# [df systems]

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## HF DF SYSTEM

The WJ-9012A HF Direction Finding (DF) System was built around the IEEE-1155 VMEbus Extentions for Instrumentation (VXI) standard. The system uses commerical off-the-shelf (COTS) equipment, and is a fully functioning Tactical/Strategic HF DF System using minimum rack space. The WJ-9012A man-machine interface (MMI) is built around field-proven software. Open-system architecture, COTS hardware and software and the IEEE-1155 standard ensure users of general-industry support for future products and upgrades.

- 1.0 to 30 MHz frequency coverage
- N-channel design (8 channels typical)
- Super-resolution algorithms
- Resolution of co-channel interference
- WJ-8721 VXI HF Receivers
- Windows<sup>™</sup> NT GUI
- Built-in test circuitry
- Variety of networking options
- Support of variable antenna configurations

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## INDEPENDENT COLLECTION EQUIPMENT (ICE)

The WJ-8991 Direction Finding (DF) System is a complete manpack DF 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 allow customization to particular system requirements.

- Frequency coverage: 20 to 2000 MHz (2 to 30 MHz with WJ-9896 HF Antenna Array)
- Lightweight (less than 40 pounds)
- DF on short-duration signals ( $< 100 \mu sec$ )
- DF fixing location through netted operation
- Flexible configuration ideal for portable, mobile & fixed-site platforms
- Typical system includes the following:
  - WJ-8996-1 DF Processor
  - WJ-9887 VHF/UHF DF antenna with compass
  - 8996/HHC handheld controller
  - Tripod
  - Headphones
  - System cables

#### Options for the ICE System:

- 8991/ASU Antenna Switch Allows simultaneous connection of both the WJ-9887 VHF/UHF DF Antenna and the WJ-9896 DF Array
- 8991/SYS/BP ALCE-type backpack
- WJ-9896 HF DF Array Monopole Array provides coverage from 2 to 30 MHz
- 9887/Mast Deploys to 35 ft. (10.67 meters), allowing improved sensitivity and DF accuracy. Includes binoculars with integrated compass for antenna alignment
- 8996/AC Allows operation from a single-phase 47 to 63 Hz, 90 to 264 Vac power supply
- 8996/WCS User Interface Software in a Windows™ Environment, with License
- 8996/NBC Laptop computer running 8996/WCS software



WJ-8996-I



WJ-9887



8996/HHC



8996/NBC (optional)