Installation

Matlab folders on this CD include either Matlab ASCII files (*.m) or Matlab binary files (*.mat). No executable files (*.com /*.exe/*.bat) are included.

Copy the CD content to the hard drive and remove **Read-only** protection. You must remove **Read-only** protection for *.mat files before you start working with the codes. Otherwise the Matlab codes will not function properly (unable to update *.mat files).

To change a file attribute from **Read-only** to **Archive** in **Windows Explorer**

- 1. Select files whose attributes need to be changed
- 2. Click Properties.
- 3. Define the attribute as **Archive**.
- 4. Click Apply.

Note: Windows Explorer does not change file attributes in subdirectories.

The Matlab codes reproduce the examples presented in the text.

Caution

- 1. A parameter most significantly affected by the discretization accuracy is the antenna input impedance. Mesh grid sizes are reported in the text along with the corresponding impedance values.
- 2. The antenna gain depends on the accuracy of the grid for the observation sphere. Scripts efield2.m (3D radiation intensity distribution) and efield3.m (2D radiation patterns) typically use different mesh grid sizes. Therefore, they may output slightly different values of gain even if the radiation maximum is in the right plane. The difference is within 1-2%.
- 3. Far-field calculations (both efield2.m and efield3.m) may give slightly different results if one varies the radius of the observation sphere. Two values used in the text are R=100 m and R=1000 m.
- 4. Matlab function fill does not work properly in certain cases. This function is used in the mesh generators for monopole and patch antennas (Chapters 4-10). Sometimes the feeding triangles do not change color after mouse click although the final result is still obtained correctly.
- 5. For some meshes and some observation angles the viewer function (based on Matlab function fill) may display inaccurate results ("loose" existing triangles). Change the observation angle (rotate the mesh) in order to see the correct result.

Contact and Support

Visit the website **www.ece.wpi.edu/books/aemm** for contact information and recent updates.