**WARNING:** This manual contains information on limitations regarding product use and function and information on the limitations as to liability of the manufacturer. The entire manual should be carefully read.
1. Introduction
When you use the PC4401 as a printer module, you can connect it to a local serial printer so that the system can print out event information.

2. Specifications
- Input - 12VDC via Combus connection
- Normal current draw of 35 mA
- Tamper and Trouble reporting codes

PC4401 Printer Module:
- Four wire (QUAD) hook-up to Combus
- Low Combus supervision to main control panel
- True RS-232 technology
- Protocol DTR
- Five possible Baud rates: 300, 600, 1200, 2400 or 4800
- Maximum cable length: 10 feet (3 meters)

3. Installing the PC4401
3.1 Unpacking
The PC4401 package includes the following parts:
- One PC4401 circuit board
- Four plastic stand-offs
- RS-232 cable and DB-25 adapter

3.2 Wiring the PC4401 Printer Module
Before beginning to wire the unit, ensure that all power (AC transformer and battery) is disconnected from the control panel.

Perform the following steps to complete wiring:
1. Connect the four Combus wires to the PC4401. Connect the red, black, yellow and green Combus wires to the RED, BLK, YEL and GRN terminals, respectively.
2. Connect terminals T1 and T2 to a normally closed tamper switch. If no tamper switch is desired, connect a jumper wire between T1 and T2 terminals.
3. Consult Diagram 1, for more information.
4. For commercial fire applications, the PC4401 module must be mounted in the same enclosure as the control panel. For all other applications, the module may be mounted in the separate enclosure Model PC4003C. The PC4401 module can be mounted on the inside wall of the enclosure using the plastic stand-offs provided.

4. Enrolling the Module
If you will be using the PC4401 as a printer module, you must enroll it with the PC4010/4020.
1. Enter installer’s programming by pressing [*][8] [Installer’s Code].
2. Scroll to “Module Hardware” and press the [*] key.
3. Scroll to “Enroll Module” and press the [*] key.
4. Scroll through the different modules until “PC44XX RS-232” is displayed. Press the [*] key.
5. The message “Create Tamper on Desired Unit” will be displayed. To create the required tamper, secure the tamper zone on the module and then open it. The transition from secure to violated enrolls the module. After this is done, the keypad will display the module number and will confirm enrollment (e.g. “PC44XX Mod 01 Enrolled”).

For more information regarding module enrollment, see the control panel Installation Manual.

5. Programming the Module
To access PC4010/4020 programming, enter [*][8] followed by the Installer’s code. The sections you will need to program are described below. For more information regarding programming, see the control panel Installation Manual.

The PC4401 module programming sections are located in the System Area section under the PC44XX options. Once you have entered installer’s programming, enter the indicated reference number; OR use the [<] [>] keys to scroll through the programming options on the LCD display and press [*] to select the desired option.

The following explains each programming option relevant to the PC4401.

5.1 Module Function
Ref. # [000800XX00], where XX = PC4401 module no.
In this section you must select which function you want the PC4401 to perform: Printer.

To use the PC4401 as a printer module, you must select the Printer option in this section. Scroll to the message “Printer”, then press [*].

NOTE: You may only program one function for each PC4401 module.

5.2 Baud Rate
Ref. # [000800XX01], where XX = PC4401 module no.
This section is used to program which Baud rate the PC4401 serial interface module will use to communicate with a serial printer. The Baud rate is the speed at which information will be transmitted from the PC4401 module to the serial printer. There are five different Baud rates available to the PC4401 module: 300, 600, 1200, 2400 and 4800 Baud. If you are experiencing problems with missing characters, try lowering the Baud rate.

5.3 Trouble Conditions
The control panel always watches for possible trouble conditions. If a trouble condition occurs, the keypad “Trouble” light will turn on and the keypad will beep. Press [*][2] to display the trouble conditions.

The following trouble condition applies to the PC4401 module. For a description of all troubles, please see your system Installation Manual. Reporting codes for these troubles can be programmed (ref. # [000403] OR scroll to System Area, then Communicator, then Reporting Codes).

- Printer Off-line
If programmed, the panel can also send reporting codes for the following conditions:
  - General System Tamper Alarm
  - General System Tamper Restore

Record your reporting code choices in the panel’s Programming Worksheets booklet.
Diagram 1: Connecting the PC4401 as a Printer Module

Programming Worksheet

Module Function

Ref # [000800XX00], where XX = PC4401 module number

- [ ] Not used (00)
- [ ] Printer (01)

Baud Rate

Ref # [000800XX01], where XX = PC4401 module number

- [ ] 300
- [ ] 600
- [ ] 1200
- [ ] 2400
- [ ] 4800

FCC COMPLIANCE STATEMENT

CAUTION: Changes or modifications not expressly approved by Digital Security Controls Ltd. could void your authority to use this equipment. This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- Re-orient the receiving antenna.
- Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/television technician for help.

The user may find the following booklet prepared by the FCC useful: “How to Identify and Resolve Radio/Television Interference Problems”. This booklet is available from the U.S. Government Printing Office, Washington D.C. 20402, Stock # 004-000-00345-4.
WARNING Please Read Carefully

Note to Installers
This warning contains vital information. As the only individual in contact with system users, it is your responsibility to bring each item in this warning to the attention of the users of this system.

System Failures
This system has been carefully designed to be as effective as possible. There are circumstances, however, when the system may not be effective or may fail to operate as expected for a variety of reasons. Some but not all of these reasons may be:

Insufficient Time
There may be circumstances when the system will operate as intended, yet the occupants will not be protected from the emergency due to their inability to respond to the warnings in a timely manner. If the system is monitored, the response may not occur in time to protect the occupants or their belongings.

Component Failure
Although every effort has been made to make this system as reliable as possible, the system may fail to function as intended due to the failure of a component.

Inadequate Testing
Most problems that would prevent an alarm system from operating as intended can be found by regular testing and maintenance. The complete system should be tested weekly and immediately after a break-in, an attempted break-in, a fire, a storm, an earthquake, an accident, or any kind of construction activity inside or outside the premises. The testing should include all sensing devices, keypads, consoles, alarm indicating devices and any other operational devices that are part of the system.

Security and Insurance
Regardless of its capabilities, an alarm system is not a substitute for property or life insurance. An alarm system also is not a substitute for property owners, renters, or other occupants to act prudently to prevent or minimize the harmful effects of an emergency situation.

Limited Warranty
Digital Security Controls Ltd. warrants the original purchaser that for a period of twelve months from the date of purchase, the product will be free of defects in materials and workmanship under normal use. During the warranty period, Digital Security Controls Ltd. shall, at its option, repair or replace any defective product upon return of the product to its factory, at no charge for labour and materials. Any replacement and/or repaired parts are warranted for the remainder of the original warranty or ninety (90) days, whichever is longer. The original owner must promptly notify Digital Security Controls Ltd. in writing that there is defect in material or workmanship, such written notice to be received in all events prior to expiration of the warranty period.

Limited Warranty
The warranty for international customers is the same as for any customer within Canada and the United States, with the exception that Digital Security Controls Ltd. shall not be responsible for any customs fees, taxes, or VAT that may be due.

Warranty Procedure
To obtain service under this warranty, please return the item(s) in question to the point of purchase. All authorized distributors and dealers have a warranty program. Anyone returning goods to Digital Security Controls Ltd. must first obtain an authorization number. Digital Security Controls Ltd. will not accept any shipment whatever for which prior authorization has not been obtained.

Conditions of Voided Warranty
This warranty applies only to defects in parts and workmanship relating to normal use. It does not cover:

• damage incurred in shipping or handling;
• damage caused by disaster including fire, flood, wind, earthquake or lightning;
• damage due to causes beyond the control of Digital Security Controls Ltd. such as excessive voltage, mechanical shock or water damage;
• damage caused by unauthorized attachment, alterations, modifications or foreign objects;
• damage caused by peripherals (unless such peripherals were supplied by Digital Security Controls Ltd.);
• defects caused by failure to provide a suitable installation environment for the products;
• damage caused by use of the products for purposes other than those for which it was designed;
• damage from improper maintenance;
• damage arising out of any abuse, mishandling or improper application of the products.

Digital Security Controls Ltd.’s liability for failure to repair the product under this warranty after a reasonable number of attempts will be limited to a replacement of the product, as the exclusive remedy for breach of warranty. Under no circumstances shall Digital Security Controls Ltd. be liable for any special, incidental, or consequential damages based upon breach of warranty, breach of contract, negligence, strict liability, or any other legal theory. Such damages include, but are not limited to, loss of profits, loss of the product or any associated equipment, cost of capital, cost of substitute or replacement equipment, facilities or services, down time, purchaser’s time, the claims of third parties, including customers, and injury to property.

Disclaimer of Warranties
This warranty contains the entire warranty and shall be in lieu of any and all other warranties, whether expressed or implied (including all implied warranties of merchantability or fitness for a particular purpose) and all other obligations or liabilities on the part of Digital Security Controls Ltd. Digital Security Controls Ltd. neither assumes nor authorizes any other person purporting to act on its behalf to modify or to change this warranty, nor to assume for it any other warranty or liability concerning this product.

This disclaimer of warranties and limited warranty are governed by the laws of the province of Ontario, Canada.

WARNING: Digital Security Controls Ltd. recommends that the entire system be completely tested on a regular basis. However, despite frequent testing, and due to, but not limited to, criminal tampering or electrical disruption, it is possible for this product to fail to perform as expected.

Installer’s Lockout
Any products returned to DSC which have the Installer’s Lockout option enabled and exhibit no other problems will be subject to a service charge.

Out of Warranty Repairs
Digital Security Controls Ltd. will fix or replace out-of-warranty products which are returned to its factory according to the following conditions. Anyone returning goods to Digital Security Controls Ltd. must first obtain an authorization number. Digital Security Controls Ltd. will not accept any shipment whatever for which prior authorization has not been obtained.

Products which Digital Security Controls Ltd. determines to be repairable will be repaired and returned. A set fee which Digital Security Controls Ltd. has predetermined and which may be revised from time to time, will be charged for each unit repaired. Products which Digital Security Controls Ltd. determines not to be repairable will be replaced by the nearest equivalent product available at that time. The current market price of the replacement product will be charged for each replacement unit.