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Interfacing Dukane Nurse Call with Freeset DCT1900

Overview

The RS232/TAP interface enables the Freeset DCT1900 system to receive alphanumeric messages addressed to its users by wireless number. The TAP (Telocator Alphanumeric Protocol) version 1.8 is used.

To add enhanced SMS syntax to the TAP data allowing simple, one-touch voice connection (and one-touch disconnect) of the wireless handset to the patient call station, Emergin's Alarm Messenger Software or a Micro Logic Systems' NetPage interface must be installed between the Dukane Nurse Call and the DCT1900 Freeset system.

Each NetPage system is shipped with the appropriate firmware chips for the specific application, therefore, no setup or programming is required. This allows rapid installation. Refer to Ascom Application Note Micro Logic NetPage and Freeset (AN-0145) for further details and instructions. Contact Mark Grossman at MLS (262-251-9045) to determine the exact NetPage configuration and to obtain ordering information.

Emergin Alarm Messenger must be configured. Refer to your Emergin Alarm Messenger handbook for further details and instructions. Contact Ginger Walker at Emergin (office: 704-335-7321, mobile phone 704-819-3237) to determine the exact configuration and to obtain ordering information.

The Dukane Nurse Call is directly connected to the Emergin Alarm Messenger Server or to the MicroLogic NetPage. The Emergin Alarm Messenger Server or the MicroLogic NetPage is then connected to DCT1900 Freeset system. Paging messages received from the Dukane Nurse Call are delivered to the wireless telephone by way of Alarm Messenger or NetPage.

Models verified are...

ProCare 6000 (PC6000) Standalone (non - Event Subscriber Manager [ESM] system)

- Complete PC6000 system
- File Server installed (with required firmware for system that has the A12-2075 installed)
- A12-2075 Pocket Page Interface (PPI) installed (with PN 437-00058 firmware)
- Telephone (TELCO) Interface installed

Note: You can no longer purchase the A12-2075 PPI, so an existing PC6000 system without the PPI must be upgraded to PC6000 with ESM. See Dukane's ESM Planning Guide, Document Number 427-20-00004, for upgrade details.

PC6000 with ESM application

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- Complete PC6000 system
- File Server (must be 110-3613C File Server with version 3.20.X or later firmware)
- ESM Server SW – Dukane PN 439-0001 (fully configured on a PC)
- PC6000 Bridge SW – Dukane PN 439-0002 (installed on a PC)
- Pocket Page Bridge SW – Dukane PN 439-0003 (installed on a PC)
- Telephone (TELCO) Interface installed

Note: All 3 SW applications listed can be installed on one PC if these will be the only ESM modules for the site.

ProCare 2000

The PC2000 can also integrate with your Freeset through the ProCare 2600 interface. The system essentially becomes a PC6000. You would also require all the PC6000 items listed above. See Dukane's ESM Planning Guide, Document Number 427-20-00004, for upgrade details.

For further details, please refer to the configuration and installation manual of the Dukane Nurse Call system.

Technical Discussion

Text (Paging) messages are sent to the DCT1900 Freeset System from the Dukane via a serial (RS232) connection.

The maximum size of the text message delivered to the wireless phone is 100 characters.

Solution

This section gives a brief description of recommended settings and configurations of the components involved in this application.

Physical Connection

Connect the Dukane Nurse Call messaging equipment to the DB9 port of the Alarm Messenger Server or Micro Logic Netpage using a null cable that is provided by Ascom. See PC Cable Pin-out in TPM in section 5, page 26-5. The Freeset DCT1900 is then connected to the Alarm Messenger or MicroLogic Netpage using the same type cable. The Dukane system will need to be set up for the TAP 1.8 protocol. The Port settings of the adjoining messaging equipment are 9600, 7, Even, 1 and No Flow Control. Use the Freeset CSM to enable the Printer port as a TAP interface.

Dukane Configuration

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The 110-2118 board supplied with the Dukane system is capable of at least two variations of the TAP protocol. In order to support TAP 1.8, dipswitches have to be set accordingly to 1000.

For further details, please refer to the configuration and installation manual of the Dukane Nurse Call system

Ascom DCT1900 Configuration

The Ascom Freeset DCT1900 must meet minimum requirements to support SMS and ANSI.

Minimum Requirements

- | | | |
|----|-------------------|-----|
| 1. | CPU Firmware | R4A |
| 2. | Base Station code | R3A |
| 3. | DT620 Code | R3C |
| 4. | CSM/CSS | R4A |

The DT600 handset does NOT support full advanced NCS functionality; however, we do have a MLS NetPage configuration that enables one button dial back to the patient station. This requires DT600 handset software R2A.

In addition, the TAP I/F of the DCT1900 must be modified. Using CSM, select System-Configuration-TAP. See Figure 1. Acknowledge <CR> after "ID=" should = yes and Suppress extended responses should = yes.

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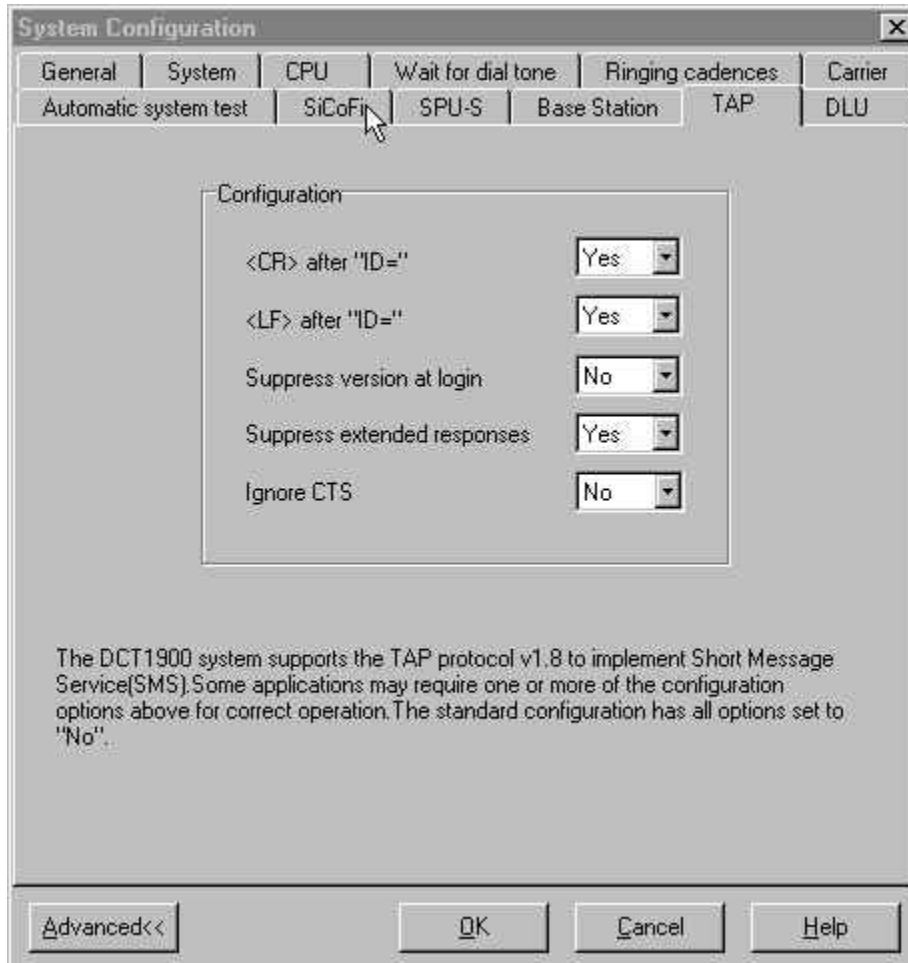


Figure 1

Also, The SPU Parameter, Dial Tone Detection Time, should be set to 2000ms. The default setting is 800ms. Use the CSM to change this setting. See Figure 2.

Menu Path: System-Configuration-Advance Tab-SPUS Tab

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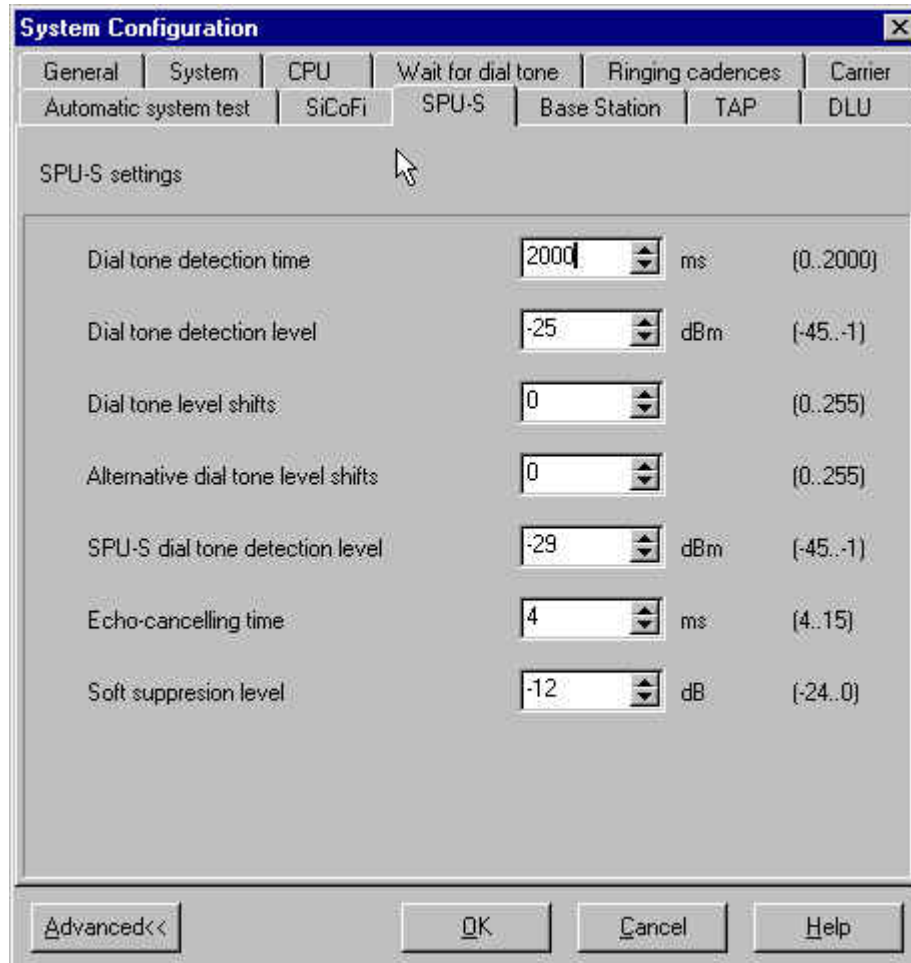


Figure 2

Handset Configuration

AutoDelete - ON (Default OFF)

Set Reminder - 1 Minute (Default OFF)

Additional Information

You may also refer to the Freeset Technical Product Manual of Ascom or contact the Technical Services Department at 1-877-712-7266.