



DEC 3000 Systems: Special Information for PTT Network Users

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Certain European countries and the United Kingdom require that installation information be provided on the system or input/output (I/O) modules which are hosted within the DEC 3000 AXP systems.

This document provides updated information for PTT network users of the following DEC 3000 systems:

Table 1 DEC 3000 System Model Numbers, System Module Part Numbers, and I/O Module Part Numbers

DEC 3000 Model Numbers	System Module Part Numbers	I/O Module Part Numbers
300/300L/300LX/300X	54-22249	
400/400S		54-21813
500/500S		54-21147
600/600S/700		54-21813
800/800S/900		54-21147

Please replace the appendix in your system manual, which describes the Special Information for PTT Network Users, with this updated information.

This addendum describes the following installation information:

- Service Categories
- Host Power Rating
- Module Isolation
- Safety Status
- Cable Approval
- Supported Cables
- Equipment Between the Approved Module and a Digital Circuit (PTT)

Service Categories

Table 2 describes the service specifications for the system or I/O modules referenced in Table 1.

Table 2 BABT-Approved Service Specifications for All Modules

Service Category	Interface Type (CCITT recommendation)	Service Requirements		Data Rate	Public Telecommunications Operators ¹		
		(Electrical)	(Physical)		BT	Hull	MCL
1	X.21bis	V.24	ISO 2110,	2400 bps	Yes	Yes	Yes
		/V.28	BS.6623:	4800 bps	Yes	Yes	Yes
			part1, 1985.	9600 bps	Yes	Yes	Yes
				19200 bps	No	No	Yes
Approved extension cables ² : BC22F-25 (25 feet) and BC22F-10 (10 feet)							

¹BT — British Telecommunications plc.
Hull — Kingston Communications (Hull) plc.
MCL — Mercury Communications Limited.

²The total length of cable used must not exceed 27 feet.

Host Power Rating

You must ensure that the total power drawn by the system or I/O module, the host, and other auxiliary equipment drawing power from the host, is within the rating of the host power supply.

Digital has designed all permutations of the host configuration (for all systems listed in Table 1) to operate within the limits of the host power rating, as shown in Table 3.

Table 3 Module Power

Nominal Voltage	Minimum Voltage (Volts)	Maximum Voltage (Volts)	Maximum Input Current (Amperage) ¹	Maximum Input Current (Amperage) ²
+5.1V	+4.896	+5.304	5.0	17.0
+12.1V	+11.616	+12.584	0.3	1.8
-12.0V	-11.4	-12.6	0.1	0.1

¹Without TURBOchannel option slots populated.

²With three TURBOchannel option slots populated. This is a worst-case current situation as specified in TURBOchannel hardware specification.

Module Isolation

Clearance and creepage distances must be maintained on your system or I/O module. Clearance is the shortest distance in air between two points. Creepage is the shortest distance along a continuous surface between those same two points.

Creepage distances apply when the system or I/O module is installed in a controlled environment.

If in doubt, you should seek the advice of a telecommunications safety engineer. Failure to install the system module in accordance with these instructions will invalidate the approval.

Except at the connector that plugs into the host, clearance and creepage distances of Xmm and Ymm, as listed in Table 4, must be maintained between the approved module and other parts of the host, including expansion cards. Digital has ensured that when the system module is installed within the systems listed in Table 1, the creepage and clearance distances to the host are met.

Table 4 Clearance and Creepage Distances

Clearance (Xmm)	Creepage (Ymm ¹)	Voltage Used or Generated by Other Parts of the Host or Expansion Card (Vrms or Vdc)
2.0	2.4 (3.8)	Up to 50
2.6	3.0 (4.8)	Up to 125
4.0	5.0 (8.0)	Up to 250
4.0	6.4 (10.0)	Up to 300

¹The distances shown in parentheses apply in an uncontrolled environment where heat, humidity, and temperature may fluctuate.

Safety Status

All interconnection points on this product are either TNV and/or SELV circuits and should only be connected to products with like circuits.

- Asynchronous/synchronous communication port—TNV operating within the limits of SELV.
- ISDN port—TNV.
- All other ports—SELV.

Cable Approval

The system and I/O modules listed in Table 1 are approved for direct connection to a particular digital circuit. This approval includes an interconnecting cable with mating connectors that conform to the British standard BS6623, parts 1 and 4. If the module is connected to the service with anything other than its own approved cables, those cables must benefit from relevant general approval NS/G/1235/100009 and/or conform to any other applicable requirements.

Figure 1 shows the pin layout for the connector.

Figure 1 Connector Pin Layout

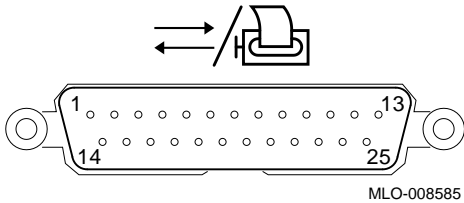


Table 5 describes pin usage for the system module connector.

Table 5 System Connector Pin Usage

Pin	Description	Pin	Description
1	Ground	14	Not used
2	Transmit data	15	Transmit data
3	Receive data	16	Not used
4	Request to send	17	Receive clock
5	Clear to send	18	Not used
6	Data set ready	19	Not used
7	Ground	20	DTR
8	Carrier detect	21	Not used
9	Not used	22	Ring indicator
10	Not used	23	Data signal rate selector
11	Not used	24	Not used
12	Speed indicator	25	Not used

Supported Cables

Table 6 describes the cables for the system and I/O modules.

Table 6 Cables Supported by the Approved Module

Interface	Cable Type	Order Number	Molding	Pins
V.24	Extension	BC22F-10 (10 feet)	straight	25-25
V.24	Extension	BC22F-25 (25 feet)	straight	25-25

Equipment Between the Approved Module and a Digital Circuit (PTT)

If any other equipment, including cables or wiring, is to be connected between the system or I/O module and the point of connection to any particular digital circuit, that equipment must conform as follows:

- The overall transmission characteristics of all other equipment must not have any material effect on the electrical conditions between the equipment and the digital circuit.
- All other equipment must comprise only the following:
 - Approved equipment, which may be subject to limitations on its use, for the purpose of connection between it and a particular digital circuit.
 - Cable or wiring that complies with a code of practice for the installation of equipment covered by this standard or other requirements that may be applicable.

For assistance, please contact Digital with your questions and concerns.