# Running the Example Programs and Loading
## *Delphi* and *Visual Basic* Source Code

The best way to learn programming is to key in the source code using the printed listings. If you have difficulty or want to quickly see what the program will do, load the compiled example program or the source code in this package.

Source code and the compiled projects for the *Dipole*, *Bearing/Distance* and *Map* programs are provided in separate folders. There are individual folders for the *Delphi*, *Visual Basic* 3 and *Visual Basic* 5 files. The *Visual Basic* 5 project files can also be loaded with *Visual Basic* 6. The downloaded files probably have their "read-only" attribute set. To modify the source code files, you must use *Windows* to turn off the read-only attribute.

To run the executable file of the example you want, place the file in a suitable directory on your hard drive and double click on the filename ending in ".exe". For this to work with the *Visual Basic* programs, you also need the *Visual Basic* helper file (vbrun300.dll for *Visual Basic* 3 or msvbvm50.dll for *Visual Basic* 5) loaded on your computer. The *Delphi* executable versions of the programs do not require any helper files other than the data and bitmap files mentioned for the World Map example.

*To Run either* VBDipole.exe *or* Delphi_Dipole.exe—*the Dipole Example*
Enter the design frequency, in megahertz, for your dipole in the box currently containing the word "Text1." Type the design frequency over the existing text. Click the calculate button. The length of the dipole in feet appears in the box originally containing the word "Text2." This is a very simple program; there are no safeguards to prevent entering inappropriate values in the Text1 (MHz) box! If you entered something other than a number in the box, the program will crash. Never mind—just restart the program.

*To Run* Visual Basic Azimuth.exe *or the* Delphi Azimuth.exe—*the Bearing/Distance Example*
Enter your latitude and longitude in decimal form and the distant station's coordinates in the appropriate boxes. Press "Calculate" to find the bearing and range in kilometers. North latitude is entered as a positive number, south latitude is entered as a negative number. Longitude is entered in degrees west, so longitudes east of the prime meridian are negative values. Use the range 180 to 0 and 0 to −180.

*To Run* Delphi DMap.exe—*the World Map Example*

Enter your latitude and longitude in decimal form in the appropriate boxes. Click "Display" to create a map from a digital file and a nearly identical map as a bitmap. Click "Show Location" to plot the entered latitudes and longitudes on the respective maps. Clicking the check box will display the digital map at an enlarged scale.

*To Run the* Visual Basic VBMap.exe—*the World Map Example*

Enter your latitude and longitude in decimal form in the appropriate boxes. Click "Get Database" to load the Worldmap.dat database (The database listing will display in the list box). Click "Plot Map" to see a map created from the digital file and a nearly identical bitmap map. Click "Show Location" to see where the latitude and longitude plot on the respective maps. There is no enlarged map option in the *Visual Basic* version.

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### *Delphi* 1-6 How To

To use the *Delphi* source code, load the project:

1. Run *Delphi*.

2. From the tool bar, go to File and click on Open Project.

3. Using the Open Project controls, go to the directory in which you placed the source code and double-click on the file *.dpr having the name of the project you want to access. This will load the project into the *Delphi* compiler.

4. From the tool bar, click on Run.

5. The project program should now be running on your compiler. *Delphi*, by default, generates a corresponding *.exe file automatically when you run the source code in the design environment. It places the executable file in the same directory in which you placed your source code.

6. You can modify the program by changing values in the Object Inspector, Code Window or the Project Form. The easiest modification is to reposition one of the controls on the form by grabbing it with a mouse and dragging it to a new location on the form.

7. For *Delphi* 1, all comment statements (any text proceeded by "//") must be removed from the source code because *Delphi* 1 does not understand the comment directive.

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### *Visual Basic* 3 How To

To access the *Visual Basic* 3 source code, load the *.mak project file:

1. Run *Visual Basic* 3.

2. From the tool bar, go to File and click on Open Project.

3. Go to the directory in which you placed the source code and double-click on the file *.mak that has the name of the project you want to access. This will load the project into the *Visual Basic* compiler.

4. From the tool bar, go to Window and click on Project.

5. Select the VB3*.frm. Click on View Form.

6. From the tool bar, go to Run and select Start.

7. The project program should now be running on your compiler. *Visual Basic* does not automatically generate a corresponding *.exe file. To generate an *.exe file, from the tool bar select File —> Make EXE File... The executable file is placed in the directory in which you placed your source code. To run the *Visual Basic* program, both the *.exe file and *Visual Basic*'s runtime library (vbrun300.dll) need to be available on your computer.

8. You can modify the program by changing values in the Properties Form, Code Window or the Project Form. The easiest modification is to reposition one of the controls on the form by grabbing it with a mouse and dragging it to a new location on the form.

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### *Visual Basic* 5 (or 6) How To

To access the *Visual Basic* 5 source code, load the *.vbp project file:

1. Run *Visual Basic* 5.

2. From the tool bar, go to File and click on Open Project.

3. Go to the directory in which you placed the source code and double-click on the file *.vbp that has the name of the project you want to access. This will load the project into the *Visual Basic* compiler.

4. From the Project window, double-click on the *.FRM file in the FORMS folder.

5. From the tool bar, go to Run and select Start.

6. The project program should now be running on your compiler. *Visual Basic* does not automatically generate a corresponding *.exe file. To generate an *.exe file, from the tool bar select File —> Make *. EXE File... The executable file is placed in the directory in which you placed your source code. In order to run the *Visual Basic* program, both the *.exe file and *Visual Basic* 5's runtime library (msvbvm50.dll) need to be available on your computer.

7. Modify the program by changing values in the Properties Form, Code Window or the Project Form. The easiest modification is to reposition one of the controls on the form by grabbing it with a mouse and dragging it to a new location on the form.