# Protocol Documentation - Server/database and Devices group

Homedork - Interactive Smart House

# Revision History

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| --- | --- |
| **Name** | **Associated Letter** |
| Sam Mcmurray | A |
| Wills Ekanem | B |

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| --- | --- | --- | --- |
| **Date** | **Version** | **Description** | **Author** |
| - | - | - | - |
| - | - | - | - |
| 21/11/2021 | 1.0 | Communication protocol | B |
| 15/11/2021 | 1.4 | Updated protocol and entire document | A,B |

Abbreviations

1. Local Hub – **LB**
2. Database Server – **DBS**

Communication method

A TCP socket is set up between the DBS and LB address gotten from the device being updated. The socket connection isn’t encrypted for now.

Communication format

DEVICE-TYPE:PIN-NUMBER:ACTION

ACTION 🡪 **ON** or **OFF** in terms of **STATE**. Double value range(101) for **LEVEL**.

DEVICE-TYPE 🡪 LAMP, FAN, CURTAIN, THERMOMETER, ...

PIN-NUMBER 🡪 Pin slot of connected device.

Action: Client 🡪 Web or mobile app

|  |  |  |  |
| --- | --- | --- | --- |
| Nr | Operation | Command | Response |
| 1 | Turn device on | deviceType:pinNumber:ON | Success/Failure |
| 2 | Turn device off | deviceType:pinNumber:OFF | Success/Failure |
| 3 | Slide device level | deviceType:pinNumber:44 | Success/Failure |

Action: User 🡪 on physical LB

|  |  |  |  |
| --- | --- | --- | --- |
| Nr | Operation | Command | Response |
| 1 | Turn device on | deviceType:pinNumber:ON | Success/Failure |
| 2 | Turn device off | deviceType:pinNumber:OFF | Success/Failure |
| 3 | Slide device level | deviceType:pinNumber:44 | Success/Failure |