

# RDF PRODUCTS

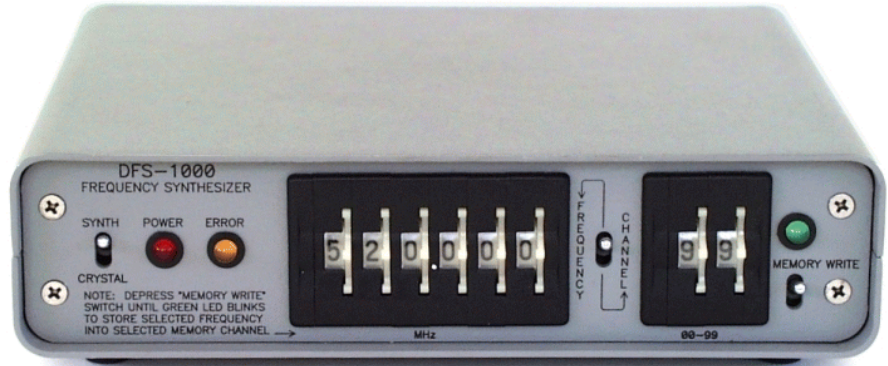
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**Product Data Sheet; Model DFS-1000** Dual-Band 100 Memory Channel Frequency Synthesizer (For DFR-1000/DFR-1000A)

## FEATURES

- VHF/UHF Dual-Band Unit
- 1 kHz Frequency Resolution
- 100 Memory Channels
- Non-Volatile Channel Memory
- Illuminated Thumbwheels
- Out-of-Band Error Indicator
- Single-Cable Interface
- Compact, Easy To Operate



## DESCRIPTION

The RDF Products Model DFS-1000 is a compact dual-band VHF/UHF frequency synthesizer. It is designed for use with the RDF Products Model DFR-1000/DFR-1000A VHF/UHF DF Receiver for applications where the flexibility of synthesized frequency control is preferred over crystal-channel operation. Its frequency coverage capability matches that of the DFR-1000A.

Frequency control is provided by an illuminated 6-digit thumbwheel selector with resolution down to 1 kHz. Alternatively, up to 100 thumbwheel-selected frequencies can be user-programmed into the non-volatile channel memory and selected via the illuminated 2-digit memory channel thumbwheel selector. The **FREQUENCY/CHANNEL** switch selects the desired frequency control mode, which also illuminates only the appropriate thumbwheel selector to avoid confusion. An out-of-band frequency selection causes the **ERROR** indicator to blink to warn the operator.

The DFS-1000 measures 1.9"x7.1"x5.9" (HxWxD, excluding interface cable) and weighs 2 lbs. Its ambient operating temperature range is 0 to +50 degrees C (-40 to +70 degrees C storage) with up to 95% humidity (no condensation). Power is provided by the DFR-1000A.

## INSTALLATION & OPERATION

The DFS-1000 is installed simply by connecting the detachable 24" interface cable from the rear-panel 6-pin interface connector to the corresponding DFR-1000A rear-panel connector. The unit may be placed in any convenient location permitted by the tether of the interface cable.

Once installed, the DFS-1000 is activated simply by placing the **CRYSTAL/SYNTH** selector switch in the **SYNTH** position. This powers-up the unit and causes it to immediately seize control of all DFR-1000A frequency and bandswitching functions. It is not necessary to remove DFR-1000A crystals or set its controls to any special positions to accommodate synthesizer operation. Synthesizer frequency selection is then accomplished as discussed above.

To revert the DFR-1000A back to crystal frequency control, the DFS-1000 **CRYSTAL/SYNTH** selector switch is returned to the **CRYSTAL** position. This powers-down the unit and allows the DFR-1000A to function normally. The interface cable need not be disconnected.

Note: Specifications are subject to change without notice.

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