

### 4-Wire Video Intercom System Technical Manual

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WES Australasia VT Manual Update 2014

### 4 Wire Look-C Door Intercom Surveillance System Instruction Manual

### **MONITOR INSTRUCTIONS APPLYING TO H424 & H427**

### H424 & H427 Inter-compatability.

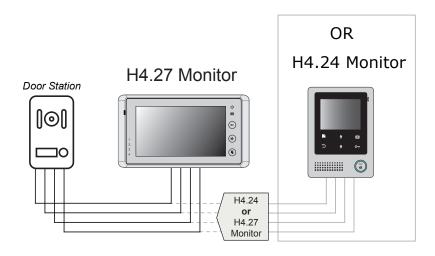
Although both monitors can operate on the same 4-Wire system, some of the features are not compatible between the H424 and H427 Monitors. For example, the majority of functions will work, including Door Camera monitoring, but the intercom feature between monitor units will not work and the Memory feature of H427SDD will not share. It is therefore recommended, for a professional setup, to restrict monitor choice to one of the two models available.

The H427 Monitor has a Two Door Station Camera Switch built-in. This enables you to connect one or two door station cameras to the system. If you require three or four cameras (Maximum), then the addition of a VT-MDS Camera Switch is required. See the "Two Door Stations" page for connecting two cameras and see the "MDS Multi-Door Station Switch" page for connecting three or four cameras.

The M424 Monitor has a single camera input. If you require two, three or four cameras (Maximum), then the addition of a VT-MDS Camera Switch is required. See "MDS Multi-Door Station Switch" page for further information.

The diagrams on the following pages show connections for Look-C 4 Wire Monitors and door cameras. Where applicable, both H424 and H427 connections are shown on the same diagrams.

For all features to work as per their respective instruction manuals, it is recommended to use only H424 with H424 Monitors and to only use H427 with other H427 Monitors. Both monitors are fully compatible with all 4-Wire Door Station Cameras and the other modules as shown on each page.



### A Maximum of Four Monitors.

You can identify each of the monitors via the menu system from Monitor #1 through to Monitor #4. This enables you to use the intercom function between monitors within an installation. Further Monitors can be connected to the system and can view and operate the door camera, but will not be compatible with the monitor to monitor intercom feature. It is therefore recommended for a professional setup to use a maximum of four monitors within a system. See "Multi-Monitor" pages for more information.

The following diagrams show wiring topologies as recommended by the factory and tested here by our technicians. Other wiring solutions may work in some circumstances, however were not included as they have not been tested or recommended by the factory and may not give best results in all installations.

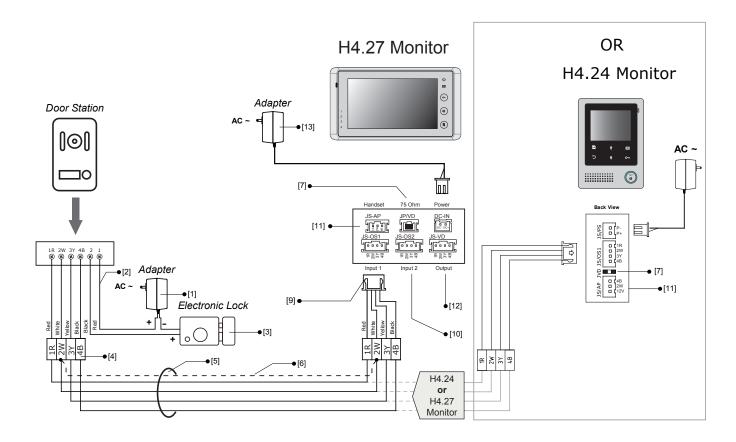
### 4 Wire - Basic Setup

### ONE DOOR STATION & ONE MONITOR

The most common way to use the VT system in a house is one Doorstation connected with one Monitor. 4 wires (with color Red, White, Yellow and Black) will be used to connect the Doorstation and Monitor,

- 1R (Red): Power positive. +12V present when Door Station calling or being monitored.
- **2W** (White): Power negative (Ground).
- 3Y (Yellow): Image signal (Video signal).
- 4B (Black): Talk and control signal (Audio signal).

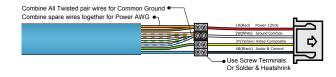
It is recomended to use CAT5 Cable for standard installs and shielded cable for noisy installations when runing cable with other wires (like mains cord, etc.) or steel structure buildings, industrial, etc.



- [1] Power supply for the lock. This adapter is not included in our product, please purchase the appropriate adapter required by the electronic lock. Not required if no door lock.
- [2] Relay Contact for lock control of Fail-Secure Latch. 2- Common Terminal, 1- Normally Open Terminal.
- [3] Electronic Lock. See Lock pages for detailed lock connection information, or RLC for exit button or Fail-Safety.
- [4] Screw Terminal Door Station Camera
- [5] RVVP cable. See Cable Pages for detail information
- [6] Shielded layer of the RVVP Cable.

For simple installations with shorter cable runs use CAT5 Twisted Pair Cable. For improved picture quality over longer runs or in noise environments, use coax for 3Y & 2W

- [7] JP\_VD jumper. To adjust the video impedance; keep the jumper on the last Monitor and remove all on other Monitors. When only one Monitor installed, keep the jumper (as in this case). Jumper on the position by default.
- [8] Menu settings out-of-the-box in default are all preset for this simplest of setup configurations. See manual for menu information.
- [9] JS\_OS1: Connect to first Doorstation.
- [10] JS\_OS2: Connect to second Doorstation / CCTV camera.
- [11] JS\_AP: Connect to Audio Phone (Plug compatible with H424).
- **[12]** If extending H427 to further H427 Monitors, connect the extra monitor to the JS-VD connector (See multi-monitor diagram).
- [13] Adapter: Power supply for the Monitor and Doorstation. 24V DC, 1000mA output.

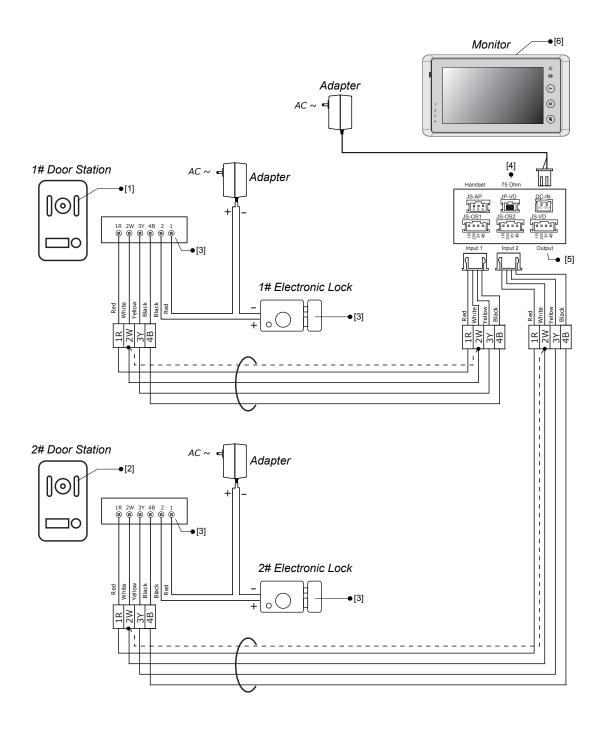




### 4 Wire - Camera Expanded

### TWO DOOR STATIONS

The H4.27 Monitor is equipped with Two Input connection ports which allows a user to connect two door stations or one door station and one CCTV Camera directly. It is required that this monitor be menu set as Monitor #1 (Default). Door station control is automatic. eg., when any Monitor activates the door unlock function, only the door latch connected to the operating door station will be unlocked. H424 does not suport 2 Inputs. See MDS for other options.

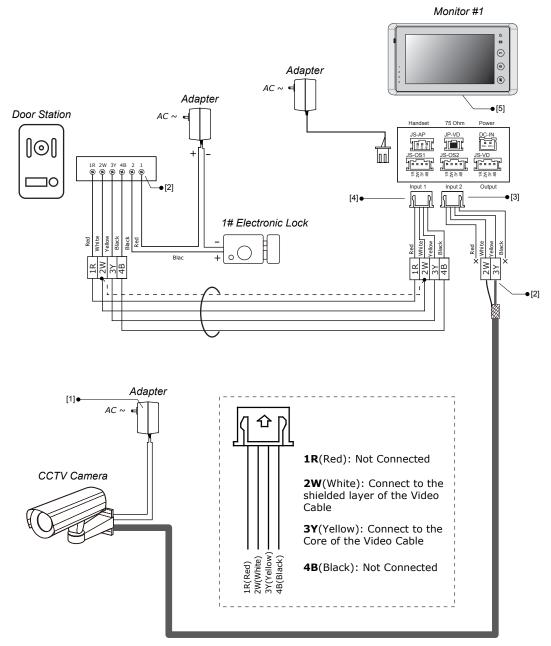


- [1] The first Doorstation connect to the JS-OS1 port.
- [2] The second Doorstation connect to the JS-OS2 port.
- [3] The electronic lock used for each Doorstation must be of the Power-on-to-Unlock type. Power can be external as shown, or internal (see door lock page for options).
- [4] JP-VD jumper. To adjust the video impedance; keep the jumper on the last Monitor and remove all on other Monitors. When only one Monitor installed, keep the jumper (as in this case). Jumper on the position by default.
- [5] System can be expanded to further monitors, see the Multi-monitor setup pages for connection topologies.
- [6] When using two door stations the <u>2 Way Input</u> menu should be set from <u>0</u> to 1 on Monitor 1# go to <u>User Setup--> Installer Setup--> 2 Way Input</u> and change the value to <u>1</u>.

### 4 Wire - Camera Expanded

### **EXTEND CCTV CAMERA**

A standard video CCTV camera can be connected to one of the built-in 2 way port of the Monitor. Video can be switched between Doorstation and CCTV camera on the Monitor just as switching video from 2 Doorstations.



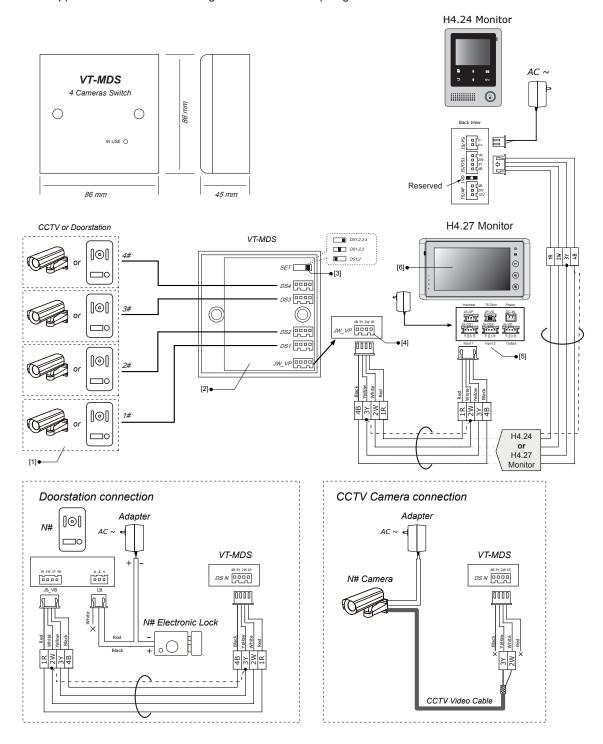
CCTV Video Coax Cable

- [1] The power supply for the CCTV camera is not included in the system, please use an appropriate power supply which is suitable for the CCTV camera.
- [2] Please connect the wire firmly, iron soldering is recommended. Screw terminals can be used, need encasing.
- [3] Connect the Doorstation to the JS-OS1 port.
- [4] Connect the CCTV camera to the JS-OS2 port.
- [5] When using 2 door stations, the 2 Way Input menu should be set to 1 on Monitor 1#. On the Monitor Menu system, go to User Setup > Installer Setup > 2 Way Input and change the value from 0 to 1.

### 4 Wire - Camera Expanded

### MDS MULTI DOOR STATION SWITCH

The MDS unit is used to extended Multiple Door Stations or CCTV cameras to one 4-Wire bus to suit H424 or H427 Monitors Multi-Monitor support - See Multi-Monitor Pages for connection topologies.



- [1] Doorstation or CCTV Camera can be connected to any of the DS1 / DS2 / DS3 / DS4 ports. At least two sources should be connected (See [3]).
- [2] Note that only one MDS unit can be installed in a system, DO NOT connect multiple MDS in one system.
- [3] SET switch, for Doorstation or CCTV total number selection; if connect 2 Doorstations(and / or Cameras), set to left position; set to middle position for 3 Doorstations(and / or Camras); set to right position for 4 Doorstations( and / or Cameras)
- [4] For MDS Video Combiner, the JW-VP Video Impedance jumper is in (Reserved) for Monitor #1 at the beguining of the chain even if multiple monitors are used (See Multi-Monitors), JP-VP always in #1.
- [5] When using MDS in the system, the H427 JS-OS2 port becomes invalid, so DO NOT connect any Doorstation or CCTV camera to JS-OS2 port.
- **[6]** When using a MDS unit, the <u>2 Way Input</u> menu should be set to  $\underline{0}$  on all the Monitors (including 1# Monitor). On the Monitor, go to <u>User Setup--> Installer Setup--> 2 Way Input</u> and change the value to  $\underline{0}$ . This is the default value.

### 4 Wire - Camera Expanded

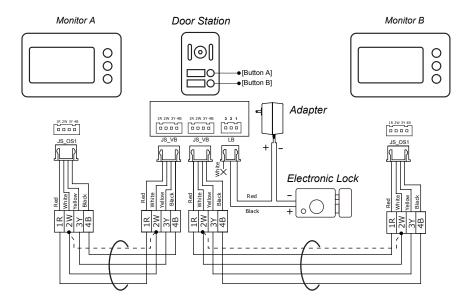
### **DUAL BUTTON DOOR STATION**

The H492RH Door Camera Station is a single camera with two door-bell buttons. Monitors are connected on either A or B branch line and ring only on one of the button presses A or B.

The door strike is shared and monitors can intercom between each other. This makes the H492RH suitable for Duplex Units with a common door, or share situations in a common dwelling, Dual occupancy, Grannie Flats, Teenagers, Private/Office, Business A or B, etc.

More monitors can be added to either branch line, see multi-monitor topology.

Only one monitor can be set as monitor #1 for intercom feature to function and Monitors can intercom between each other. If only two monitors total are used and both are set as Monitor #1, then the intercom feature will not function.



### 4 Wire -Camera Expanded

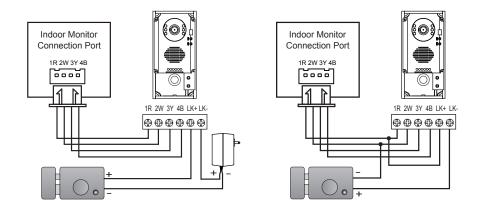
### **DOOR STRIKE**

### Fail-Secure is Power-On-To-Release.

The Door Station Camera has a Dry Relay Contact Connection, Normally Open.

Connect using internal power is 12V at 200mA max hold current with a lead from station to strike of no more that 2 metres.

For higher power door strike or a longer wire, it is recommended to add an external power pack for the door strike.



### Fail-Safety is Power-Off-To-Release.

The Door Station Camera is NOT compatible with power always on type systems. For this feature there is an optional extra module for Fail-Safety door lock control. See RLC Relay Lock Control module for more information. This module is Fail-Secure compatible too and also offers an Exit-Button with programmable time delay.

### 4 Wire - Monitor Expanded

### **MULTI-MONITOR READ-ME!**

### DO NOT MIX MONITORS

Two styles of Monitors: H424 (4" Screen) and H427 (7" Screen) models are available in the 4-Wire system. The menu system on these two models are different and some of the extended features may not be available or compatible when mixing a system using both H424 and H427 models. For this reason it is recommended that for a professional system, an installer use only the same model monitor in one system.

### MONITOR #1

By default, Monitors out of the box are set as Monitor #1. For some features to work it is necessary to change some settings via the menu system. See the units user manual for specific instructions. The master unit should be set to Monitor #1 and further monitors should be set in sequence, #2, #3, #4, etc.

### JP-VD JUMPER

If multiple monitors are used then some attention to video termination is necessary for maintaining picture quality. This involves sometimes removing the JP-VD terminal. See the following diagrams for details depending on which wiring topology is used.

### SECURITY CODE 2412

If you are presented with a security code screen, please enter the 4 digit code: 2412 (store this number with the instruction manual for future reference.)

### MEMORY MODULE

Optional memory for capturing images of door bell button presses for retrieval is available with the H427SDD. Only one SDD model can be used in one system and should be set as Monitor #1. The other monitors in a system are the standard model and can each access this memory to view the sequence of images of the visitors.

 Please note: If using a BDU Splitter, be sure to set the monitors setup menu option "BDU Installed" = "1", see BDU Star Wiring Topology page for further information.



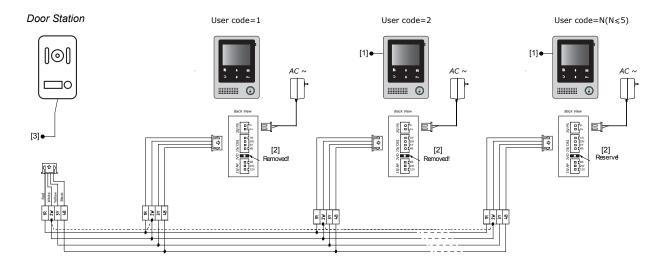


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### 4 Wire - Monitor Expanded

### **EXTEND TO AN EXTRA MONITOR H427**

The 4-Wire system uses a common Bus system wired in series for a daisy-chain type configuration. Cable distance between the Door Station and the Last Monitor (#n) depends on cable used. Typically 50M to 100M for CAT5. See Cable page for more information. Junctions should be directly next to the monitor for best image results. Notice the JVD Jumpers and Menu settings on Monitor #2 -> User Setup -> Installer Setup -> User Code = 2. Shown below is H424 Monitors, this same topology can be applied using H427 Monitors with the consequence of JP-OS2 no longer functioning. Multiple Door Stations can however be added with the addition of a MDS module.



- [1] Change the setting on Monitor #2 to User Code = 2, etc.
- [2] Remove the JVD jumper on Monitor 1# Keep the JVD jumper on Monitor N# being the last monitor on the chain. JVD is the "Jumper Video" for terminating  $75\Omega$  end of line.
- [3] Only one Door Station on this wiring topology. For more Door Stations, see the MDS module.
- [4] Cable length depends on cable used. CAT5 gives up to 50M to 100M Use shielded for noisy environments. Use BDU as a booster if required.

### 4 Wire - Monitor Expanded

### **EXTEND MULTIPLE MONITORS**

Extended Monitors in a single line bus 4-wire system;

An extra Monitor can be connected to Monitor #1 directly in this topology. When visitors call from the Doorstation, both Monitors will ring at the same time, and either of them can answer the call, the other unit will then stop ringing. For further Monitors, a BDU module is required. See BDU pages for Star-Wire topologies of up to four Monitors.

Audio-Only handsets can also be added to the system, see "Extend Audio Handset" page for more information.

[1] The 1st monitor in this chain is set to default being Monitor #1, all subsequent monitors need to be identified via the menu system (User Code) as monitors #2, #3, etc. This is required for some advanced features to function.

[2] Remove the JP-VD jumper on all Monitors except the last one. This is the 75 ohm terminator for end of line.

[3] JS-OS2 is available for a second Door Station or CCTV Camera connection. See "Two Door Stations" for information.

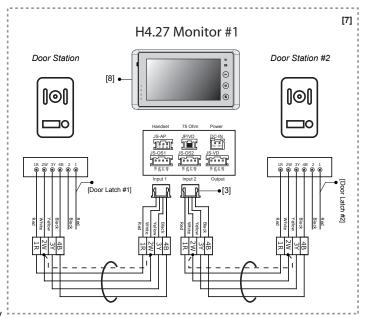
[4] All the extended Monitor MUST be connected to the JS\_VP of the 1# Monitor. DO NOT connect extended further Monitors to the JS\_VP port of any other Monitor except the 1# Monitor.

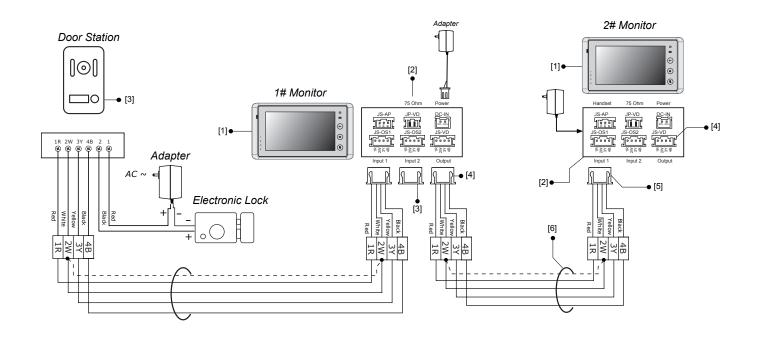
[5] Use JS-OS1 of all extended Monitors to connect to the JS-VP of Monitor 1#. Do not use JS-OS2 on other monitors. Do not attach a door station or camera on any other monitor.

[6] Cable length depends on cable used. See cable pages for information. Total distance is restricted to the length between the Door Station and the last monitor in a single chain. Note: BDU can be used as an inline booster. See BDU Distance Extending page for information.

[7] This topology is particularly suited to using the H427's second Video input JS-OS2. This can be a second Door Station or a CCTV Video Camera, etc. See Two Door Stations page and the Extend CCTV Camera page for further information.

[8] When using 2 door stations, the 2 Way Input menu should be set to 1 on Monitor 1#. On the Monitor Menu system, go to User Setup > Installer Setup > 2 Way Input and change the value from 0 to 1.

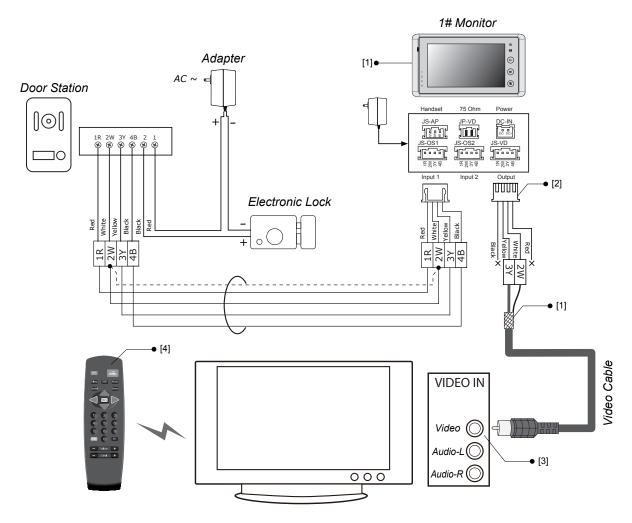




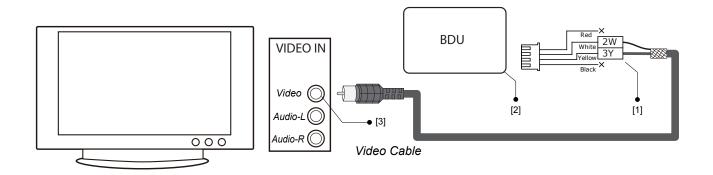
### 4 Wire - Monitor Expanded

### **EXTEND TO A TV MONITOR**

Television can be connect to the Monitor directly; when the visitor calls from the Doorstation, press the AV Button on the TV remote to view the video from the Doorstation.



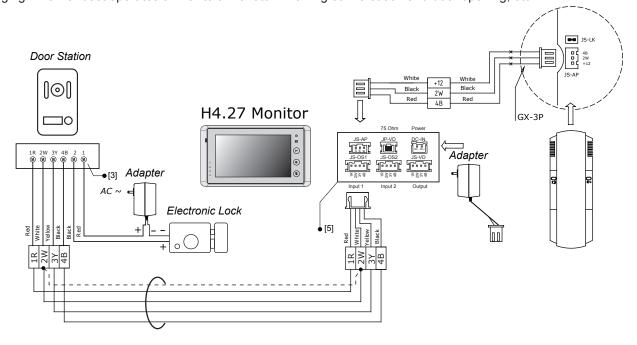
- [1] Connect the video cable core to 3Y and the shielded layer to 2W.
- [2] The Television can be connect to any H4.27 JS-VD port, even if multiple monitors are installed. Otherwise, the TV can be connected on a BDU branch. BDU will be required if using H4.24 units.
- [3] Connect the video cable to the VIDEO terminal of the Televison, Composite Video Input.
- [4] Press the AV Button on the TV remote to switch the picture from TV to Doorstation.



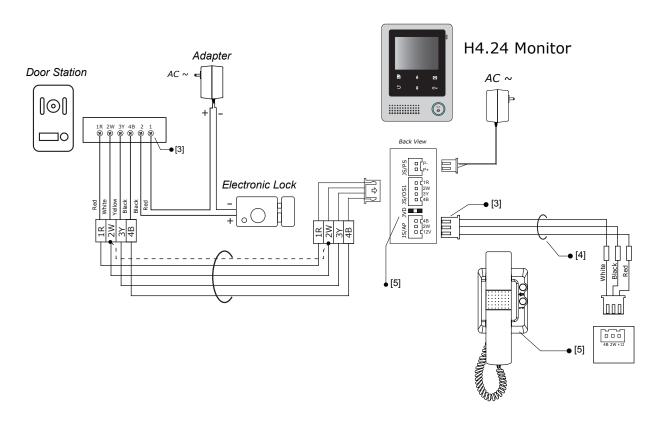
### 4 Wire - Monitor Expanded

### **EXTEND AUDIO HANDSET**

Audio Phones can be connected to the Monitor system. The Audio Phone can answer the calling from Doorstation and unlock the door. When visitors call from the Doorstation, Monitor(s) and Audio Phone(s) will ring at the same time, and any of them answer the call, the other will stop ringing. The Handset operates similar to a monotor involving conversation and door opening, etc.



- [1] The power supply for the Handset is not required. The 4 wire system incorporates 12Vdc to operate the handset.
- [2] Please connect the wire firmly, iron welding is recommended. Screw terminals optional, will need enclosure.
- [3] Connect the Doorstation to the JS-OS1 port (H427).
- [4] Connect the Audio Phone to the JS-AP port (H424).
- [5] Audio only handsets have no Video termination, If Monitor end-of-line then set last monitor JP-VD (JVD) = Closed



### 4 Wire - Connection Expanded

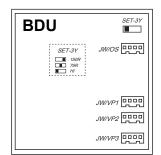
### **BDU BRANCH DISTRIBUTION UNIT**

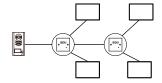
The BDU unit is designed as a repeater and distribution amplifier for splitting a Bus into three branches.

- Distribute the 4-Wire system in star topology, for splitting the Audio/Video/Control/Voltage Bus.
- Muitiple BDUs can be used when multiple distributor nodes need to be applied (up to 3 max.).
- There is a maximum of three BDU's that can be used in one system, in any configuration. If the system also uses a MDS Camera splitter, then only two BDU's can be used.
- BDU can work as a signal repeater in a long wiring distance system (up to 100 meters).
- The Video Signal quality requires  $75\Omega$  to be maintained. Please pay attention to the setting of JP-VD or JVD of the monitors (See Star Wiring Topology) and SET-3Y below:
- SET-3Y: Video impedance setting; 1- When multiple BDU uints are installed in the system, all the BDU units must be set to HI except the last one of the chain (which is end-of-line).
   2- The last BDU unit (or only one\*) it should be set to 75R or 150R according the following: when the distance from the door station to the BDU is over 50 meters, set to 150R, other wise set to 75R.

\*If there is only one BDU installed, the settings are the same as being the end-of-line unit.

- JW/OS: Input port; Connect to the door station, or previous BDU unit.
- JW/VP1/2/3: Output port; connect to indoor monitors or next BDU unit.
- H427 Requires Set Menu to: User Setup -> Installer Setup -> BDU Installed = 1

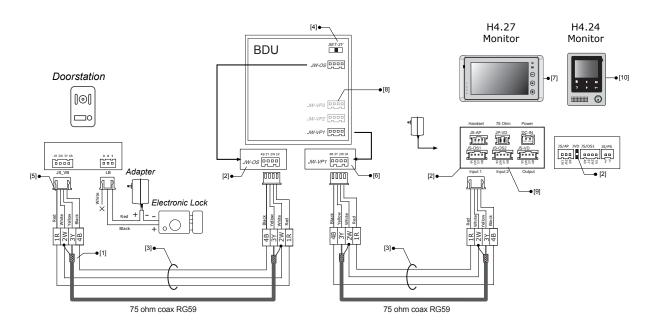




### **BDU DISTANCE EXTENDING**

The BDU can be used to extend the wiring distance from Doorstation to Monitor or from Monitor to Monitor in a chain.

• Connect the BDU directly between Doorstation and Monitor(s). Maximum distance 100 meters.



- [1] 75 ohm coax RG59 video cable, connect the video core to 3Y and connect the shielded layer to 2W.
- [2] Connect the Doorstation to the JW-OS port of the BDU.
- [3] The use of higher guage cables can help maximise range
- [4] Set the SET-3Y to 75R position(middle position)
- [5] Illustrated with a Door station as source. Can also be from another BDU branch line or Output of Monitor #1, etc.
- [6] Connect the JW/VP 1 to the Monitor #1. Optional Multi-Monitor setup. See Multi-Monitor pages.
- [7] H427 Requires Set Menu to: User Setup -> Installer Setup -> BDU Installed = 1
- **[8]** Multiple Monitors can be supported when using the BDU unit, refer to <u>Extend Multiple Monitors</u> section for connection detail).
- [9] The JS-OS2 can be connected to the second Doorstation, only if this H427 is the master Monitor #1.
- [10] H424 is shown for alternative conection Illustration purposes.

More BDU units can be inserted in the chain to further extend.

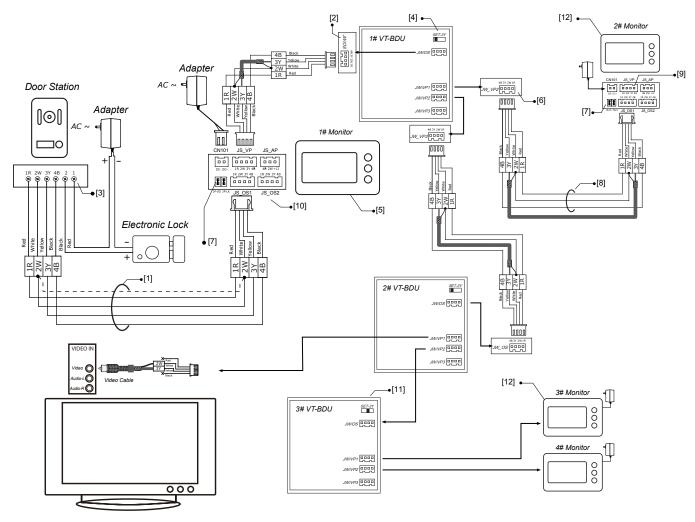
Please note that a BDU will not fix issues with cable selection.

### 4 Wire - Connection Expanded

### **BDU STAR-WIRING TOPOLOGY**

Star topology can be applied using one VT-BDU unit or multiple VT-DBU units, to meet the needs of defferent house structures. Maximum 3 VT-BDU units can be used in one system.

### Star Topology Connection

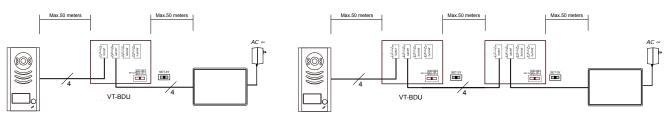


- [1] When the distance between two connect port is less than 30 meters, use RVVP 4\*0.5 mm² shielded cable, when the distance is over 30 meters, use RVVP-75-3(RG-59) video cable plus a RVVP 3\*0.5mm².
- [2] Connect the Doorstation to the JW/OS port.
- [3] This power adaptor is for the optional door strike only.
- [4] Set the SET-3Y to HI except the last VT-BDU.(4# BDU in this case). This is the impedance setting for end-of-line  $75\Omega$
- [5] Monitors in this topology should be all of the one same type. See Multi-Monitor Notes. H427 shown here for connection eg. only.
- [6] Each JW/VP port can be connected either Monitor or next VT-BDU unit.
- [7] Keep the JP\_VD jumpers connected on ALL monitors. This is the 75 ohm load for end-of-line termination (see 8).

- [8] Multiple Monitors can be connected, and the distance from the farest Monitor to the connected VT-BDU should be less than 50 meters. (refer to <a href="Extend Multiple Monitors"><u>Extend Multiple Monitors</u></a> section for connection detail).
- [9] Audio phones can be extended, (refer to Extend Audio Phone section for connection detail)
- **[10]** Doorstation can be connected to the JS\_OS2 port of only Monitor1# (refer to <u>Dual Doorstation Connection</u> section for connection detail).
- [11] The SET-3Y of the last VT-BDU must be set to 75R.
- [12] "BDU Installed" Setting = "1" to enable all Monitor features. eg. To share H427SDD Memory between extra monitors, etc. <u>User Setup</u> --> <u>Installer Setup</u> --> <u>2412</u> --> <u>Save</u> --> Select Option <u>BDU Installed</u> and enter <u>"1"</u>, <u>Save</u> and Exit.

### 4 Wire - Connection Expanded

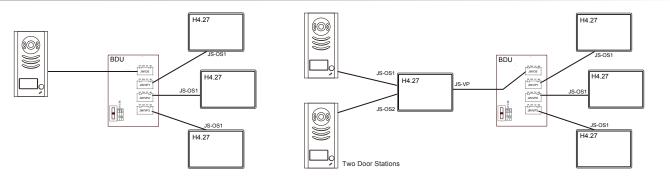
### **BDU EXTENSION TOPOLOGY**



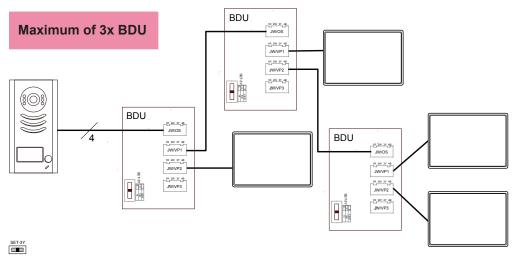
Note:SET-3Y set to 75R when the distance from door station to BDU is within 50 meters, otherwise set to 150R.

Note:SET-3Y set to 75R when the distance from door station to BDU is within 50 meters,otherwise set to 150R.

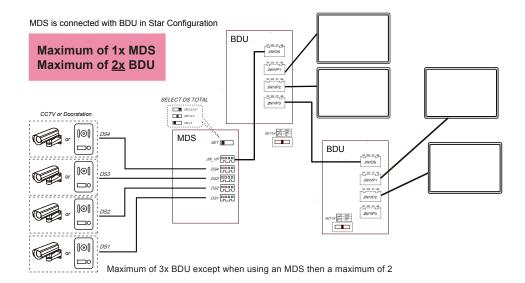
### **BDU STAR-WIRING TOPOLOGY**



BDU is connected from one output to another (Star Configuration)



Note:SET-3Y set to 75R when the distance from door station to BDU is within 50 meters, otherwise set to 150R.



### 4 Wire - Accessories

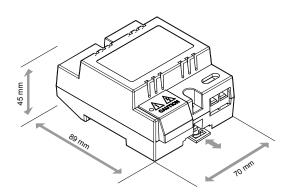
### RLC LOCK/LAMP CONTROL UNIT

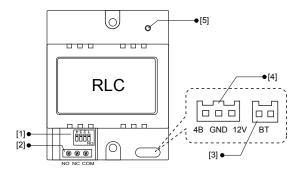
The VT-RLC unit can be used to control lamp(for example, the staircase light) or to control a additional electronic lock(for example, garage door lock).

When control a lamp, there are 2 different control modes can be used, Automatic mode and Manual mode.

- Automatic Mode: The lamp will be automically turned on when visitors press Call button on the Doorstation, and it will be turned off automatically after a given time(called Light-on time, can be set by the DIP switches for 1, 3, 5 or 10 minutes)
- Manual Mode: The lamp will be turned on and off manually on the screen of the Monitor or by the external button.

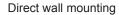
### **RLC Terminal descriptions**

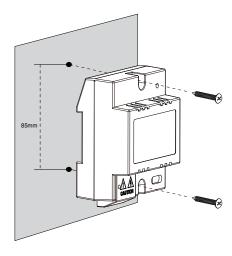




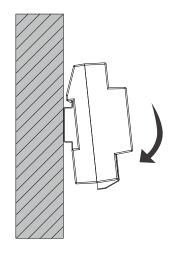
- [1] DIP switches for lamp control or unlock time settings(see detail information later this section).
- [2] Relay contact terminal, connect to lock or lamp. NO Normally open terminal; NC Normally closed terminal; COM Common terminal.
- [3] External control button port.

- [4] Monitor connection port, connect to the JS\_AP port of Monitor. 4B data transmition line, connect to 4B pin of Monitor; GND power ground, connect to 2W pin of Monitor; 12V DC 12V power, connect to +12V of Monitor.
- [5] LED indicator, lights in red when power is on, blink in red when the unit is active.



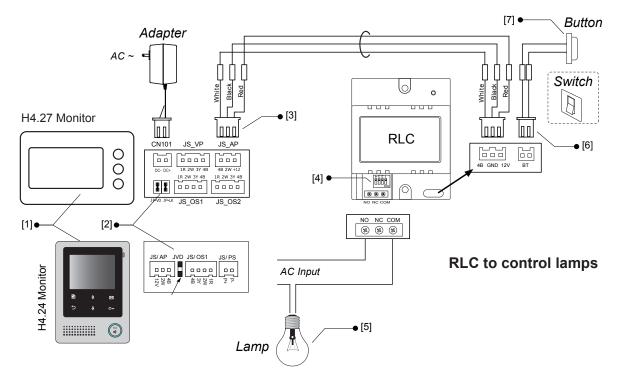


DIN rail mounting



### 4 Wire - Accessories

### **RLC LAMP CONTROL**



- [1] Only the Monitors with a touch screen can support VT-RLC unit, and settings need to be made to enable the RLC function.
- [2] Connecting RLC unit will not afffect the jamper settings.
- [3] Connect the RLC unit to the JS\_AP port of Monitor. Note that Audio Phone can not be supported when using RLC.
- [4] DIP switches for Lock/Lamp control settings.

### **DIP** settings

- Bit-1: Lamp / Lock select. set to OFF for lamp control; set to ON for lock control.
- Bit-2: Control mode select. set to ON to select Manual Mode, set to OFF to select automatical Mode.
- Bit-3 and Bit-4: Light-on time select, see table below
- DIP state Function descriptions

  Automatic Mode;
  Light-on time=10 min;
  Defaut setting

  Automatic Mode;
  Light-on time=3 min;

  ON
  Light-on time=5 min;

  Automatic Mode;
  Light-on time=5 min;

  ON
  Light-on time=1 min;

  ON
  Light-on time=1 min;

  Manual Mode;
  Lamp manually control by button or Monitor

- [5] Connect the lamp to **NO** and **COM** terminal, this lamp can be any type of AC light(the power rating must less then 700 w), such as a light tube.
- [6] The button connection is Non-polarity.
- [7] Both button or switch can be connect to the BT port. Note that if using a switch, the Light-on timing will only work when the switch is turned off, when the switch is turn on, the lamp will always be on.

### Monitor settings and operations

### H424

Tools ->>Installer Setup(1)/(2) ->> Staircase Light

### H427

User Setup ->>Installer Setup ->> Staircase Light

Light on door bell activation can be set as follows:

[0]: don't light on at any time when receive calling [1]: light on at night only when receive calling

[2]: light on at any time when receive calling.

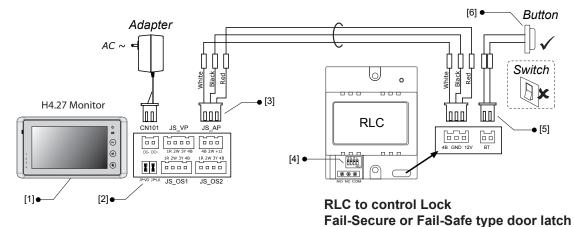
Note that this item should be set on Monitor #1 for slave monitors, this item is invalid.

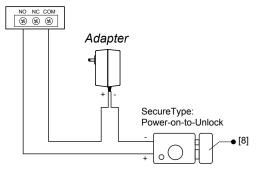
Night/Day timing is set by the clock.



### 4 Wire - Accessories

### **RLC LOCK CONTROL**





- [1] Only the Monitors with a touch screen can support VT-RLC unit, and settings need to be made to enable the RLC function.
- [2] Connecting RLC unit will not afffect the jamper settings.
- [3] Connect the RLC unit to the JS\_AP port of Monitor. Note that Audio Phone can not be supported when using RLC.
- [4] DIP switches for Lock/Lamp control settings.

## Safety Type: Power-off-to-Unlock [7]

Adapter

- [6] External button can be connect to the BT port. DO NOT connect a switch to the BT port.
- [7] When connecting a lock with the safety type of Power-off-to-Unlock, connect to the  ${\bf NC}$  and  ${\bf COM}$  port.
- [8] When connecting a lock with the safety type of Poweron-to Unlock, connect to the **NO** and **COM** port.

### **DIP** settings

- Bit-1: Lamp / Lock select. set to OFF for lamp control; set to ON for lock control.
- Bit-2: Function reserved.
- Bit-3 and Bit-4: Light-on time select, see table below.

# DIP state Function descriptions Unlocking time = 10 seconds Unlocking time = 3 seconds Unlocking time = 5 seconds Unlocking time = 5 seconds Unlocking time = 1 seconds

### Monitor settings and operations

### **H427 TIMING**

User Setup ->>Installer Setup ->> Unlock Timing

Sets the timing interval that the door catch is activated for. 0 to 9 Seconds. Default 3 seconds.

User Setup ->>Installer Setup ->> Unlock Auto Off

Sets the timing interval that the Monitor remains on for, after the door release has finished activating. 0 to 9 Seconds. Default 3 seconds.

### Fail Secure is Power-On-To Release

This is available standard with a Door Station (Door station is without Exit Button delay)

Fail-Safe is Power-Off-To-Release

This type requires RLC using NC/COM Contacts



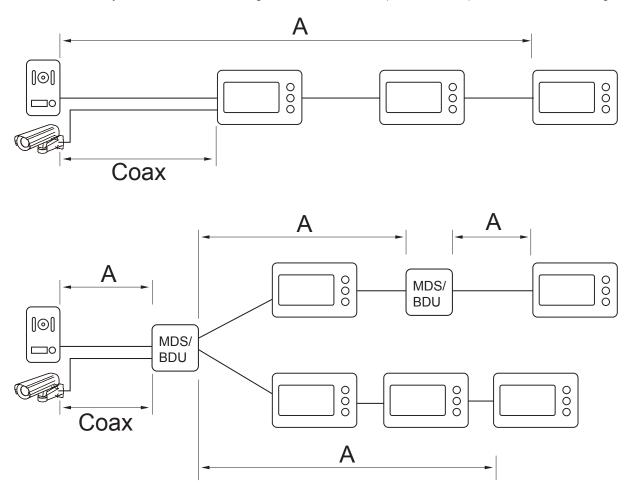
H4.24 Monitor Not Compatible with Door Lock Control

### 4 Wire - Technical Connections

### **CABLE DISTANCES**

Distance achieved can vary when using different grades and types of cable and connection methods. Below is manufacturers recommended cables and cables available from WES Australasia (Tested). Resalts may vary depending on application.

It is recomended to use CAT5 or CAT6 Cable for standard installations of shorter lengths and simpler type applications. Use shielded cable for noisy environments when runing cable with other wires (like mains, etc.) or steel structure buildings, etc.



**Distance (A):** 0 < Distance ≤ 30m 30 ≤ Distance ≤ 50m 50m ≤ Distance ≤100m



Distance ≤ 100m General Install Shielded Cable For Noisy Environment Install

WES Cables

CAT5 or CAT6 24AWG SEC7505

### Application:

It is recomended to use CAT5 Cable for standard installs with shorter lengths. As tested, we found 24AWG CAT5 ample for up to 50 Meters (see also BDU as a booster). Longer lengths require 20AWG. It is recommended to use shielded cable for noisy installations when runing cable with other wires (like mains cord, etc.) or steel structure buildings, industrial, etc.

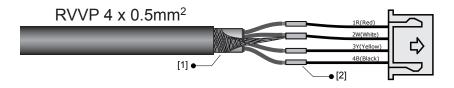
### 4 Wire - Technical Connections

### **CABLE CONNECTION**

Connect the cable to the 4 pin connector, the joint should be soldered with an iron.

### **Manufacturers Recommended Cables**

### 1. Connect RVVP 4 cable



### 2. Connect RVV 3 + SYV cable

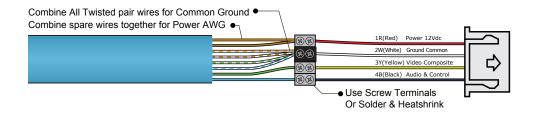


[1] Connect the shielded layer of the cable to the 2W wire.

[2] All the jointers should be weldded with an iron.

### **WES Cables**

### 1. Connect CAT5/CAT6 cable Twisted-Pair



### 2. Connect Security Cable SEC7505 - Shielded for noisy environments

