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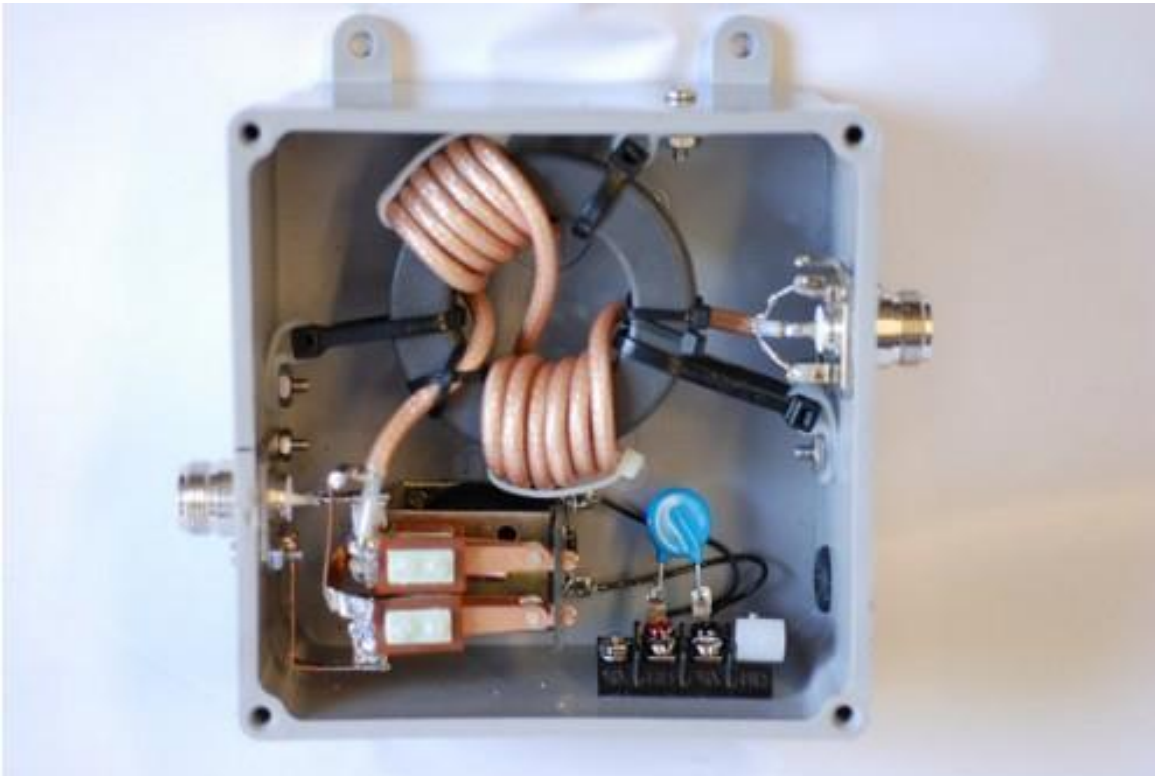
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Thank you for purchasing the 180 degree phase shifter product from Array Solutions.



Features

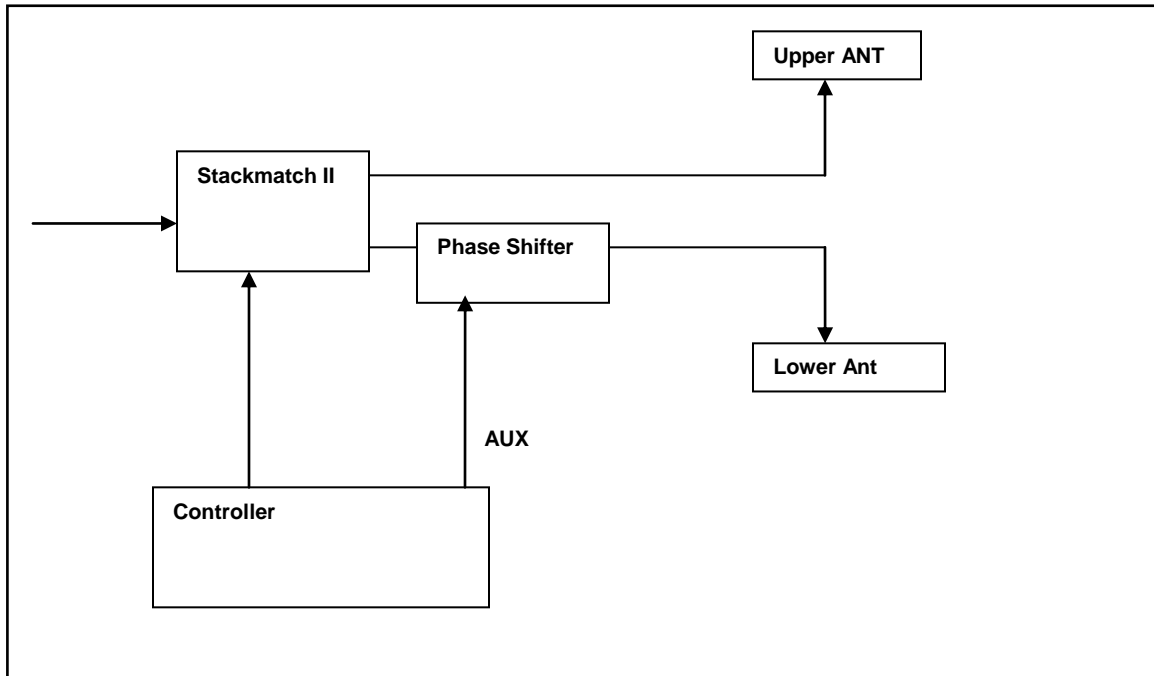
- Weather proof housing and galvanized mounting hardware
- 5 kW continuous duty for reliability
- 12 V DC 100 mA control voltage and current – for easy integration
- Lightning protection

Applications

- Use with StackMatch, StackMatch II, StackMaster, Mini Stack Match, Mini StackMatch II and Four Square controllers to produce a 180 degree phase shift.
- Use it with your own fixed cabled stack to give you BIP / BOP capability.

Wiring the Phase Shifter

1. Remove the box cover by removing the four corner screws.
2. Route your control cable (2-wire) to the terminal strip inside.
3. Control it with the Auxiliary outputs from the Array Solutions products or you may wire it to your own 12 V DC switch
4. Place the Phase shifter at the output of the antenna controller you desire to delay the phase. See a typical installation below.



5. The phase shifter has a constant free space delay of 32 inches (813 mm). Therefore the feedline to the lower antenna in the figure above must be shortened by this amount multiplied by the velocity factor of the coax cable. For instance, if using RG-213 Coaxial cable which has a VF of .667 you would need to shorten the lower antennas coax by $32 \times .667$ or 21.3 inches (541 mm).
6. Replace the cover and weather proof your connections.

Operation

Just activate the phase shifter when a 180 degree phase shift is desired in your Array.

Specifications

Power	5 kW continuous
Connectors	SO-239 standard, N*, 7/16 DIN optional
Power requirements	12-16 V DC 120 mA
Weight	2 lb
Dimensions	Approx 14 L x 5 T x 6 W inches
Frequency Range	1.8 to 32 MHz
Insertion Loss	Less than .01 dB
VSWR 1.8 to 32 Mhz	Less than 1.1:1
Lightning & Surge protection	MOV

Warranty

Lifetime unless damaged by Lightning.