APPLICATION NOTE #01-A

ARGANTIX DOWN-PROGRAMMING FEATURE

Selecting the DC power supply best suited to the user's requirements is critical. To help your understanding of the functions offered, a brief explanation of the down-programming circuit for the XDS Series of Programmable DC Power Sources follows.

XDS Series DC Power Sources can source current up to 500 amperes, but do not have the capability to sink current. Under a no-load condition, the output voltage will discharge very slowly, unless there is a provision to bleed the voltage from the storage capacitors across the output terminals. This is the function of the down programmer. *The down programming circuit speeds up test times by reducing the output voltage in a very short period of time* (see chart below). Without the down programming circuit, under no-load conditions, the voltage discharge time could be minutes or longer. Down programming is a standard feature in Argantix XDS Series DC Power Sources.

Note: The down programming circuit is *not* designed to discharge loads. Protection circuits are highly recommended to protect the power source from load discharge.

Model	Full Load Down Programming*	No Load Down Programming*
30V	16ms	30V - 0V in 250ms.
50V	31ms	50V - 14V in 300ms 14V - 0V in 1.2sec.
80V	20ms	80v - 8V in 280ms. 8V - 0V in 300ms.
100V	17ms	100V - 0V in 276ms.
150V	27ms	150V - 50V in 280ms. 50V - 0V in 1.5sec.
300V	30ms	300V - 150V in 280ms. 150V - 0V in 3sec.
600V	37ms	600V - 280V in 250ms. 280 V - 0V in 2.3sec.

* Typical Slew Rate