Instruction Manual

VDP304

Table of Contents

Introduction

The VDP304 has a stylish brushed aluminium & gloss black finish. The quality build the DoorKnox is ideal for domestic, retail and commercial projects.

The menu interface has an updated modern design, showing coloured icons, for easy use of the menu.*

Our touch button monitor provides control of the door entry camera and is available in a 4" size.

Two door cameras and two door locks can be connected to the main monitor.

The menu structure in the VDP304 does not match the latest VDP207 and VDP210 monitors, but they can be used in conjunction with each other.

DoorKnox Monitors from serial numbers VDP207 (HCA01001) & VDP210 (HCB00401) can be used along side the VDP304.

1.1 Key Features

- Up to 4 monitors on a system. 1 Main Monitor plus 3 Auxiliary Monitors.
- Camera to Monitor Intercom
- Monitor to Monitor Intercom
- 12 built ringtones
- Customise ringtone MP3
- Motion detection
- Ring at camera
- Automated Message & Video Mail Recording
- Local Unlock
- Standby Screen Saver Customisation
- Media Player - Music, Video & Pictures

User Information

- Do not expose to moisture or high humidity conditions. This product is rated for internal use only.

- Take care when transporting, storing and installing the monitor

- Always use and conform to current standards to install and use these. The signal cables should be kept way from high voltage equipment. Damage to units by lightning or mains voltage surges is not covered under the product warranty.(BS EN 62676-1-1) (BS EN 62676-4) (BS8418)

- There are no user serviceable parts in the monitor and opening or attempting to repair the product will void the warranty.

- Do not touch the connections with wet hands.

- Wipe dirt away with a damp micro-fibrecloth.

- Do not install or use the monitor if the cables, casing, or the power supply is damaged.

Connections and Wiring
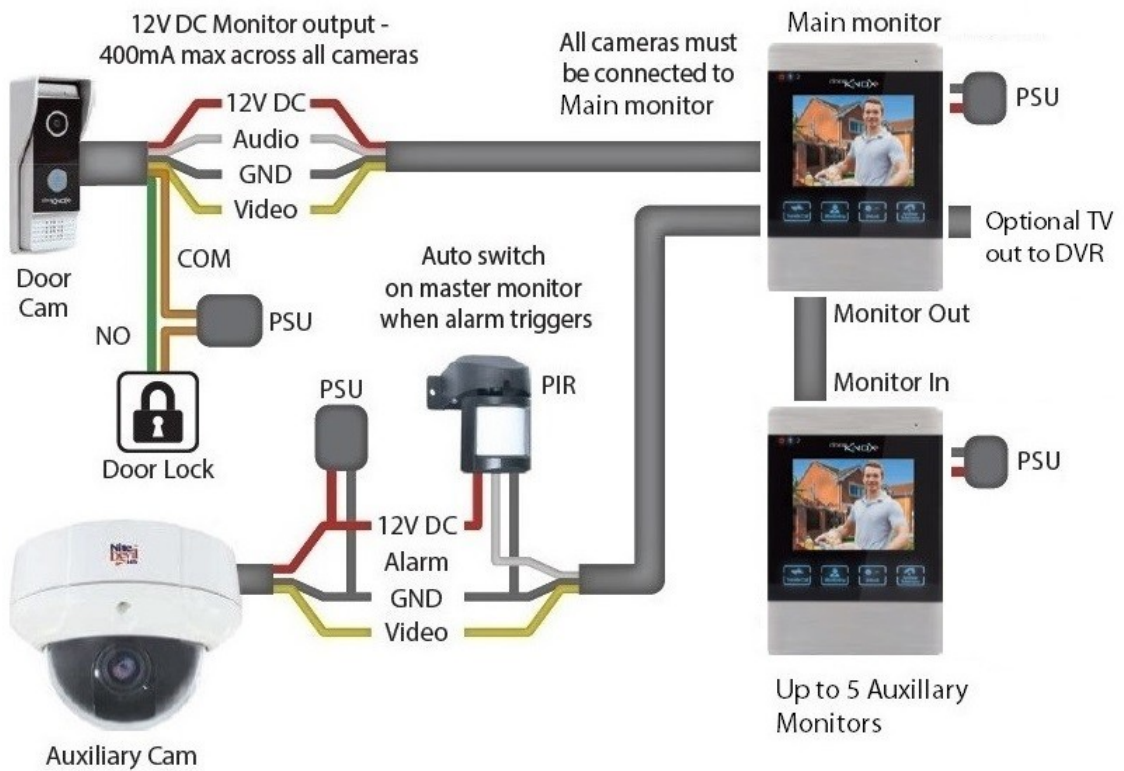
To make life easier all monitors feature the exact
same connection layout as shown below.
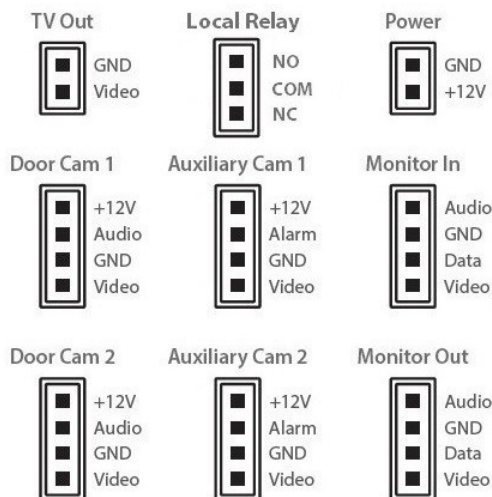
3.1 Cameras

All of the DoorKnox cameras have connection cables terminated into the same 7 colour coordinated wires. 4 wires are used to connect to the monitor and then 2 of the 3 remaining wires are used to connect to an electronic door lock.

The common (COM) wire is always used along with either the normally open (NO) or normally closed (NC) wire depending on the lock type, power for the lock is separate as the Door Lock relay does not provide power output.
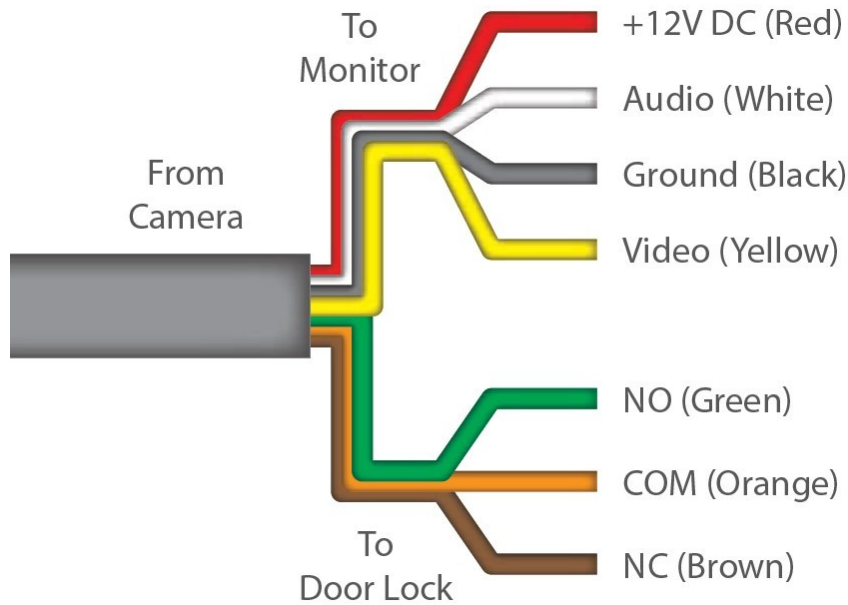
3.2 Monitors

Every monitor is supplied with 5x 4 wire y-leads, 1x 2 wire y-lead and 1x 3 wire y-lead.

The 4 wire y-leads are terminated into 4 pin plugs which are simply inserted into the sockets on the rear of the monitor. These are used for connecting door cameras, auxiliary cameras and auxiliary monitors, the 4 wires are colour co-ordinated to match the 4 wires from the door camera.

The 2 wire y-lead is terminated with a 2 pin plug and is used as the TV out for connecting the door monitor to a TV monitor or DVR.

The 3 wire y-lead is terminated for the local relay plug and is used to unlock a local relay like a door release local to the monitor.
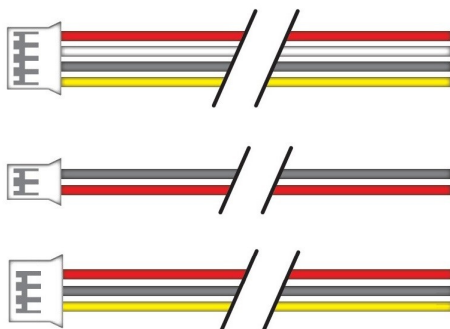
3.3 Powering Cameras

Door cameras and auxiliary cameras can be powered in two ways, either locally or via the main monitor.

The DoorKnox monitors can supply a 12V DC output to any of the four cameras but can only supply a maximum of 400mA across all outputs.

To power a camera locally connect the Audio (white) and Video (yellow) to the door monitor, the GND (black) to the PSU and the door monitor and then the 12V DC (red) to the PSU only.

3.4 Powering Monitors

Door monitors are supplied with a 12V DC 2A plug-in PSU that terminates into a 2 pin plug which slots into the rear of the monitor.

3.5 Cable Runs

The maximum achievable cable run is limited by the voltage drop in the chosen cable and also the quality of the video cable which can cause signal loss and interference.

Resistance differs depending on the cable used and the higher the resistance the more the voltage drops hence the shorter cable run achievable.

It is recommended to use one of three types of cable, PTZ combo cable sometimes known as RG59+4, CAT5+2 cable or 4 core cable with 0.3mm2 cores.

Below shows the maximum recommended cable run for each cable type. Cable runs exceeding the stated maximum run are at risk of issues caused by voltage drop and non performance of equipment.

Camera to Main Monitor

Cable Type	Max Cable Run
PTZ Combo Cable (RG59+4)	Up To 150m
CAT5+2 Up To 100m 4 Core Cable (0.3mm2	Up To 100m
4 Core Cable (0.3mm2)	Up To 50m

Main Monitor to Auxiliary Monitors

Cable Type	Max Cable Run
PTZ Combo Cable (RG59+4)	Up To 30m (Per Monitor)

Mounting
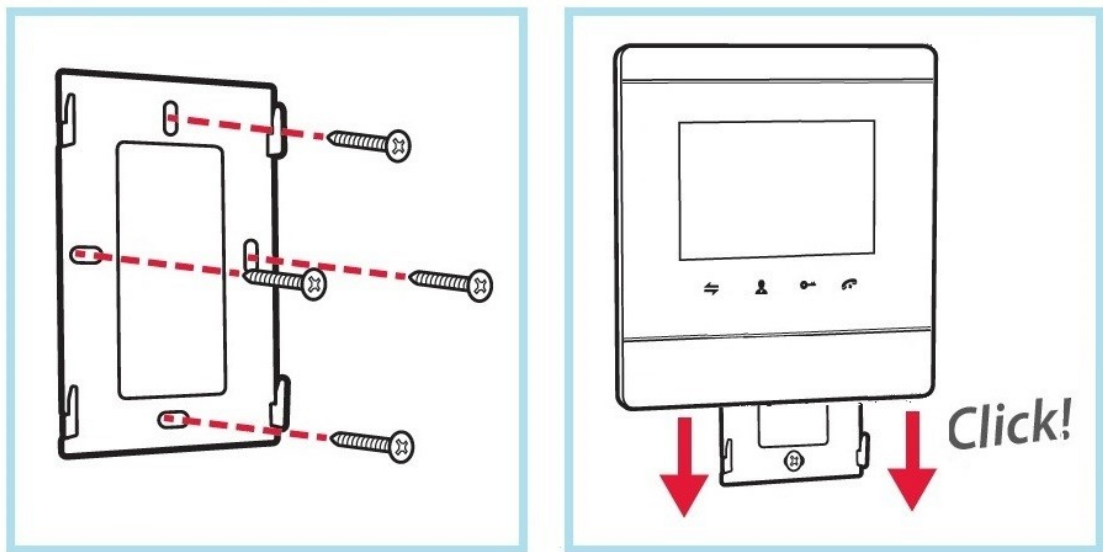
Mark the hole positions using the mounting bracket.

Drill the holes and install the wall plugs.

Secure the mounting plate and then slot the monitor onto the bracket, when the monitor clicks it is secured in place.

Controls and Features
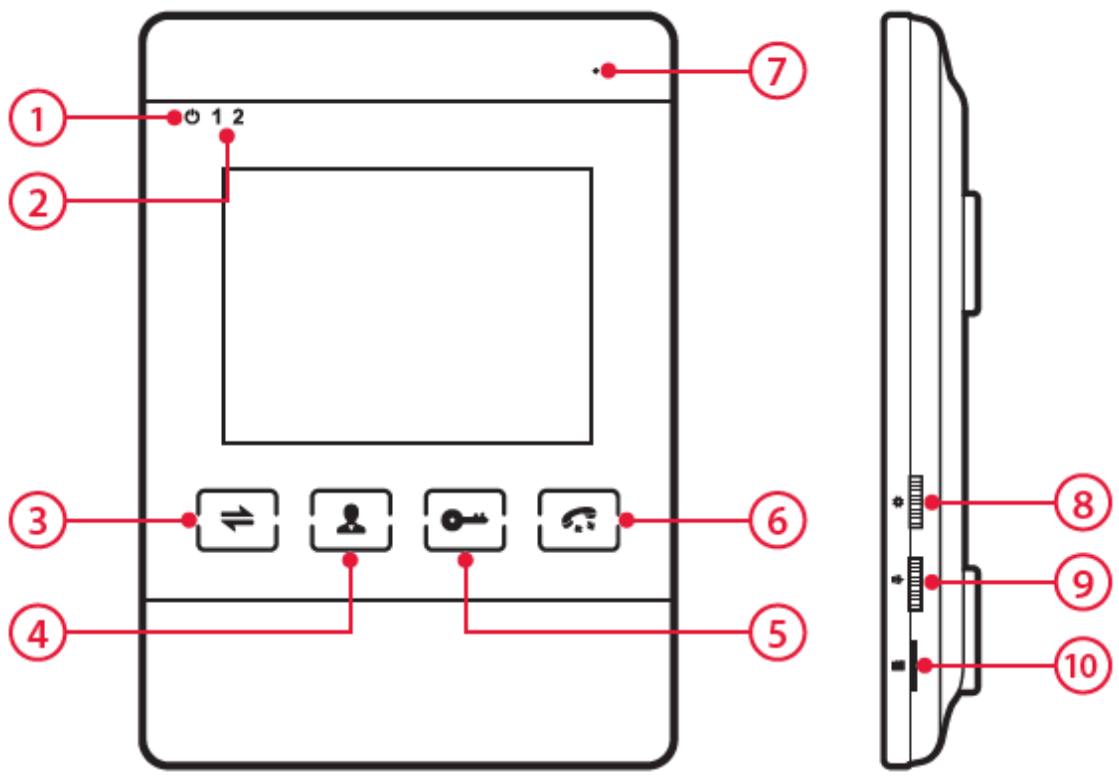
1. Power Indicator
2. Indicator shows which camera is being displayed
3. Transfer - Send call to other monitor(s) / Intercom
4. Monitoring - Switch between camera inputs
5. Unlock - Sends command to unlock
6. Talk - Answer / End call / Return
7. Microphone
8. Settings - Enter / Up and down
9. Volume Control
10. Micro SD card slot

Menu Navigation

Setting button on the side of the monitor -

- Press in to enter the menu.

- Flick up / down to navigate the menu system

- Press again to make selection

Talk (Answer/ hang up) intercom button -

- To go back at any time or to exit the menu use the **Talk** button.

- Repeatedly pressing this button from any page will take you out of the settings.

- Any settings that you have made will be automatically saved.

Basic Monitor Settings

If only using 1 door camera and 1 monitor then skip setting monitor ID and camera switch.

7.1 Setting Monitor ID

Up to 4 DoorKnox monitors can be used; 1 main monitor and up to 3 auxiliary monitors.

The main monitor ID must be set to 1, and the auxiliary monitors ID from 2 up.

1. **Press** the **Setting** button on the side of the monitor to access the menu.

2. Using the **Setting** button **flick** up / down to navigate to **"Mode"** in the menu, then press the **Setting** button.

3. Navigate to "**Device ID**" then press **Setting** button, **flick** up / down to change the ID.

7.2 Setting the Time

1. **Press** the **Setting** button on the side of the monitor to access the menu.

2. Using the **Setting** button **flick** up / down to navigate to **"Time"** in the menu, then press the **Setting** button.

3. **Flick** up / down to navigate the page and then press the **Setting** button to select the setting, use **up / down** to change the setting.

Using the Door Entry System

8.1 Visitor Calls

When a visitor presses the call button on a door camera the ringtone will be played and their image will be displayed on all door monitors. To answer the call press the **Talk** button.

8.2 Monitoring Cameras

To monitor any camera press the **Monitoring** button to cycle through camera inputs.

When monitoring a door camera open two way audio by pressing the **Talk** button.

Unlock door by pressing the **Unlock** button.

When monitoring cameras the door monitor will return to standby after 60 seconds of inactivity.
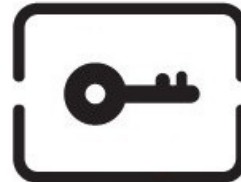
8.3 Local Relay / Unlock

The local relay to the monitor can be wired to unlock a door from the monitor using its local relay.

Press and hold **Unlock** to activate local relay.

8.4 Intercom (Monitor to Monitor Audio)

Press the **Transfer** button to show different monitor extension IDs
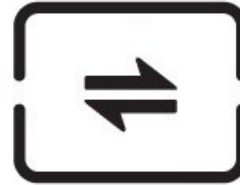
Press the **Up / Down** to select the different monitor IDs then select using **Setting** to call another monitor.

To answer the call press the **Talk** button on the receiving monitor.

To end the call press the Hang Up Button.

Monitor Menu

Language	Language	**English** / Italian / Lithuanian / Turkish / Dutch / Spanish / Slovakian / Czech / French / Ukrainian / Polish / Russian / Traditional Chinese / Simplified Chinese
Time	Clock	**On** / off
	Format	**YY-MM-DD** / DD-MM-YY / MM-DD-YY
	Date	Custom Set
	Time	Custom Set
Information	Software Version	AGD-V2.0.25
	MCU Version	MCU-V2_4_4
	Release Date	2023-06-06
	Reboot	**Ok** (Press)
	SD free size	Free space / Total space
	Format SD	**Ok** (Press)
	Factory reset	**Ok** (Press)
Ring	Mode	**Default** / User Defined
	Door 1	**(Default) 1st** / Custom Ring Tone
	Door 2	**(Default) 1st** / Custom Ring Tone
	Motion Detection	**Enable** / Disable
Volume	Ring Vol 1:	Start Time / End Time / Volume / Duration
	Ring Vol 2:	Start Time / End Time / Volume / Duration
	Ring Vol 3:	Start Time / End Time / Volume / Duration
	Button Voice	**On** / Off
Mode	Device ID	**01 –** 06
	Door 2 Status	**On** / Off
	Door 1 Unlock Time	**02** – 10 (Seconds)
	Door 2 Unlock Time	**02** – 10 (Seconds)
	Record Mode	**Video** / Snapshot
	Motion Detection	**Disable** / Door 1 / Door 2 / Cam 1 / Cam 2
	MD Sensitivity	**Medium** / Low / High
	MD Duration	**60** / 120 / 180 / 240 / 300 / 15 / 30
	Message	**Enable** / Disable
Alarm	Alarm Record	**Video** / Snapshot
	CAM 1 Sensor Type	**NO** / NC / Off
	CAM 1	**Enable** / Disable
	CAM 1 Ring Time	**5** (0 - 20)
	CAM 2 Sensor Type	**NO** / NC / Off
	CAM 2	**Enable** / Disable

	CAM 2 Ring Time	**5** (0 - 20)
Record	Video	Enter to view files
	Picture	Enter to view files
	Return	
Digital Photo	Digital Switch	**Disable** / Enable
	Interval Time	**09** (01 – 10)
Media	Music	Enter to preview files
	Movie	Enter to preview files
	Photo	Enter to preview files
	File	Enter to preview files

Troubleshooting

Poor Connections - A poor lead connection may cause signal loss or interference so check that each component is firmly plugged in and any joints (soldered or otherwise) have been made well and solid with no shorts or crossed wires.

Lack Of Power - May cause a lack of picture or other intermittent results. Check your equipment works on a short lead to rule out unsuitable cable runs. Ensure that each add-on item such as cameras, PIRs etc. have their own adequate power supply source. Finally try powering the unit locally with a suitably rated power supply unit (12V DC 2A). See Powering Monitors ⁷ for help on this.

Long Cable Runs Causing Signal Loss - A long cable run may result in poor or complete signal loss. Firstly check if this is the cause by testing the camera and screen on a short test cable. If the problem disappears then both units are working correctly.

Next check if the correct cable is being used. If your cable is below specification then it will need replacing with a more suitable heavier duty cable. See Connections and Wiring ⁵

All above checks should be carried out in any situation where one unit does not appear to be receiving a signal whether video, audio or data from another unit.

General Maintenance

- Ensure that nothing is obscuring the field of view, position the camera to ensure the subject is in field of view and can be seen clearly.

- Ensure that the Microphone is clear and not obscured at all.

- Routinely clean the monitor to prevent dust build up as this can effect the performance. We recommend a damp non-abrasive microfibre cloth.

- Routinely check the connections for power and data to ensure the connections are secure and solid.

- Check that the monitor is firmly attached to the wall mounting bracket.

- Check playback in the monitor to ensure it is recording & triggering properly on the SD Card

Specifications

Screen Size	4"
Video Input	CVBS / AHD (2MP) Ready
Screen Resolution	320 (H) x 240 (V)
Camera Input	2x Door Cameras / 2x Auxiliary Cameras
Door Monitor Inputs	1
Door Monitor Outputs	1 (3 Auxiliary, 4 Total – Daisy chained)
TV Monitor Outputs	1 (720 x 576)
SD Card	Micro SD / 2GB – 128GB Class 10 Min (Not Supplied)
Power / Consumption	12V DC / 1200mA (2A PSU Supplied)
Build	Plastic (Silver)
Operating Temperature	-10°C +60°C
Installation	Internal Use Surface Mount
Intercom Duration	120s
Dimensions	(H) 165 x (W) 245 x (D) 23mm

Conditions

All specifications are approximate. System Q Ltd reserves the right to change any product specifications or features without notice. Whilst every effort is made to ensure that these instructions are complete and accurate, System Q Ltd cannot be held responsible in any way for any losses, no matter how they arise, from errors or omissions in these instructions, or the performance or non-performance of the equipment that these instructions refer to.

This symbol on the products and/or accompanying documents means that used electronic equipment must not be mixed with general household waste. For treatment, recovery and recycling please return this unit to your trade supplier or local designated WEE/CG0783SS collection point as defined by your local council.

© Copyright 2020
DoorKnox is a registered trademark of System Q Ltd, Chesterfield. Derbyshire. S40 2WB