Radionics Frequently Asked Questions

Here are answers to the questions generated by the article **Introduction to Kelly Radionic Antennas** in the last issue of the *Kelly Research Report.*

What is meant by the "Phase Array" in a Phase Array Reaction Plate/Antenna?

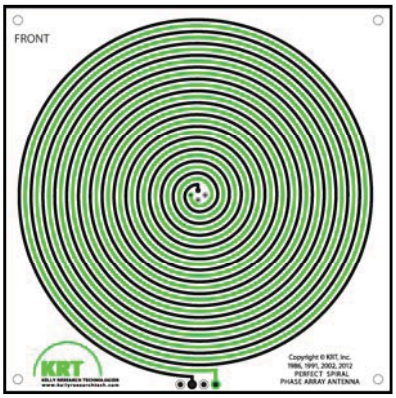
When we look at the ocean we see the rise and fall of the surface as the planet's energy is transmitted through the water. We describe the movement of that energy as a wave, calling the highest points as the crests and the lowest points as the troughs. Just as we describe the changing cycle of the moon as the "phases", the "phase" of a wave merely describes where we are in the cycle of movement between crest and trough.

Within the context of radio wave transmission, antenna theory describes a phased array as "an array of antennas in which the relative phases of the respective signals feeding the antennas are varied in such a way that the effective radiation pattern of the array is reinforced in a desired direction and suppressed in undesired directions."[1] The technique was **first developed by Nobel Laureate Karl Ferdinand Braun in 1905**, who demonstrated enhanced transmission of radio waves in one direction using three antennas.[2] Today Wikipedia describes usage of phase array antennas not only in broadcasting but also in the areas of radar, naval weapons control, space probe communication, weather research, optics, radio-frequency identification, and man-machine virtual reality interfacing.[3] KRT Phase Array Antennas utilize plates with bifilar coils on both sides assembled vertically to create an array that maximizes vector cancellation and signal strength.

Six stacked plates turn individual antennas into an antenna array.

Why is each antenna plate in a KRT Phase Array described as having eight phases?

All KRT radionic instruments utilizes bifilar coil antennas to convert the signal output of the instrument into the longitudinal or "scalar" wave that **provides the pathway back to the energetic realm from which all things flow**. While the general term "bifilar coil" simply describes "an electromagnetic coil that contains two closely spaced, parallel windings",[4] KRT bifilar coils are arranged such that one of the winding provides a clockwise direction of rotation to the outgoing signal, while the second winding in the circuit provides a counterclockwise direction of rotation. As such, the Classic Rub Plate provided with a Personal Instrument and the secondary spool-style antennas in a Beacon or Workstation may accurately be described as "Two Phase" antennas.



The signal rotates clockwise on the black path from edge to center, then counterclockwise on the green path from center back to the edge.

However, each of the antenna plates found in a Phase Array has identical bifilar coils on both sides of the plate. As a result, the total strength of the signal on one side of an antenna plate is the sum of signals found on that side plus the weaker signals that leak *through* the silicon circuit board from the identical coil on the other side. These weaker signals, which are also rotating in clockwise and counterclockwise directions, represent the third and fourth phases of activity found on that side of the antenna plate. Because the same processes take place on the *other* side of the antenna plate, we describe each plate as having a total of eight phases of signal activity.

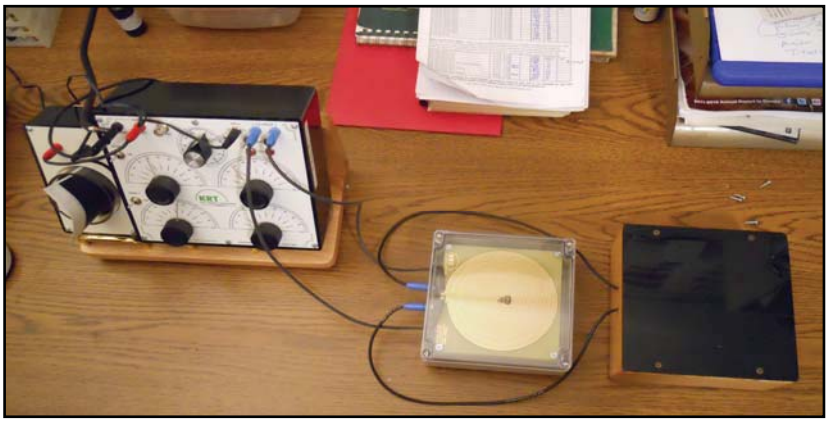
For a comparable situation, consider the heating of two apartments that share a common wall. The family living in Apartment A gets most of their heat from the furnace in their own apartment, but also receives the benefit of a smaller amount of heat that leaks through the common wall since the family living in Apartment B has a furnace of their own. We can stretch this metaphor a bit further by noting that most furnace systems have separate ducts for two phases of activity; the supply ducts bring warm air from the furnace to the living spaces, while the return ducts carry the cooling air from the living space back to the furnace for reheating. So the total heat available for the family in Apartment A includes the two phases of their furnace system plus a smaller contribution of heat through the wall from the two phases of the furnace system in Apartment B – a total of four phases.

The same result is generated when we switch our perspective to the family in Apartment B. That family has two phases of thermal energy moving through the supply and return ducts of their furnace system, but they also receive the smaller benefit of the heat passing through the wall from the furnace system in Apartment A. Together we can describe a total of eight phases of heat energy flowing through the furnace systems of the apartments of both families, just as we describe each dual-sided KRT Phase Array antenna plate as having a total of eight phases of signal activity.

Can I use my Classic Rub Plate or Original Phase Array with a new Perfect Spiral?

Absolutely! Built into every new Perfect Spiral Phase Array Antenna is an extra pair of output/input jacks that deliver **unlimited expansion capability** to every instrument. These jacks may be used to connect additional Perfect Spiral Antennas, Original Phase Array Antennas, or Classic Rub Plates to any Kelly instrument, including Replicators, Personal Instruments, Seekers, Beacons, or Workstations.

This arrangement provides ultimate flexibility to the researcher, as the **new Perfect Spiral Antennas may be combined with existing hardware** to deliver maximum broadcast capability for those projects requiring maximum results, or utilized individually with other devices.



Top: Classic Rub Plate, Original Phase Array and Perfect Spiral Antenna
Bottom: Perfect Spiral Antenna combined with Original Phase Array

Sources
1. (2013). Phased Array. Wikipedia. (See: http://en.wikipedia.org/wiki/Phased_array)
2. Braun, Karl. "Electrical oscillations and wireless telegraphy." 11 December, 1909. Nobel Academy Lecture. (See: http://tinyurl.com/o95qd52)
3. (2013). Phased Array. Wikipedia. (See: http://en.wikipedia.org/wiki/Phased_array)
4. (2013). Bifilar Coil. Wikipedia. (See: http://en.wikipedia.org/wiki/Bifilar_coil)