Digital inputs are CMOS type with TTL levels.
Zero code offset voltage is ±15 V at overlap.
There are 256 possible values.

Gain can be varied from 0 to -255/256 x 10.
GENERAL DESCRIPTION
The AD7845 is the industry’s first 4-quadrant multiplying D/A converter with an on-chip amplifier. It is fabricated on the LC²MOS process, which allows precision linear components and digital circuitry to be implemented on the same chip.

The 12 data inputs drive latches which are controlled by standard CS and WR signals, making microprocessor interfacing simple. For stand-alone operation, the CS and WR inputs can be tied to ground, making all latches transparent. All digital inputs are TTL and 5 V CMOS compatible.

The output amplifier can supply ±10 V into a 2 kΩ load. It is internally compensated, and its input offset is low due to laser trimming at wafer level. For normal operation, RFB is tied to VOUT, but the user may alternatively choose RA, RB, or RC to scale the output voltage range.

PRODUCT HIGHLIGHTS
1. Voltage Output Multiplying DAC
   The AD7845 is the first DAC which has a full 4-quadrant multiplying capability and an output amplifier on chip. All specifications include amplifier performance.
2. Matched Application Resistors
   Three application resistors provide an easy facility for gain ranging, voltage offsetting, etc.
3. Space Saving
   The AD7845 saves space in two ways. The integration of the output amplifier on chip means that chip count is reduced. The part is housed in skinny 24-lead 0.3" DIP, 28-terminal LCC and PLCC and 24-terminal SOIC packages.