Figure 1: Wyse 370 Color Terminal

Specifications

Standard Features
- 64k display for 26 x (80, 132) with 2 row status
- 14” diagonal monitor with .28mm dot pitch
- Dual-session capability
- 64 independent screen colors for fore/back-ground
- Application Specific Integrated Circuit (ASIC) gate array with a 8 Mhz 68000 processor chip.
- Pull-Down Setup Menus
- WyseWorks -- Integrated desktop applications such as:
  - Datebook / Calendar, Calculator, Alarm Clock
- Multi-Language Keyboards
- Variable Scroll Speed
- Screen Saver
- Two Serial Ports ( A & B )
- Refresh rates: 74Hz Alpha mode or 65Hz graphic mode
- Tilt and Swivel Base

Optional Features
- 256k display for 52 x 161 display or 8 page display

Operating Modes
- Setup
- On-Line
  - Full or Half Duplex
  - Block or Half-Block Mode
  - Printing: Normal, Auto Print, Controller Print
- Local or WyseWorks

Interfaces
- Port A: RS-232 / RS-422, Female DB-25, 76.8 K baud
- Port B: RS-232, Female DB-25, 38.4 K baud
- Keyboard: ANSI, ANSI, EPC
- Cartridge Slot

Dimensions
- Footprint: 11.5” w X 11.0” d
- Display: 14.0” w X 14.5” d X 13.5” h
- Weight: 45 lb.

Power
- 120 VAC ± 10% @ 47-63 Hz.

Emulations
- ANSI
  - Wyse 370, ColorTrend 220
  - DEC VT52, VT100, VT220, VT320
- Graphics
  - Tektronics 4010, 4014
- ASCII
  - Wyse 350, TVI 950, Esprit III, ADDS A2

Special Notices
- Dual sessions are N/A with both Tektronix emulations.
- XMT handshake should never be used with ADDS, Data General, and PC graphics personality terminals.
- Signal ground is always internally connected to the frame ground on all Wyse terminals.
- Hardware handshaking for all terminals is always:
  - Busy = Low / Ready = High.
  - If a printer uses a variable input buffer level, setup the printer to handshake at the lowest level possible.
- All terminals utilize one start bit for operation.
- Maximum distance for serial cable is fifty feet but with shielded cable it may exceed this distance.

Tools Recommended
- #1 Phillips Screwdriver
- Small straight-blade screwdriver
- Compressed air or vacuum cleaner

Keyboard Commands

<table>
<thead>
<tr>
<th>Function</th>
<th>ASCII</th>
<th>ANSI</th>
<th>EPC</th>
</tr>
</thead>
<tbody>
<tr>
<td>Enter Setup Mode</td>
<td>Setup</td>
<td>F3</td>
<td>Select</td>
</tr>
<tr>
<td>Toggle Block Mode</td>
<td>Ctrl / Shift Break</td>
<td>Shift F5</td>
<td>Ctrl / Shift Break</td>
</tr>
<tr>
<td>Toggle Auto Print</td>
<td>Ctrl / Print</td>
<td>Ctrl / Shift F2</td>
<td>Ctrl / Print</td>
</tr>
<tr>
<td>Print Screen</td>
<td>Print</td>
<td>F2</td>
<td>Print Screen</td>
</tr>
</tbody>
</table>

Error Codes

<table>
<thead>
<tr>
<th>Error Codes**</th>
<th>Explanation</th>
</tr>
</thead>
<tbody>
<tr>
<td>9</td>
<td>Battery-backed RAM checksum error</td>
</tr>
<tr>
<td>P</td>
<td>Code ROM checksum error</td>
</tr>
<tr>
<td>G*</td>
<td>Cartridge 1 ROM set error</td>
</tr>
<tr>
<td>H*</td>
<td>Cartridge 2 ROM set error</td>
</tr>
<tr>
<td>u xx xxxxxx xx xx</td>
<td>RAM error</td>
</tr>
</tbody>
</table>

* When optional cartridge installed, indicates malfunction
** To clear error messages enter “Setup Mode” then exit.
Procedures

Reset Settings

- Turn OFF terminal
- Remove both cables from Ports A & B
- Power ON terminal and “Enter setup mode” (See Keyboard Commands for reference)
- Select (Default All) and press (Return) key.
- Select (Exit Setup and Save) and press (Return) key.
- Reconfigure the terminals setup parameters
- Turn OFF terminal
- Reconnect the cables to Ports A & B
- Power ON terminal

Firmware Replacement

- Power ON terminal and “Enter setup mode” (See Keyboard Commands for reference)
- Make notes about the options this terminal has setup. You may have to reconfigure with these settings later
- Power OFF terminal and disconnect the power cable, keyboard, optional cartridges and cables from the communication ports A & B.
- Flip terminal on side and locate five screws on base.
- Remove the five screws with a #1 Phillips screwdriver.
- Remove any dust that may be found on the base.
- Pull out bottom base far enough to free the metal tabs from the top base.
- Gently place the loosened base on the work surface so the connectors on J1, J10, J11 are not disconnected from the logic board.
- Locate the firmware in sockets (17U or Program 0) & (16U or Program 1)
- Insert Flat-blade screwdriver between PROM and socket to separate then remove PROM from socket.
- Insert new PROM in the same way the old PROM was installed. Make sure the notched side or pin 1 is to the same side and the pins are not bent during installation.
- Check to see if the connectors on J1, J10, and J11 are still securely fastened to the logic board.
- Position the top base over lower base to align the appropriate tabs. Lower top base so the tabs fit snug with lower base.
- Flip terminal on side and re-tighten the five Phillips screws holding the base.
- Reinstall any optional cartridges if they were removed.
- Re-connect the power and keyboard cables only.
- Power ON terminal and “Enter setup mode” to clear the error condition.
- Check all settings and verify them against the ones you taken earlier and change any if necessary to match.
- Power OFF the terminal and reconnect the communication cables to ports A & B.
- Power ON terminal to verify terminal is working. A BEEP sound and cursor or status line should appear.

Procedures (Continued)

Firmware Identification

- Power OFF terminal and remove cable from Port A and jump pin 2 with 3. They are the 2nd & 3rd pins from the right on the top row of the port when facing it.
- Power ON terminal and “Enter setup mode”
- Change Sub-Menu Personality = (WYSE 350)
- Change Display Top Status Line = (USER)
- Change Port Communications Mode = (FULL DUPLEX)
- Turn Caps OFF
- Depress ESC (Control on ANSI KB) then depress “d”
- Turn Caps ON and depress SHIFT and ( “ ) together.
- An Alpha-numeric string will appear.

Interface Connections

<table>
<thead>
<tr>
<th>Port A RS-232/RS-422 Connector Wiring</th>
<th>From Pin</th>
<th>To Pin</th>
<th>Name</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>1</td>
<td>Shield Ground</td>
<td></td>
</tr>
<tr>
<td>2</td>
<td>2</td>
<td>Transmit RS-232C -Data</td>
<td></td>
</tr>
<tr>
<td>3</td>
<td>3</td>
<td>Receive RS-232C -Data</td>
<td></td>
</tr>
<tr>
<td>4</td>
<td>4</td>
<td>Request to Send*</td>
<td></td>
</tr>
<tr>
<td>5</td>
<td>5</td>
<td>Clear to Send*</td>
<td></td>
</tr>
<tr>
<td>7</td>
<td>7</td>
<td>Signal Ground</td>
<td></td>
</tr>
<tr>
<td>8</td>
<td>8</td>
<td>Receive Line Signal Detect*</td>
<td></td>
</tr>
<tr>
<td>15</td>
<td>15</td>
<td>Receive RS-422 +Data</td>
<td></td>
</tr>
<tr>
<td>17</td>
<td>17</td>
<td>Receive RS-422 -Data</td>
<td></td>
</tr>
<tr>
<td>19</td>
<td>19</td>
<td>Transmit RS-422 +Data</td>
<td></td>
</tr>
<tr>
<td>20</td>
<td>20</td>
<td>Data Terminal Ready</td>
<td></td>
</tr>
<tr>
<td>25</td>
<td>25</td>
<td>Transmit RS-422 -Data</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Port B RS-232 Connector Wiring</th>
<th>From Pin</th>
<th>To Pin</th>
<th>Name</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>1</td>
<td>Shield Ground</td>
<td></td>
</tr>
<tr>
<td>2</td>
<td>2</td>
<td>Transmit RS-232C -Data</td>
<td></td>
</tr>
<tr>
<td>3</td>
<td>3</td>
<td>Receive RS-232C -Data</td>
<td></td>
</tr>
<tr>
<td>4</td>
<td>4</td>
<td>Request to Send*</td>
<td></td>
</tr>
<tr>
<td>5</td>
<td>5</td>
<td>Clear to Send*</td>
<td></td>
</tr>
<tr>
<td>7</td>
<td>7</td>
<td>Signal Ground</td>
<td></td>
</tr>
<tr>
<td>8</td>
<td>8</td>
<td>Receive Line Signal Detect*</td>
<td></td>
</tr>
<tr>
<td>20</td>
<td>20</td>
<td>Data Terminal Ready</td>
<td></td>
</tr>
</tbody>
</table>

Field Replaceable Units

<table>
<thead>
<tr>
<th>Description</th>
<th>OEM Part</th>
<th>IBM Part</th>
</tr>
</thead>
<tbody>
<tr>
<td>Wyse 370 Color Display Terminal</td>
<td>900251-01</td>
<td>49H6166</td>
</tr>
<tr>
<td>Keyboard - Standard</td>
<td>840358-01</td>
<td>93F5661</td>
</tr>
<tr>
<td>Keyboard - ANSI / VT220</td>
<td>900243-01</td>
<td>93F5902</td>
</tr>
<tr>
<td>Keyboard - Enhanced PC (102 Keys)</td>
<td>900233-01</td>
<td>93F5903</td>
</tr>
<tr>
<td>Keyboard Connector</td>
<td>920151-01</td>
<td>06J8362</td>
</tr>
</tbody>
</table>