



## Tutorial About SuperDF:

## Comparing SuperDF with Several Common RDF Systems

Notes:

Click to download as a [GIF Image](#). Its name is Compare.GIF.

In general, the more X's an RDF has below it in the chart, the more versatile it is. A ? indicates the author does not have that information.

----- FEATURE -----	----- TYPE OF RADIO DIRECTION FINDER -----							
	SuperDF	Vector Finder	beam	Little L-Per	Adcock	Loop	Doppler	OAR
Unambiguous	X		X	X			X	X
Ignores Multipath in motion	X			X			X	X
Electronic detection	X			X			X	X
Detects multipath on foot	X	X		X	X	X		
Vertical or Horizontal	X	X	X	X		X		
Kit available	X	?					X	
Assembled available	X	X	X	X	?	?	X	X
Adjustment free hunting	X	X					X	X
Very sensitive	X		X	X				
Highly accurate	X			X	X			
Well documented and supported	X	?		?			?	?
Use with any NBFM receiver	X	X					X	
S-Meter NOT required	X	X					X	X
Attenuator NOT required	X	X					X	X
Very wide frequency coverage	X	X			X		X	X
Fast response	X	X		X			X	X
Easy maintenance	X	?	X	?	X	X	?	
Affordable	X	X	X	X	X	X	X	
Easy to use	X	X		X			X	X
Eyes-free operation	X	X						
Automatic							X	X
Practical for mobile in motion	X			X			X	X
Practical for On-foot	X	X	X	X	X	X		
Practical for Base	X	X	X	X	X		X	X

Below are a collection of important comments about particular systems in the chart.

### Vector Finder

- User must pick out a tone and rotate antenna to null it to zero to obtain the bearing. This is difficult to do with a modulated or noisy signal.
- Ambiguous. Can't tell if a bearing is towards or away from the transmitter.
- Not able to sort out the strongest path in multipath.

### Beam

- Small beams have a rather broad front lobe; not accurate.
- Have multiple lobes to confuse the hunter.
- Awkward on foot.
- Fragile (unless specially built).

### L-Per

- Covers only 6 MHz (with adjustment).
- Crystal controlled.

### Adcock

- No commercial source (known by the author).
- Cannot obtain accurate bearing on weak signals.

#### loop

- Must rotate in both Azimuth and Elevation to get good null.
- Null washes out in multipath.
- Rather insensitive.
- Tends to be limited in frequency range for good performance.

#### Doppler

- Fully automatic RDF.
- Cannot hunt horizontal signals.
- Tends to be insensitive.

#### OAR & similar

- Fully automatic RDF.
- Cannot hunt horizontal signals.
- Very expensive.
- Very fast response.
- Very complex electronics. (Difficult maintenance.)

BMG Engineering, Inc. holds a patent on the SuperDF, and has been manufacturing and marketing it since 1981.

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## Contact Information

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