# Roundhill Computer Systems



Screen Generator and Screen Management Library for 'C' under DOS, OS/2, Unix, Xenix, QNX, VMS or RMX

## PANEL Plus II

## New release available now

#### Partial version and price list:

**OS/2** and **DOS**...... \$595/£345 (Lattice, Microsoft C, or MS-Fortran)

Unix/Xenix/VMS.... \$495/£295 (per-programmer pricing: versions for SCO Xenix, SysV/386, NCR, AIX/386, AIX/6150, HP, Olivetti, AT&T 3Bx, Sun, VAX-VMS. Please call for full list)

With **Utility Source**. \$1195/£720 (portable C version, with source for library, editor and generators).

All versions include complete library source, **no royalties**.

### PANEL Plus II: Unique new benefits for software developers

As more development tools become available it gets harder to select the one that best meets your needs. When Roundhill introduced PANEL nearly eight years ago, the main priority was interfacing 8-bit CP/M systems with all those old dumb terminals. PANEL was one of the first screen managers which also addressed the development productivity issues, with Roundhill's interactive screen design and code generation system.

Later, with the advent of the IBM PC, developers were quite pleased just to find a way of positioning the cursor on the screen. PANEL again led the field by providing full application portability between PC-DOS, Xenix, Unix, and VMS while other libraries were stuck on the PC.

Three years ago, PANEL Plus was the first general-purpose screen manager which could run text-based applications in graphics mode, by combining enhanced data entry and validation features with interfaces to popular graphics libraries. And PANEL Plus added full library source, including all variant modules for different environments.

PANEL Plus II is still the leader, with its OS/2 Dynamic Link Library support and a new virtual screen architecture that's ideally positioned to work with the upcoming user interfaces of the 1990's. And the availability of the full source for our screen editor and code generator utilities now gives users the freedom to transfer development of screen-based applications to any required hardware platform in their organisation.

Roundhill's policy is to strive to produce the best available programming tools, and as PANEL Plus II has gained features and usability, it has lost none of the traditional advantages that made it the developer's choice: complete portability between all supported environments - quick and easy interactive screen layout for maximum productivity - and all the latest human interface features demanded by your users. And you can still process screen layouts you designed with PANEL back in 1984. Even if you evaluated PANEL some years ago, now is the time to look again at PANEL Plus II and see how its exciting new features can benefit your next project.

See inside to find out what's in PANEL Plus II today!

### The PANEL Plus II Library

- ♦ A precompiled, fully tested screen management library (or libraries) for your selected compiler and operating system, ready to use immediately:
  - ♦ With DOS versions of PANEL Plus II, precompiled libraries (all models) are provided for Microsoft, Borland, and Lattice C, with makefiles for Watcom C, Metaware High C and other C compilers.
  - ♦ With OS/2 versions a PANEL Plus II dynamic link library is provided.
  - ❖ PANEL Plus II versions for Unix, VMS and other operating systems have libraries in the standard format for the operating system, and shareable libraries are either implemented or planned where supported by the operating system.
- ♦ About 30,000 lines of documented, commented and indexed library source code, header files, and make files. The same library source code files are supplied with all versions of PANEL Plus II. They include <u>all</u> of the following items:
  - ♦ High-level functions for scrolling windows, menus, file selection pop-ups, etc.
  - ❖ Functions to prepare, display and edit data fields, individually or in selectable groupings. Fields may be any size up to 255 by 255, and the functions can automatically scroll a field's data area through a smaller visible window.
  - An extensive set of validation functions for numeric, text, and date values, with associated support functions, such as pop-up help boxes and pick lists. Validation tables allow additional custom validation to be added easily.
  - ❖ Functions to initialize and manipulate multiple virtual screens and to control the painting of virtual screen areas to the physical screen.
  - ❖ Functions to load screen layouts dynamically, either from individual files or from files containing indexed collections of screen layouts, and to write your screen layouts to disk for use in other parts of your application. This gives you the capability to control the selective modification of screen layouts and attributes by your users.
  - ♦ A high-speed memory-mapped interface for PC-compatible systems, including support for 43- and 50-line screen modes, and full mouse support.
  - ♦ A multi-threaded OS/2 interface designed for dynamic linking, which dramatically reduces the size of your .EXE files. The OS/2 interface can also be compiled to create a statically linked program, including support for keyboard and mouse operation in family mode.
  - ❖ A throughput-optimized low-level interface for remote terminals under Unix, Xenix, VMS and RMX-II. This interface includes a terminal configuration capability for screens and keyboards. A second low-level interface for Unix is also provided which operates through termcap and terminfo.
  - A selection of low-level interfaces which support operation in graphics mode through popular graphics library packages. The currently supported graphics libraries include GSS\*GDT, Halo '88, MetaWindow, Essential Graphics, and the graphics libraries which are included with the Microsoft and Borland C compilers. With any of these interfaces you can pop-up a PANEL Plus II data entry form or menu over a graphics image created with the graphics product, or pop-up a graphics image over a PANEL Plus II data entry form.
  - ♦ Low-level operating system interface code specific to all currently supported compilers and operating systems.
- ♦ For the PANEL Plus II version supporting Microsoft FORTRAN v5, a special library (for DOS) and DLL (for OS/2) is provided which is callable directly from FORTRAN and supports FORTRAN numeric formats. Because this library is written in C, the DOS version requires that you link your applications with both the Microsoft FORTRAN and C run-time libraries.
- ♦ A 640-page manual including a user guide, tutorial, and reference documentation for every global function, structure, structure element, #define symbol and #define flag in the library.