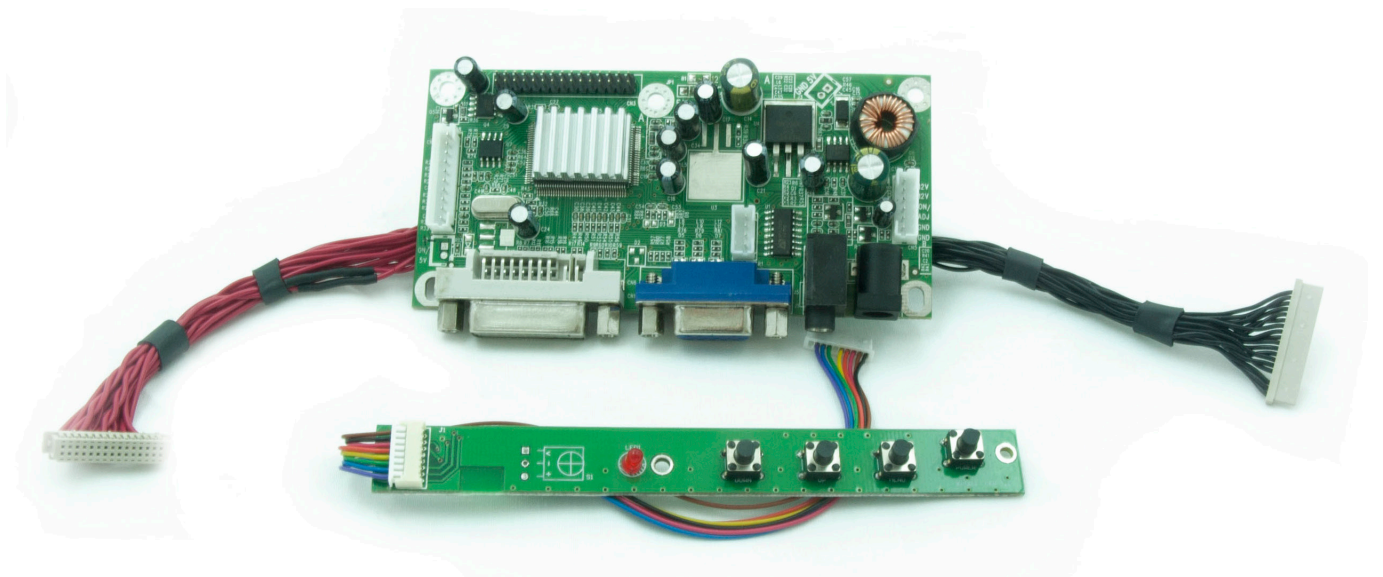# Interface Kit for LVDS TFT Displays

IES-TIK-AMxxxxxxxx

Product Overview

The IES range of TFT Interface Kits (TIK) is an advanced TFT LCD monitor control board, offering high quality images on a range of TFT products.

This single board solution enables an easy monitor and or video replacement with a large area TFT display.

The TIK has a wide input and automatic scaling range, up to WUXGA (1080x1920 pixels) at 60Hz, and in all video modes the full TFT screen is used.
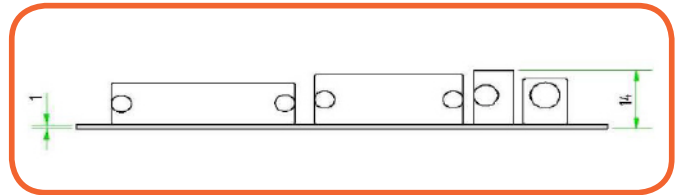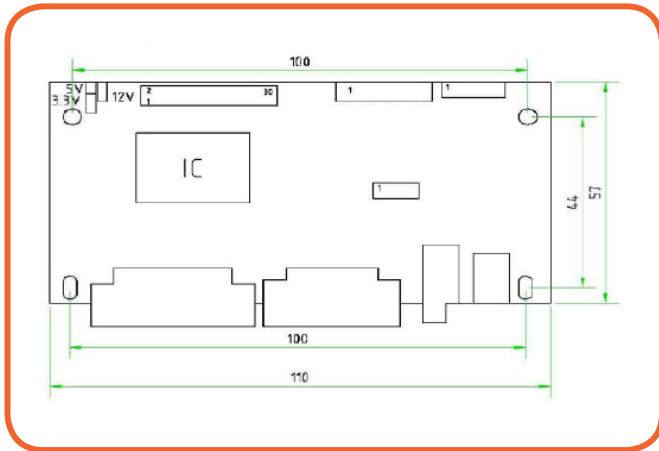
Applications :

● Monitor replacement

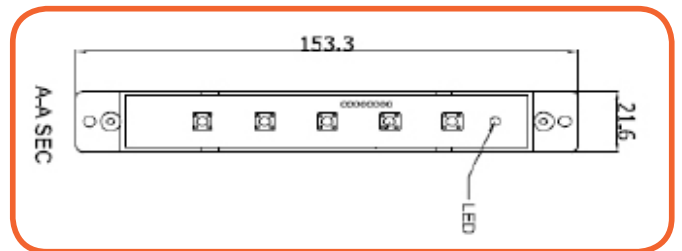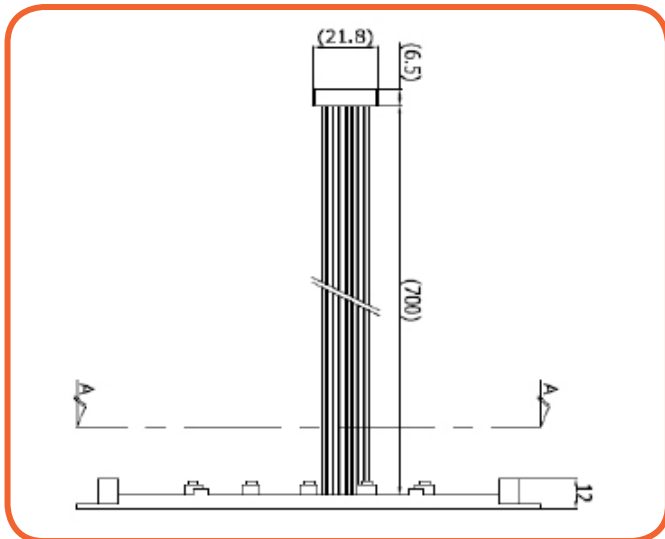● Adding additional monitors

Features :

● Analogue RGB D-SUB and DVI (Digital Video Interface) Inputs

● Audio in and out (2x3W 4ohm)

● Single 12v DC input voltage

● Built-in multi language On Screen Display (OSD) user interface

● Multi-sync capability up to WUXGA resolution at 60Hz

● Compatible standard VGA, SVGA, XGA, SXGA and UXGA VESA timing

DATASHEET

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Technical Drawing

Main Board

OSD Keyboard

Connector Details
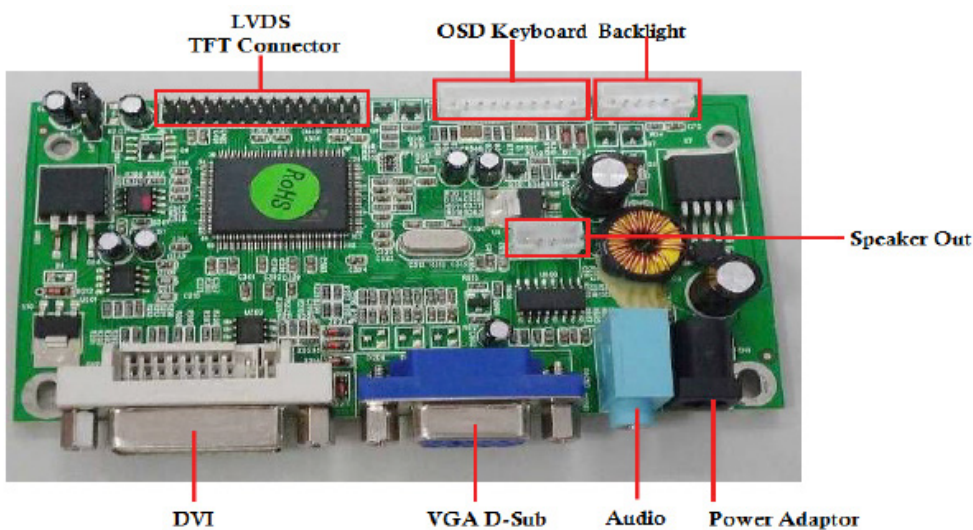
Connections

LVDS TFT Connector

Pin Number	Name	Pin Number	Name
1	Vcc	16	RXOC+
2	Vcc	17	RXO3-
3	Vcc	18	RXO3+
4	Open	19	RXE0-
5	GND	20	RXE0+
6	GND	21	RXE1-
7	RXO0-	22	RXE1+
8	RXO0+	23	RXE2-
9	RXO1-	24	RXE2+
10	RXO1+	25	GND
11	RXO2-	26	GND
12	RXO2+	27	RXEC-
13	GND	28	RXEC+
14	GND	29	RXE3-
15	RXOC-	30	RXE3+

OSD Keyboard

Pin Number	Name
1	NC
2	NC
3	MENU
4	AUTO
5	LEFT/DOWN
6	RIGHT/UP
7	GND
8	LED-GREEN
9	LED-RED
10	POWER

Backlight

Pin Number	Name
1	12V
2	12V
3	NC
4	NC
5	GND
6	GND

Speaker Out

Pin Number	Name
1	Left Out
2	GND
3	GND
4	Right Out

OSD Control
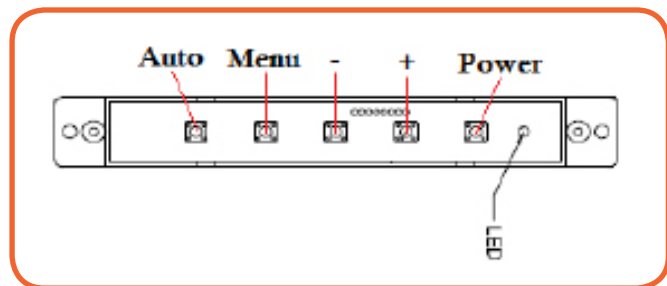
Button name	Description
Auto	Pressing this button executes the Auto configuration routine. This will adjust all the image, scaling, colour and resolution settings to give you the perfect screen image. At any stage pressing this button will start the auto configuration process
Menu	Pressing this button will enter the drivers Home Menu screen
-	Down or reduce button
+	Up or increase button
Power	Turns the unit On and Off.
Led	Red - Standby , Green - On

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OSD user interface :

The OSD – On Screen Display – allows you to manipulate the settings for the driver, and the settings for the image. The button layout and description is shown below ;
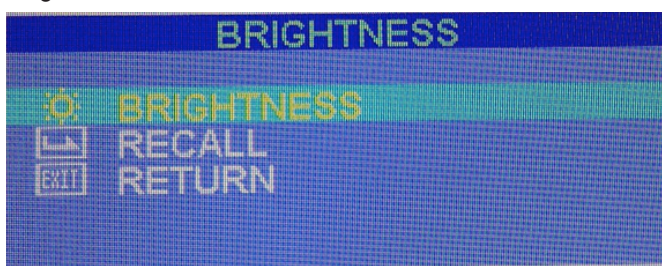
Main Menu Screen

Pressing the MENU button brings up the main menu screen on your display.

Use the + to go up the menu tree, use the – key to go down the menu tree. When you are on the section you require press MENU again and it will enter that section.
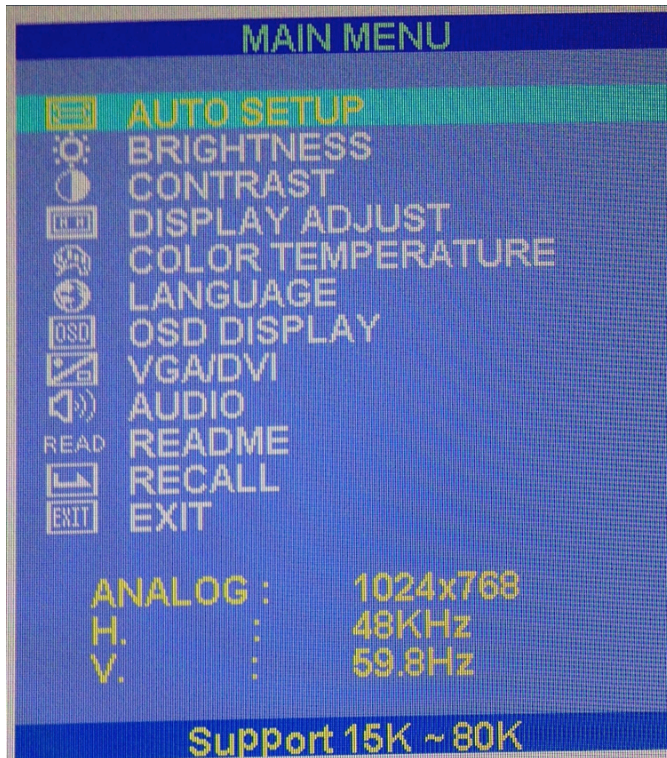
Brightness

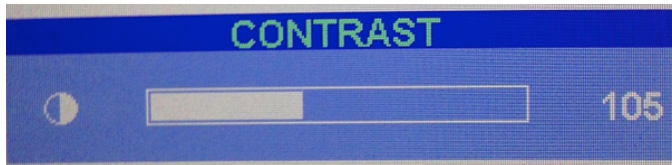Use the – key to go down to brightness, press MENU to enter

Use the + and – keys to increase or decrease brightness.

The brightness on this screen is NOT backlight brightness, this is the saturation of the display settings.

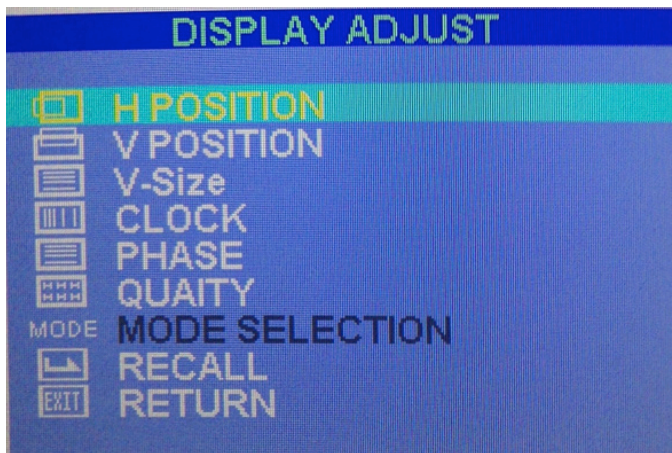RECALL – this returns the brightness setting to the factory setting

RETURN – returns you to the MAIN MENU

Contrast

Pressing the + key increases the contrast of the display

Pressing the – key decreases the contrast of the display

Press MENU to return to MAIN MENU

Display Adjust

Use the – key to go down the options

Use the + key to go up the options

Use the MENU key to go into the option you have selected

Use the MENU key to exit any screen once you have made your adjustments

H POSITION – use the + and – keys to move the displayed image in the horizontal plane

V POSITION – use the + and – keys to move the displayed image in the vertical plane

V SIZE – use the + and – keys to increase or decrease the vertical size of the displayed image

CLOCK – use the + and – keys to increase or decrease the clock frequency driving the display

PHASE – use the + and – keys to increase or decrease the Phase frequency driving the display

QUALITY – use this to adjust the colour bit depth of the display

MODE – not used

COLOUR TEMPERATURE

RECALL – returns to original factory value

RETURN – returns you to the main menu

Language
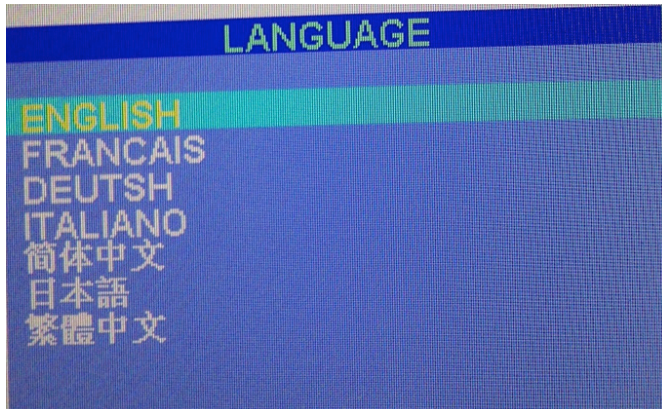
Use the – key to go down the options

Use the + key to go up the options

Use the MENU key to go into the option you have selected

Use the MENU key to exit any screen once you have made your adjustments

Select the preferred language you want the OSD controller to be represented in

OSD Display

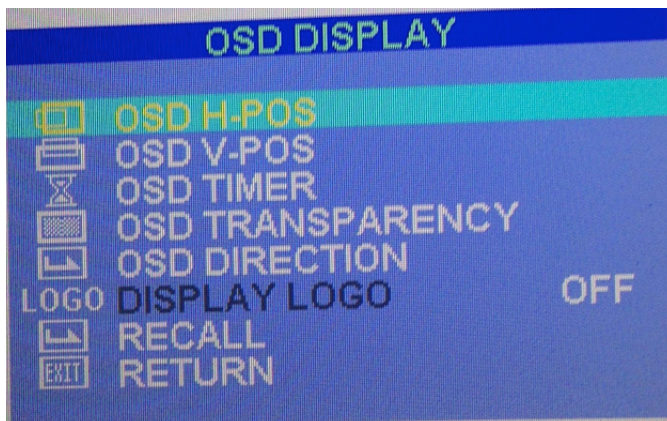Use the – key to go down the options

Use the + key to go up the options

Use the MENU key to go into the option you have selected

Use the MENU key to exit any screen once you have made your adjustments

OSD H-POS – use the + and – keys to move the OSD dialogue box horizontally on the display

OSD V-POS – use the + and – keys to move the OSD dialogue box vertically on the display

OSD TIMER – use the + and – keys to set how long the OSD stays on screen when not used

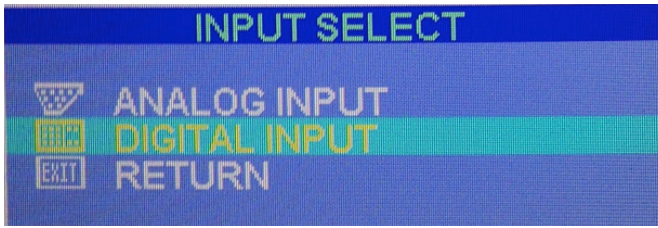OSD TRANSPARENCY – use the + and – keys to set the level of dialogue box transparency

OSD DIRECTION – use this to flip the osd screen vertically or horizontally

LOGO – not used

RECALL – returns the driver t factory settings

RETURN – returns the OSD to the MAIN MENU

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VGA/DVI

Use the – key to go down the options

Use the + key to go up the options

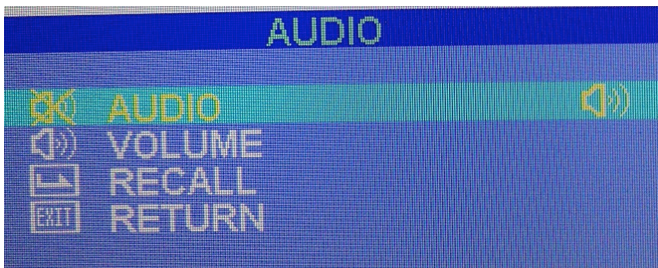Use the MENU key to go into the option you have selected

Use the MENU key to exit any screen once you have made your adjustments

ANALOG INPUT – sets the driver to work from the VGA input only

DIGITAL INPUT – sets the driver to work from the DVI input only

RETURN – returns the OSD to the MAIN MENU

Audio

Use the – key to go down the options

Use the + key to go up the options

Use the MENU key to go into the option you have selected

Use the MENU key to exit any screen once you have made your adjustments

AUDIO – turns the audio output on or off

VOLUME – use the + and – keys to set the output volume

RECALL – returns the driver to factory setting

RETURN – returns the OSD to the MAIN MENU

Read Me

Use the – key to go down the options

Use the + key to go up the options

Use the MENU key to go into the option you have selected

Use the MENU key to exit any screen once you have made your adjustments
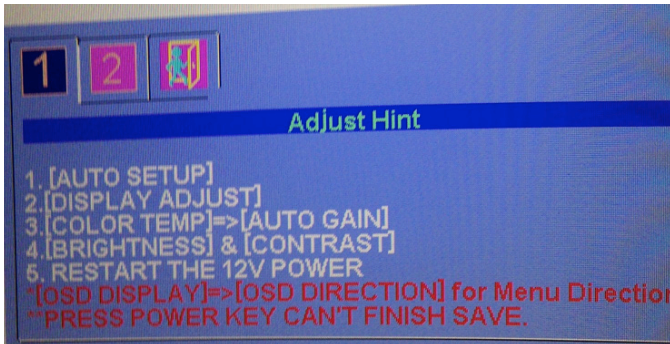
These are simple instructions to help explain the various adjustments you can make on the driver

Recall

Selecting this will return the driver to the factory settings

Exit

Selecting this exits the OSD menu

Input signal values

The values in yellow underneath the above sections gives you the current detected input signal values.

WEEE Consumer Notice

This product is subject to Directive 2002/96/EC of the European Parliament and the Council of the European Union on Waste of Electrical and Electronic Equipment (WEEE) and, in jurisdictions adopting that Directive, is marked as being put on the market after August 13, 2005, and should not be disposed of as unsorted municipal/public waste. Please utilise your local WEEE collection facilities in the disposition and otherwise observe all applicable requirements. For further information on the requirements regarding the disposition of this product in other languages please visit www.i-sbc.com

RoHS Compliance

This product complies with Directive 2002/95/EC of the European Parliament and the Council of the European Union on the Restriction of Hazardous Substances (RoHS) which prohibits the use of various heavy metals (lead, mercury, cadmium, and hexavalent chromium), polybrominated biphenyls (PBB) and polybrominated diphenyl ethers (PBDE).

For further information please contact IES

The values contained in this data sheet can change due to technical innovations. Any such changes will be made without separate notification.