



Castle Care-Tech **18**

Technical Bulletin

March 2004

Contents

- ① Product News
- ② FAQs
- ④ EN50131 Corner

Welcome to our March bulletin.

If you are new to our products we hope that this bulletin will give you a little insight into the workings of our panels, their flexibility, and capabilities. If you are familiar with our Euro-MERiDIAN range then we hope you will find a few hints and tips to help your installations.

To help you keep up-to-date with Castle developments, we produce a monthly newsletter. If you would like to receive a personal copy of this newsletter regularly, please send an e-mail to j.harrington@castle-caretech.com.

New Product News

A revolutionary new way to perform servicing on security systems - automatically!

This new ARM® (Automatic Remote Maintenance) software provides a fully automated solution to remote maintenance. All you need is a PC running InSite 2004 ARM software on your computer and Euro-MERiDIAN control panels fitted with the latest version 4ARM00 software.

Everyday vital control panel information (such as system voltage and current, battery condition, zones on test etc) is stored in the new maintenance log. At preprogrammed intervals, the panel will call the ARM PC and upload the maintenance log to complete its servicing requirements.

Just look at the benefits...

Benefits to the Installer



- Labour time reduced offering a major cost saving
- Faster and more effective service scheduling that guarantees maintenance performance
- A full electrical and operational service can be done quickly and effectively without the need for an engineer on site or an operator at the PC.

Benefits to the Client

- Renews confidence in the security system
- Provides reassurance that the system has been painstakingly checked, and can be relied upon to work in anger
- A full printed report confirms this position
- Preventative maintenance
- Reduces call-outs

Please visit www.arm2004.com/installer for an online demonstration of how ARM works

FAQs from Technical Support

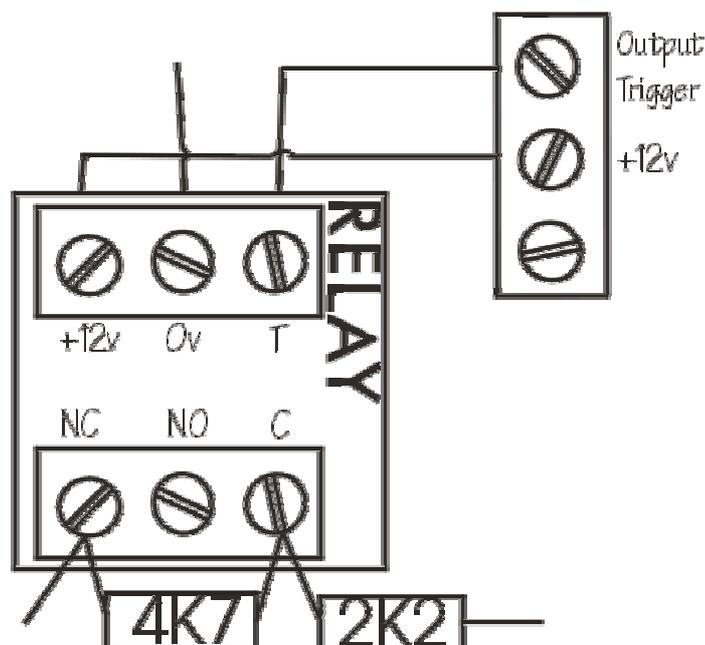
If you have any questions for our technical support team, please ring **01344 886767**.

"How do I wire a relay as a zone?"

One application of this problem is if you want to have one alarm panel trigger an alarm on another panel. Basically what you want to happen is for the first control panel to fire an output which triggers a relay to switch, and for the second control panel to see the relay as a zone so that that too will also go into alarm.

The first step is to wire the output into the relay. Our own U-relays have the capability of being triggered by both a positive or negative voltage, the choice being made via a jumper on the PCB. The outputs on our panels will fire a negative voltage, for example from terminal C3 on our Endstations, N2-5 on a ZEM or odd numbered terminals on an output module. The adjacent +12v on the output will need to wire into the +12V input on the relay, and the 0v can come from another source, such as D1.

The second step is to wire the output from the relay as a zone on the second panel. If wiring in EoL mode, follow the diagram below for placement of the resistors. If using iD wiring, connect the biscuit blue wire to NC, white to C, and the yellow wire should be taken straight back to the iD run going out from the panel.



In terms of programming the system, if you want to have your first alarm panel raise an alarm on the second panel, you need to have the relay programmed as the correct zone type. If you want to raise the alarm at all times you could use a 'tamper' zone. If an 'intruder' zone is used, it will only trigger an alarm on the second panel if the relevant area is set.

Another possibility is to use a 'switcher zone' triggering a communicator output without the system going into alarm.

"How can I signal a fire alarm to Central Station without raising a local alarm?"

Rather than programme up the zone as 'Fire', select it as zone type 12 'Switcher'. This will prevent it from raising a local alarm if activated. In order to signal to the central station, you will need to programme up the relevant output as a follow zone, so if the switcher is zone 12, the output will need to be type 1012, so that it will follow zone 12.

If you are using a 134 or 256, you will have another zone type available for you to use, type 0035 'Follow Zone'. This is a special follow zone that has extra parameters that can be programmed. These include whether you want to time the length of the output or have it latched, and you can also specify if the output follows the zone when the system is set, unset or both.



"How do I omit a zone?"

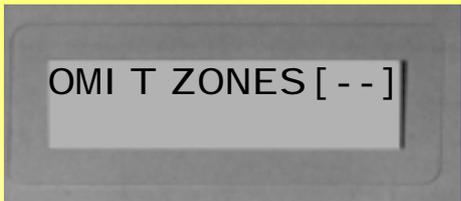
There's three ways that the user can do this, (1) omit a zone from the manager menu in day mode, (2) omitting a zone on the system that is already open [will work for that one time only] and (3) omitting a zone during the setting procedure [again, will work when setting for that one time only]. In order for any zone to be omitted it must first have the "Omittable" attribute turned to 'yes' in the "Change Zones" option in the Engineering Menu.

(1) Certain types of zone are live in day-mode, such as 'tamper' or 'day alarm' types. Should the user wish to omit a zone of those types whilst the system is unset he can enter the "Manager Menu" and scroll through to the option "OMIT ZONES?". He will then be able to enter the zone number of the zone to be omitted and press 'YES', entering as many as he wishes. When he comes out of the manager menu those zones will be omitted until either he goes back in and re-admits them or until he sets the system.

(2) If a zone is already open (such as a window) when the setting procedure has commenced the following message will appear on the keypad "Leave Open? Zone Name". If the user presses 'yes' the zone will be omitted, if 'no' the setting procedure will stop and he will then have to close the zone. For this method to work, the Engineer will have to set the "SITE OPTION" 'Leave Open Menu' as 'Yes'. The zone will be omitted for that one set only.

(3) The end user can also omit a zone during the exit procedure by hitting the 'Yes' key after keying in his code to start exit time. The omit zone menu will then appear and the user can key in the zone number of the zone to be omitted. Again, this will work for this one setting procedure only.

Remember, any zone to be omitted must have the 'Omit' attribute set to 'yes' in the Engineering Menu.



OMIT ZONES [- -]

Enter the zone number you wish to omit.

Press 'YES'



OMIT ZONES [06]
FIRE DOORS

To reinstate zones, simply key in the number again.

Press 'YES'.



EN50131 Corner

EN50131 Compliency Statement

Existing British Standards for intruder alarm systems, including BS.4737, will be officially withdrawn by, at the behest of CENELEC, on 1st March 2004. These are to be replaced by new harmonised European Standards in the EN50131 family. We are frequently being asked when the Euro-MERiDIAN range will be fully compliant with "EN50131." Unfortunately, ***along with all other manufacturers***, we cannot yet answer that question.

Why?

There are three basic points to bear in mind:

1. The requirements for installations within the UK will NOT be those currently included in EN50131-1:1997. The implementation in the UK will be based on a revised version of this standard, which will be published as part of the overall requirements of PD6662:2004.
2. Any claim of compliance with EN50131 is therefore irrelevant in the UK. It is compliance with PD6662:2004 that will matter.
3. PD6662:2004 – along with other necessary support documentation – is not yet available for manufacturers to use to design and develop products / upgrades in order to comply.

At Castle Care-Tech, we are fully committed to the development and use of these standards, and are actively involved in the work of the various committees working to resolve these issues. Whilst we cannot yet provide definitive information as to technical issues relating to the standards, we will in due course be making detailed training available for our customers. In the meantime, we can provide the following additional information as to progress:

An agreement has been reached between all parties in the industry – ABI, ACPO, ACPO(S), BSIA, NSI and SSAIB for a formal "dual-running" period to enable manufacturers to produce appropriate equipment and installers to complete necessary training, etc. This implementation period was agreed to be a period of 12 months, commencing 1st March 2004 ***or whenever all appropriate documentation is published***. The full text of this joint industry statement is attached.

This necessary documentation includes PD6662:2004, the amended ACPO PA policy and DD243:2004. As this last-named document is not currently expected to be available before September 2004, the implementation period is expected to be delayed accordingly.

NOTE re: Euro-MERiDIAN.

This panel range was designed to provide the facilities required for use in a system designed to comply with EN50131-1:1997, and has been certified as compliant. However, this is now irrelevant in the UK, as explained above.



Battery Standby requirements:

The parts of EN.50131 available so far contain conflicting requirements that require clarification. However, assuming the use of a conventional mains-PSU with rechargeable backup batteries, the new requirements (for the UK) are expected to be:

<i>Grade 1</i>	<i>Grade 2</i>	<i>Grade 3</i>	<i>Grade 4</i>
12 hours	12 hours	24 hours	24 hours

- of which, 30 minutes must be at full alarm load. This is clearly going to require rather more battery capacity than we are used to.

One possible redeeming feature is that the backup times can be halved by the action of including a remote "mains fail" signal to permit an engineer to attend site before the battery becomes flat, reducing the requirements to 6 and 12 hours.

If we assume that the alarm load is 800mA above quiescent, calculations give us the following guidance figures for the absolute maximum quiescent current that can be supported:

<i>Battery type:</i>	<i>7 Ahr</i>	<i>17 Ahr</i>
6 hour	900 mA	2.1 A
12 hour	500 mA	1.2 A
24 hour	275 mA	675 mA

These figures do NOT allow for the progressive reduction in efficiency of a battery that is more than three years old (or the phenomenon reported by some that the battery will not reach peak performance for 12 months).

One final factor to take into account is that there is a set of "recharge periods" also specified:

<i>Grade 1</i>	<i>Grade2</i>	<i>Grade 3</i>	<i>Grade 4</i>
72 hours	72 hours	24 hours	24 hours

These will require the power supply to be rated to supply the following MINIMUM levels of current over and above the normal quiescent load for battery charging:

<i>Battery type:</i>	<i>7 Ahr</i>	<i>17 Ahr</i>
24 hour	300 mA	700mA
72 hour	100 mA	250 mA

In summary, battery size - both electrically and physically - will tend to be larger than we have been using, with the inevitable knock-on effect on the size of equipment housings. It is also likely that the choice of power supplies will swing upwards a little.

On the positive side, properly applied, this should give improved system reliability.



RS232 to USB Converters

Some laptop computers are now built without any serial ports, which could be a bit of a problem if you were wanting to up and download to a panel on site via an RS-232 connection. Getting around this is quite simple however, USB to RS-232 converters are readily available from most computer stores.

After plugging it into your computer's USB port, a serial "COM" port will be created. To find out which COM port it is plugged into (which you'll need to configure Euro InSite 2004) you can open the system folder in your computer's 'Control Panel'. After clicking on the 'hardware' tab and the 'device manager' button, the COM port will be listed.

When buying a USB to RS-232 converter, make sure that it has a male serial connector, else the RS-232 loom will not be able to be plugged in to it.



Castle Care-Tech Ltd

6 Bracknell Beeches, Old Bracknell Lane West, Bracknell, RG12 7BW
t Sales & General: 01344 469479 Technical Support: 0870 1211632
f 01344 469489 e sales@castle-caretech.com