Challenger

TS0816

Panel

Meeting the Challenge of your security needs.

The Tecom Challenger panel...
the heart and soul of your security/access system

The Tecom Systems Challenger integrated alarm and access control panel, first released to the security industry in 1989, is widely accepted as a versatile, quality, Australian made product. Challenger's flexible design makes it the benchmark for alarm and access control systems.

The Challenger panel is the heart and soul of the system, with its modular 'Add As You Go' design. The panel allows expansion and control of the system with a range of ancillary panels, controllers, readers and LAN devices.

Suitable for locations with special needs, the Challenger has been installed in universities, financial institutions, chain stores, supermarkets and prisons. A large number of Challenger panels are also used to secure homes and small businesses.

The Challenger is flexible. Its design allows you to control just a few access doors and alarm inputs, or expand it to control thousands of doors, inputs and users. Built-in alarm reporting facilities ensure every Challenger input, door, field controller — or in fact any device on the encrypted LAN network — when programmed, automatically report a change of status on a 24-hour basis to a remote location.

The Challenger uses all industry standard reporting formats and mediums, hence, High Speed Digital Dialler, Direct Line, Securitel, Mobile Data and TCP/IP are supported.

The Challenger Panel is programmable and can be used directly from installed keypads. The panel can also be connected permanently, or temporarily, to either of Tecom's two management software packages, Ares and Titan.

During Challenger's evolution, Tecom Systems has maintained and encouraged direct feedback from customers to further adapt the product to real-life, ever-changing applications.

The power to grow even further...

Even your biggest security needs can be handled by Challenger. Whether running from its own LAN, or via a PC network, Challenger meets your needs.

With printers...

The Challenger Panel when connected to a serial printer using the optional TS0094 Printer Interface, supports Epson's Dot Matrix or Hewlett Packard's Laser II. (Several printer baud rates can be selected.) The printer can be programmed to produce 'real time' hard copies of all alarm and access control events as they occur, or print history reports at specific times of the day.

User names, once programmed into the Challenger panel, are printed with events where relevant. The Challenger Panel can produce all reports without a PC or a computer network.

Or with ARES and TITAN management software...

To give you more control over your security needs, and to increase the flexibility of your Challenger Panel; with a TS009 Computer and Printer interface installed you can connect to a computer running Ares or Titan management software.

Both optional management software packages are designed to work with your Challenger panel. Whether your site is big or small, the Titan and Ares management software packages can handle every aspect of your security needs. Titan and Ares off on-screen site maps, alarm monitoring, full system programming and control, user and alarm, history reports, eve logs, access control and Photo-Id.

(Specific brochures cover the Tita and Ares management software solutions.)

Flexibility, security and control

The challenger panel is flexible, secure and gives you the control you need. Whether you're a small one-room office or a multi-site manufacturer, Challenger meets your needs...

Start out small...

For example, let's say you're an exclusive jewellery designer with a small shop. Your immediate security needs are met by installing a 16 input Challenger system with one Remote Arming Station (keypad) adjacent to the front door, a few passive infrared sensors, front and rear door magnetic reed switches, a strobe light and a siren.

Success! Your business grows...

Business is good, in fact, it's so good you buy the store next door and hire a few staff. Naturally you'll want the same level of security at your new premises too. Thanks to the flexibility of the Challenger system you simply add one Data Gathering Panel to manage the additional alarm points in the new shop. Keypads and a Smart Card Reader are also added to the rear door to enable staff control of the alarm and restrict access into the rear of the shop.

...and your Challenger system continues to grow with you

Through hard work and clever marketing, business booms. You buy a vacant block of land at the end of the street and build a new warehouse, office and showroom. But you still require the same level of security.

Once again, the Challenger system expands with you. Your original Challenger Panel is networked, using a leased line, to the new security equipment in the new complex. The new complex contains additional security alarm equipment including detection devices, Remote Arming Stations and sirens. Using Intelligent Four Door Controllers and Smart Cards and Readers, access control features have also been included to restrict, manage and monitor access through and out of the complex. This is due to large amounts of finished goods stored in your new warehouse.

As all three premises are part of a single Challenger system, any part of the complex may be monitored, controlled and checked from any Remote Arming Station at each of the locations.

As your sites become busier with large amounts of both employee and stock traffic, you install the Titan management software package and connect it to the Challenger Panel. The Titan software maintains a full log of all system activities with archiving and reporting facilities. Programming, monitoring and control of the Challenger are standard features of the package but you relish the optional built-in Photo ID package that allows you to create and manage photo identification cards for all your employees, contractors and visitors. All products in the Tecom Challenger range are designed to work hand-in-hand to complement all aspects of your security and access control requirements.

It's that easy.

'Add as you go' makes expansion easy!

As your access and security needs grow, so can your Challenger system, thanks to Tecom's simple-to-use 'add-as-you-go' system. Some of the features available include:

Challenger Panel ■

The standard Tecom Challenger Panel comes with 16 inputs, monitored siren outputs, strobe or bell output, and manages up to 16 individual areas or systems. Each individual area has specific user access.

The features and capability of the Challenger Panel are expandable by adding Data Gathering Panels. Data Gathering Panels may be connected by an encrypted RS485 LAN system, with a network distance of up to 1.5kms.

Remote Arming Stations (RASs) ■

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.

Standard Input/Output Data-Gathering Panel (TS0820) ■

The Standard Data Gathering Panel expands the Challenger's alarm handling abilities, so more inputs and outputs can be connected to the system. Standard Data Gathering Panels have eight inputs. By using expander units (TS0021) the number of inputs can be increased to 32. In addition, up to 16 relay or open collector outputs can be added to the Standard Data Gathering Panel, to drive auxiliary devices such as sounders, lights, pumps, and sprinklers.

Tecom also offers a cost effective four input Data-Gathering Panel to monitor non-powered devices, such as panic/duress buttons or reed switches.

Inovonics Radio Data Gathering Panel (TS0825) ■

The Inovonics Data Gathering Panel is designed for installations where wiring to input devices is impossible, extremely difficult or simply too expensive. The Inovonics Data Gathering Panel manages all Inovonics radio transmitting devices, such as passive infrared detectors, reed switches, smoke detectors, and duress/panic buttons. Each Inovonics Data Gathering Panel manages up to 32 individual, fully supervised, wireless transmitters, and 2048 user duress buttons.

Intelligent Four-Door Controller (TS0867) ■

The Tecom Challenger Intelligent Four-Door Controllers perform all access control facilities in 'real time' using 'distributed intelligence architecture'. The Intelligent Four-Door Controllers make all access control decisions themselves and report events back to the Challenger Panel, via the Challenger LAN.

If the Challenger's LAN to the Intelligent Four-Door Controller fails, all access control operations continue normally without users being aware of the problem. During a system failure, the Intelligent Four-Door controller stores up to 500 events in its buffer, uploading them to the Challenger Panel and any management software when LAN communications are restored. The Intelligent Four-Door Controllers also integrate alarm and access control by enabling users and events to control the intruder alarm areas behind each controlled door. For example, the controller can count people moving in and out of an area, and arm an area's alarms if no traffic is counted after a specified time.

With four built-in reader interfaces and it's own sub-LAN, the Intelligent Four-Door Controller supports all industry standard reader devices, including magnetic stripe, proximity, Biometrics and PIN. In fact, 20 reader devices may simultaneously control the four doors. Multiple reader and PIN formats can also be used simultaneously.

Hardware features of the Tecom Intelligent Four-Door Controller include:

- Power Supply and provision for dual standby rechargeable batteries
- Four lock strike relays
- Sixteen inputs for door contacts, egress buttons, 'door open too long' and alarm inputs. All inputs are monitored against tampering by using selectable four-state monitoring
- Four reader ports, selectable for interfacing to Wiegand or magnetic stripe format readers
- An access controller LAN capable of driving 16 LAN devices for increased door control options.

Operating features of the Tecom Intelligent Four-Door Controllers include:

- Standard 11,466 users, expandable to 17,000 & 65,535 users
- Anti-passback facilities with selectable enforcement modes
- Region counting to track the number of users in any area, including car parks
- Integration of alarm control by region counting and monitoring of movement within areas
- Integration of alarm control using multiple, programmable badging techniques
- Door 'forced' and 'open too long' alarm monitoring and generation. Door 'open too long' alarms may also be preceded by a 'warning' timer, giving a local alert before an 'open too long' alarm starts
- Macro-logic facilities perform automatic operations if a specific event occurs e.g., a valid card badge automatically turns the relevant alarm area off, lights and air conditioning on, but only in a specific time frame
- Restriction and management of user access including time zone, privileged, dual custody, lost, void, expired and automatic locking and unlocking of doors at specified times with another feature, stopping the door unlocking automatically until a valid user is already in the area
- Interlocking of airlock doors in secure areas.

Intelligent Four-Lift Controller (TS0869) ■

The Intelligent Four-Lift Controller gives full access control facilities for four lifts/elevators over 64 floors. Using the same design as the Intelligent Four-Door Controller, the Intelligent Four-Lift controller has all features of the Intelligent Four-Door Controller.

Other lift facilities include security and fire override capabilities and monitoring of call button activation. An optional Tecom integration unit enables high-level interfacing with the protocols of several lift companies.

LAN Devices (TS0893, TS0894, TS0895, TS0896) ■

Four different LAN devices offer a range of communication alternatives and solutions for the Challenger LAN. These include electrical isolation of LAN devices from each other, cable looping to and from a central point for line integrity, and communication from the Challenger LAN cabling to Optical Fibre and back again.

Mobile Data Interface (TS2053) ■

This interface enables a Challenger system to communicate via the Telstra Digital Mobile Data Network™. All alarm and status information is transmitted from anywhere within the Australian Coverage Area to a TS2000 Tecom Receiver located at a remote monitoring station. Mobile Data communications are also duplex, allowing the remote Monitoring Station to control some of the Challenger's operations.

Intelligent User Modules (TS0883 & TS0884) ■

The Intelligent User Modules (IUMs), 'TS0883–17,000 users' and 'TS0884–65,535 users', increase the Tecom Challenger system's flexibility with user access cards by providing unlimited re-issue levels and the ability to learn multiple and non-standard card formats. IUMs also enable the Challenger system to use multiple card formats and protocols simultaneously. Each user in the database can hold and use both card and PIN information.

Challenger – expandable, flexible...

Starting from the basic Challenger panel (top left corner), this diagram demonstrates the Challenger's major advantage over its rivals — the system easily grows to meet your needs.

TS0816 Challenger panel with optional TS0091 computer & printer interface

RS232

RS232

Printer

Titan or ARES Management Software

TS0867 Intelligent 4 Door Controller (Fully redundant)

Four onboard Wiegand/ Mag Stripe Interfaces

16 x Inputs
4 x Lock Outputs

Access Controller LAN

Max 16 keypad/reader devices on 'Access Controller LAN' also provides 'In' & 'Out' Reader & PIN functions for each door.

TS0869 Intelligent Four Lift Controller (Four lifts- 64 floors each. Fully redundant.)

Four onboard Wiegand/ Mag Stripe Interfaces

Optional high level interface
16 x Inputs
4 x Lift Outputs, expandable to 255 outputs

Access Controller LAN

TS0820 Data Gathering Panel
Eight inputs, expandable, in groups of eight using TS0021 expanders, to 32 inputs. Siren output and up to 16 programmable outputs.

TS0825 Inovonics Radio Data Gathering Panel
Selectable 16 or 32 fully supervised Inovonics wireless alarm inputs & up to 2048 user duress transmitters.

TS0827 Four Input Data Gathering Panel

Maximum 15 Data Gathering Panels, 12 of which may be Intelligent Door or Lift Controllers

Maximum 16 Keypad or Reader Devices connected to Challenger LAN

TS0862 Single Smart Door Controller
interfacing to Wiegand format Reader

TS0862 Single Smart Door Controller and
TS0861C Chrome Magnetic Stripe Card Reader

TS0007/8 Magnetic Stripe Arming Station/Reader

TS0801-8 Area RAS, TS0804-16 Area RAS, TS0003-4 LED RAS & TS0006-H/Duty 4 LED RAS

TS0870 Smart Card Reader

Challenger has the strength and dependability you need...

The Challenger makes it easy to automate access, security and environmental management for all types of buildings and offices.

The Challenger system can control:
- Alarm points
- Access control doors and lifts
- Lighting
- Heating and air conditioning
- Video switching
- Bank vaults
- Plant equipment.

- Intelligent Access Controllers can be connected to the Challenger Panel to enhance the system's access control features, on both door and floor access. These provide full redundancy i.e., stand-alone mode and special functions for high security requirements.

- When expanded, the Challenger recognises up to 65,535 users. Each user is allocated up to three levels of access; area control ('alarm group'), door access ('door group') and floor access ('floor group'). Each level of access can be restricted to time periods ('time zones'). User alarm groups can be allocated up to three time zones.

- The Challenger can modify existing access restrictions for holidays, and take into account other automatically programmed functions.

- Challenger is compatible with daylight saving.

- Dates for routine maintenance can be pre-programmed. In addition, any LCD arming station in a system can display customised text.

- Complicated sequences of events can be programmed using extensive macro-logic programming features. Here's a simple example: turn on lights and air conditioning, disarm area, restrict access to one group of users — all within a specified time. Macro-logic can also be used to program HVAC, lighting and other features.

- Arming and disarming can be automated for particular times and days, or when specified events occur in a system. With auto-arm and disarm, staff no longer need to monitor security system integrity.

- Areas can be linked together to create common areas. Physical areas can be armed and disarmed in unison, without separate alarm and access control procedures.

- For high security areas where still-cameras are used, the Challenger can count the number of stills taken. The Challenger can also detect if still-cameras are low on film or out of film, and report this to a remote monitoring station.

- Laptop PCs can be connected (via a port on the Challenger Panel) to allow downloads and uploads of Challenger system information. The Challenger Panel can also be programmed online.

- The Challenger Panel includes onboard modem, external monitored siren, internal siren and strobe connections as standard features.

- Using the TS2053 Mobile Data Interface, the Challenger Panel can communicate with (through Telstra's Mobile Data Network™) a remote monitoring station.

- The Challenger can communicate with Remote Arming Stations and Data Gathering Panels over leased lines or Fibre Optics using Tecom LAN devices.

- Multiple base station reporting formats are supported including: Contact ID, Extended High Speed, TCP/IP, Tecom Dialler and Tecom Direct Line, with capabilities for Securitel and Mobile Data.

Challenger Panel specifications

The Challenger Panel operating capabilities are:

Standard:

- 16 to 256 expandable inputs, all with selectable 2 or 4-state monitoring
- 255 relays
- 16 areas
- 16 arming stations
- 15 Data Gathering Panels, 12 of which can be Intelligent Door or Lift Controllers)
- 64 doors (48 Intelligent, 16 Standard)
- 64 floors
- On-board digital dialler
- On-board direct line facility
- Serial connection to Mobile Data alarm transmission unit
- Serial Securitel interface connection
- Serial printer connection (optional)
- Serial computer connection (optional).

Standard Memory Capacity:

- 50 users with 16 characters for user name and up to 10 digits PIN code
- 128 fully programmable alarm groups
- 10 fully programmable door groups
- 10 fully programmable floor groups
- 200 event buffer storing 100 access control events and 100 alarm system events.

1 Meg Expanded Memory Capacity (TS0882):

11,466 users with:

- 200 users with 16 characters for user name.
- 1000 with 10 digits PIN code
- 11,466 cardholders
- 128 fully programmable alarm groups
- 128 fully programmable door groups
- 64 fully programmable floor groups
- 2000 event buffer storing 1000 access control events and 1000 alarm system events.

Intelligent User Module – TS0883 -

17,000 users

Intelligent User Module – TS0884 -

65, 535 users

Both support unlimited card re-issues per user, simultaneous use of multiple card formats and learning of any industry standard format, including proprietary (maximum 48 bits). All users may have both a PIN and a card assigned to them. All users may be assigned both a PIN and a card.

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