

# Startup Instructions for Display Kits

## Overview

Delivery comprises:

- 1 LCD controller board
- 1 OSD controller board with cable
- 1 Display
- 1 Data cable (2 connectors)
- 1 Backlight inverter (displays with CCFL only, without on-board inverter)
- 1 Backlight cable (configuration depends on module)
- 1 Cable for power supply of the controller board (optional)

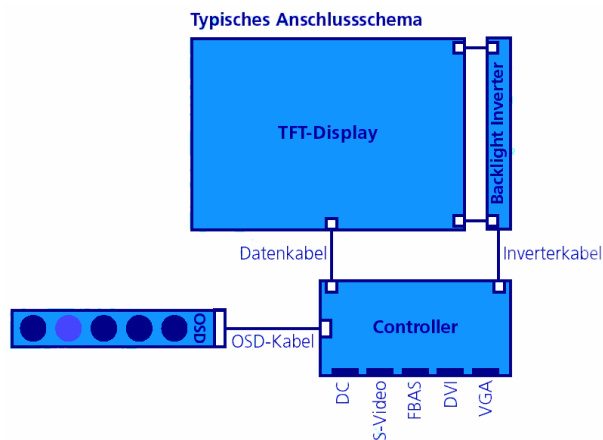
The LCD controller board will be delivered in different configurations, please refer to your purchase order confirmation prior powering up.

- CRTtoLCD-5** with VGA and DVI input
- CRTtoLCD-6** with VGA input, DVI input optional (compact size PCB)
- CRTtoLCD-7** with VGA and DVI input; version „full“ with additional video input (CVBS, S-Video); version „multimedia“ with add. component signal input (YPrPb) and de-interlacing chip



**The controller board contained in the kit has been matched to the display exactly; connecting a different display, the board and the display may be damaged. Never change position of jumpers!**

**Please observe the common ESD rules!**



Some display types have an integrated backlight inverter. Because of high power consumption the voltage has to be applied with a separate cable. For the following displays, the backlight voltage is 24VDC: LC230, LC260, LC320, LC370, LC420, LC550

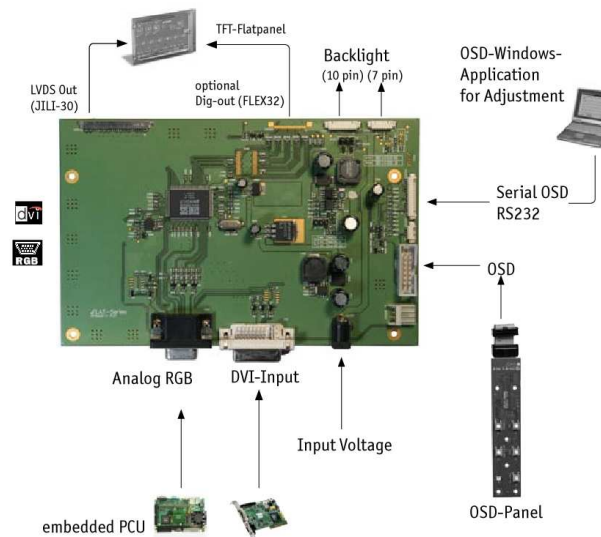
For the power required please refer to the display's data sheet which is available from <http://www.hy-line.de/Display-Konfigurator>



If in doubt, please contact **prior** to powering up our technical support line at +49 89 61450340 or by mail [computer@hy-line.de](mailto:computer@hy-line.de)

A detailed description of the controller board can be downloaded from <http://www.hy-line.de/CRTtoLCD>

## Description of CRTtoLCD-5 connectors



### Display data LVDS Out/Dig-Out

One of the connectors Flex32 (18-Bit RGB) or JILI-30 (LVDS) is used to connect the display's data lines. Some cables are using the same connector for both sides. In this case, one side of the cable is marked with „Controller“. This connector has to be plugged to the controller board, the second one with the display.

### Backlight inverter

The inverter cable has to be connected, depending on number of pins, with one of the connectors marked „Backlight“. Depending on the display, the other end of the cable has to be connected to the inverter PCB or the inverter input of the display (large size displays). Large size displays often require a separate power input which is connected with separate lines to the power supply. In this case, a connection of GND between controller board supply and backlight-supply has to be established.

### Input Voltage

This is the power supply input, nominal 12VDC. +12V = center contact, GND = sleeve.

### Serial OSD

Remote OSD over RS-232 interface of the PC

### OSD

Connector for OSD board for adjustment of picture parameters

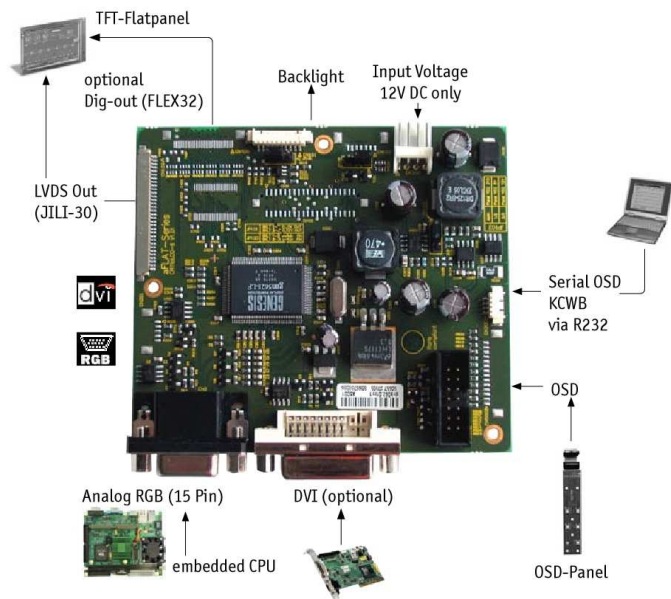
### Analog RGB (VGA)

VGA (RGB) signal input

### DVI input

DVI signal input

## Description of CRTtoLCD-6 connectors



### Display data LVDS Out/Dig-Out

One of the connectors Flex32 (18-Bit RGB) or JILI-30 (LVDS) is used to connect the display's data lines. Some cables are using the same connector for both sides. In this case, one side of the cable is marked with „Controller“. This connector has to be plugged to the controller board, the second one with the display.

### Backlight inverter

The inverter cable has to be connected, depending on number of pins, with one of the connectors marked „Backlight“. Depending on the display, the other end of the cable has to be connected to the inverter PCB or the inverter input of the display (large size displays). Large size displays often require a separate power input which is connected with separate lines to the power supply. In this case, a connection of GND between controller board supply and backlight< supply has to be established.

### Input Voltage

This is the power supply input, nominal 12VDC. +12V = center contact, GND = sleeve.

### Serial OSD

Remote OSD over RS-232 interface of the PC

### OSD

Connector for OSD board for adjustment of picture parameters

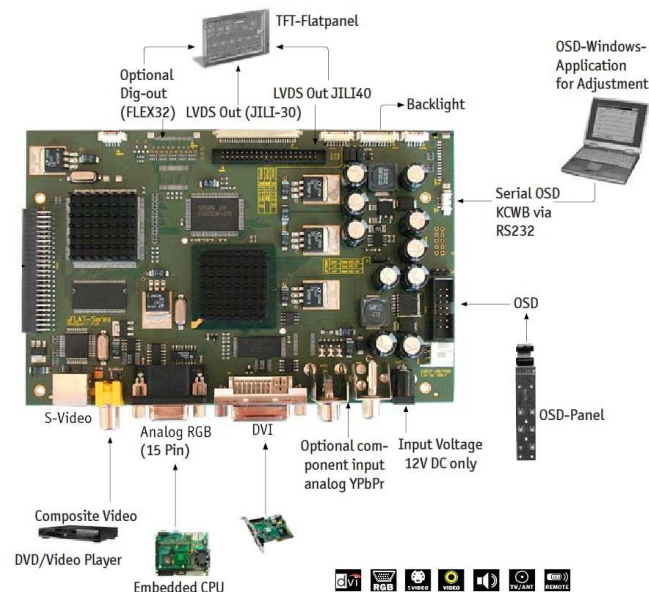
### Analog RGB (VGA)

VGA (RGB) signal input

### DVI input (optional)

DVI signal input

## Description of CRTtoLCD-7 connectors



### Display data LVDS Out/Dig-Out

One of the connectors Flex32 (18-Bit RGB) or JILI-30 (LVDS) is used to connect the display's data lines. Some cables are using the same connector for both sides. In this case, one side of the cable is marked with „Controller“. This connector has to be plugged to the controller board, the second one with the display.

### Backlight inverter

The inverter cable has to be connected, depending on number of pins, with one of the connectors marked „Backlight“. Depending on the display, the other end of the cable has to be connected to the inverter PCB or the inverter input of the display (large size displays). Large size displays often require a separate power input which is connected with separate lines to the power supply. In this case, a connection of GND between controller board supply and backlight< supply has to be established.

### Input Voltage

- power supply input 12VDC. +12V = center contact, GND = sleeve.

### Serial OSD

- Remote OSD over RS-232 interface of the PC

### OSD

- Connector for OSD board for adjustment of picture parameters

### Analog RGB (VGA)/DVI input

- VGA (RGB)/DVI signal input

### Composite Video/S-Video (optional)/ Component Input YPbPr (optional)

Inputs for CVBS and S-Video signals/input for analogue component signal

**Other connectors** are reserved for special applications.