-style-type: none"> Weighs approximately 3 lbs (1.36 kg)
8996/HHA-1 Handheld DF Antenna	<ul style="list-style-type: none"> Same as 8996/HHA except coverage changes to 100 to 1000 MHz 	

* Included in basic manportable system.