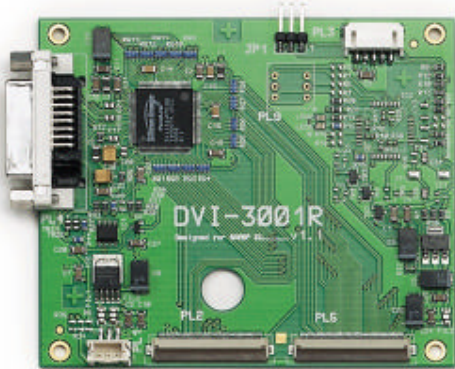


Digital Visual Interface (DVI) compatible panel interface

DVI-3001/2/3/XR



The DVI-3001/2/3/XR is a family of all digital interfaces for Sharp TFT LCD panels to give the best picture performance possible. No analogue conversion is used to possibly degrade the image displayed. The DVI-3001/2/3/XR allows for interfacing between any DVI compatible graphics interface/card and a Sharp TFT LCD panel. All settings and panel specific data is pre-programmed for true Plug&Play function when used with Windows NT/98/95.

The data transmission system between the transmitter and receiver utilizes the PanelLink high speed digital serial data transmission system and conforms to the DDWG Digital Visual Interface specification.

Application

- Industrial monitor/display interface
- Adaptable interface for future developments
- PC monitor interface

Features

- Silicon Image Si151/141/851 receiver.
- DDWG DVI based connection, max 5m.
- Max 1600x1200pixels at maximum 16.7mil colours.
- Firmware drives Sharp TFT panels.
- TDK inverter interface included.
- Full range of Sharp LCD adapters available.

Panels supported

Technology	TFT	DVI receiver	Sharp LCD panels:
Sizes	6.4" to 19.6", TFT	DVI-3002R	e.g. LQ104V1DG11/LQ150V1DG11
Performance	640x480 upto 256k colours	DVI-3002R	e.g. LQ121S1DG31
	800x600 upto 256k colours	DVI-3002R	e.g. LQ150X1DG11/16
	1024x768 upto 16.7mil colours	DVI-300XR	e.g. LQ150X1DG11/16
	1024x768 upto 16.7mil colours	DVI-3001R	e.g. LQ181E1DG11
	1280x1024 upto 16.7mil colours	DVI-3003R	e.g. LQ196U1LG01
	1600x1200 upto 16.7mil colours		

Other panel support on request. Please contact your local Sharp dealer/distributor.

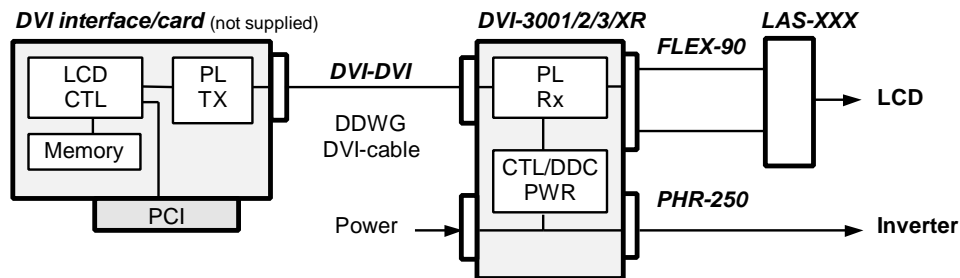
Graphics and installation

The DVI-3001/2/3/XR generates the true representation of the digital signals being sent from an DVI compatible graphics interface/card. All the features of the graphics interface/card is thereby transferred directly to the connected LCD panel, like 3D, special colour coding and/or drive conditions. The DVI-300XR receiver performs 24bit dithering and expansion of lower input resolutions onto a XGA resolution LCD panel.

Easy installation is achieved through a standard panel output from the receiver, attaching via a simple flex cable connections to various LCD panel adapters. The system supports 3.3V and 5V panels. Power for the receiver, panel and inverter is via a 5VDC and 12VDC connector. Optional power supply via the DVI cable (factory installed on request only). Cable management is further simplified by an integrated back-light inverter connection, connecting directly to standard TDK inverters.

SHARP

Digital Video Interface (DVI) compatible panel interface



Technical specification

DVI-3001/2/3/XR, DVI receiver

Input connectors:	DVI-D and power	Colour depth:	Max. 8bit/colour
Input format:	DVI 24-bit MSB RGB TMDS single link	Output format:	H/V-sync, CLK, DE and Data (alt. 2ch LVDS)
TMDS receiver:	Silicon Image 151/141/851	Power supply:	12VDC and 5VDC via 3way JST PH
Outputs:	Panel (50way FFC) and back-light (5way JST PH)	Inverter:	5way JST PH output for TDK inverter support
Panel output:	24bit/2pixel/clock	Size:	83.5x100.0mm
Resolutions supported:	640x480 to 1600x1200	Other features:	"Hot-pluggable" Ext. brightness control EDID 1.3 support
Panel support:	TFT (3.3/5V) only		

Note I: the DVI-300XR will expand a lower resolution from the DVI host to the XGA panel resolution, while the DVI-3001/2/3R will display the exact output of the DVI host as defined by programmed EDID.

Note II: the DVI-3002/XR is pre-programmed to XGA support. For other resolutions the receivers must be re-configured with DVI-PROG programming equipment.

Note III: the DVI-3003R has a 2 channel LVDS output programmed to be used with a UXGA TFT panel. Other panel resolutions possible, but subject to re-programming with DVI-PROG.

Ordering code

DVI-3001R	Includes 1x DVI-3001R, 2x FLEX-90, 1xPHR-250 and a receiver power supply cable.
DVI-3002R	Includes 1x DVI-3002R, 1x FLEX-90, 1xPHR-250 and a receiver power supply cable.
DVI-3003R	Includes 1x DVI-3001R, 1xPHR-250 and a receiver power supply cable.
DVI-300XR	Includes 1x DVI-300XR receiver only.
DVI-cable	Single-link DVI cable, 2meter long.
DVI-PROG	Programming equipment for DVI receivers.
LAS-T04	Panel adapter for LQ104V1DG11 (or equiv.) and DVI-3002R
LAS-T03	Panel adapter for LQ121S1DG31 (or equiv.) and DVI-3002R
LAS-T05	Panel adapter for LQ150X1DG11/16 and DVI-3001/2/XR
LAS-SXA	Panel adapter for LQ181E1DG11 and DVI-3002R
LAS-SXB	Panel adapter for LQ181E1DG11 and DVI-3001R

Accessories

SHARP