Version 8 Challenger Panel TS0816

The Challenger Panel is the hub of TecomÕs integrated alarm and access control system, through which all security events pass. Based on a modular design, the Challenger system provides a flexible upgrade path for existing systems. Increasing the number of inputs, outputs and access control doors is achieved easily with the addition of Tecom Data Gathering Panels, Access Controllers and Relay Cards and expansion of the Challenger PanelÕs memory is also possible with plug-in RAM modules of various capacities. All of these features are programmed using a Tecom LCD Arming Station or using Management Software.

The Version 8 Challenger system provides complete integration of alarm and access control management facilities such as multiple area programming, definable user functions, remote monitoring capabilities, input and output functionality as well as supporting various reporting formats. Operator stations (computers) connected to a computer interface on the Version 8 Challenger Panel, running TecomÕs ARES or Titan software, take alarm and access control monitoring to new levels of flexibility and sophistication. Challenger programming can be fully uploaded and downloaded when using the Titan Management Software.

The newest member of the Challenger series is the Version 9 Challenger Range, one of the most sophisticated and advanced security systems in the industry to date. The Version 9 range integrates up to 16 separate Challenger systems to form a powerful, fully cohesive alarm and access control system with countless enhancements. See Version 9 Challenger Range section for more details.
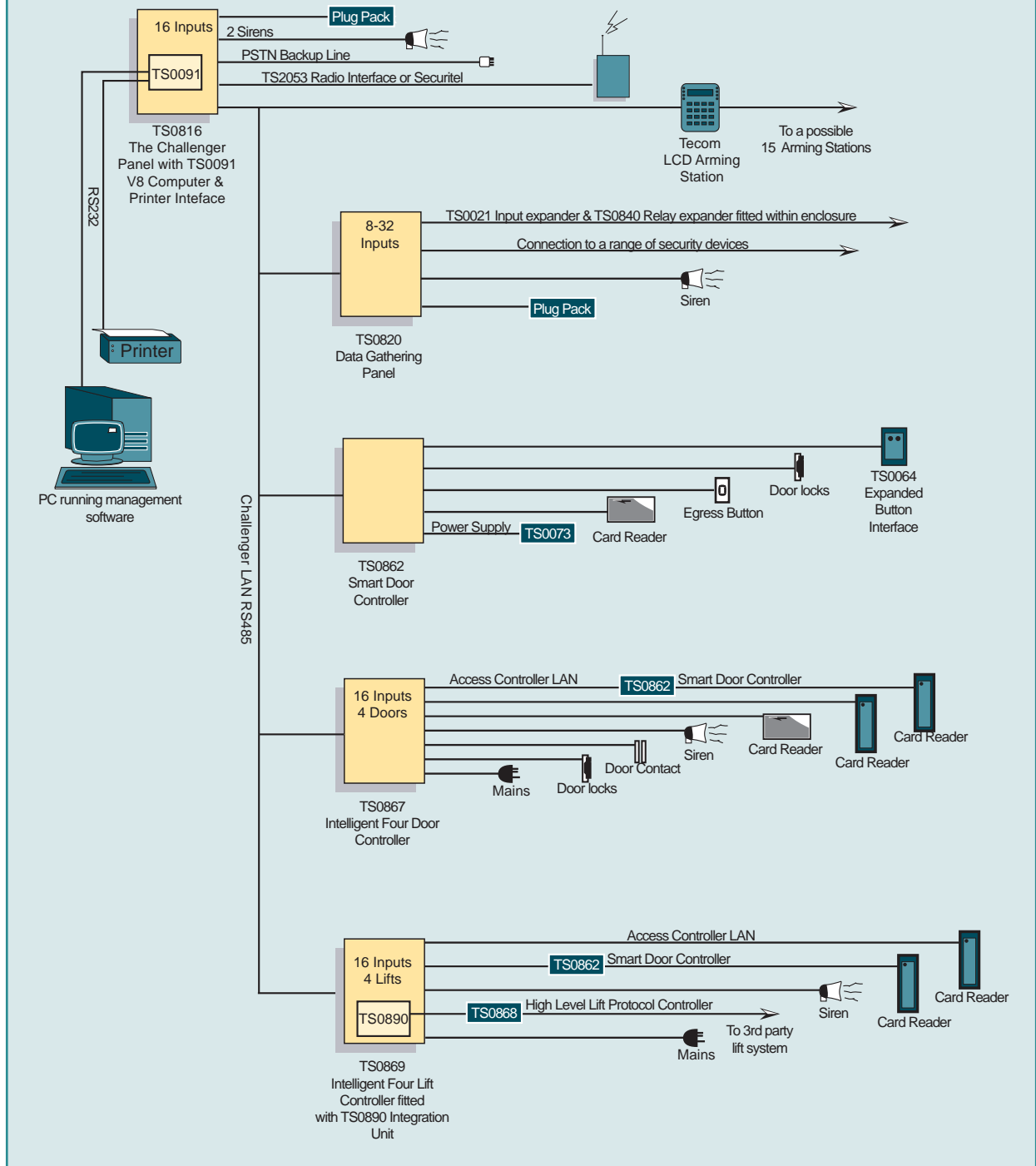
CONNECTIVITY

It is understood that a system's requirements can change over time and the Challenger system's modular design makes upgrading an easy process. The system comprises two main modules/groups, Data Gathering Panels (DGPs) and Remote Arming Stations (RASs). These modules are connected to a Local Area Network (LAN) that enables communication with the Challenger Panel. The Challenger Panel, Data Gathering Panels and Remote Arming Stations can have ancillary products connected to them, such as, input and output devices including relay cards, card reader devices etc., to meet security needs. LAN devices may be required depending on each system's requirements. See LAN Devices section for more details.

TS0816 Version 8 Challenger Panel

the backbone of the Challenger system, connecting
to an array of Tecom and third party peripheral devices
to provide a complete alarm and access control monitoring solution

TS0091

16 Inputs

Plug Pack

2 Sirens

PSTN Backup Line

TS2053 Radio Interface or Securitel

TS0816
The Challenger
Panel with TS0091
V8 Computer &
Printer Inteface

RS232

Tecom
LCD Arming
Station

To a possible
15 Arming Stations

Printer

PC running management
software

Challenger LAN RS485

8-32
Inputs

TS0021 Input expander & TS0840 Relay expander fitted within enclosure

Connection to a range of security devices

Plug Pack

Siren

TS0820
Data Gathering
Panel

Door locks

TS0064
Expanded
Button
Interface

Egress Button

Power Supply TS0073 Card Reader

TS0862
Smart Door
Controller

16 Inputs
4 Doors

Access Controller LAN

TS0862 Smart Door Controller

Card Reader

Card Reader

Card Reader

Siren

Mains Door Contact

Door locks

TS0867
Intelligent Four Door
Controller

16 Inputs
4 Lifts

Access Controller LAN

TS0862 Smart Door Controller

TS0890 TS0868 High Level Lift Protocol Controller

Siren

Card Reader

Card Reader

Mains To 3rd party
lift system

TS0869
Intelligent Four Lift
Controller fitted
with TS0890 Integration
Unit

Tecom Systems

THE CHALLENGER PANEL FEATURES

1. The Challenger system can control alarm points, access control doors and lifts, lighting, heating and air conditioning, video switching, bank vaults, warehousing access control, plant equipment and automate most building and office environmental management.

2. Intelligent Access Controllers can be connected to the Challenger Panel to enhance access control features throughout a system, on both door and floor access. These provide full redundancy i.e., stand-alone mode and special functions for higher security requirements. See Data Gathering Panels and Access Controllers section for more details.

3. The Challenger can be expanded to accommodate up to 65,536 fully programmable users. Each user can be allocated three levels of access; area control (Alarm Group), door access (Door Group) and floor access (Floor Group). Each one of these access levels can be restricted to time periods (Time Zones). User Alarm Groups can have up to three alternatives depending on requirements.

4. Programmable holidays modify existing access restrictions.

5. Fully daylight savings compatible.

6. A date for routine maintenance can be preprogrammed along with customised text that will appear on any LCD Arming Station in a system.

7. Extensive macro logic programming features can be used to program a complicated sequence of events. For example allowing a water storage tank to be completely filled only during off-peak electricity tariff rates, thus reducing costs and environmental impact. Other features which can be programmed using macro logic include HVAC and lighting.

8. Arming and disarming can be automated to occur at particular times, days and/or when particular events occur in a system. Auto arm and disarm removes the reliance on staff to maintain security integrity.

9. Areas can be linked together to create common areas. These physical areas can then be armed and disarmed in unison without separate access control procedures.

10. A printer can be connected to the Challenger Panel, via an interface, to print out events. The printer can be programmed to do so during specific times of day or outside specific times of day.

11. For high security areas where still cameras are used, the Challenger can count the number of stills taken and report to a remote monitoring station when film is low.

12. The addition of an interface to the Challenger Panel allows for the connection of a computer to run Tecom's ARES or Titan Management Software.

13. A port on the Challenger Panel can be connected to a laptop PC to enable download and upload of Challenger system information.

14. Onboard modem, external monitored siren, internal siren and strobe connections come standard on the TS0816.

15. The TS2053 Mobile Data Interface enables the Challenger Panel to communicate with, through Telstra's Mobile Data Network™, a remote monitoring station.

16. Capable of communicating with Remote Arming Stations and Data Gathering Panels over leased line, fibre optic, microwave etc. using LAN devices.

17. Multiple base station reporting formats are supported including; Contact ID, Extended High Speed, Serial STU, Tecom Dialer and Tecom Direct Line.

OPTIONS

TS0882	1 Meg Memory Expansion for user database
TS0883	4 Meg Memory Expansion for user database
TS0884	8 Meg Memory Expansion for user database
TS0091	V8 Computer & Printer Interface
TS0094	V8 Printer Interface
TS0893-96	LAN Devices Range
TS0840	4 Way Relay Board
TS0841	8 Way Relay Board
TS0842	16 Way Open Collector Controller
TS2053	Mobile Data Interface
Data Gathering Panels (DGPs) & Access Controllers	TS0820 Data Gathering Panel
	TS0825 Inovonics Data Gathering Panel
	TS0826 Fire Data Gathering Panel
	TS0827 4 Input Data Gathering Panel
	TS0867 Intelligent Four Door Controller
	TS0869 Intelligent Four Lift Controller
Remote Arming Stations (RASs)	TS0003 4 LED Arming Station
	TS0006 Heavy Duty 4 LED Arming Station
	TS0007/8 Magnetic Card Reader Arming Station
	TS0801/2 8 Area LCD Arming Station
	TS0804/5 16 Area LCD Arming Station
	TS0861C Magnetic Swipe Card Reader
	TS0862 Smart Door Controller

TS0882, TS0883, TS0884 Memory Expansion for user database

The TS0882, TS0883 and TS0884 are plugged onto the Challenger Panel in a socket provided and expand memory capacity.

Installation of one of these modules can increase user capacity to a huge 65,536, up from the standard 50. The TS0883 and TS0884 can also be installed on the Intelligent Four Door Controller and Lift Controller.

Expansion Capacity

TS0882 1 Meg Bit Memory	Expansi

Tecom Systems

TS0091 V8 Printer & Computer Interface

The Serial Computer and Printer interface is mounted on an expansion port on the Challenger board and secured with two screws (supplied). The interface provides two serial RS232 ports.

Port A can be used to interface to a computer running ARES or Titan Management Software. Port B can be used to connect a serial printer. Epson Dot Matrix or HP Laser II formats are supported, and several baud rates can be selected. The printer can be programmed to produce a 'real time' hard copy of all alarm and access control events or a print out of past history stored in the Challenger. Name text, programmed into the Challenger Panel, is printed with events where appropriate.

TS0094 V8 Printer Interface

The V8 Printer Interface can be mounted on an existing expansion port on the Challenger board and fixed with 2 screws (supplied). The interface provides a single RS232 port for connection of a printer.

Epson Dot Matrix or HP Laser II formats are supported by this interface and several baud rates can also be selected. The printer can be programmed to produce a 'real time' hard copy of alarm and access control events or a print out of past history stored in the Challenger Panel. Name text, programmed into the Challenger Panel, is printed with events where appropriate.

LAN Devices TS0893, TS0894, TS0895, TS0896

LAN devices are used to provide a range of communications alternatives on the Challenger LAN. These include, electrically isolating LAN devices from each other, cable looping to and from a central point to ensure line integrity and enabling communication from the Challenger LAN cabling to Optical Fibre and back again. See LAN Devices section for more details.

TS0840 4 Way Relay Board

One TS0840 can be connected to a Challenger Panel to provide an additional 3 multi purpose relays. Leads for connection are supplied with relay boards. See Relays section for more details.

TS0841 8 Way Relay Board

The TS0841 provides an additional 8 relays to a Challenger Panel, to a maximum of 32. The TS0841 and TS0842 can be used in combination, provided the maximum output count of 255 is not exceeded. Where more than two 8 Way Relay Boards (16 outputs) are used, Challenger and Data Gathering Panel output numbering is effected. See Relays section for more details.

TS0842 16 Way Open Collector Controller

The TS0842 provides an additional 16 open collector outputs to the Challenger Panel. The TS0841 and TS0842 can be used in combination, provided the maximum output count of 255 is not exceeded. Open collector outputs differ from relay contacts in that they provide a short circuit to ground. Where more than one 16 Way Collector is used, Challenger and Data Gathering Panel output numbering is effected. See Relays section for more details.

TS2053 Mobile Data Interface

The Mobile Data Interface enables a Challenger system to communicate via the Telstra Digital Mobile Data Network™. All alarm and status information, from a Challenger Panel, can be transmitted from anywhere within the Australian Coverage Area to a TS2000 Tecom Receiver located at a remote monitoring station. See Challenger Reporting Interfaces for more details.

Data Gathering Panels (DGPs) & Access Controllers

A range of Data Gathering Panels can be included in a Challenger system to expand and enhance an existing or new system. Data Gathering Panels include door and lift controllers and fire monitoring equipment. See Data Gathering Panels and Access Controllers section for more details.

Remote Arming Stations (RASs)

A range of Remote Arming Stations can be connected to the Challenger Panel and Access Controllers to expand and enhance both new and existing systems. These devices, when assigned to a panel, provide a range of access control, programming and status indication functions depending on programming. See Remote Arming Stations and Readers sections for more details.

SPECIFICATIONS

Power Supply	
Input Voltage:	16-18 Volts AC (space for 6.5AH battery allocated)
Testing:	Dynamic battery testing
Operating Current:	150mA maximum (no peripheral devices fitted)
Aux. Power O/P:	750mA maximum (for detectors etc.)
Operating Capacities and Connections	
Users:	50 (expandable to 65,536)
Users with PIN Codes:	50 (expandable to 1,000)
Users with Names:	50 (expandable to 200)
Alarm Groups:	128
Alarm Systems/Areas:	16 (controllable from multiple Arming Stations)
Access Control Doors:	64
Door Groups:	10 (expandable to 128)
Lift Groups:	10 (expandable to 64)
Alarm Inputs:	16 (expandable to 256 using Data Gathering Panels)
Outputs Open Collector:	3 (50mA max. per O/P). Expandable to 255 with relay cards
Siren Drivers:	2 (8 Ohm monitored siren speaker)
Strobe:	1
Time Zones:	24 (each made up of 4 sub-zones)
Time:	365 day real time clock with battery backup
Holidays/Special Days:	24
History Alarm Events:	100 (expandable to 1,000)
History Access Control:	100 (expandable to 1,000)
Maximum DGP Connections:	15 – less if each or any DGP is fully expanded to 32 inputs
Maximum RAS Connections:	16
Operating Temperature:	0 - +70°C
Communications	
Maximum distance to remote LAN devices:	1.5 km
Specified Cable for Challenger and Access Controller LAN:	Belden 8723 or equiv. A long cable run between the Challenger and LAN devices either a separate figure 8 cable must be run or a power supply fitted at the remote end; common negative
LAN Monitoring:	Continuous monitoring for Off-Line status of all devices on the LAN
Addressing:	All remote devices are individually addressed via dip switches
Modem:	Standard on Challenger Panel (auto dialer testing), built in communicator and V21 Modem

Reporting Formats:	Multiple, including Contact ID, Extended High Speed, Serial STU, Tecom Dialer/Direct Line and more

Board Size

TS0816 The Version 8 Challenger Panel:	'C' size board

Ordering Information

When placing an order please specify the following part number:

TS0816	Version 8 Challenger Panel with Plug Pack in TS0303 Enclosure
TS0816B	Version 8 Challenger, Board Only