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| <b>Title:</b>   | 2 wire Intercom Products Installation Guide | <b>Version:</b> | v1.0 | <b>Date:</b> | 08/30/2019 |
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## 2-wire intercom products Installation Guide

### Cables and Wiring

- When there are multiple cores in one parallel line, only one pair of closed cores are allowed to transmit signal. It is not allowed to use multiple pair of cores in one cable to transmit signal;
- When using parallel lines, it is suggested to use those with shielding layer. If dual core or multiple core parallel lines without shielding layer are routed, stability of signal transmission can be effected. You need to run a test before installation;
- Impedance of cable should not be over suggested value, or distributor cannot transmit enough power to indoor station or door station;
- Strong electricity and weak electricity cannot be wired in the same route, they need to be wired separately and the distance should be more than 0.5 meter;
- All the cables used need to follow the restriction in the following table on Page2.

### Device Installation

- Installation environment (temperature, moisture etc.) need to follow requirements in specification or power output can be effected
- Power consumption of modular door station (main module and sub modules) should be less than 12W. Please reach local technical support if you are not sure about power consumption of each module. Door station should be connected to CH6 of the video/audio distributor. If modular door station is connected to any terminal of CH1 to CH5, up to 3 sub modules can be connected;
- Indoor station should be connected to any terminal of CH1 to CH5 of the video/audio distributor;
- Up to 15 video/audio distributor can be cascaded. If more distributors are needed, you should cascade network switch supporting 1000Mbps. The whole 2-wire system can have up to 500 devices.
- Power supply must be certified by Hikvision;
- Indoor station needs to use firmware released after October, 2019

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**Table A**

| Routing Path                      | Twisted Pair                                |   |   |  | Parallel lines                              |   |   |  |
|-----------------------------------|---|---|---|--|---|---|---|--|
|                                   | 24AWG<br>(0.2mm <sup>2</sup> , 9<br>Ω/100m) | 20AWG<br>(0.5mm <sup>2</sup> , 3.5<br>Ω/100m) | 18AWG<br>(0.8mm <sup>2</sup> , 2.5<br>Ω/100m) | 16AWG<br>(1mm <sup>2</sup> , 1.5 Ω<br>/100m) | 24AWG<br>(0.2mm <sup>2</sup> , 9<br>Ω/100m) | 20AWG<br>(0.5mm <sup>2</sup> , 3.5<br>Ω/100m) | 18AWG<br>(0.8mm <sup>2</sup> , 2.5<br>Ω/100m) | 16AWG<br>(1mm <sup>2</sup> , 1.5 Ω<br>/100m) |
| DS-KAD706-<br>S-DS-KAD706         | Transmission<br>Distance≤60<br>m            | Transmission<br>Distance≤60<br>m              | Transmission<br>Distance≤60<br>m              | Transmission<br>Distance≤50<br>m             | Transmission Distance≤35m                   |   |   |  |
| DS-KAD706-<br>DS-KAD706           | Transmission<br>Distance≤60<br>m            | Transmission<br>Distance≤60<br>m              | Transmission<br>Distance≤60<br>m              | Transmission<br>Distance≤50<br>m             | Transmission Distance≤35m                   |   |   |  |
| DS-KAD706-<br>DS-KD8003-<br>IME2  | Transmission<br>Distance≤35<br>m            | Transmission<br>distance≤60<br>m              | Transmission<br>distance≤60<br>m              | Transmission<br>distance≤50<br>m             | Transmission Distance≤35m                   |   |   |  |
| DS-KAD706-<br>DS- KH6320-<br>WTE2 | Transmission<br>Distance≤35<br>m            | Transmission<br>Distance≤100<br>m             | Transmission<br>Distance≤100<br>m             | Transmission<br>Distance≤100<br>m            | Transmission<br>Distance≤50<br>m            | Transmission<br>Distance≤100<br>m             | Transmission<br>Distance≤100<br>m             | Transmission<br>Distance≤100<br>m            |



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## First Choice for Security Professionals

### **HIKVISION** Technical Support