

TS1084 Memory Expansion Module Installation Sheet

Description

The TS1084 Memory Expansion Module increases user capacity in a Challenger10/ChallengerPlus control panel to 65,535 (including user 50 Tecom Master).

The module stores user data on a removable microSD card, and loads this data to the module's RAM each time the panel is powered up.

Notes

- The Challenger panel must have firmware version V10-03.3951 (or later).
- The microSD card must remain fitted to the module for it to function correctly.
- A fully-populated module takes approximately 30 seconds to load all users to the module's RAM after the panel is powered up or restarted. During this time some users may not be operational.

Figure 1: TS1084 Memory Expansion Module details

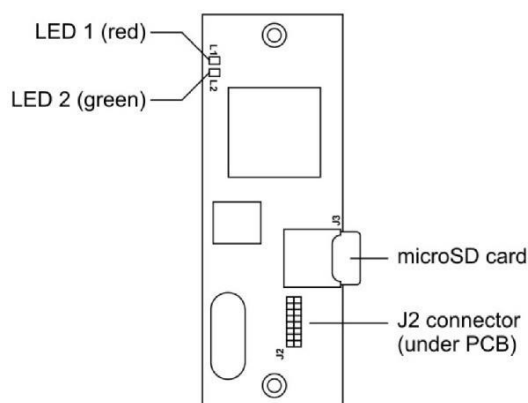


Table 1: Challenger10 system capacity with TS1084

User records (cards)	65,535 (increased from 2,000)
Users with PIN code (10 digits)	all users
User names (max. 16 characters)	None
Card data formats	Up to 48-bit
Programmable alarm groups	245
Door groups	255
Floor groups	128
Hard time zones	46
Alarm events buffer	5,000
Access events buffer	5,000

Installation

The module is plugged in to a Challenger10/ChallengerPlus control panel PCB at the "Expander 3" slot. Power to the panel must be off during installation.

Note: A qualified service person, complying with all applicable codes, should perform all required hardware installation.

Getting ready

Any changes to users after installing the module are stored **only** on the microSD card and not in the Challenger panel's user database. If the module or the microSD card are removed, or fail, then the Challenger panel will revert to its original (and possibly obsolete) user database.

We recommend the following preventive measures to ensure that obsolete user data does not remain on the Challenger panel.

To prepare for memory expansion (prior to installing):

1. Connect the Challenger panel to management software, and then upload all users.
2. Use an LCD RAS to access Install menu option 14-Defaults.
3. Press [111] [ENTER] to delete all users (user 50 Tecom Master will not be deleted).

After installing the module download the users from management software.

Installing the module

To install the memory expansion module:

1. Disconnect the plug pack and battery from the control panel.
2. Carefully remove the module from its packaging, taking care that none of the pins are bent.
3. Gently push the microSD into its socket to ensure that it's fully inserted.
4. Position the module over the "Expander 3" slot, with the microSD card facing the Challenger panel's USB port (J18).
5. Gently press the module into the socket below J2 until the module sits firmly on the standoffs and the mounting holes are aligned with the PCB studs.
6. Secure the module in place via the two screws provided.
7. Reconnect power to the control panel.

8. Use an LCD RAS to access Install menu option 11 Version, and then select option 1 Chall. Press ENTER to display the module's firmware version. The module's firmware version is shown after the Challenger panel's firmware version. Memory type displays LIUM instead of MIUM.

LED indications

The module performs a self test upon power up, during which LED 1 flashes red. Upon completion of self test, LED 2 flashes green to indicate normal operation. For module firmware version V01.20.03645 (or later) the LEDs provide the following additional indications:

- During normal operation, LED 2 (green) flashes slowly.
- When the panel is writing to the module, LED 2 (green) flashes quickly.
- When powering down both LED 1 (red) and LED 2 (green) flash quickly.
- When a fault is detected, LED 1 (red) illuminates.

Firmware upgrade process

The module's firmware can be upgraded via CTPlus (refer to the CTPlus help files for instructions).

Replacing a module


In the event that a Challenger panel's TS1084 Memory Expansion Module is faulty or damaged and must be replaced, you can avoid waiting for a user download to the replacement module by reusing the populated microSD card from the old module.

Note: Do not reuse a populated microSD card from one Challenger panel in a different Challenger panel or use a populated microSD card to back up a Challenger panel's users over time. Users' access groups are not stored on the microSD card so unintended results may occur.

To reuse a microSD card in a new module:

1. Disconnect the plug pack and battery from the control panel and wait a moment until the LEDs on the TS1084 Memory Expansion Module are no longer active.
2. Carefully remove the new module from its packaging, taking care that none of the pins are bent.
3. Pull the microSD from its socket and set aside (to avoid confusing it with the populated microSD card).
4. Remove the old module from the Challenger panel's "Expander 3" slot, and then pull the populated microSD from its socket.
5. Gently push the populated microSD into the socket on the new module to ensure that it's fully inserted.
6. Position the new module over the "Expander 3" slot, with the microSD card facing the Challenger panel's USB port (J18).
7. Gently press the module into the socket below J2 until the module sits firmly on the standoffs and the mounting holes are aligned with the PCB studs.
8. Secure the module in place via the two screws provided.
9. Reapply power to the control panel.

Regulatory information

Manufacturer	KGS Fire and Security Australia Pty Ltd Suite 4.01, 2 Ferntree Place, Notting Hill, VIC, 3168, Australia
Year of manufacture	If the product serial number (located on the product identification label) has nine digits then the year of manufacture will be the first two digits of said serial number. If the product serial number has twelve digits, then the fourth and fifth digits indicate the year of manufacture.
Product warnings and disclaimers	THESE PRODUCTS ARE INTENDED FOR SALE TO AND INSTALLATION BY QUALIFIED PROFESSIONALS. KGS FIRE AND SECURITY AUSTRALIA PTY. LTD. CANNOT PROVIDE ANY ASSURANCE THAT ANY PERSON OR ENTITY BUYING ITS PRODUCTS, INCLUDING ANY "AUTHORIZED DEALER" OR "AUTHORIZED RESELLER", IS PROPERLY TRAINED OR EXPERIENCED TO CORRECTLY INSTALL FIRE AND SECURITY RELATED PRODUCTS. For more information on warranty disclaimers and product safety information, please check https://aritech.com.au/aritech-product-warranty/ or scan the QR code.
Compliance	



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Contact information

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