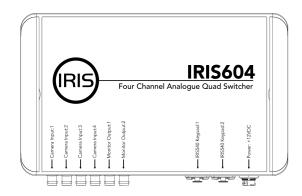
# **IRIS604**

Analogue Video Switcher with Quad View



# QUICK START GUIDE

Thank you for choosing the IRIS604 Four Channel Quad Video Switcher from Iris Innovations.

This document is designed to provide a brief overview of the product, it's features and installation instructions. Full instructions, regulatory and safety information can be downloaded from our website: www.boat-cameras.com

The IRIS604 Quad Switcher is a four input / two output analogue video switcher in a compact and rugged enclosure designed for harsh environments.

The switcher is designed to be hidden away out of view and controlled via the company IRIS540 panel mount keypad to provide an intuitive and elegant video switching solution whilst at the same time hiding any unsightly wires, cables and connections - a feature especially desirable in high end luxury boating or vehicular applications.

The IRIS604 features a duplicate output so video can be switched on upper and lower helm monitors or chart plotters. Accordingly, two keypad ports are included so the unit can also be controlled from two positions.

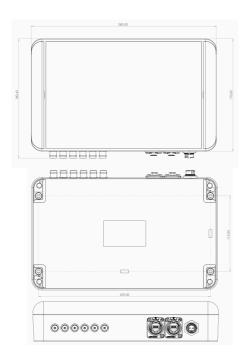
Outputting  $75\Omega$  composite video 1VP~P, the IRIS604 is compatible with any multifunctional display, chart plotter or screen with analogue / CVBS / composite or AVI labelled video inputs.

## Rugged & Compact

With its stylish and compact form factor, heavy duty plastic moulded case and water resistant locking connectors, the IRIS604 box can be installed anywhere on board, even in areas subject to exposure to moisture.

# Easy Installation

Four hidden screws are all thats needed to install the system. Then just plug in your cables, power up, and you're good to go! www.boat-cameras.com



# What's in the Box?

The following parts are included with your IRIS604 Quad Switcher

- 1 x IRIS604 Quad Switcher Box
- 1 x IRIS540 Switcher Keypad
- 1 x Fixing Template
- 1 x Quick Start Guide
- 1 x CAT5 Cable (For IRIS540 Keypad)
- 1 x Power Cable (12VDC) 2 Pin Connector

## Installation - Switcher Box

Offer the switcher box into your desired position, ensuring there is sufficient clearance space to allow connection and disconnection of the attaching cables.

At either end of the box lid there is a cover flap which conceals the screw fixing points. Once placed in the desired position, lift the flaps to reveal the screw shafts, insert a self tapper screw (supplied) into each of the four shafts and screw in place.

A fixing template is provided for you to mark off and predrill pilot holes if required.

#### Installation - IRIS540 Keypad

Remove the lock nut from the back of the connector and retain.

Offer the keypad up to the desired position, carefully ensuring there are no cables or obstacles behind the panel which could become damaged when you drill the connector hole.

A fixing template is available to download from <a href="https://www.boat-cameras.com">www.boat-cameras.com</a>. Use this to determine the centre point for the hole that must be drilled to accommodate the keypad connector.

Drill a suitable pilot hole if necessary before opening the hole out to 30mm using a hole saw.

## Installation - Keypad (cont...)

Use a suitable marine grade sealant to apply a bead around the edge of the back of the keypad. Ensure the bead of sealant is continuous so as to form a seal around the entire perimeter of the keypad. It is recommended that you apply the seal a centimetre or so in from the edge of the keypad so the silicone does not extrude past the edge of the keypad bezel when firmly fixed in place.

Push the keypad down, wiping away and extraneous sealant that has been pushed out during fitting.

Level~off the keypad so it is flush and level.

Tightly fit the lot nut back onto the cable connector from the rear - ensuring the keypad remains level as you tighten. Leave until the sealant has cured in accordance with the manufacturers instructions and cure times.

#### Installation - Cable

Finally connect the CAT5 cables supplied to the connector on the keypad and to the appropriate Keypad port on the switcher.

The switcher has two ports to allow connection of an additional keypad if required.

#### **IMPORTANT** - Cable Information!

If extending, or installing your own keypad cable you must use screened CAT5/6 cable and couplers.

# **IMPORTANT** - Connection Warning!

Although the system uses CAT5/6 network cable, this is not an ethernet device and therefore **MUST NOT** be connected to any network equipment so as network hubs / switches / routers / PoE equipment or computers. Keep cabling for the switcher separate from any structured cabling used for an ethernet network.

#### Video Inputs

The switcher is designed for  $75\Omega$  1VP~P analogue composite video. Video connections are via female BNC connectors, therefore your video cables must terminate with the appropriate  $75\Omega$  male BNC plug.

#### Video Outputs

The switcher is designed for 75 $\Omega$  1VP $\sim$ P analogue composite video and features two output connectors (sharing the same video output). Video connections are via female BNC connectors, therefore your video cables must terminate with the appropriate 75 $\Omega$  male BNC plug.

#### Power

The switcher must be powered from a clean 12VDC source. A two pin power cable is supplied with colour coded tails to connect your power. Red must be connected to +12VDC and Black must be connected to DC Ground. ENSURE CORRECT POLARITY IS OBSERVED TO AVOID POTENTIAL DAMAGE & INJURY.

## **ESSENTIAL SAFETY NOTICES:**

#### Product Disposal and Recycling:

Dispose of this product in accordance with the WEEE Directive. The Waste Electrical and Electronic Equipment (WEEE) Directive requires the recycling of waste electronic and electrical equipment. Iris Innovations supports the WEEE policy and politely request you observe correct disposal methods. For further information on how to correctly dispose of this product please contact Iris Innovations. Please recycle unwanted packaging and documentation. The cardboard carton, all paper manuals and documents and the protective plastic bag in which the camera is shipped are widely recyclable. Please check with your local recycling plant for confirmation.

#### **EMC** Guidelines:

This camera is designed to be used as a visual aid and is not part of the vessels navigational system - even if used in conjunction with other on board equipment or third party systems - and is compliant with the EMC directive 2014/30/EC. The original Declaration of Conformity (DoC) is available from our website The camera should not be installed on the ships helm or in close proximity to radio receiver equipment. We recommend the camera is installed no closer than 1m from any equipment transmitting or cables carrying radio signals - particularly VHF radios and associated equipment. The camera should be powered from a clean 12VDC supply.

#### Water Ingress:

Disclaimer This product has been tested and complies with the requirements of the standard EN60529 to level IP66, however, water intrusion and subsequent equipment failure may occur is subject to commercial high pressure washing or sustained exposure to water spray. This product is not designed to be completely submerged. Any damage caused as a result of these circumstances are not covered by the product warranty.

Full product safety, warning and compliance information, including Declaration of conformity is available from <a href="https://www.boat-cameras.com">www.boat-cameras.com</a>

### Operation

Ensure all connections are made before powering up.

When the system has powered up, you will briefly see a colour bar pattern flash on the screen as the system initialises, then the guad view will be displayed.

# Switching Camera Inputs / Quad View

To switch individual camera inputs, simply press the corresponding input number on the IRIS540 keypad.

To switch to quad view (all four cameras displayed in 2x2 layout on the screen together) simply press the QUAD/ MENU button.



IRIS540 Keypad

# Picture in Picture / Split Screen

Use the PinP/SPLIT button to cycle through the various picture in picture / Split screen displays.

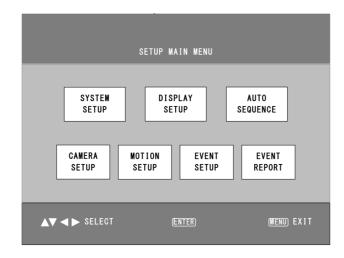
# SETUP MENU NAVIGATION

The IRIS604 Quad unit features an on screen set up menu function. From here you can define regional video format (PAL / NTSC), set up auto-sequences and dwell times (per input), change camera titles and a variety of other features.

To enter the SETUP MENU, press and hold the QUAD/ MENU button for approx 3 seconds.

To navigate around the menu system and make changes, the numeric (1,2,3,4) keys also have directional arrows (1 = UP, 2 = DOWN, 3 = LEFT, 4 = RIGHT). Use 1(UP) and 2(DOWN) to select the desired menu item, the ENTER key to select specific functions and the 3(LEFT) and 4(RIGHT) buttons to increase and decrease values or cycle through the options.

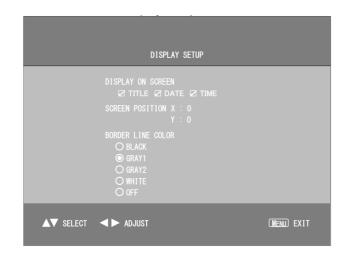
## MAIN SETUP MENU:



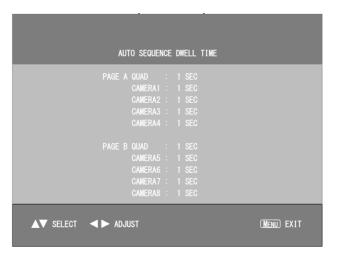
#### SYSTEM SETUP MENU:



#### **DISPLAY SETUP MENU:**



#### **AUTO-SEQUENCE MENU:**



#### CAMERA SETUP MENU:



#### Please Note:

Motion Setup & Event Setup Menus are not supported in this model.

# **SELECTED SPECIFICATIONS:**

Full specifications are listed in the complete product guide which can be downloaded from our website.

Video Format	1VD D Composite Video / 750
	1VP-P Composite Video / 75Ω
Regional Formats	PAL / NTSC Switchable
Video Inputs	4
Video Outputs	2 (Same Image x 2)
Keypad Connections	2 x RJ45 Shielded - USE SCREENED CAT5
Network	THIS IS NOT A NETWORK DEVICE
Compatible Keypad	1 x IRIS540 Supplied + Additional IRIS540 (Optional)
Features	Full Image Switch (4 cameras), Quad Image 7 x Picture in Picture Options, Definable Auto-Sequence, Image Freeze
Motion Alarm	Special Order - Contact Iris
Material	ABS Plastic
Power	+12VDC / <500mA
Consumption	4W Nominal
Operating Temperature	-30°C ~ +60°C
EMC	EN60945 Sections 9 & 10
Environmental	IP66
Dimension/mm	IRIS604: 280mm x 176mm x 60mm IRIS540 Keypad: 74mm x 74mm x 6mm
Weight/g	0.885Kg

Manufactured & Assembled in the United Kingdom











Iris Innovations Limited Unit 240 Ordnance Business Park, Aerodrome Road

Gosport. Hampshire PO13 0FG. United Kingdom

Tel: +44(0)2392 556509 / email: info@boat-cameras.com www.boat-cameras.com