Extended Basic Game Developers Package "JUWEL4"

This package consists of two applications that make it possible to produce arcade quality games using Extended BASIC. Although they are designed to complement each other, each is a stand alone utility. Also included is XB 2.9 G.E.M. which offers greatly enhanced graphics in Extended BASIC.

The package has been extensively updated to be fast, versatile, and simple to use. It is meant to be used with the Classic99 emulator, but the programs it creates are fully compatible with a real TI99, requiring nothing more than XB, 32K and a disk drive. Purists can use Juwel994 which has modified prompts to work with a real TI99.

There is an option to use the older, more compact TI BASIC only runtime routines. This replaces for the older "Harry Wilhelm's BASIC COMPILER" and as a bonus, it's much easier and faster to use.

XB256

XB256 lets you toggle between two independent screens as desired. Screen2 lets you define all 256 characters and still have up to 28 double sized sprites using the character definitions available to Screen1. Scrolling routines let you scroll characters left, right, up, or down or scroll using single pixels.

There is a text crawl that gives an effect similar to the STAR WARS title screen. You can highlight text, set the sprite early clock, print in any direction on the screen using 32 columns, read/write to VDP ram, write compressed strings or sound tables to VDP ram, play a sound list, and catalog a disk.

A utility lets you save selected areas of VDP memory as compressed strings that cn be merged with your program. With this, character definitions, sound tables, screen images, etc. can be saved in a more compact form that can be loaded virtually instantaneously, even in XB

There are two utilities that can convert the CALL SOUNDs in an XB program into a sound table containing music and sound effects. Sound tables can be loaded directly into VDP memory and played automatically while your XB program does other things. Also, a second player can play a different sound list simultaneously with the first, so you can have music playing with sound effects on top of the background music.

XB COMPILER

COMPILER lets you compile an XB program into an equivalent assembly language program that will run about 30 times faster. All the XB256 subprograms are supported by the compiler and in general, all the major features of XB are supported, including XB style IF/THEN/ELSE and named subprograms. Programs using assembly support routines such as The Missing Link, T40XB and T80 XB programs can now be compiled. About the only unsupported XB features are DEF and the trig functions.
There are provisions to save programs in EA5 format, as an XB loader, as a grom cartridge, or as a rom cartridge.