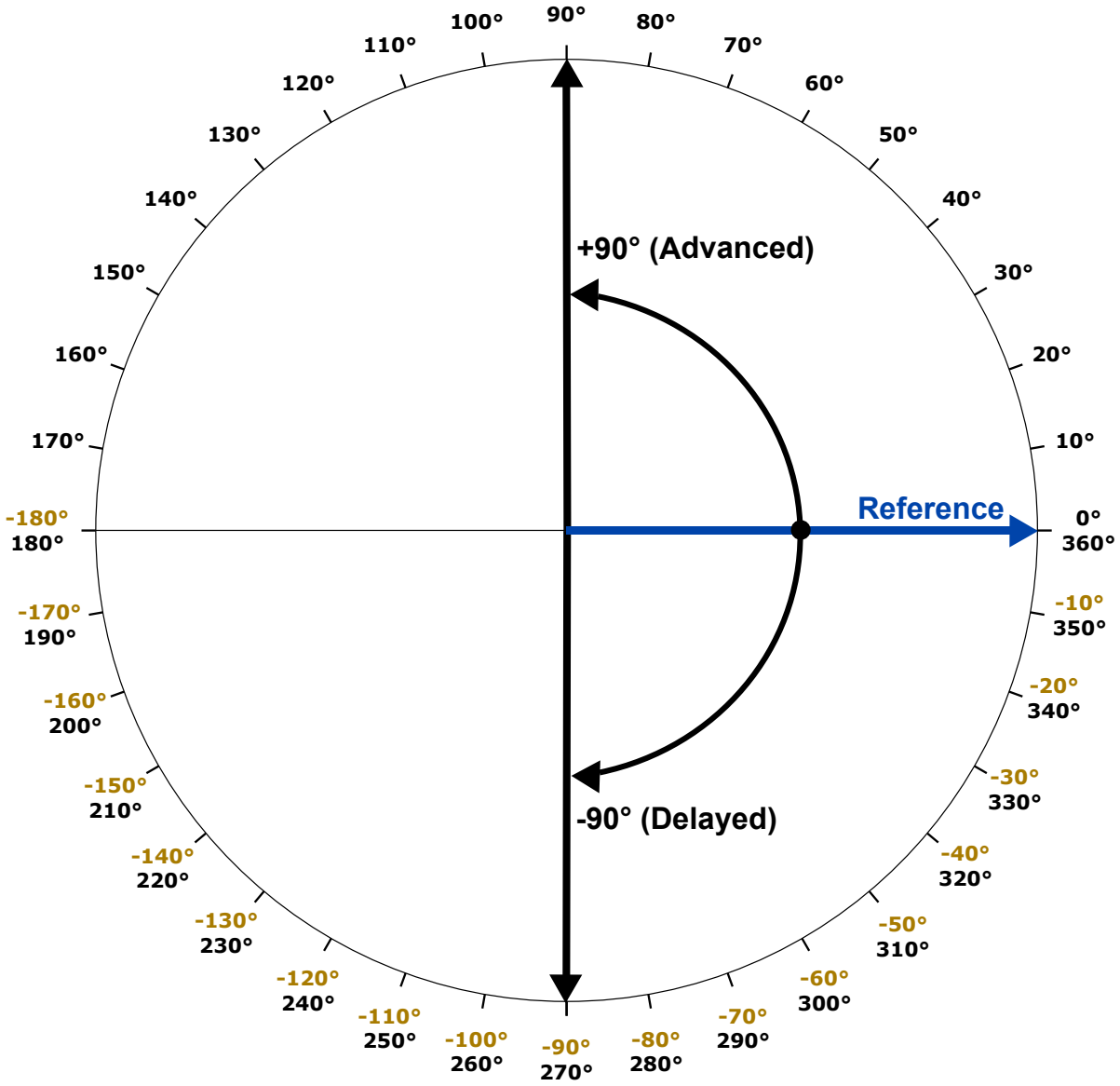
PHASOR DIAGRAM



HOW TO USE THE PHASOR DIAGRAM

The phasors pivot from the center of the circle known as the origin. The reference is on the positive x-axis as shown.

Phasors that rotate in a **counterclockwise** direction are considered to be a **positive** rotation and **advanced**, or **lead** the reference.

Likewise, phasors that rotate in a **clockwise** direction are considered to be a **negative** rotation and **delayed**, or **lag** the reference.

Notice the degree markings below the x-axis have equivalent **positive** and **negative** values. There are two conventions you will encounter depending on the application. Generally, positive values greater than 180° are used in AC circuit analysis while both positive or negative values are used in RF vector network analysis to indicate the direction of rotation from the reference. This can be observed when lengthening an RF line section relative to a reference. The measurement will become delayed (more negative). Conversely, when shortening an RF line section relative to a reference, the measurement becomes advanced (more positive).