



## Smart Home Proposal

Prepared for: James Bond

Project Address: LONDON

Date: 29/05/2023

5 Bed Detached House



Meet the team: [jsjelec.com/team](https://jsjelec.com/team)



## Our Vision

In 2009 JSJ was birthed out of frustration with the expense and complication associated with Home Automation. Our vision is to give homes a more affordable, safe & yet highly intelligent solution by working closely with our partners at Loxone. Our vision has and will always be to bring all the functional aspects of the home into 1 place, from Security and Lighting, right through to Fire Safety.



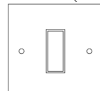
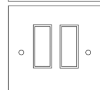
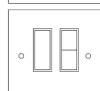












## Our Mission

It is our mission to be the technology catalyst for the building industry by using 1 platform to control multiple aspects of the home. JSJ are passionate and committed to making Home Automation affordable and accessible for everyone. We are inspired and driven to find ways that can provide the highest levels of comfort, convenience, fun and peace of mind.

*1 App*  
*1 User Experience*  
*1 Thing to Learn*

[www.jsjelec.com](https://www.jsjelec.com)

CEDIA®

| QTY   | UNIT PRICE | DESCRIPTION | O&M DESCRIPTION   |   |
|---|------------|-------------|---|---|
| LIGHTING: £2674.03  |            |             |   |   |
|    | 11         | £0.00       | Dimmable circuit - Individual dimmed circuits required. There is 1 dimmer module to every 4 circuits. Cost shown here is the average cost per output, please see dependencies for more details. 1 dimmer output controls 1 circuit, for example a bedroom with 6 downlights is classified as 1 circuit. | In contrast to conventional lighting which is mechanically controlled, these dimmer outputs are electronically controlled so they are configurable by you as the user in an instant. These dimmers work with virtually any light fittings. Good quality LED bulbs recommended for the best dimming curve.   |
|    | 31         | £0.00       | Relay - Lighting - Individual relays required. There is 1 module to every 14 circuits. Cost shown here is the average cost per output, please see dependencies for more details. 1 relay controls 1 circuit, for example a bathroom with 4 downlights is classified as 1 circuit.                       | In contrast to conventional lighting which is mechanically controlled, these relays are electronically controlled so they are configurable by you as the user in an instant. These relays work with any fittings even existing chandeliers etc.   |
|    | 11         | £22.52      | 1 switch, 2 position - Typical budget allowed for a premium switch, use any switch, from any manufacturer in many finishes: E.g Brushed SS, White Metal, etc. Typical use is lights & all off function, e.g at Entrance switch  | Tap button once to scroll through lighting scenes, double tap middle to turn off room. At the main entrance & master bedroom switch, hold down for 3 secs to shutdown the entire house. Triple tap switch in the main entrance to arm the alarm which in turn will shut down the entire house.  |
|    | 3          | £31.79      | 2 switches, 2 position - Typical budget for premium switch, use any switch, from any manufacturer in many finishes: E.g Brushed SS, White Metal, etc. Typical use is light control multiple areas from one point  | Tap button once to scroll through lighting scenes, double tap middle to turn off room. At the main entrance & master bedroom switch, hold down for 3 secs to shutdown the entire house. Triple tap switch in the main entrance to arm the alarm which in turn will shut down the entire house.  |
|    | 10         | £40.48      | 2 switches, 2 & 3 position - Typical budget for a contemporary toggle switch switch, use any switch, from any manufacturer in many finishes: E.g Brushed SS, White Metal, etc. Typical use is lights & multiple blinds/window control   | Tap up/down button to control blinds/curtains up/down respectively.   |
|    | 24         | £80.26      | 6 Digital Inputs - The Nano DI Tree fits easily into any back box - making it easier to use third-party switches and sensors but leveraging the Loxone Tree network to reduce cabling   | ---   |
|    | 1          | £0.00       | Associated labour for deploying peripherals in the field, assisting the installers with wiring schematics. Also time allowed for debugging typical issues associated with deploying such systems.   | ---   |
| HEATING & VENTILATION: £1216.17   |            |             |   |   |
|  | 22         | £8.60       | Temperature Zone - Embedded sensor, allows any switch to become a thermostat  | Used as the thermostat in the respective room/zone. These temp sensors are embedded in every light switch and provide temperature readings in each room, hence reducing wall clutter. Control each room independently from your Loxone app or wall station if requested.  |
|  | 5          | £205.38     | AC Interface (Intesis Box) - Air Conditioning - Complete control of your AC system, fully integrated with your smart home. We'll ensure your heating and AC never clash. HVAC supplier to only supply 1 thermostat/zone out of site in a hatch for maintenance  | Hidden interface to AC system. Heating used as a secondary source to bring a room to temperature in the event there is a large difference between the target and actual room temp. Temperature reading from localised room temp specified separately. Comfort heating temp: 22.5°, comfort cooling temp is 24.5°, inbetween this range (dead band) your room will do nothing. This wider the range the more efficient your system is. |
|  | 6          | £0.00       | Relay - Radiator - Radiator - Individual relay control for 1 zone, 1 electric thermostatic radiator valve per radiator. Typically triggered via timer, temperature and/or presence  | ---   |
|  | 17         | £0.00       | Relay - Wet UFH Heating - Individual relay control for 1 zone on the under floor heating on the manifold. Typically triggered via timer, temperature and/or presence  | ---   |
|  | 6          | £0.00       | Relay - Towel Rail - Individual relay control. Typically triggered via timer, temperature and/or presence   | ---   |
|  | 7          | £0.00       | Relay - Extractor fan control - Ventilation - Individual relays required. There is 1 module to every 8 circuits. Cost shown here is the average cost per output, please see dependencies for more details.  | Triggers after 2 minutes of presence in a bathroom or increased humidity above 65%  |
|  | 1          | £0.00       | Boiler Wiring Centre - Heat Enable - Interlink between all manifolds to mechanically trigger boiler.  | ---   |
|  | 1          | £0.00       | Boiler Wiring Centre - Zone Valves & Power to Panel - Individual relay control for x2 2/3 port valves alongside feed back to panel to ensure all heating is on 1 circuit. Typically triggered via 1 more zone demand  | ---   |
|  | 1          | £0.00       | Power Supply Heating/Manifolds - Power Supply to all Manifolds  | ---   |
|  | 1          | £0.00       | Associated labour for deploying peripherals in the field, assisting the installers with wiring schematics. Also time allowed for debugging typical issues associated with deploying such systems.   | ---   |

## SECURITY: £1865.11



13

£15.84

Door Contacts Hidden - Used to determine the status of doors, to be embedded into any doorframe so is virtually invisible.



5

£162.66

Dahua CCTV Camera - External CCTV - This camera comes in many shades, sizes and form factors. Choice of a dark grey colour or white.



3

£162.66

Dahua CCTV Camera - Internal CCTV - This camera comes in many shades, sizes and form factors. Choice of a dark grey colour or white.



1

£296.74

NFC Code Touch Tree (Keypad) - NFC Code touch from Loxone, The perfect access control solution. The NFC Code Touch for control of your door, gate, garage and/or alarm. Includes fobs



1

£61.20

External Sounder - External sounder to warn intruders before hand that you have a sophisticated alarm



1

£0.00

Associated labour for deploying peripherals in the field, assisting the installers with wiring schematics etc. Also time allowed for debugging typical issues associated with deploying such systems.

Your Miniserver alerts you when doors and windows are opened without permission even without arming your alarm. From your door and window monitor in the app, see how many window/doors have been left opened. If you open a window in a room that's currently being heated, the Window Contact will signal the Miniserver to lower the heating, ensuring you never throw money out of the window. Prevent damaging motorised blinds/shutters by AI is used differentiate between a human and any animal in your garden after hours. Also, vehicle detection, camera masking detection and trip wire detection will be setup for granular security. Your system is on continuous recording and in the event of any of the above alarm triggers, a notification with a recording of the event time frame will be given to you via a pop up instantly. Direct App link from Loxone to Dahua's DMSS app for CCTV AI is used differentiate between a human and any animal in your garden after hours. Also, vehicle detection, camera masking detection and trip wire detection will be setup for granular security. Your system is on continuous recording and in the event of any of the above alarm triggers, a notification with a recording of the event time frame will be given to you via a pop up instantly. Direct App link from Loxone to Dahua's DMSS app for CCTV Pin Based Alarm Keypad - Function 1: Arm Alarm, Function 2: Disarm Alarm. Each user can set a code within the User Management section of the Loxone App, that code works on all keypads. Each keypad has up to 6 functions. For example, function 3 can be triggered by entering 3, followed by a tick and entering your user code or by typing 3 and swiping your fob. Function 1 can be triggered by simply entering your code and pressing the tick button or by

The burglar alarm within Loxone has 5 key stages that are separated by time: Arming delay is 60s (Da), Silent Alarm 15s (Ds), Visual 30s (D3), Internal Audible Alarm 45s (D4), External Audible Alarm 60s (D5). So after 1 minute your alarm will be in full flow to agitate any intruders. These delays can all be updated in expert setting within the Loxone app.

## ACCESS CONTROL: £1495.20



1

£0.00

Relay - Door Release - Individual relays required. Typically triggered via a fob, keypad, button press or voice



2

£0.00

Relay - Gates Dry Contact - Individual relays required. Typically triggered via a fob, keypad, button press or voice



1

£0.00

Relay - Shutters Dry Contact - Individual relays required. Typically triggered via a fob, keypad, button press or voice



1

£564.00

Intercom - Loxone Intercom GEN 2 - Anthracite - POE power supply for intercom. Timeless, elegant design with real glass satin-finish surface. Comes in black or white

Smart intercom, initiates audio connection upon presence to reduce audio connection delays when the doorbell has been rung. The doorbell chime plays and/or the speakers in the house pause any music then play a chime sound to trigger awareness, the audio if any continues where it left off from. Lights can also flash to trigger awareness to aid those with impaired hearing.



1

£931.20

Intercom - Loxone Intercom GEN 2 + NFC - Anthracite - POE power supply for intercom. Timeless, elegant design with real glass satin-finish surface with inbuilt keypad. Comes in black or white

Smart intercom, initiates audio connection upon presence to reduce audio connection delays when the doorbell has been rung. The doorbell chime plays and/or the speakers in the house pause any music then play a chime sound to trigger awareness, the audio if any continues where it left off from. Lights can also flash to trigger awareness to aid those with impaired hearing. Pin Based Access Control Keypad - Function 1: Open Drive Gate, Function 2: Open



1

£0.00

Associated labour for deploying peripherals in the field, assisting the installers with wiring schematics. Also time allowed for debugging typical issues associated with deploying such systems.

## GENERAL AUTOMATION: £959.90



9

£106.66

Flush Mounted Presence Sensor Tree - Used to detect motion and brightness. As one of the most important sensors in the smart home, it provides information for useful features like alarms, lighting and energy saving. Comes in black or white.

Rooms with presence detection. When you walk into a room, the light will turn on for a minimum of 5 minutes (TH) and will remain on while there is still presence detected. If lights are manually switched on, after 30 mins (MT) of no motion (absence scene), the lights will automatically switch off, this is set to 120 mins in the Kitchen and Living room. If lights are manually turned off, motion detection will be disabled for 5 minutes (Ti). There will be 2 presence moods per



1

£0.00

Associated labour for deploying peripherals in the field, assisting the installers with wiring schematics. Also time allowed for debugging typical issues associated with deploying such systems.

## DATA: £767.94



5

£153.59

Ubiquiti AP Pro WiFi Access Point - Used to extend the WiFi in your home into a seamless large & robust network

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1

£0.00

Associated labour for deploying peripherals in the field, assisting the installers with wiring schematics. Also time allowed for debugging typical issues associated with deploying such systems.

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**AUDIO & VISUAL: £5805.08**


13

£98.79

Sonance Mono Speaker (VP60R) - Entry level speaker, used for general background music

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7

£248.16

Stereo Extension - Each Stereo Extension adds 2 more amplifier outputs to the Audioserver - giving you a scalable audio solution.

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1

£2,293.70

Sonos Surround Set - Enjoy a cinematic experience with breathtakingly realistic surround sound and buzz-free bass plus the 3D experience of Dolby Atmos. Includes brackets for the soundbar and rear speakers.

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1

£490.00

Associated labour for deploying peripherals in the field, assisting the installers with wiring schematics. Also time allowed for debugging typical issues associated with deploying such systems.

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**WEATHER, SHADING & MOTORIZED APPLIANCES: £312.00**


5

£0.00

Relay - 230V Blinds - Blinds/Curtains - Individual relays required. Typically triggered via a button press, weather, time of day, sunshine direction and voice

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2

£156.00

Velux KLF 200 interface - The VELUX KLF 200 interface unit is for connection to external commands or to use as a relay station to increase range

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1

£0.00

Associated labour for deploying peripherals in the field, assisting the installers with wiring schematics. Also time allowed for debugging typical issues associated with deploying such systems.

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**LOXONE EQUIPMENT & AUTOMATION PANELS + SUNDRIES: £8464.96**


1

£642.05

Miniserver Gen 2 - The brain of your Loxone system and can look after everything around the house, from simple lighting to intelligent zoned heating control



3

£451.97

Dimmer Extensions - With the Loxone Dimmer Extension you can dim all types of lights including LEDs. Simple!



7

£330.53

Relay Extensions (+14 Relays) - Expand your Loxone system with 14 hefty 16A relays to switch even the biggest loads with ease.



2

£181.63

1 Wire - Use 1-Wire sensors as part of your Loxone system as they are very cost effective for installations with large numbers of sensors



1

£67.58

24V Power Supply (4.2A) - DIN rail mounted power supply from TDK-Lambda



1

£197.34

10A Power Supply - DIN rail mounted power supply from TDK-Lambda



1

£5.99

MCB - For independant isolation of individual circuits. Better segregation of circuits lead to minimum disruption in the event of a fault



11

£58.61

RCBO - RCBO for segregated additional protection



1

£27.08

100a Isolator - For opening and closing circuits under load. For disconnection of on-load electrical circuits already protected against overloads and short-circuits



1

£458.33

4 Din Rail Automation Panel - Elegant panel hand crafted by Future Automation - Product Dimensions: 900mm (35.4") x 690mm (27.2") x 141.5mm (5.6")



1

£550.00

5 Din Rail Automation Panel - Elegant panel hand crafted by Future Automation - Product Dimensions: 1125mm (44.3") x 690mm (27.2") x 141.5mm (5.6")



2

£100.00

Prefab Panel Cabling - Internal cable used in the building of your Loxone panel



1

£215.42

3 Port Terminal For 3 Core + CPC Cable (50 PCS) - 3 Core & Earth Terminal, perfect for connecting blinds, curtain or garage door motors



1

£115.10

Push In Terminal Block, Twin + CPC (50 PCS) - Twin & Earth Terminal for 230V circuits



1

£220.71

Push In Terminal Block 8 X 4, Interconnected (20 PCS) - 8 Layer Interconnected Terminal Block, perfect for 24V distribution & 1-Wire



2

£209.09

Push In Terminal Block 8 X 4, Separated (20 PCS) - 8 Layer Terminal Block, perfect for connecting sensors



1

£495.26

Audioserver - Flexible audio solution for any building, compact form factor with impressive performance and containing 4 amplifier outputs.



1

£214.37

Modbus Extention - Easily expand your system to interact with other Modbus devices like HVAC alongside gas and electricity meters. Up to 32 Modbus devices can be controlled per Modbus extension. Up to 20 extensions can be connected to the Miniserver without affecting the performance of the system.



1

£0.00

All materials required for your smart system, this includes items for housing any kit, power supplies and any associated sundries

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#### RACK EQUIPMENT: £3368.78



1

£479.06

Draytek Network Switch 24 Port POE (P2280X) - The VigorSwitch P2280x is a high performance L2+ managed Gigabit ethernet switch. With 24 PoE+ (Power over Ethernet) RJ-45 LAN ports and 4 to Gigabit ethernet SFP+ ports for high bandwidth uplinks to servers, network attached storage and switches.



1

£590.00

Sanus CFR Series Enclosed Rack 15U - 600 X 600 X 15U Rack for housing all Network & AV equipment



1

£391.20

Draytek Router - DrayTek Routers provide business-grade features including VPN, firewall, content filtering, and bandwidth management, are an integrated network solution for home and business



1

£198.61

Patch panel (Including Key Stone Jacks) - 24 Port pass through patch panel for Cat 6 connections. Ideal for effective network management with cable management bar and clear labelling.



1

£102.00

Rack roof fans - Ideal for all floorstanding general purpose and server-style cabinets and enclosures, up to 1000mm in cabinet depth. Keeps all your networks and AV equipment cool



2

£46.80

6 way PDU - Rack Power Distribution Unit with BS 1363 UK Sockets and UK Plug Input - comes with surge Protection inbuilt














6

£6.00

1U Blank Plate - 1U blank plate. For use in all types of standard rack/server cabinets for aesthetics

|   |   |         |   |
|---|---|---------|---|
|  | 3 | £18.00  | 1U Brush Plate - 1U Brush Strip cable management panel. For use in all types of standard rack/server cabinets   |
|  | 1 | £785.70 | Dahua NVR - Video recorder connected to your network that records video footage from the IP cameras also connected to that network.   |
|  | 1 | £638.62 | Riello SDH 1500 VA UPS - The Sentinel Dual 1500 (Low Power) is an excellent choice of power backup system that is plug in and play that will allow full power protection against any problems. Sentinel Dual 1500 (Low Power) is rated for 1350 Watts of power and is easily capable of keeping your critical IT infrastructure safe during a power outage. If a power outage happens, you will have enough time to safely shut down any sensitive equipment to ensure no data is lost. |
|  | 1 | £0.00   | All materials required for your network and/or AV equipment.  |

SPECIALIST LABOUR

| DESCRIPTION  | PRICE     | LABOUR DESCRIPTION  |
|--|-----------|---|
|  OPTIONAL 1 YEAR CLIENT CARE PACKAGE (GOLD) | £839.88   | The maintenance cost proposal is largely based on response time and the degree of physical support available. Irrespective of the size/complexity of your project our prices are designed to fit all needs and budgets. Response times outside our care packages are typically 10 – 20 working days. See more here: <a href="https://jsjelec.com/jsj-client-care-package-signup">https://jsjelec.com/jsj-client-care-package-signup</a> |
|  INITIAL PROJECT DESIGN                     | £3,454.50 | Project design is an early phase of the project where the project's key features are assessed to ensure integration with the rest of the property.  |
|  PROJECT MANAGEMENT                        | £2,450.00 | Communicate with all trades to achieve all project goals within the given constraints to facilitate the process and ensuring that primary constraints are scope, time, and budget.  |
|  SITE VISITS (OVERSEEING INSTALLERS)      | £1,500.00 | Time required to ensure that things are progressing onsite as expected.   |
|  RACK - (PREFABRICATION OFF SITE)         | £763.37   | Your entire network will be prebuilt and configured in our workshop and go through our quality assurance process.   |
|  RACK - INSTALLATION (ON SITE)            | £763.37   | Installation of your Data/AV rack onsite, this is where all the network based CAT cables will connect into.   |
|  HA PANEL - PREFABRICATION (OFF SITE)     | £980.00   | Your entire Loxone automation panel which is the brain for your home will be prebuilt and configured in our workshop within a controlled environment. All peripheral items will also be setup offsite to ensure time on site is minimised and hence controlled  |
|  HA PANEL - INSTALLATION - (ON SITE)      | £4,042.50 | Installation of your Loxone panel onsite, essentially connecting the backbone infrastructure cabling of the house into your Loxone panel.   |
|  PROGRAMING & COMMISSIONING               | £2,450.00 | Planning, documenting, scheduling, adjusting and verifying to provide a facility that operates as a fully functional system per the Owner's Project Requirements.   |
|  CLIENT TRAINING & OWNERS MANUAL          | £490.00   | The operation and maintenance (O&M) manual is a detailed document containing the instructions to manage and maintain the smart home/property. It details what each component that you have to interact with can/will do   |
|  TESTING & COMMISSIONING                  | £500.00   | Functional checks: ensuring that all systems and components of the building management systems (BMS) are designed, installed and tested according to the operational requirements of the owner or final client.   |

Total = 45162.79 Ex VAT

| CCT NO.  | TO LOCATION       | DEVICE  |
|----------|-------------------|---|
| DIM-1    | Kitchen           | Dimmable circuit                                |
| DIM-2    | Living Room       | Dimmable circuit                                |
| DIM-3    | Bedroom 1         | Dimmable circuit                                |
| DIM-4    | Bedroom 2         | Dimmable circuit                                |
| DIM-5    | Bedroom 3         | Dimmable circuit                                |
| DIM-6    | Bedroom 4         | Dimmable circuit                                |
| DIM-7    | Bedroom 5         | Dimmable circuit                                |
| DIM-8    | Study             | Dimmable circuit                                |
| DIM-9    | Library           | Dimmable circuit                                |
| DIM-10   | Reception         | Dimmable circuit                                |
| DIM-11   | Cinema/Media Room | Dimmable circuit                                |
| SW-1     | Kitchen           | Relay - Lighting                                |
| SW-2     | Bedroom 1         | Relay - Lighting                                |
| SW-3     | Bedroom 1         | Relay - Lighting                                |
| SW-4     | Bathroom 1        | Relay - Lighting                                |
| SW-5     | Bathroom 1        | Relay - Lighting                                |
| SW-6     | Bathroom 2        | Relay - Lighting                                |
| SW-7     | Bathroom 2        | Relay - Lighting                                |
| SW-8     | Bathroom 3        | Relay - Lighting                                |
| SW-9     | Bathroom 3        | Relay - Lighting                                |
| SW-10    | Bathroom 4        | Relay - Lighting                                |
| SW-11    | Bathroom 4        | Relay - Lighting                                |
| SW-12    | Bathroom 5        | Relay - Lighting                                |
| SW-13    | Bathroom 5        | Relay - Lighting                                |
| SW-14    | Bathroom 6        | Relay - Lighting                                |
| SW-15    | Bathroom 6        | Relay - Lighting                                |
| SW-16    | Ground Floor      | Relay - Lighting                                |
| SW-17    | First Floor       | Relay - Lighting                                |
| SW-18    | Second Floor      | Relay - Lighting                                |
| SW-19    | Dressing Room 1   | Relay - Lighting                                |
| SW-20    | Utility           | Relay - Lighting                                |
| SW-21    | Study             | Relay - Lighting                                |
| SW-22    | Gym               | Relay - Lighting                                |
| SW-23    | Garage            | Relay - Lighting                                |
| SW-24    | Garden            | Relay - Lighting                                |
| SW-25    | Garden 2          | Relay - Lighting                                |
| SW-26    | Annex             | Relay - Lighting                                |
| SW-27    | Library           | Relay - Lighting                                |
| SW-28    | Reception         | Relay - Lighting                                |
| SW-29    | Front Of House    | Relay - Lighting                                |
| SW-30    | Front Door        | Relay - Lighting                                |
| SW-31    | Cinema/Media Room | Relay - Lighting                                |
| PB1-1    | Kitchen           | 1 switch, 2 position                            |
| PB1-2    | Bathroom 1        | 1 switch, 2 position                            |
| PB1-3    | Bathroom 2        | 1 switch, 2 position                            |
| PB1-4    | Bathroom 3        | 1 switch, 2 position                            |
| PB1-5    | Bathroom 4        | 1 switch, 2 position                            |
| PB1-6    | Bathroom 5        | 1 switch, 2 position                            |
| PB1-7    | Bathroom 6        | 1 switch, 2 position                            |
| PB1-8    | Utility           | 1 switch, 2 position                            |
| PB1-9    | Gym               | 1 switch, 2 position                            |
| PB1-10   | Garage            | 1 switch, 2 position                            |
| PB1-11   | Annex             | 1 switch, 2 position                            |
| PB2-1    | Ground Floor      | 2 switches, 2 position                          |
| PB2-2    | First Floor       | 2 switches, 2 position                          |
| PB2-3    | Second Floor      | 2 switches, 2 position                          |
| PB2T1-1  | Living Room       | 2 switches, 2 & 3 position                      |
| PB2T1-2  | Bedroom 1         | 2 switches, 2 & 3 position                      |
| PB2T1-3  | Bedroom 2         | 2 switches, 2 & 3 position                      |
| PB2T1-4  | Bedroom 3         | 2 switches, 2 & 3 position                      |
| PB2T1-5  | Bedroom 4         | 2 switches, 2 & 3 position                      |
| PB2T1-6  | Bedroom 5         | 2 switches, 2 & 3 position                      |
| PB2T1-7  | Study             | 2 switches, 2 & 3 position                      |
| PB2T1-8  | Library           | 2 switches, 2 & 3 position                      |
| PB2T1-9  | Reception         | 2 switches, 2 & 3 position                      |
| PB2T1-10 | Cinema/Media Room | 2 switches, 2 & 3 position                      |
| TEMP-1   | Kitchen           | Temperature Zone 1-WIRE BUS (SCREENED/SHIELDED) |
| TEMP-2   | Living Room       | Temperature Zone 1-WIRE BUS (SCREENED/SHIELDED) |
| TEMP-3   | Bedroom 1         | Temperature Zone 1-WIRE BUS (SCREENED/SHIELDED) |
| TEMP-4   | Bedroom 2         | Temperature Zone 1-WIRE BUS (SCREENED/SHIELDED) |
| TEMP-5   | Bedroom 3         | Temperature Zone 1-WIRE BUS (SCREENED/SHIELDED) |
| TEMP-6   | Bedroom 4         | Temperature Zone 1-WIRE BUS (SCREENED/SHIELDED) |
| TEMP-7   | Bedroom 5         | Temperature Zone 1-WIRE BUS (SCREENED/SHIELDED) |
| TEMP-8   | Bathroom 1        | Temperature Zone 1-WIRE BUS (SCREENED/SHIELDED) |
| TEMP-9   | Bathroom 2        | Temperature Zone 1-WIRE BUS (SCREENED/SHIELDED) |
| TEMP-10  | Bathroom 3        | Temperature Zone 1-WIRE BUS (SCREENED/SHIELDED) |
| TEMP-11  | Bathroom 4        | Temperature Zone 1-WIRE BUS (SCREENED/SHIELDED) |
| TEMP-12  | Bathroom 5        | Temperature Zone 1-WIRE BUS (SCREENED/SHIELDED) |
| TEMP-13  | Bathroom 6        | Temperature Zone 1-WIRE BUS (SCREENED/SHIELDED) |
| TEMP-14  | Ground Floor      | Temperature Zone 1-WIRE BUS (SCREENED/SHIELDED) |
| TEMP-15  | First Floor       | Temperature Zone 1-WIRE BUS (SCREENED/SHIELDED) |
| TEMP-16  | Second Floor      | Temperature Zone 1-WIRE BUS (SCREENED/SHIELDED) |
| TEMP-17  | Utility           | Temperature Zone 1-WIRE BUS (SCREENED/SHIELDED) |
| TEMP-18  | Study             | Temperature Zone 1-WIRE BUS (SCREENED/SHIELDED) |
| TEMP-19  | Gym               | Temperature Zone 1-WIRE BUS (SCREENED/SHIELDED) |
| TEMP-20  | Annex             | Temperature Zone 1-WIRE BUS (SCREENED/SHIELDED) |
| TEMP-21  | Library           | Temperature Zone 1-WIRE BUS (SCREENED/SHIELDED) |
| TEMP-22  | Reception         | Temperature Zone 1-WIRE BUS (SCREENED/SHIELDED) |

|                |                               |  |
|----------------|-------------------------------|--|
| ACTR-1         | Kitchen                       | AC Interface (Intesis Box) - Air Conditioning  |
| ACTR-2         | Bedroom 5                     | AC Interface (Intesis Box) - Air Conditioning  |
| ACTR-3         | Gym                           | AC Interface (Intesis Box) - Air Conditioning  |
| ACTR-4         | Reception                     | AC Interface (Intesis Box) - Air Conditioning  |
| ACTR-5         | Cinema/Media Room             | AC Interface (Intesis Box) - Air Conditioning  |
| RAD-1          | Bedroom 1                     | Relay - Radiator - Radiator - See JSJ heating control drawings (Assume X1 5 Core Flex Per 4 Zones Per Manifold)        |
| RAD-2          | Bedroom 2                     | Relay - Radiator - Radiator - See JSJ heating control drawings (Assume X1 5 Core Flex Per 4 Zones Per Manifold)        |
| RAD-3          | Bedroom 3                     | Relay - Radiator - Radiator - See JSJ heating control drawings (Assume X1 5 Core Flex Per 4 Zones Per Manifold)        |
| RAD-4          | Bedroom 4                     | Relay - Radiator - Radiator - See JSJ heating control drawings (Assume X1 5 Core Flex Per 4 Zones Per Manifold)        |
| RAD-5          | Bedroom 5                     | Relay - Radiator - Radiator - See JSJ heating control drawings (Assume X1 5 Core Flex Per 4 Zones Per Manifold)        |
| RAD-6          | Annex                         | Relay - Radiator - Radiator - See JSJ heating control drawings (Assume X1 5 Core Flex Per 4 Zones Per Manifold)        |
| UFH-1          | Kitchen                       | Relay - Wet UFH Heating - See JSJ heating control drawings (Assume X1 5 Core Flex Per 4 Zones Per Manifold)            |
| UFH-2          | Living Room                   | Relay - Wet UFH Heating - See JSJ heating control drawings (Assume X1 5 Core Flex Per 4 Zones Per Manifold)            |
| UFH-3          | Bathroom 1                    | Relay - Wet UFH Heating - See JSJ heating control drawings (Assume X1 5 Core Flex Per 4 Zones Per Manifold)            |
| UFH-4          | Bathroom 2                    | Relay - Wet UFH Heating - See JSJ heating control drawings (Assume X1 5 Core Flex Per 4 Zones Per Manifold)            |
| UFH-5          | Bathroom 3                    | Relay - Wet UFH Heating - See JSJ heating control drawings (Assume X1 5 Core Flex Per 4 Zones Per Manifold)            |
| UFH-6          | Bathroom 4                    | Relay - Wet UFH Heating - See JSJ heating control drawings (Assume X1 5 Core Flex Per 4 Zones Per Manifold)            |
| UFH-7          | Bathroom 5                    | Relay - Wet UFH Heating - See JSJ heating control drawings (Assume X1 5 Core Flex Per 4 Zones Per Manifold)            |
| UFH-8          | Bathroom 6                    | Relay - Wet UFH Heating - See JSJ heating control drawings (Assume X1 5 Core Flex Per 4 Zones Per Manifold)            |
| UFH-9          | Ground Floor                  | Relay - Wet UFH Heating - See JSJ heating control drawings (Assume X1 5 Core Flex Per 4 Zones Per Manifold)            |
| UFH-10         | First Floor                   | Relay - Wet UFH Heating - See JSJ heating control drawings (Assume X1 5 Core Flex Per 4 Zones Per Manifold)            |
| UFH-11         | Second Floor                  | Relay - Wet UFH Heating - See JSJ heating control drawings (Assume X1 5 Core Flex Per 4 Zones Per Manifold)            |
| UFH-12         | Utility                       | Relay - Wet UFH Heating - See JSJ heating control drawings (Assume X1 5 Core Flex Per 4 Zones Per Manifold)            |
| UFH-13         | Study                         | Relay - Wet UFH Heating - See JSJ heating control drawings (Assume X1 5 Core Flex Per 4 Zones Per Manifold)            |
| UFH-14         | Gym                           | Relay - Wet UFH Heating - See JSJ heating control drawings (Assume X1 5 Core Flex Per 4 Zones Per Manifold)            |
| UFH-15         | Library                       | Relay - Wet UFH Heating - See JSJ heating control drawings (Assume X1 5 Core Flex Per 4 Zones Per Manifold)            |
| UFH-16         | Reception                     | Relay - Wet UFH Heating - See JSJ heating control drawings (Assume X1 5 Core Flex Per 4 Zones Per Manifold)            |
| UFH-17         | Cinema/Media Room             | Relay - Wet UFH Heating - See JSJ heating control drawings (Assume X1 5 Core Flex Per 4 Zones Per Manifold)            |
| TR-1           | Bathroom 1                    | Relay - Towel Rail   |
| TR-2           | Bathroom 2                    | Relay - Towel Rail   |
| TR-3           | Bathroom 3                    | Relay - Towel Rail   |
| TR-4           | Bathroom 4                    | Relay - Towel Rail   |
| TR-5           | Bathroom 5                    | Relay - Towel Rail   |
| TR-6           | Bathroom 6                    | Relay - Towel Rail   |
| FAN-1          | Bathroom 1                    | Relay - Extractor fan control - Ventilation  |
| FAN-2          | Bathroom 2                    | Relay - Extractor fan control - Ventilation  |
| FAN-3          | Bathroom 3                    | Relay - Extractor fan control - Ventilation  |
| FAN-4          | Bathroom 4                    | Relay - Extractor fan control - Ventilation  |
| FAN-5          | Bathroom 5                    | Relay - Extractor fan control - Ventilation  |
| FAN-6          | Bathroom 6                    | Relay - Extractor fan control - Ventilation  |
| FAN-7          | Utility                       | Relay - Extractor fan control - Ventilation  |
| BLR-1          | All Manifolds                 | Boiler Wiring Centre - Heat Enable - Link in between all Manifolds. Permanent & Boiler/Heatpump SL                     |
| BLR-CTRLS-1    | Boiler Wiring Centre          | Boiler Wiring Centre - Zone Valves & Power to Panel - Hotwater Valve, Dining CH Valve (Wiring Center) + Feed to Loxone |
| PWR-1          | All Manifolds & Wiring Centre | Power Supply Heating/Manifolds - Radial to all manifolds & wiring centre   |
| DC-1           | Kitchen                       | Door Contacts Hidden   |
| DC-2           | Living Room                   | Door Contacts Hidden   |
| DC-3           | Bedroom 1                     | Door Contacts Hidden   |
| DC-4           | Bedroom 2                     | Door Contacts Hidden   |
| DC-5           | Bedroom 3                     | Door Contacts Hidden   |
| DC-6           | Bedroom 4                     | Door Contacts Hidden   |
| DC-7           | Bedroom 5                     | Door Contacts Hidden   |
| DC-8           | Study                         | Door Contacts Hidden   |
| DC-9           | Garage                        | Door Contacts Hidden   |
| DC-10          | Annex                         | Door Contacts Hidden   |
| DC-11          | Reception                     | Door Contacts Hidden   |
| DC-12          | Reception                     | Door Contacts Hidden   |
| DC-13          | Front Door                    | Door Contacts Hidden   |
| CCTV-1         | Garage                        | Dahua CCTV Camera - External CCTV  |
| CCTV-2         | Garden                        | Dahua CCTV Camera - External CCTV  |
| CCTV-3         | Garden                        | Dahua CCTV Camera - External CCTV  |
| CCTV-4         | Garden 2                      | Dahua CCTV Camera - External CCTV  |
| CCTV-5         | Garden 2                      | Dahua CCTV Camera - External CCTV  |
| CCTV-1         | Ground Floor                  | Dahua CCTV Camera - Internal CCTV  |
| CCTV-2         | First Floor                   | Dahua CCTV Camera - Internal CCTV  |
| CCTV-3         | Second Floor                  | Dahua CCTV Camera - Internal CCTV  |
| NFC-REE-1      | Ground Floor                  | NFC Code Touch Tree (Keypad) (TREE/STAR TOPOLOGY)  |
| EXSDR-1        | Front Of House                | External Sounder   |
| DR-1           | Front Door                    | Relay - Door Release   |
| GATE-1         | Front Of House                | Relay - Gates Dry Contact  |
| GATE-2         | Front Of House                | Relay - Gates Dry Contact  |
| SHUT-1         | Garage                        | Relay - Shutters Dry Contact   |
| LSD-INT-1      | Front Door                    | Intercom - Loxone Intercom GEN 2 - Anthracite  |
| LMD-ANTH-INT-1 | Front Of House                | Intercom - Loxone Intercom GEN 2 + NFC - Anthracite  |
| MS-F-1         | Kitchen                       | Flush Mounted Presence Sensor Tree (TREE/STAR TOPOLOGY)  |
| MS-F-2         | Living Room                   | Flush Mounted Presence Sensor Tree (TREE/STAR TOPOLOGY)  |
| MS-F-3         | Ground Floor                  | Flush Mounted Presence Sensor Tree (TREE/STAR TOPOLOGY)  |
| MS-F-4         | First Floor                   | Flush Mounted Presence Sensor Tree (TREE/STAR TOPOLOGY)  |
| MS-F-5         | Second Floor                  | Flush Mounted Presence Sensor Tree (TREE/STAR TOPOLOGY)  |
| MS-F-6         | Dressing Room 1               | Flush Mounted Presence Sensor Tree (TREE/STAR TOPOLOGY)  |
| MS-F-7         | Utility                       | Flush Mounted Presence Sensor Tree (TREE/STAR TOPOLOGY)  |
| MS-F-8         | Study                         | Flush Mounted Presence Sensor Tree (TREE/STAR TOPOLOGY)  |
| MS-F-9         | Garage                        | Flush Mounted Presence Sensor Tree (TREE/STAR TOPOLOGY)  |
| AP-1           | Kitchen                       | Ubiquiti AP Pro WiFi Access Point  |
| AP-2           | Ground Floor                  | Ubiquiti AP Pro WiFi Access Point  |
| AP-3           | First Floor                   | Ubiquiti AP Pro WiFi Access Point  |
| AP-4           | Second Floor                  | Ubiquiti AP Pro WiFi Access Point  |
| AP-5           | Annex                         | Ubiquiti AP Pro WiFi Access Point  |
| SP2-VP60R-1    | Kitchen                       | Sonance Mono Speaker (VP60R)   |
| SP2-VP60R-2    | Kitchen                       | Sonance Mono Speaker (VP60R)   |



|              |                   |  |
|--------------|-------------------|--|
| SP2-VP60R-3  | Living Room       | Sonanace Mono Speaker (VP60R)                      |
| SP2-VP60R-4  | Living Room       | Sonanace Mono Speaker (VP60R)                      |
| SP2-VP60R-5  | Bedroom 1         | Sonanace Mono Speaker (VP60R)                      |
| SP2-VP60R-6  | Bedroom 1         | Sonanace Mono Speaker (VP60R)                      |
| SP2-VP60R-7  | Bedroom 5         | Sonanace Mono Speaker (VP60R)                      |
| SP2-VP60R-8  | Bedroom 5         | Sonanace Mono Speaker (VP60R)                      |
| SP2-VP60R-9  | Bathroom 1        | Sonanace Mono Speaker (VP60R)                      |
| SP2-VP60R-10 | Gym               | Sonanace Mono Speaker (VP60R)                      |
| SP2-VP60R-11 | Gym               | Sonanace Mono Speaker (VP60R)                      |
| SP2-VP60R-12 | Reception         | Sonanace Mono Speaker (VP60R)                      |
| SP2-VP60R-13 | Reception         | Sonanace Mono Speaker (VP60R)                      |
| STE-ION-1    | Kitchen           | Stereo Extension                                   |
| STE-ION-2    | Living Room       | Stereo Extension                                   |
| STE-ION-3    | Bedroom 1         | Stereo Extension                                   |
| STE-ION-4    | Bedroom 5         | Stereo Extension                                   |
| STE-ION-5    | Bathroom 1        | Stereo Extension                                   |
| STE-ION-6    | Gym               | Stereo Extension                                   |
| STE-ION-7    | Reception         | Stereo Extension                                   |
| SON-SET-1    | Cinema/Media Room | Sonos Surround Set (CAT 6 TO SOUNDBAR & SUBWOOFER) |
| BLD-1        | Living Room       | Relay - 230V Blinds - Blinds/Curtians              |
| BLD-2        | Bedroom 1         | Relay - 230V Blinds - Blinds/Curtians              |
| BLD-3        | Study             | Relay - 230V Blinds - Blinds/Curtians              |
| BLD-4        | Library           | Relay - 230V Blinds - Blinds/Curtians              |
| BLD-5        | Reception         | Relay - 230V Blinds - Blinds/Curtians              |
| VELUX-1      | Bedroom 4         | Velux KLF 200 interface                            |
| VELUX-2      | Bedroom 5         | Velux KLF 200 interface                            |