## **300AP Wave Shape Options**

SP = Straight Polarity

## RP = Reverse Polarity

## AC Soft



AC Soft includes all the benefits of AC square wave with the addition of maximum puddle control and good wetting action of the weld puddle which helps to overcome surface tension.

## Triangle Wave



Triangle Wave provides the punch of the peak amperage, while reducing overall heat input. Quick puddle formation reduces weld time — limiting heat input and reducing weld distortion, especially on thin materials.

See Section 4.7 in the Owner's Manual to switch from Soft AC to Triangle AC. Set Internal Parameter 24 to "ON" for Triangle Wave. Turn Internal Parameter 24 to "OFF" for Soft AC.

Internal parameters can be set by pressing and holding the encoder button. Turn the encoder to display "End" and press the encoder to return to the standby screen. VR Current - Variable of Reverse Polarity Current.



VR Current is the independent adjustment of the RP Current half cycle of the AC wave to precisely control the heat input to the work and the electrode.

The SP amperage controls the amount of heat directed to the work, while the RP amperage effects the arc cleaning action.

VR Current along with AC Wave Balance

dramatically effects the RP cleaning action. Reducing VR Current will reduce the heat input to the TIG Torch and reduce electrode geometry degradation and increases heat input to the work piece for increased travel speeds. Increasing VR Current will enhance cleaning when welding on a dirty work piece. Note: Increased VR Current and increased Wave Balance will result in an increase to Electrode degradation.

VR Current works only in AC mode. The VR current cannot be set beyond the output current range. The minimum output current during AC welding is 10 A. The maximum output current is 300A in AC mode and 200A in AC-SOFT mode.