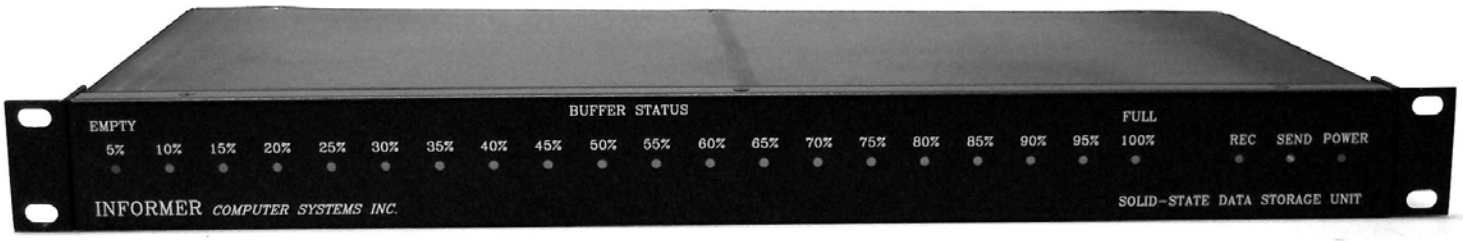
INFORMER®
COMPUTER SYSTEMS, INC.

User's Guide 65085 ver. 1.2

SOLID-STATE DATA STORAGE UNIT



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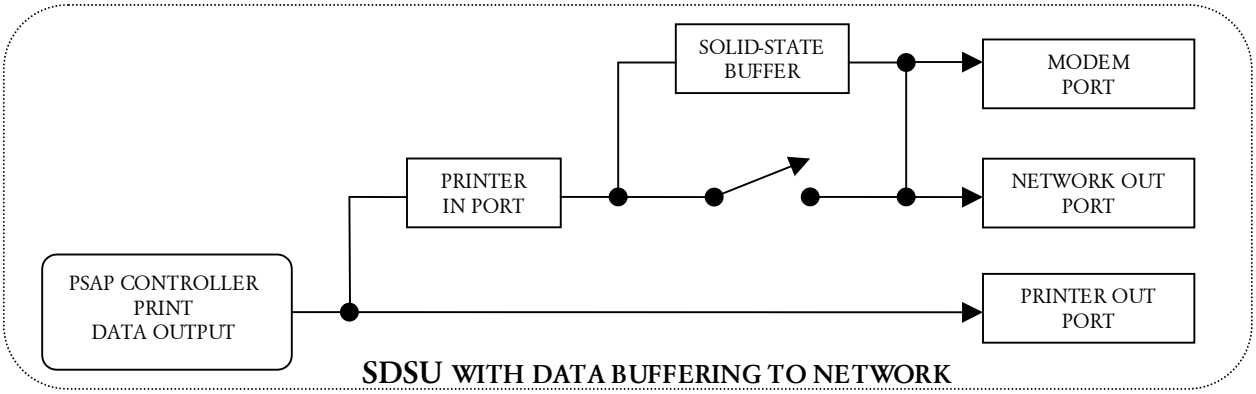
Product Overview

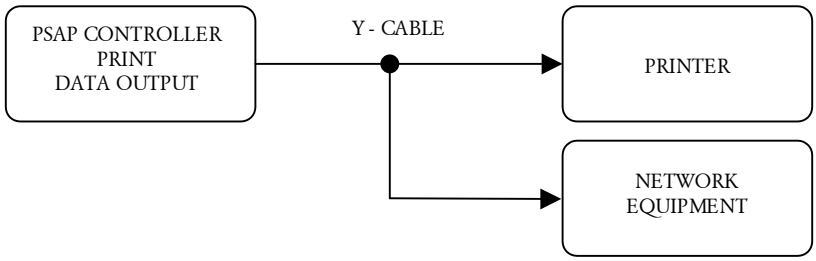
Informer's Solid-State Data Storage Unit (SDSU) will maintain PSAP printer functions while buffering data to Network equipment when Network data transmission is not possible. The data stored in the buffer will remain permanent in the event of a power loss to the SDSU. The printer data connection is also maintained in the event of a power loss. The data that would normally be sent the printer is not changed but the data sent to the Network device is buffered and held until a determination is made that the network is ready to receive data. Upon the Network signaling that it is ready, data transmission is reestablished.

For installation's where dedicated network equipment is not present, a dial-up modem option is available. Also the Solid-State Storage Unit provides alarm relay contacts when data buffering is occurring.

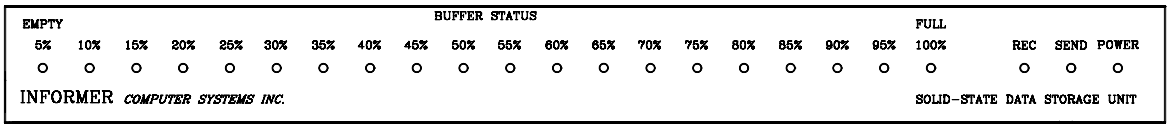


SDSU WITH DATA BUFFERING TO NETWORK

ORIGINAL PSAP CONNECTIONS WITH POTENTIAL NETWORK DATA LOSS OR PRINTER STOPPAGE

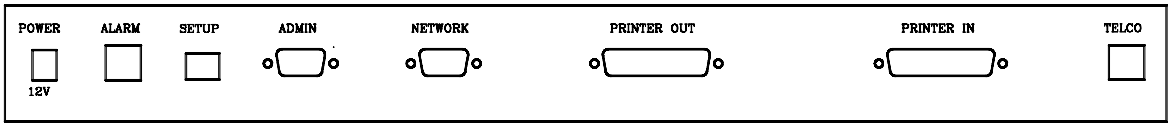


Front Panel Indicators



- The 5% through 100% status LED's represent the contents of either the 2meg or 16Meg buffer
- The 5% LED will blink to indicate normal operational status, except when the buffer has contents then it will stay on steady.
- The REC LED indicates when print data is active from the PSAP controller.
- The SEND LED indicates when print data is sent to the Network equipment or to the Dial-up Modem.
- The POWER LED indicates when stable power is present.

Back Panel Connectors



- The POWER connector is used to connect a nominally +12 DC 1 Amp power supply to the SDSU
- The ALARM connector is used to provide a short condition to alarm reporting equipment.
- The SETUP switch has the following settings NOTE: factory use only
- The ADMIN connector has a DTE RS-232 interface and is used to access the Configure screen settings.
- The NETWORK connector has a DTE RS-232 interface and its EIA leads determine when the buffering starts and stops.
- The PRINTER OUT connector provide uninterrupted data to the printer even in the event of power loss to the SDSU.
- The PRINTER IN connector connects to the PSAP controller's printer output, which is normally connected directly to the printer.

Installation Procedure

- It is recommend to use all new and direct cables when installing the SDSU. Do not use the existing Y cable.

- Attach DB-25 cable from PSAP printer output to Printer input on the SDSU. If the PSAP printer output has a DCE configuration, no null modem adapter will be needed.

- With a laptop connected to the ADMIN port initially set the port settings for 1200, N,8,1 then enter the monitor mode and examine the data with a test call. If the data looks correct then proceed to the next step, if not then make changes to the port setting until correct data is observed.

- Attach a DB-9 cable from the NETWORK port on the SDSU to the network equipment, then enter the Hardware flow control monitor screen. If some or all of the signals show an on condition then the cable is correct, if all signals are all off, then use a null modem adapter on the cable and verify a on condition exists.

- While in the Configuration screen enable the same handshake signals that were observed to have a on condition in the Hardware flow control monitor screen. Note: this is what determines when the SDSU buffers the data.

- Last, connect the Printer out port to either the printer or the print server, if the connection is to a print server a null modem adapter will be required.

Mechanical Mounting to 19" Rack

Using the mounting ears located on the sides of the SDSU, use four screws to fasten the SDSU to the shelf. Location of the SDSU at the top of an existing rack will insure easy viewing of status LED's.

Power Supply Requirements

A 12 volt DC power supply rated for 1 amp with a OD 5.5mm / ID 2.0mm barreled connector and a positive center conductor.

Connector Electrical Signals

	Printer in Port DCE DB-25 female	**Printer out Port** DTE DB-25 female	**Network port** DTE DB-9 female	**Administrative port** DTE DB-9 female
TXD	PIN 2 input	Pin 2 output	Pin 3 output	Pin 3 output
RXD	Pin 3 output	Pin 3 input	Pin 2 input	Pin 2 input
RTS	PIN 4 input	Pin 4 output	Pin 7 output	Pin 7 output
CTS	PIN 5 output	Pin 5 input	Pin 8 input	Pin 8 input
DCD	PIN 8 output	Pin 8 input	Pin 1 input	Pin 1 input
DTR	PIN 20 input	Pin 20 output	Pin 4 output	Pin 4 output
DSR	PIN 6 output	Pin 6 input	Pin 6 input	Pin 6 input
SG	PIN 7	Pin 7	Pin 5	Pin 5
RI	PIN 22 output	Pin 22 input	Pin 9 input	Pin 9 input

Configuration Screen

All configure commands and settings (via ADMIN port) are displayed on this screen for ease of operation. To access screen, set terminal emulation for 1200,N,8,1 and press ESC for menu.

This screen is used to set the data format for both the (printer in) connection and the (network) connection of the buffer box. The following commands can be used to configure the data format.

P00<enter> example for 1200,N,8,1
P20<enter> example for 9600,N,8,1

This screen is also used to set the appropriate Handshake protocol for the network connection of the buffer box. The following example commands can be used to set the Handshake protocol.

F1<enter> example CTS enabled
F0<enter> example CTS disabled
F111<enter> example CTS, DSR, DCD enabled

Also at the bottom of this screen is a display current configuration.

```
Setup Menu SDSU
Firmware V4.0129

Commands
  Change Port Settings
  Pbf<cr> where b=baud rate 0-1200, 1-2400, 2-9600, 3-19200
                f=format 0-8N1, 1-7E1, 2-7O1, 3-8E1, 4-8O1

  Select Hanshake Signal
  Fcrd<cr> where c=CTS 0-Disabled, 1-Enabled
                 r=DSR 0-Disabled, 1-Enabled
                 d=DCD 0-Disabled, 1-Enabled

  Enter Data Monitor Mode     M<cr>  (<ESC> terminates monitor)
  Enter EIA Monitor Mode      E<cr>  (<ESC> terminates monitor)

Current Configuration

  Printer/Network Baud Rate 1200 BPS
  Printer/Network Char Format EIGHT-NONE-ONE
  EIA Handshake CTS
```

Data Monitor Screen

When the M<cr> command is used, all data normally sent to the Network port is redirected to the Admin port. The purpose of this is to allow the installer to verify the buffer box is receiving data from the printer correctly (bps, data word, parity, stop bit). This procedure is normally accomplish with the use of a data scope, but is a built in feature to the buffer box. This mode is terminated when the ESC key is pressed.

The quick brown fox jumped over the lazy dog's back 0123456789
The quick brown fox jumped over the lazy dog's back 0123456789
The quick brown fox jumped over the lazy dog's back 0123456789

Hardware Flow Control Monitor Screen

This screen is activated by entering E<enter> and will show how the Network equipment is signaling the buffer box. Typically, wherever a on condition is noticed, it should also be turned on in the EIA handshake configuration screen. The result when turning on more than one handshake option is that when a off condition of any of the active EIA leads will cause the buffering process to occur.

```
[CTS:on]
[DSR:on]
[DCD:on]
```

Time stamp logging of buffer performance

Time stamps are logged to the bottom of the Configuration screen. The last time stamp is stored and can be viewed by entering L<cr>. The format of the time stamps is shown below.

<STX>Start Time 08:12:56 12/18/2003 Stop Time 09:12:56 12/18/2003
Buffered Chars=00489 Lost Chars=00000<ETX>

To set the internal real time clock, use the following procedure for 1/20/2004 23:30:15 (example)

T23301501202004<cr>

Then press ESC to verify setting.

Product Ordering Numbers

- 99796-001 SDSU 2meg memory (approximately 100 full screen calls)
- 99796-002 SDSU 2 meg memory with modem option
- 99796-003 SDSU 16 meg memory (approximately 800 full screen calls)
- 99796-004 SDSU 16 meg memory with modem option

WARRANTY

Informer Computer Systems, Inc. offers a limited warranty on the SDSU for twelve months from date of shipment.

During the warranty period, Informer shall, at its option, repair or replace the product should it prove to be defective in either material or workmanship. The customer is required to ship product to Informer postage paid with a return material authorization number (RMA) obtained from Informer.

This warranty specifically excludes any implied warranties of merchantability and fitness for a particular purpose and does not apply to failures caused by accident, abuse, improper installation, negligence or unauthorized modifications by customer.

If repair is required, contact Informer for RMA instructions at the following address:

Informer Computer Systems, Inc.

12711 Western Ave.
Garden Grove, CA 92841
Tel: (714) 891-1112 Ext. 252
Fax: (714) 898-2624