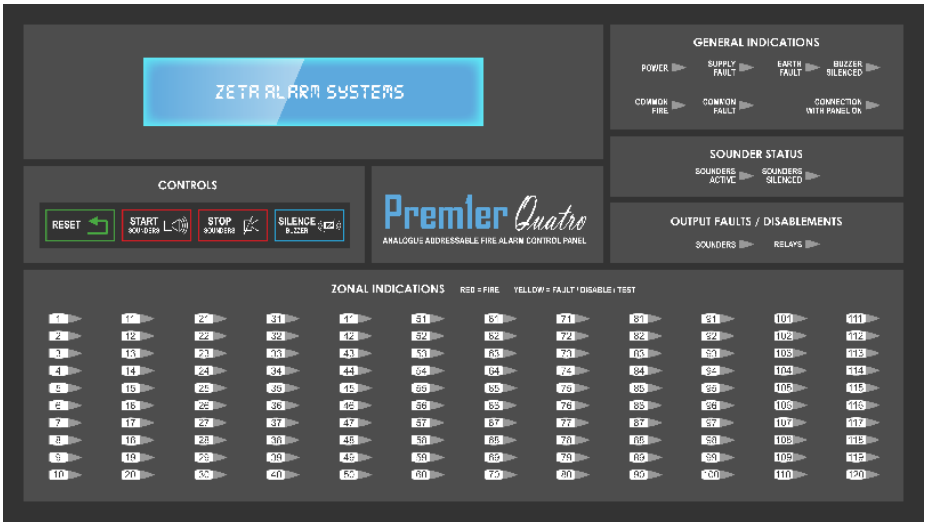
Premier Quatro

ZETA TOUCHSCREEN REPEATER INTERFACE

(ZT-TSRI)



Installation Manual

Zeta® ALARM SYSTEMS

Index

1 – Introduction

1.1 – System Planning and Design....3
1.2 – Personnel....3
2 – Setup....3
2.1 Connecting the Power....3
2.2 Connections to the Quatro Panel....3
2.3 Connection to a Screen/Monitor....4
2.4 Connections to a Web Server....5
2.5 Connections Checks & Start-up....5
3 – General....5
3.1 Function....5
3.2 User Interface....6
4 – ZT-TSRI Configuration....6
4.1 Configuring the Repeater from the Display....6
4.2 Configuring the Repeater from the Web Server....6
4.3 Repeater Network Configuration....7
4.3.1 Configuration of the Ethernet....7
4.3.2 Master-Slave Configuration....8
4.4 Repeater Configuration....8
4.4.1 General Settings....8
4.4.2 Serial/IP Ports....8
4.4.3 Sound....8
4.4.4 Miscellaneous....9
4.5 User Levels....9
4.6 Configuration of Zone maps, Drawings and Images....9
4.6.1 Registering an Area....10
4.6.2 Drawing area/zone boundaries on a map/drawing or image....10
4.6.3 To Remove a Zone....10
4.6.4 To Remove a Map/Image....11
4.7 Uploading of Zone Maps, Drawings and Images....11
4.8 Backups and Updates....11
4.9 Devices....12
4.9.1 Parameters to be configured per device....12
4.9.2 Add/Delete/Modify a Device....13

1. Introduction

1.1 System Planning and Design

It is understood that the system, of which this device is part, has been designed by an expert in fire alarm systems, and is in accordance with the requirements of British Standard BS 5839-1:2013 and other applicable standards. The design should clearly show the locations of the control panel and field devices.

1.2 Personnel

Installation of this product should only be carried out by qualified personnel. Read the setup and startup procedures in this manual carefully. The manufacturer recommends checking the cabling before making any connection to the equipment. Do not perform any configuration without fully understanding how it functions.

2. Setup

2.1 Connecting the Power

The ZT-TSRI is powered by 5v, and is provided with a 5v micro (mini) USB power supply. The power supply is to be plugged into the micro USB port, positioned to the left of the HDMI port.

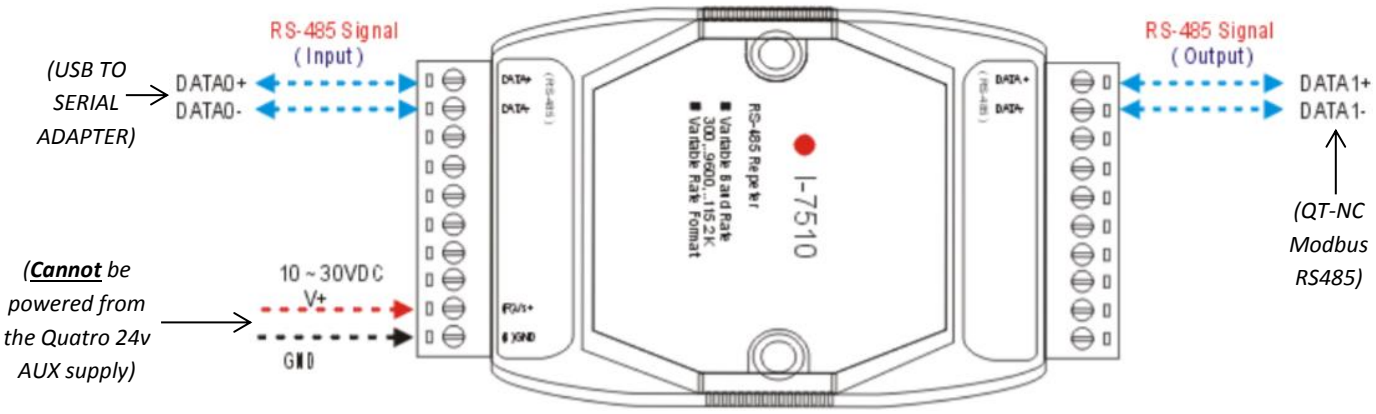
2.2 Connections to the Quatro Panel

The ZT-TSRI will connect to the QT-NC Modbus via the provided USB A to Serial converter.

NOTE: To avoid an earth fault on you panel due to a connection to a TV/Monitor, please purchase the following: (RS Stock No.912-0459) http://uk.rs-online.com/web/p/pc-data-acquisition/9120459/

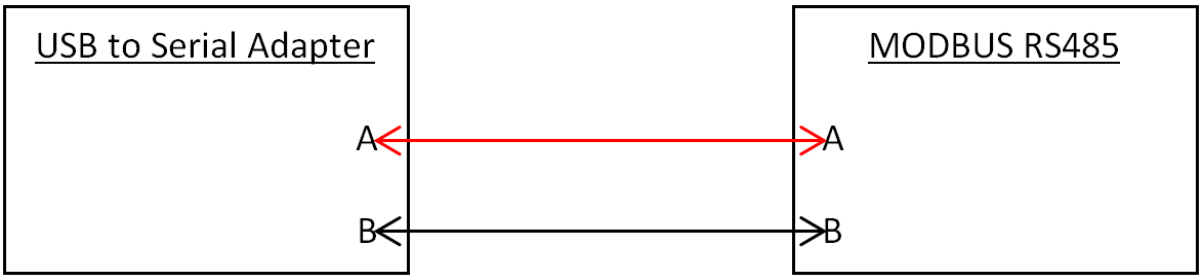
The ICP-DAS Isolated Converter will isolate the RS485 from the repeater, and the RS485 on the network card, so that no Earth Fault will be given from the connected display. We recommend that one is used to ensure that your panel is able to detect other Earth faults that may occur in the panel/loops.

ICP-DAS Wiring



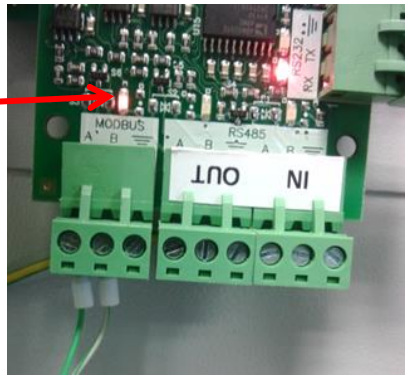
Full manual here: ftp://ftp.icpdas.com/pub/cd/8000cd/napdos/7000/manual/7520.pdf

If No ICP-DAS is used:
The connection to be made between the QT-NC Modbus and ZT-TSRI (repeater) are as follows:



The USB A to serial converter can then be inserted into any of the 4 USB slots on the ZT-TSRI.

Note: When looking at the QT-NC, if the Modbus red LED is flashing, then it indicates that there are comms being sent / received.



2.3 Connection to a Screen/Monitor

The ZT-TSRI can be connected to either a touch screen monitor/interface or a regular PC monitor/TV (can only be used with a USB mouse & keyboard with this option). It needs to be connected via its HDMI port located next to the micro USB port.

2.4 Connections to Web Server

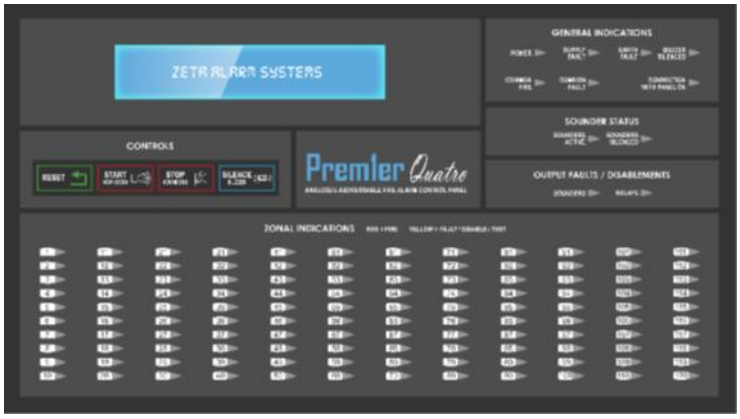
There are two options to access your Web Server:

1. Connect the ZT-TSRI directly to a **PC** via RJ-45 connectors through an Ethernet cable.

2. Connect the Repeater to a **LAN** (via Ethernet connection) and access from any **PC** connected to it. If there is server active DHCP on the network, the equipment will auto configure your network options (whenever this option is operational). See section

2.5 Connection Checks & Start-up

Before powering up the ZT-TSRI, double check that all the connections are correct, then turn on the power. The repeater will take around 30-40 seconds to boot when turned on. Once it has booted, it will load into its main repeater screen:



If the repeater is connected and communicating to the Quatro panel correctly, the "**CONNECTION WITH PANEL ON**" digital LED will be **GREEN**. If there is a connection issue, this digital LED will be shown in **YELLOW**. If connection problems do arise then make sure the system settings are correct.

3. General

The digital repeater is a peripheral based on an embedded system to which the customer can connect any screen with HDMI input.

3.1 Function

- Main panel repeater: Indicates **alarms** and **faults** associated with **zones**.
- Shows the location of Zones that are affected by events on a map/plan.
- Shows the location of devices that are affected by events on a map/plan.
- Has the remote function to: Reset, Silence Buzzer, Silence Sounders and Start Sounders.

3.2 User Interface

The digital repeater has two user interfaces: the display itself connected to the equipment which, if it is not a touch, can be operated through a keyboard and a mouse connected to the USB inputs of the repeater, and an integrated Web Server.

4. ZT-TSRI Configuration

The Repeater configuration can be performed:

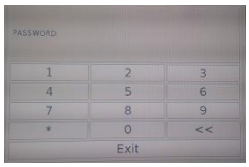
- From the display connected to the repeater (by touch if the screen is touch or mouse and keyboard if connected to the computer through the USB inputs).
- From the Webserver integrated in the repeater.

(Some options can be configured only from the repeater screen, others only from the Webserver.)

- ➢ *From the display: we can configure the network options of the equipment and draw the areas on the maps.*
- ➢ *From the Webserver: we can upload maps and icons, update firmware, and perform backups and restorations.*
- ➢ *From both options: we configure zones, language, Ports, Filters, Sound, E-mails, etc.*

4.1 Configuring the Repeater from the Display

- Click on the button 
- Enter the Level 3 password (default 2222) on the keyboard that appears.
- Click on the tab "SYSTEM"
- To modify the different configuration fields, we must click on the text boxes. Once selected a keyboard will be displayed:



To access numbers

- Depending on the field selected, only numeric keys will function.
- At the end of the configuration, click on “Save Configuration”. Some changes, such as language or general settings may need to you to perform a reboot of the repeater

4.2 Configuring the Repeater from the Web Server

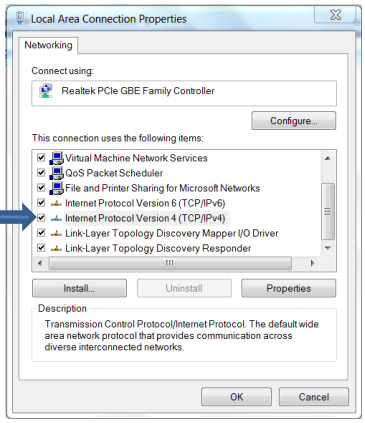
There are two options for accessing the Web Server:

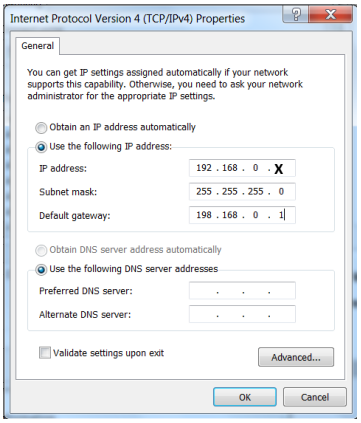
- Connect the repeater directly to a PC using the RJ-45 connectors through an Ethernet cable.

- Connect the repeater to a LAN (via the Ethernet connection) and access from any PC connected to it. If there is a DHCP server on the network, the repeater will auto configure its network options (as long as this option is turned on in the Configuration). To know at any time what the IP is configured in the repeater (in both networks, Ethernet and Wi-Fi) enter the configuration screen and it will display it.

The default network configuration of the repeater is:
IP: 192.168.1.200 Gateway: 192.168.1.1 Mask: 255.255.255.0

- In either of the two above options, the repeater and the PC must be within the same range of IP's to be able to communicate. To review and if necessary modify the IP of the PC to make the first connection with the repeater, you should check the network configuration of your PC:





Start -> Control Panel -> Network Settings (Network and Sharing Center in W7) -> Local Area Connection (Change Adapter Settings in W7) -> Right click on this option -> Properties

- Check the "Internet Protocol" option. The configuration must be the same as in the attached image, where **X** is any integer between 1-254 (always different from the gateway, (which is the router) and 200 which is the repeater default. Also make sure it is different from those used in the rest of the active computers in the network).
- To connect to the Web Server, open any browser on the PC and type in the navigation bar: Http://repeater IP (default http://192.168.0.200). ***(Default Login: [Username: admin] [Password: 2222])***
- To access the Repeater Configuration: within the Web Server, click on the Configuration tab.

4.3 Repeater Network Configuration

We can make changes to the configuration from the display or from the webserver.

4.3.1 Configuration of the Ethernet

To configure and enable repeater IP communication:

- Eth IP automatic (DHCP): To Enable / Disable DHCP.
- Eth IP: Indicates the IP address that our repeater will have.
- Eth Netmask: To configure the subnet mask.
- Eth Gateway: Indicates the IP address of the router.
- Eth DNS's: To configure the DNS server.

4.3.2 Master-Slave Configuration

In an installation, we will configure only one of the repeaters as a Master, which will be the one that will communicate with the panel. All other devices will be Slaves and will be managed by the Master.

- **To configure a repeater as a Master:**

Device Type: Master

IP Net Master: No need to configure anything.

TCP Port Master: Port to access this equipment (Default 20010)

- **To configure a repeater as a Slave:**

Device Type: Slave

IP Net Master: Enter the Master's IP.

TCP Port Master: Master's port (Default 20010).

4.4 Repeater Configuration

We can make changes to the configuration from the display or from the webserver.

4.4.1 General Settings

- Language: Choose language of the repeater.
- Time in seconds for the display be disconnected: Time for the screen to go into idle mode with no activity. 0 to 65,000 secs.
- Zone filtering: The repeater allows you to filter zones and display only the ones configured here. To determine which zones to supervise, the following formula must be applied: **To supervise Panel 2 Zones 1-44 = p2z1-44 / to supervise Panel 1 zones 20-50 = p1z20-50 etc.**
- Simple mode: By enabling it, the repeater will not display any maps or map device icons.
- Hide events not related to zones: Disables the display of events that are not associated with zones.

4.4.2 Serial/IP Ports

- Modbus panel number: The number of the panel to which the repeater is connected.
- Modbus baud rate: The communication speed of the Modbus port.

4.4.3 Sound

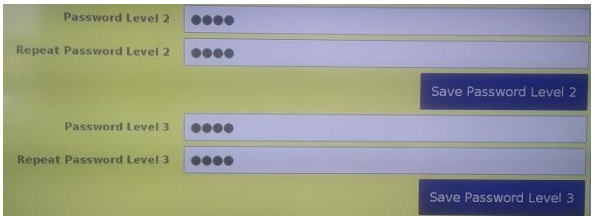
- Enable Alarm Sound: Activate/deactivate the alarm tone of the repeater during Alarms.
- Enable Fault Sound: Activate/deactivate the alarm tone of the repeater during Faults.
- Centralised Mute: If it is ON, when the buzzer is muted in the control panel, or if any equipment on the network is muted, the repeater will also silence.

4.4.4 Miscellaneous

During an alarm and/or fault, the repeater has the ability to send an email to one or more recipients. The parameters we must configure are:

- Enable SMTP Server authentication: Some mail servers may need authentication (for example, Gmail). If so, this option must be activated and you must indicate the User and Password that the repeater will use (e.g. if you are using Gmail, it must match your Gmail User and Email password).
- Mail Server SMTP: Input the SMTP server information given to us by the server (smtp.gmail.com for Gmail).
- User: The username of the email address that you are using for the repeater.
- Password: The password of the email address that you are using for the repeater.
- TLS Encryption: Activate this if your email server uses it (with Gmail it should be activated).
- Email destination in Alarms: Set the destination email address of Alarm events (If more than one, separate with commas).
- Email destination in Faults: Set the destination email address of Fault events (If more than one, separate with commas).
- Panel Address: The address of the panel connected.

4.5 User Levels



The Repeater has 3 user levels:

• Level 1: No password. No access to perform actions or to change configuration settings.

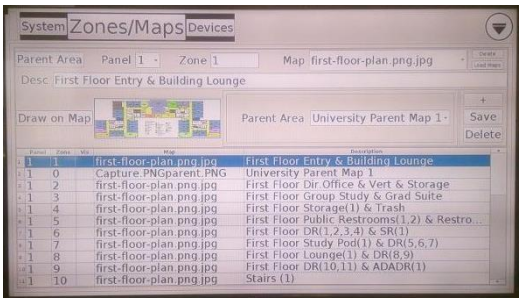
• Level 2: Password default 1234. Allow you to perform the following actions: RESET, START SOUNDERS, STOP SOUNDERS and SILENCE BUZZER.

• Level 3: Password default 4321. It allows access to the configuration of the repeater as well as configuration of zones.

(Changing these passwords is done through the repeater display's configuration menu)

4.6 Configuration of Zone maps, Drawings and Images

- Zones that are in fault/fire can be shown on screen via maps, drawings and images.
- These maps, drawings and images can be imported into the repeater via its Web Server.



- On the repeater main screen select the settings icon. 
- Enter password (default 4321) level 3.
- Select the Zones/Plans tab.

4.6.1 Registering an Area

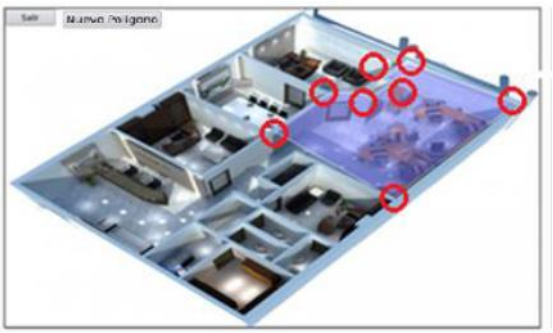
An area is an area of a map in a building or facility (the same as a zone). It can be formed by drawing one or more polygons on a map. The area can belong to a panel zone, or can be used as a Parent Area to related maps. When clicking on "Parent Area", the options of panel and Zone are hidden**.**

- To create a Parent Area:
  - Select the associated map (previously added from Web Server).
  - Select Associated Video (previously added from Web Server).
  - We are able to relate this area to another one, configuring it in the Parent Area section.

- To create an area associated with a panel zone:
  - Select the Panel Number and Zone Number associated with this area.
  - Select Associated Plan (previously added from Web Server).
  - Select Associated Video (previously added from Web Server).
  - We can relate this area to another one, configuring it in the Parent Area section.

4.6.2 Drawing area/zone boundaries on a map/drawing or image

- Press **Draw on Map**.
- You will now be able to start marking the **vertices** of the **polygon** that show the area that the zone covers.
- To be precise when drawing, it's best to connect a mouse into one of the USB ports.
- If there are zones that overlap, then they will be distinguished with different intensities of colour when they both have outstanding events.



- When drawing the polygon, it's best to set the vertices all around the edge of the area that you want to highlight.
- If it is required to draw another polygon select **New Polygon**.
- If you want to redraw the area, press **Exit** to leave this screen without saving, and then select **Draw on Map** to re-enter to try again.
- Once you are happy with the polygon(s), press **Exit** and then **Save**.

4.6.3 To Remove a Zone

- Select/highlight the Zone.
- Click on Delete.

- To exit the Zones menu, press the  button to return to the repeater main screen.

4.6.4 To Remove a Map/Image

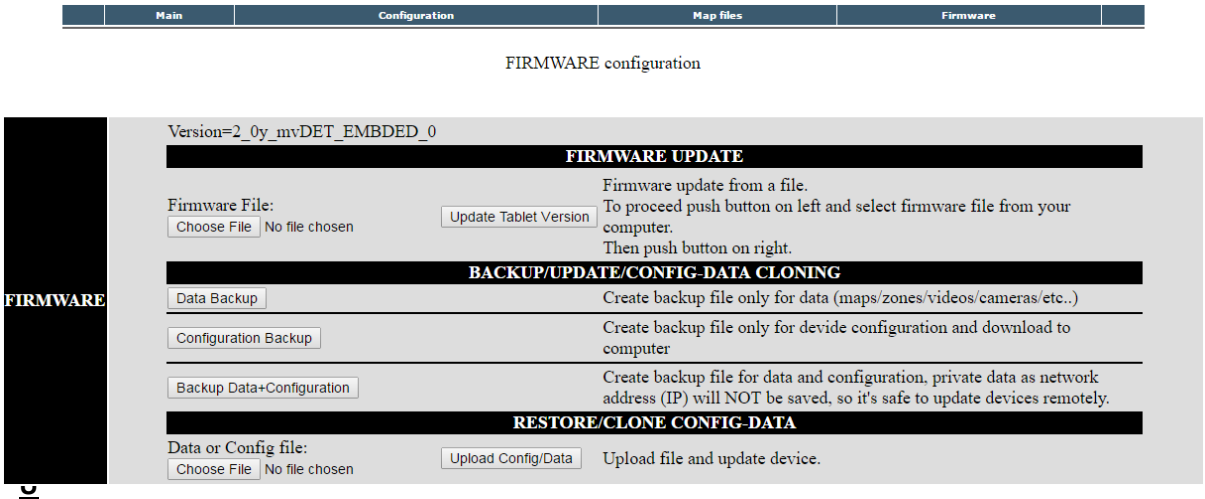
- Choose a map from the map list.
- Click on the delete button on the right.

4.7 Uploading of Zone Maps, Drawings and Images

This process must be done from webserver “Map files” tab. The maps will be the areas that will be associated with the zones. In each map we can configure more than one zone. Each zone must be associated to a map. It allows the following image formats: JPEG, PNG, GIF, BMP....etc. The map names cannot contain spaces.

4.8 Backups and Updates.

We can perform Backups of the information on the repeater, as well as update its firmware version in a quick simple way. To do this, we access the Web Server and once there, click the option "Firmware". At the top will indicate the version of firmware that is installed.



Update the Firmware:

- Click on "Choose file in the Browser.
- Search for update file.
- Click on "Update Tablet Version"
- Wait for the repeater to restart.

To perform a Data Backup / Restore:

This includes backing up the configuration of Areas and Devices.

- **To Backup**, Click on "Data Backup". In the Browser that shows select a name and a location to save the Backup.

- **To restore** a backup of data on a computer, click on "Choose file", select the file of Backup data to restore. Finally click on "Upload Config/Data".

To perform a Configuration Backup / Restore:

This includes the settings of the repeater itself (except network settings).

- **To Backup**, Click on "Configuration Backup". In the Browser that shows select a name and a location to save the Backup.
- **To Restore** a backup of data on a computer, click on "Choose file" then choose your config file, and click on "Upload Config / Data".

To perform a Configuration / Data Backup / Restore:

This includes repeater Configuration (excluding network configuration) in addition to the Area/Zone Configuration.

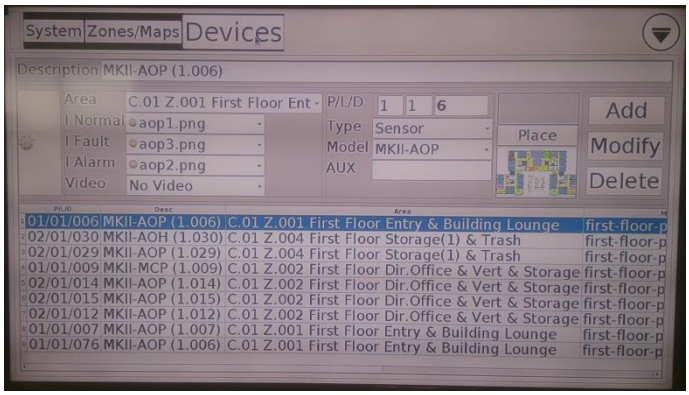
- **To Backup**, Click on "Backup data + Configuration" and select a name and a location to save the Backup.
- **To Restore**, Click on "Select file", the find the Data Backup + Configuration file to restore. Finally click on "Upload Config / Data".

4.9 Devices

The digital repeater allows you to locate different types of devices in the form of icons and associate them with an area. To configure them, click on  and then the "**Devices**" tab.

4.9.1 Parameters to be configured per device

- Description: A description that we give to the device.
- Area: The area to which the device belongs to.
- I Normal: The icon to be shown when that device is in the "**Normal**" state.
- I Fault: The icon to be shown when that device is in the "**Fault**" state.
- I Alarm: The icon to be shown when that device is in the "**Alarm**" state.
- Video: A video file associated with the device.
- P/L/D: The Panel/Loop/Device (address) associated with the device (make sure this is correct).
- Type: The type of device (e.g. detectors, modules, sirens or flash, cameras, tactile devices, central, repeaters, extinguishers ... etc).
- Model: Device type subdivision (e.g. For detectors they can be MKII-AOH/MKII-AOP/MKII-AHR/MKII-AHF etc.)
- AUX: For if you need to write a note about a device



- Place: Allows us to place the device in the selected area. We can also select the size of the device sliding the zoom bar on the right.

4.9.2 Add/Delete/Modify a Device

- **Add** - If we press on "Add", the repeater will add one device and will locate it in the part Bottom of the list of devices. After modifying the parameters of the new device, click on "Modify" to save the changes.
- **Modify** - Select a device to modify from the bottom list. To save the changes click on "Modify".
- **Remove** - Select a device to be deleted from the bottom list. When selected, click on "Delete".