



WARNING! DO NOT connect or disconnect the panel's internal wiring/looms, or terminate field wiring at the PCBs, with the panel's power applied (either mains or battery).
Failure to observe this will destroy the panel's electronic components and the warranty will be void.
ENSURE YOU HAVE ATTENDED C-TEC'S AUTHORISED TRAINING COURSE BEFORE ATTEMPTING TO INSTALL AND PROGRAM THE PANEL.

INSTALLATION PROCEDURE	CABLES	THIS GUIDE IS FOR EXPERIENCED INSTALLERS OF ANALOGUE FIRE SYSTEMS <u>ONLY</u> AND SUMMARISES KEY INFORMATION PROVIDED IN THE MAIN INSTALLATION AND PROGRAMMING MANUAL (DOCUMENT NO. DFU5030000). IF YOU ARE IN ANY DOUBT WHATSOEVER, READ THE FULL MANUAL. This product is a piece of Class 1 equipment and MUST BE EARTHED. Anti-static handling guidelines: Make sure that handling precautions for electro-static devices (ESD) are taken immediately before handling PCBs and other ESD components. Section numbers, e.g. 4 , reference sections in the full manual with additional information.	DETAIL 1 EXTERNAL MAINS CONNECTION 5.16 Isolate mains power to the panel until it is ready to be tested (one method is to open and lock off the main circuit breaker to the panel). The panel is supplied with 230V, 50Hz mains. Remove the protective cover of the PSU and terminate incoming mains to L (Live), N (Neutral) and $\oplus$ (Earth) terminals at CONN1 on the Power Supply PCB, shown right. After terminating, <u>refit and secure</u> the protective cover. CONN1 Connections made at Power Supply PCB
		RECOMMENDED CABLE TYPES 4 All cables must be installed in accordance with the relevant national, regional or local regulations. Mains wiring is fixed wiring, using fire resistant, 3-core cable (no less than 1mm² and no more than 2.5mm²), or a suitable three conductor system fed from an isolating switched fused spur, fused at 3A or a 6A Type B circuit breaker to IEC/EN 60898-1. Mains wiring should be segregated from extra low voltage field wiring. Extra low voltage field wiring includes loop circuits, conventional sounder circuits and auxiliary inputs/outputs. Fire resistant, screened cable may be used such as FP 200™, Firetuff™, Firecel™ and MICC. All screens must be terminated to the earth bar provided in the panel's back box.	DETAIL 2 INTERNAL BATTERIES CONNECTION 5.17 CAUTION: There is a risk of explosion if an incorrect battery type is used. Always dispose of used batteries in accordance with the battery manufacturers' instructions. Isolate battery power to the panel until it is ready to be tested (one method is to disconnect the green battery link wire). Fit <u>two</u> new, good quality and fully charged 12V VRLA batteries. Use the connection wires (supplied) to connect the batteries to CONN7 on the Power Supply PCB, shown right. BATTERY CONN7 Red+ Black- Red wire + Black wire - Battery Set Green link wire
		RECOMMENDED SHORTFORM INSTALLATION & COMMISSIONING PROCEDURE 8.2 Note: DO NOT connect mains or battery power to the panel until the installation is complete, i.e. panel PCBs are fitted and field wiring has been tested and connected to the panel. Remove the panel's lid and chassis. Fit the panel's back box to a wall. Connect field cables to the panel via glands and terminate all screens to the earth bar in the back box. Test field cables and ensure they are fault-free, i.e. check continuity of cable runs (including screens). Check the continuity on the negative (-ve) line of the device loop to ensure it is fault free. Remove the small cable cover on the PSU and connect external mains cable to the panel (with mains isolated) – SEE DETAIL 1, opposite. Refit the cover. Connect the panel's internal batteries (with battery supply isolated) – SEE DETAIL 2, opposite. Refit the panel's chassis and lid. Connect analogue loop(s) wiring to the panel – SEE DETAIL 3, opposite. Connect conventional sounder circuit(s) to the panel – SEE DETAIL 4, opposite. Connect additional field wiring to the panel – SEE DETAIL 5, opposite. Apply mains and battery supply to power up the panel. Investigate and rectify any messages reported as faults on the panel's touchscreen. Commission the panel by entering AL3 and performing an auto address (see overleaf) or loop learn. Program the panel using the CAST ZFP Programming Tools (Part No. ZTOOLS).	DETAIL 3 TYPICAL ANALOGUE LOOPS CONNECTION 5.10 Two analogue loop connectors (Loop1 & Loop2) are provided on the Main 2-Loop PCB, shown right. Note: A 1-Loop PCB is also available. N.B. Some protocols and systems have different methods of loop isolation. The example shown right has loop isolators in every +ve leg of each device. See full manual for details. Terminate all screens to the earth bar in the panel's back box. Loop1 Loop2 A+ A- B+ B- A+ A- B+ B- Connections made at Main 2-Loop PCB LOOP1 A+ (OUT) LOOP1 A- (OUT) LOOP1 B+ (RETURN) LOOP1 B- (RETURN) in out in out in out out in out in out in Loop 1 Wiring (Loop 2 <u>not</u> shown)
		DETAIL 4 CONVENTIONAL SOUNDER CIRCUITS CONNECTION 5.11 Two conventional sounder circuit connectors (SNDR1 & SNDR2) are provided on the Main 2-Loop PCB, shown right. Terminate all screens to the earth bar in the panel's back box. ALWAYS make sure the two 6k8 EOL resistors (supplied) are fitted at the last sounder on each circuit. If a sounder circuit is unused, you must still connect the resistor at the panel terminals. SNDR1 SNDR2 0 + 0 + Connections made at Main 2-Loop PCB SNDR1 (+) SNDR1 (0) SNDR2 (+) SNDR2 (0) 6K8 EOL 6K8 EOL	
		DETAIL 5 ADDITIONAL FIELD WIRING Auxiliary inputs 5.12 AUX 24V output 5.13 Relay outputs 5.14 A-Bus (RS485) 6	

Disclaimer: Errors and omissions excepted. No responsibility can be accepted by the manufacturer or distributors of this range of fire panels for any misinterpretation of an instruction or guidance note or for the compliance of the system as a whole. The manufacturer's policy is one of continuous improvement and we reserve the right to make changes to product specifications at our discretion and without prior notice.

The quick start programming steps detailed below provide a basic configuration of the system when the panel is first powered up. It is assumed that all loops are correctly wired to the panel with no wiring/crossover faults.

 **Hint:** CAST ZFP Programming Tools (Part No. ZTOOLS) are available that allow quick and easy input of data, cause and effect programming, naming of devices, zones and groups, etc. Contact your supplier for details.

The following touchscreen buttons are available in the steps listed below:

 - displays user menus  - returns to previous menu  - scroll up  - scroll down

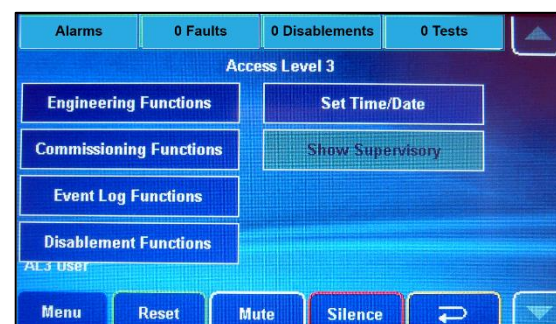
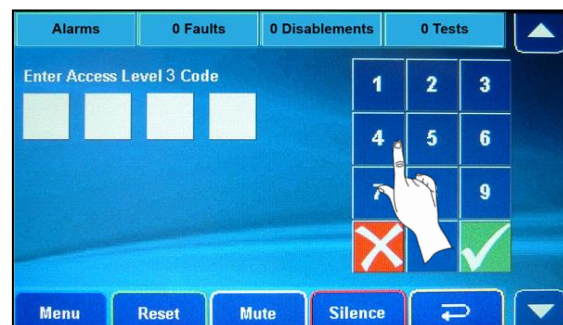
 - confirms changes/settings  - cancels changes/settings

Section numbers, e.g. 9.3, reference sections in the full manual with additional information.

STEP 1 ENTER ACCESS LEVEL 3 (AL3) 8.4

First, press  button on the panel's touchscreen to display the access level 1 menu options. Then, press  button and the AL3 login window appears (shown below left).

Using the touchscreen's numeric keypad, enter the four-digit AL3 code (default code is: 4444). When the code has been entered correctly, the AL3 menu options appear (shown below right).



STEP 2 SET PANEL'S TIME AND DATE 8.9

Enter AL3 (4444) press  button and a window similar to the one shown right appears.

Set the time and date using the touchscreen's numeric keypad and   buttons. Also, set/unset the daylight saving time (DST).

When correct, press the  button to return to the AL3 menus.

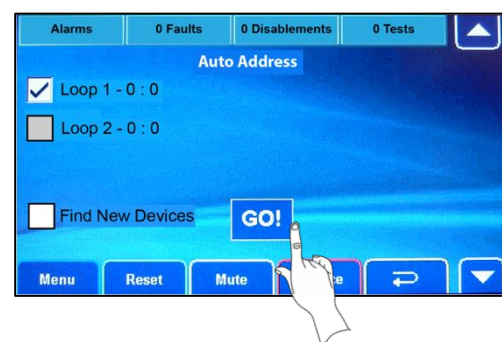


STEP 3 AUTO ADDRESS 8.6.2

During an auto address the panel automatically assigns an address to each loop device in sequentially wired order. An alternative function to auto address is loop learn which is used with pre-addressed devices.

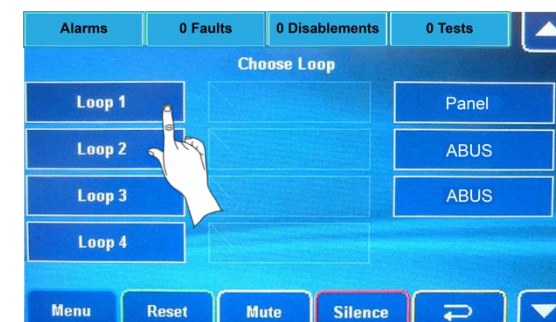
Enter AL3 (4444) > **Commissioning Functions** press  button. **Note:** When one loop is selected the remaining loops are 'greyed out' and not selectable, i.e. you can only auto address one loop at a time, Press  button and follow the instructions displayed at the panel. When 'auto address' process is complete Device Manager is displayed. Repeat the auto address function for the remaining loops, e.g. loop 2, 3 & 4.

AFTER A SUCCESSFUL AUTO ADDRESS YOU WILL HAVE A "ONE OUT, ALL OUT" FIRE ALARM SYSTEM!

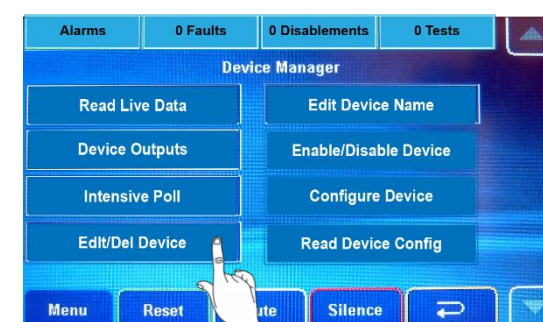


EDITING DEVICE DETAILS USING DEVICE MANAGER (WITHOUT USING ZTOOLS) 8.5.1

Enter AL3 (4444) > **Engineering Functions** press  button. A window similar to the one shown below left appears. Select a loop (loop 1 is shown selected) and a window similar to the one shown below right appears.

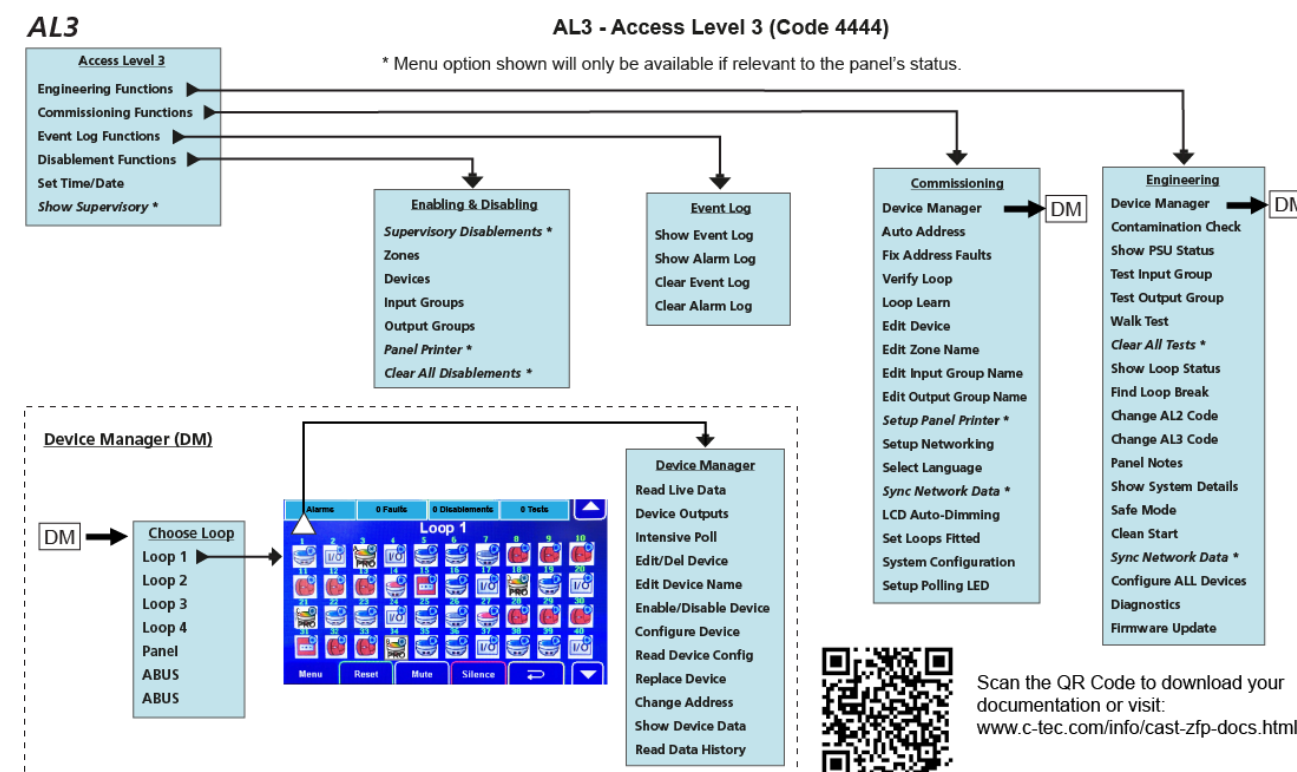


Select a loop device (device 1 is shown selected above) and a window similar to the one shown below left appears.



Press  button and a window similar to the one shown above right appears. This display allows the selected device's parameters to be edited including device type, zone, input / output group and device name.

ACCESS LEVEL 3 (AL3) MENUS



Scan the QR Code to download your documentation or visit:
www.c-tec.com/info/cast-zfp-docs.html