

# DataLinks Frequency Finder

Tutorial #3

Last Revision: July 2003

## Introduction

This tutorial was designed to help DataLinks users find available frequencies with the frequency finder tools. New users or users unfamiliar with the DataLinks system may need to refer to Tutorials #1 and #2 before using the Find Available Frequencies option. This document assumes the user is familiar with concepts covered in the first two tutorials.

## INSIDE THIS TUTORIAL

- 1 Introduction
- 1 Frequency Finder Overview
- 2 Searching For Available Frequencies
- 3 Frequency Finder Output

## Frequency Finder Overview

### Selecting A Frequency Finder

After logging in to the system, a list of database categories is displayed. To select one of the available frequency finder tools, click on the Tools and Utilities category. The system currently offers three different frequency finders:

#### Tools and Utilities



- 1.) Find Available Frequencies:** Searches FCC frequency database for available frequencies based on user criteria.
- 2.) Find Available Frequencies – Public Safety:** Searches FCC frequency database for available frequencies based on user criteria. Includes additional options for adjacent and aid channel criteria used for public safety licenses.
- 3.) Find Available Frequencies – US & Canada:** Searches both the FCC frequency database for available frequencies in the US and the Industry Canada database for available frequencies in Canada based on user criteria.

**Note:** The DataLinks frequency finder tools are only available for unlimited subscription users. DataLinks users who do not have unlimited access accounts will not be able to use the frequency finders.

# Searching For Available Frequencies

After selecting the appropriate frequency finder, do the following:

**Step 1:** Enter the center latitude and longitude.

**Note:** The latitude must be a 6-digit value and the longitude must be a 7-digit value. Any longitudes less than 100 degrees require a leading zero.

**Step 2:** Enter a search distance in miles.

**Step 3:** Enter the low frequency in MHz.

**Step 4:** Enter the high frequency in MHz.

**Step 5:** Enter the frequency spacing in KHz.

**Note:** The frequency finder does not verify the spacing provided by the user. It is the user's responsibility to ensure the spacing entered is valid for the specified frequency range.

The screenshot shows a web form titled "Frequency Finder". It is divided into two main sections: "Distance & Center Point" and "Frequency Information".

**Distance & Center Point:**

- Latitude (Required): 420931
- Longitude (Required): 0793106
- Distance (Required): 10

**Frequency Information:**

- Frequency - Low (Required): 46.1
- Frequency - High (Required): 46.2
- Spacing - KHZ - (Required): 20 (selected from a dropdown menu)

Below the frequency information, there are three links: "OUTPUT FORMAT", "STATISTICS", and "Client / Project Code".

- OUTPUT FORMAT: Detail (selected from a dropdown menu)
- STATISTICS:
- Client / Project Code: (empty text box)

At the bottom of the form are two buttons: "Submit" and "Reset".

The search criteria show in the above screen shot is valid and can be used as test values.

**Step 6:** Once data has been entered into the required fields, select an output option and click the Submit button to run the search. For additional information on the difference between output options, see the Frequency Finder Output section.

**Note:** Once a search has been submitted, it cannot be stopped. If you make a mistake, DO NOT click the Stop button on your browser. Let the search finish, click the Back button and re-run the search with the correct criteria.

# Frequency Finder Output

## Overview

There are currently three different output formats available. The results displayed from all output options are color coded to differentiate between available and occupied frequencies.

- **Blue** frequencies are available assuming the user entered valid criteria.
- **Red** frequencies are existing frequencies that are already occupied.
- **Orange** frequencies are potentially available frequencies that are within the specified frequency range, but do not match the specified spacing. The frequencies could be the result of an invalid frequency used on a valid FCC license.

## Detail Format

The Detail format outputs search results in a web page with the search criteria at the top of the page followed by a frequency summary. The summary portion is partitioned into the three groups listed above. Each group displays 10 fields of data per record including the frequency, distance and bearing from the center point, callsign, radio service and class of station codes, owner name, city and state and the total number of units.

## Detail With Links Format

The Detail With Link output format also displays search results in a web page with the same frequency summary as the Detail format. In addition, searchable links are included for the callsign, owner name and city fields. By clicking on the links, users can retrieve all records for a callsign, owner name or a city.

## Summary Format

The Summary output is a more condensed form of the Detail format. The search criteria along with the list of available frequencies and occupied frequencies with totals are displayed.

### *FIND AVAILABLE FREQUENCY SUMMARY REPORT*

SEARCH RESULTS 07/01/03 09:16:38

Frequency - Low :46.1  
Frequency - High :46.2  
Offset :20 khz  
Latitude :420931  
Longitude :0793106  
Distance :10  
Client Code :TEST

Frequency Available : 46.12000000  
Frequency Available : 46.16000000  
Frequency Available : 46.18000000  
Frequency Available : 46.20000000

Frequency Found : 46.10000000 - Count 13  
Frequency Found : 46.14000000 - Count 14

## Company Information

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## DataLinks Tutorials

**Tutorial #1:**  
**Introduction To PerCon DataLinks**

**Tutorial #2:**  
**PerCon DataLinks Output Options**

**Tutorial #3:**  
**DataLinks Frequency Finder**

**Tutorial #4:**  
**PerCon DataLinks Co-Channel /  
Adjacent Channel Analysis**