## Honeywell

DKU9101/9102 CRT Keyboard Consoles

SERIES 60 (LEVEL 6)

The DKU9101 CRT Keyboard Console Unit permits conversational message transfer, status display, and operator control of any 6/30 Model system. The video unit can generate 64 distinct ASCII display characters including an uppercase alphabetic capability and a space character. The DKU9102 can generate 95 ASCII characters providing both an uppercase and lowercase alphabetic capability to satisfy the additional functions required for a peripheral display station. Using the latest computer technology, these units feature a high level of reliability at a relatively low price.

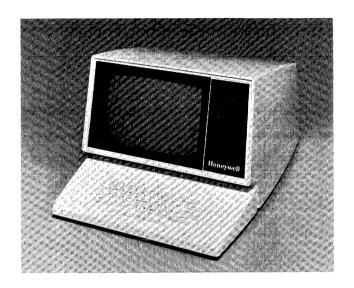
The DKU9101/9102 consist of a CRT display unit with a separable keyboard unit, providing flexibility in operation and placement. The Keyboard Console display station interfaces with the Level 6 processor by means of a single-board Multiple Device Controller (MDC9101), a CRT Device-Pac (KCM9101), and a specific device cable.

#### **FEATURES**

- Displays 960 characters on 12 lines of 80 characters each
- Roll-up line feed allows data to be entered on the bottom line
- Keyboard has 60 encoded keys with Multi-key depression protection (*n*-key roll-over)
- Keyboard generates 97 ASCII codes using SHIFT, UNSHIFT, and CONTROL keys and optionally generates 128 ASCII codes when CAPS LOCK key is not enabled
- BREAK, ESCAPE, and DELETE keys provide flexibility to allow application software interpretation
- Allows two-way simultaneous transmission on full-duplex link
- Audible alarm sounds upon BEL code from processor
- Displays keyboard input upon return (echo) from the connected processor
- Transmission rate varies by steps from 110 to 9600 bits per second

#### **KEYBOARD**

The console keyboard uses solid-state, high-reliability switches as keys. The keyboard permits



variable data and program parameters to be entered. The 60 keys can generate 128 characters of the ASCII code set (see Figure 1). The characters include 26 alphabetic, 10 numeric, and 32 special symbols. Also included are 10 control keys.

A special entry marker (cursor) appears on the console display screen to indicate the location of the next character to be displayed. The DKU9101/9102 uses the "bottom line entry" approach for the display. The cursor moves only on the bottom line of the display. The bottom line display operates just like the print line of a journal roll, i.e., a line feed causes the entire display page (including the bottom line) to move up one line, leaving the new bottom line blank, or clear. A line return moves the cursor to the left margin first display position.

### **DISPLAY SCREEN**

Manually entered data and processor-generated inquiries and responses are displayed on a 12-inch cathode ray tube. With a display of up to 960 characters (12 lines, 80 characters per line) and a refresh rate of 60 frames per second, the display projects clear, bright, easily read information.

#### TWO-WAY AUDIBLE ALARM

An operator-attention alarm sounds whenever the console receives a BEL code or a character is displayed in the 75th character (or column) position.

#### **OPERATING CONVENTIONS**

The DKU9101 Console allows traditional Teletype KSR conventions for keyboard input. For example, the "line return" code can be used to signal termination of input, the "at sign" code can be used to signal backspace and deletion of the previously entered character, and the ASCII "cancel" code can be generated by pressing CTL and X keys simultaneously to signal that the line of previously entered characters should be canceled. In addition, the "backslant" code can be generated to signal that the next character to be entered is to be data rather than a control code. The recognition of the ASCII codes "BS" and "DC2" can be enabled to allow movement of the cursor left and right on the bottom line for control before line roll-up.

Additional optional functions, not part of the Teletype KSR conventions, provide those capabilities required for CRT display stations.

#### **SOFTWARE**

The CRT Keyboard Console is supported by Level 6 GCOS/BES I/O drivers and executive routines. A test and maintenance program assists in fault isolation and equipment maintenance.

#### **SPECIFICATIONS**

KEYBOARD: Teleprinter layout; 60 keys; 128-character

ASCII code set: n-key roll-over

KEYBOARD DIMENSIONS:

Width -17.9 in. (45.4 cm)

Depth -8.0 in. (20.3 cm)

Height -3.0 in. (7.6 cm)

DISPLAY: 960-character screen: 80-character line: 12 lines: displays up to 95 ASCII characters including uppercase and space; 5- x 7-character matrix; 54-square in. (137.2-square cm) displayable screen area: character size of 0.08 in. x

0.16 in. (2.0 mm x 4.1 mm)

DISPLAY DIMENSIONS: Width -18.1 in. (46.0 cm)

Depth -17.5 in. (44.4 cm)

Height -13.1 in. (33.3 cm)

Depth of combined display and keyboard -23.7 in. (60.3 cm)

DEVICE INTERFACE: Fach CRT Keyboard Console requires its own Device-Pac (KCM9101)

Specifications may change as design improvements are introduced.

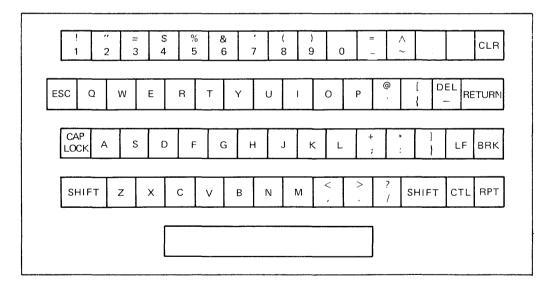


Figure 1. Console Keyboard

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