

4 Camera Inputs With 7 Display Options

Handbook &
Instructions



Quad



Pic In Pic



H Split



V Split

...and more!

XQUAD050
Vol1 / Ver1



**Free
Remote**



- HD-TVI, AHD & Analogue Compatible
- Combined Quad & Switcher In 1
- Wall-mount To Free Up Desk Space
- Display On Up To 4 Monitors
- Choose From 7 Display Modes
- Free Remote Control Included

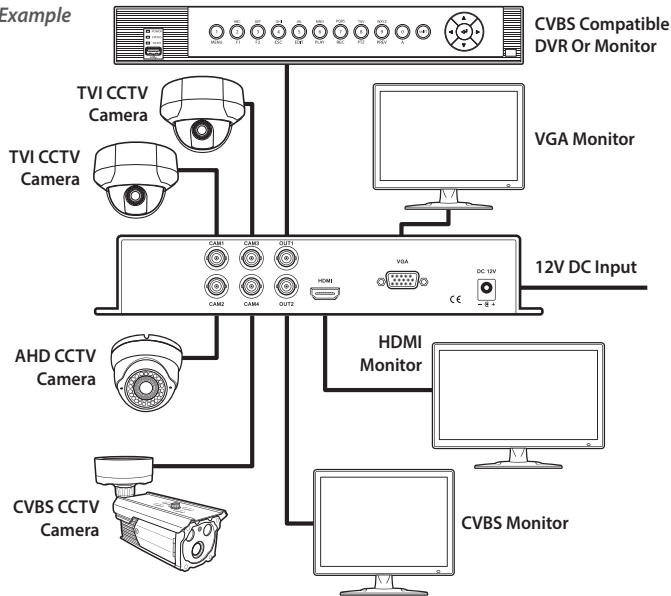
The new HandyQuad TVI is a great choice for any CCTV or AV engineer to distribute and display up to 4 video or CCTV signals to 4 monitors simultaneously. Compatible with analogue as well as HD-TVI and AHD technologies, it's a useful device to take on a job as it produces 7 different viewing displays including Picture-In-Picture and a 2 way vertical split screen.

A built-in sequential switcher means you can use it as a basic switching device on 2 standard DVR monitors, via a BNC connection. Or connect up to 2 additional monitors via a VGA and HDMI connection to have 4 monitors!

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How To Connect The HandyQuad TVI

Example



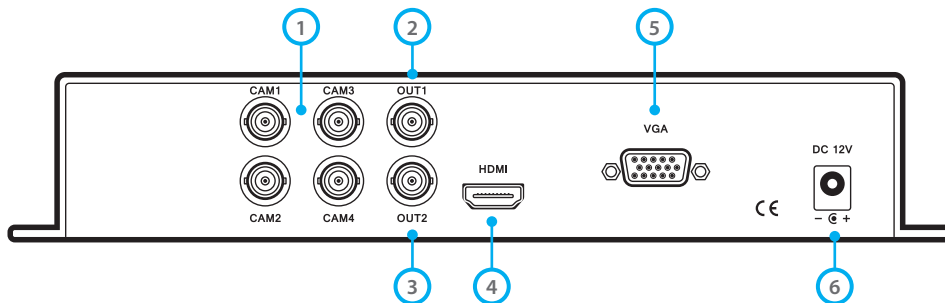
The HandyQuad TVI is really easy to install into an existing or as part of a new CCTV system.

Simply connect your HD-TVI, AHD or analogue cameras to the camera inputs labelled CAM 1 to CAM 4. You then need to go to the '**Input Settings**' menu (*see page 9*) and set the correct format for each camera e.g. TVI, AHD or D1 (Analogue).

The two BNC CVBS outputs can be connected to a compatible DVR or monitor. High resolution monitors can also be connected to the VGA and HDMI outputs.

All four outputs show whichever display mode is currently set on the HandyQuad TVI.

To power the unit you will need a 12V DC PSU with a 2.1mm DC plug providing a minimum of 500mA.



No.	Description
1	Camera Inputs (HD-TVI, AHD or Analogue)
2	BNC Output 1 (CVBS)
3	BNC Output 2 (CVBS)

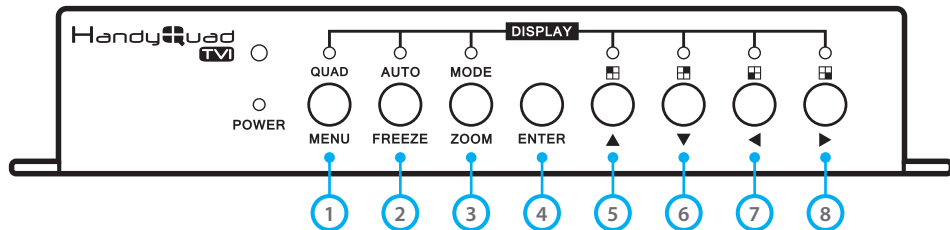
No.	Description
4	HDMI Output
5	VGA Output
6	Power Input / 2.1mm DC Socket

Powering the HandyQuad TVI

Our high quality, reliable AntiHum power supplies are ideal for use with the HandyQuad TVI. We offer a 12V DC, 500mA

power supply with an industry standard 2.1mm DC plug.

Order Code: **POW151**



No.	Button	Short Press	Long Press
1	MENU	Quad View	Menu / Exit Menu
2	FREEZE	Auto Switch	Freeze Camera(s)
3	ZOOM (See below for display modes)	1x PIP / 2x Main Monitor & Split Screen / 3x Vertical Split / 9x Horizontal Split	Zoom / Hide Zoom (Direction buttons to move zoom area, ENTER to confirm & exit)

No.	Button	Short Press	Long Press
4	ENTER	Confirm Selection	N/A
5	▲	Ch 1 / Up	N/A
6	▼	Ch 2 / Down	N/A
7	◀	Ch 3 / Left	N/A
8	▶	Ch 4 / Right	N/A

Display Modes - Accessed Using The Mode (Zoom) Button

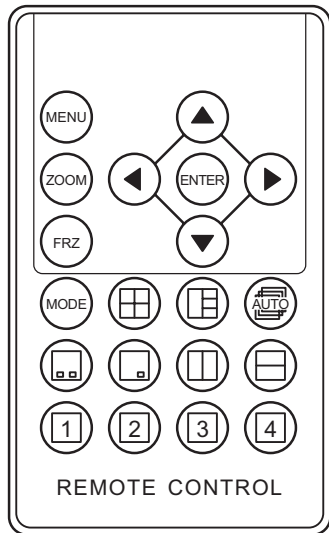
PIP - Main and sub channel set in PIP Settings, *see page 13*.

Main Monitor & Split Screen - Ch 1 big. Ch 2, 3 & 4 small.

Vertical Split - Displays next configuration with each

button press. 1 & 2 / 1 & 3 / 1 & 4 / 2 & 3 / 2 & 4 / 3 & 4.

Horizontal Split - Displays next configuration with each button press. 1 & 2 / 1 & 3 / 1 & 4 / 2 & 3 / 2 & 4 / 3 & 4.



Button	Function
MENU	Menu / Exit
ZOOM	Zoom / 2x Exit Zoom
FRZ	Freeze Current Image(s) / 2x Unfreeze
▲	Up
▼	Down
◀	Left
▶	Right
ENTER	Confirm Selection
MODE	1x PIP 2x Main Monitor & Split Screen 3x Vertical Split 9x Horizontal Split
	Quad View
	Main Monitor & Split Screen

Button	Function
	Start Auto-Switch
	Not Supported
	PIP
	Vertical Split (Ch 1 & 2)
	Horizontal Split (Ch 1 & 2)
	Ch 1 Full screen
	Ch 2 Full screen
	Ch 3 Full screen
	Ch 4 Full screen

See opposite for display mode options.

INPUT SETTINGS
DISPLAY SETTINGS
IMAGE SETTINGS
AUTOSEQ SETTINGS
PIP SETTINGS
SYSTEM RESET

The HandyQuad TVI has a really simple and easy to use menu system.

Pressing **MENU** on the IR remote control, or holding **MENU** on the HandyQuad TVI's front panel will display the Main Menu.

From here use the directional arrow buttons to highlight the sub menu required. Press **ENTER** to select the sub menu.

Inside sub menus use the directional arrow buttons to highlight and change parameters and to highlight check boxes. To select a check box or to confirm a selection press **ENTER**. To exit a sub menu and return to the main menu press/hold the **MENU** button.

To exit the menu system , when viewing the main menu press the **MENU** button on the IR remote control or hold the **MENU** button on the front panel of the device.

INPUT SETTINGS

CH1	D1 <input type="checkbox"/>	AHD <input type="checkbox"/>	TVI <input checked="" type="checkbox"/>
CH2	D1 <input type="checkbox"/>	AHD <input type="checkbox"/>	TVI <input checked="" type="checkbox"/>
CH3	D1 <input type="checkbox"/>	AHD <input checked="" type="checkbox"/>	TVI <input type="checkbox"/>
CH4	D1 <input checked="" type="checkbox"/>	AHD <input type="checkbox"/>	TVI <input type="checkbox"/>

VIDEO FORMAT PAL NTSC

One of the best features of the HandyQuad TVI is its ability to accept HD-TVI, AHD and analogue CCTV cameras. As it is compatible with different technologies, when a camera is connected you need to set the corresponding channel to match the technology of the camera. This is done in the Input Settings menu. For each channel there are three options available, **D1** (analogue), **AHD** and **TVI**.

The Input Settings menu is also where you set the HandyQuad TVI's video format, **PAL** or **NTSC**, which is used for both its inputs and outputs. For use in the UK this should be set as **PAL**.

To select a check box, highlight it using the directional arrow buttons and press **ENTER** to confirm your selection.

Note: *If the wrong technology is selected the camera's image may be displayed incorrectly or may not display at all.*

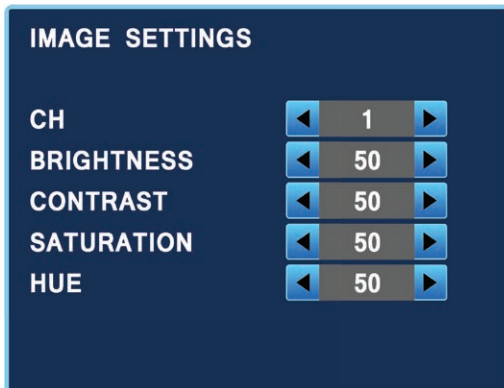
DISPLAY SETTINGS

HDMI/VGA RESOLUTION

1024X768	<input type="checkbox"/>	720P/60HZ	<input type="checkbox"/>
1280X1024	<input type="checkbox"/>	1080P/50HZ	<input checked="" type="checkbox"/>
1440X900	<input type="checkbox"/>	1080P/60HZ	<input type="checkbox"/>
720P/50HZ	<input type="checkbox"/>		

In the Display Settings sub menu you can set the resolution of the HDMI and VGA outputs. The HandyQuad TVI supports a full 1080p HD output so no image quality is lost when TVI and AHD cameras are connected.

To set the output resolution use the directional arrows to highlight the desired resolution and press **ENTER**.



The Image Settings menu allows you to adjust variables for each channel individually so that you get the best possible image from all cameras.

To make adjustments you first need to choose which channel you wish to configure. Use the **Down** arrow to highlight CH (Channel) then the **Left** and **Right** arrows to switch between camera inputs. Once you have selected the desired channel use the **Up** and **Down** arrows to choose either **Brightness**, **Contrast**, **Saturation** or **Hue** then the **Left** and **Right** arrows to set the value. Values can be set between **0** and **99**.

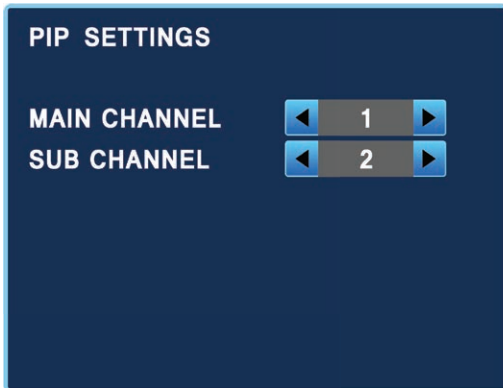
AUTOSEQ SETTINGS	
CH NO	DWELL TIME
CH1	◀ 5 ▶
CH2	◀ 5 ▶
CH3	◀ 5 ▶
CH4	◀ 5 ▶

The HandyQuad TVI has a built in sequential switcher which automatically cycles through the four camera inputs for a user defined amount of time.

The length of time each image is displayed can be adjusted in the Autoseq Settings sub menu. Use the **Up** and **Down** arrows to select the channel you want to configure. The **Left** and **Right** arrows are then used to set the amount of time the channel will appear on screen before the HandyQuad switches to the next channel, this is known as the **Dwell Time**.

The Dwell Time for each channel can be set between **3** and **99** seconds.

To start the auto switch display mode press the **Freeze** button on the front panel of the device or the **Auto** button on the IR remote control



The PIP Settings (Picture in Picture) sub menu allows you to set which two channels will be displayed when viewing PIP.

To set which channels are displayed use the **Up** and **Down** arrows to select either **Main Channel** (full-screen) or **Sub Channel** (small widow) and then the **Left** and **Right** arrows to select the camera.



To perform a factory reset and restore the unit back to the original default settings select **System Reset** from the main menu. The above message will be displayed warning that all user settings will be lost. If you wish to proceed use the **Left** or **Right** arrows to select **Yes** and press **Enter** to confirm. If you don't want to continue select **No** and press **Enter**.

The HandyQuad TVI features seven different display modes including a sequential switcher making it an ideal solution for a wide variety of security purposes where real-time monitoring is required.

To select a display mode you can use the buttons on the front panel of the device or on the IR remote control, *see pages 6-7.*

The seven available display modes are:

- Full Screen
- Quad
- PIP (Picture In Picture)
- Main Monitor & Split Screen
- Vertical Split
- Horizontal Split
- Auto Switching



Full Screen

Each channel can be displayed full screen by pressing the corresponding button on the remote, or on the front of the HandyQuad unit. This makes it easy to quickly switch between camera inputs.



Quad

Quad view is a great way to display all four images at once ensuring nothing is missed.



PIP (Picture In Picture)

PIP is ideal for when you have a main camera that requires constant observation, but also a second location to keep an eye on. e.g. A main entrance and a side entrance to a property.

To set which two channels are displayed *see page 13*.



Main Monitor & Split Screen

This is a useful alternative to the quad display. It allows you to view a large image of the main camera (Ch 1) with cameras 2-4 in smaller windows down the side of the screen. This is a great way to monitor four areas with the main focus on the most important camera.



Vertical Split

In Vertical Split mode you can display any two cameras side by side full screen. The images are stretched to fit the display area so no part of the camera's image is cut off and nothing is missed.



Horizontal Split

Much like Vertical Split, Horizontal Split displays any two cameras stacked one on top of the other. Horizontal Split provides a wider picture and again the images are stretched to fit the display area so no part of the camera's image is cut off.



Auto Switching

Auto switch constantly cycles through all four camera inputs. The amount of time each channel is displayed can be adjusted in the Autoseq Settings sub menu, *see page 12.*

Problem	Possible Cause	Possible Solution
No Or Poor Image From Camera	Incorrect technology selected	Ensure the correct technology has been selected for the affected channel so that it matches the technology of the camera connected to it. e.g. TVI, AHD. See Input Settings on page 9.
	Insufficient Power Supply	Test that the camera has the correct voltage supplying it, you must do this with the camera connected so that there is load on the PSU. A 12V DC camera should have at least 10.5V DC connected to it.
	Video Loss	Video loss in Composite cable as run too long usually you would get a picture up to around 120mtrs (Remedied by fitting a video amp).
	Poor Cabling	Ensure that the BNC - BNC lead that you connect between the camera and HandyQuad unit has no shorts or open circuits. If you are making your own lead, don't forget the lead must have two wires connected to complete the circuit, Video and Ground.
No Image From HDMI Or VGA Output	Unsupported resolution	Check that the monitor being used supports the output resolution of the HandyQuad TVI, see page 10. If the resolution is not supported select one which is.
HandyQuad Unit Beeping	Video Loss	If the HandyQuad loses connection to a camera it will sound an audible alarm to alert the operator. By checking the quad display you will be able to quickly see which camera is down.
HandyQuad Unit Won't Turn On	Insufficient Power Supply	The HandyQuad TVI requires a 12V DC power supply providing a minimum of 350mA. As a rule you should always allow at least 30% head room therefore we recommend a power supply providing no less than 500mA.

Other Products To Consider - Useful Tools

3 In 1 Test Monitor



cctvmate.com

- 3 In 1 TVI, IP & Analogue
- ONVIF 2 Compatible
- Coaxitron & RS485 Control
- Network & Cable Testing
- 12V DC Output & POE
- Full Qwerty Keyboard
- Built-in Torch
- Built-in Storage For Recordings
- Supports 1080p & 720p HD
- Lithium Ion Battery

Includes



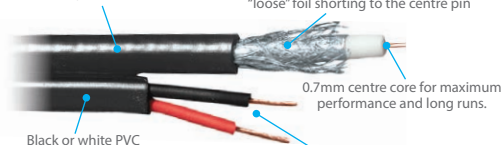
Order Code: **LCD390**

AntiHum RG59+2

Cable Contains: 1 co-ax core + 2 power cores

Cables can be separated for fast, easy installation

Glued foil sheath provides maximum protection against interference and prevents "loose" foil shorting to the centre pin



Black 100m Order Code: **CAB050**

White 100m Order Code: **CAB040**

HDMI & TVI Monitor

Slimline 32" AlienCCTV monitor with built-in speakers, HDMI, VGA, TVI & AHD inputs.

Order Code: **LCD832**



For more information visit www.cctvmate.com

Other Products To Consider - SEE220 TVI Dome Camera



MiRs
Maximum IR
Sensitivity 

With a built in Balun the SEE220 can be installed with either CAT5 or Composite co-ax cable allowing flexible installation options. The camera's menu can be controlled by "up the co-ax telemetry" (Alien TVI Coaxitron) or additional 2-wire telemetry (PELCO-D) making it easier to set up on site and remotely.

- HD-TVI 1080p output at 25fps
- Dual TVI and CVBS (analogue) outputs
- Dual Voltage 12V DC, 24V AC
- Built in Balun
- Up the co-ax control - (Alien TVI Coaxitron)
- Pelco D - (RS485 2 wire)
- NiteDevil low light - 0.015 Lux
- Internal connections - no flying lead
- Vandal-proof & Weatherproof
- 3 Axis Gimbal for wall or ceiling mounting
- 2.1 Mega-pixel 2.8 ~ 12 mm Auto Iris Lens
- True day-night mechanical IR cut filter

Dual TVI and analogue outputs, dual power (12V DC and 24V AC), a clever internal connection PCB for neat and fast installation and stunning 1080p HD picture quality make the SEE220 a great first choice CCTV Dome cameras for any installation.

Order Code: [SEE220](#)

Other Products To Consider - SEE220 TVI Dome Camera

1 Zoom Adjustment

Unlocking this screw allows you to adjust the zoom in and out of the camera.

3 Tilt Axis

Unlock this screw and one on the other side to tilt the camera up and down.

2 Focus Adjustment

Unlocking this screw allows you to re-adjust the focus of the camera after adjusting the zoom.

4 Rotational Axis

Turn this to rotate the camera's output image so that it is correct on a monitor.
(Loosen tilt screws first)

7 HD-TVI Video Out

Connect your co-ax to this for the main TVI output.

See pages 6, 7

5 Left-Right Axis

Unlock these screws to adjust the left-right orientation of the camera.
(2 Screws, 1 either side)

8 Analogue Out

700TVL Analogue output great for on legacy installs.

6 Connection Block

Spring lock terminals to wire up the power input, TVI CAT5 connection to the built in balun and RS485 telemetry.

See pages 6, 7, 8, 9

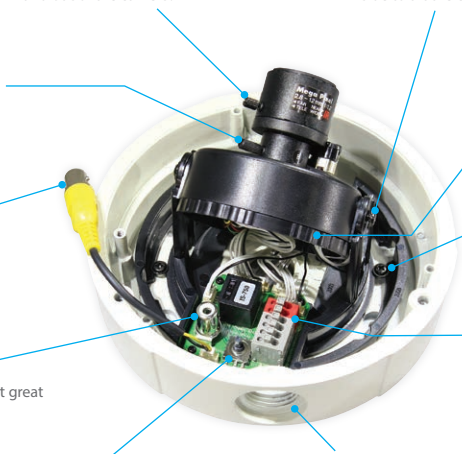
9 Joystick

Press to bring up the OSD then navigate using the joystick. Press again to select.

10 Conduit Entry

20mm blank supplied.

(Cable entry also at rear through a grommet)



A low-cost Video Entry System that you can even connect to a DVR!

*Integrate it to old or new CCTV installations to use features such as remote control and viewing on a mobile phone**



- Records video (2min) or images (80) of callers on to an SD card
- Can control access to 2 doors
- Up to 4 monitors per system
- Connect up to 3 CCTV cameras
- Connect a DVR to its video output

* Integrate to an AlienDVR for unlimited video recording, Email images of callers and mobile phone viewing/control.



Other Products To Consider - DoorKnox Video Door Entry System

DoorKnox Door Monitors



- Range Of Sizes
- Backlit LED Display
- Touch Button Controls
- Wall Mount Design

The versatile DoorKnox system allows you to create a comprehensive four monitor setup with one master monitor and up to three slave monitors. There are three monitor sizes to suit any installation.

Mini 4" Door Monitor: [VDP204](#)

Standard 7" Door Monitor: [VDP207](#)

Super 10" Door Monitor: [VDP210](#)

DoorKnox Door Cameras



- Externally Rated
- Tough Metal Case
- Built-in IR LEDs
- Built-in Microphone

The DoorKnox system supports two door cameras and there are three great options to choose from. There's the traditional VDP101, the wide angle VDP102 and the VDP103 which features Key code, key fob and key card entry.

Traditional Door Camera: [VDP101](#)

Wide Angle Door Camera: [VDP102](#)

Secure Access Door Camera: [VDP103](#)

Specification

COMPATIBILITY	HD-TVI / AHD / Analogue (CVBS)
CAMERA INPUTS	4x BNC
HD OUTPUTS	1x HDMI / 1x VGA
HD OUTPUT RESOLUTION	1024 x 768 / 1280 x 1024 / 1440 x 900 / 720p / 1080p
CVBS OUTPUTS	2x BNC
CVBS OUTPUT RESOLUTION	720 x 576
POWER	12V DC / 350mA (PSU Required)
POWER CONNECTION	2.1mm DC Socket
CONTROLS	Push Button
IR REMOTE CONTROL	Supplied
FREEZE FRAME	Yes
DISPLAY MODES	7
WORKING TEMPERATURE	-10°C ~ 55°C
DIMENSIONS	234 x 150 x 40mm (Exc Connectors)

All specifications are approximate. Handy Quad 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, Handy Quad 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.



WEE/CG07835S

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 collection point as defined by your local council.

