

## ARV-700



ARV-700



ARV-720

### Overview

ARV-700 series are professional AD converter boards supporting most high definition LCD TV panels and also general monitor LCD panels. This product series supports wide display resolutions from VGA (640 x 480) up to WUXGA (1920 x 1200), and also provides several enhanced functions such as picture in picture (PIP), advanced color management, dual power modules, YPbPr video ports, and dual inverter output ports. ARV-700 series supports a wide range of LCD panels including AUO, CMO, Sharp, CPT, NEC, Toshiba, Samsung, LG, Optrex, and Mitsubishi.

### Specifications

#### ADC Controller

- Genesis GM1601 ADC chip
- Support PIP (Picture In Picture)
- Frame rate conversion feature support frame rate adjustment
- Adaptive color and contrast enhancement (Genesis ACC & ACM-II features)
- 8-bit triple-channel ADC / PLL
- Professional scaling engine
- Complete OSD functions

#### Video Decoder (ARV-72X only)

- Micronas VPC 3230D
- High-performance adaptive comb filter
- Multi-standard color decoder NTSC/PAL/SECAM

#### Input Port

- DB-15 analog R.G.B. interface
- DVI-29 DVI-I digital interface
- RCA jack composite signal interface (ARV-720 only)
- S\_Video YC signal interface (ARV-720 only)
- Components for YPbPr signal (ARV-720 only)

#### Video Input Support

- Composite, S\_Video and YPbPr ports
- NTSC / PAL interlaced signal
- Spatial de-interlacing

#### Audio Amplifier (ARV-706/726 only)

- Support stereo 2W+2W class AB output power

#### On Screen Display (OSD)

- Auto setup
- Brightness/ Contrast / Black level adjustment
- ACC / ACM-II color enhancement & Contrast adjustment
- Image V-position / H-position adjustment
- Auto color reset / Standard color setup
- Hue / Saturation / Color temperature adjustment

#### Panel Support

- TFT VGA 640 x 480
- TFT SVGA 800 x 600
- TFT XGA 1024 x 768
- TFT SXGA 1280 x 1024
- TFT UXGA 1600 x 1200
- TFT WUXGA 1920 x 1080
- TFT WUXGA 1920 x 1200

#### Image Processing Feature

- Auto-detection (Input format detection)
- Auto-configuration (Input positioning & Phase)

#### Power In Support

- LCD Panel: +3.3V, +5V, +12V
- Backlight inverter: +3.3V, +5V, +12V, +24V

#### Image Scaling

- Scale up / Down a lower / Higher resolution image to fit higher / Lower resolution panels

#### Panel Connection

- One 30-pin LVDS connector
- Two 40-pin TTL connectors (Optional)

#### VESA Standard

- Supports VESA DDC2B and a subset of VESA DPMS standards
- On board EDID ROM compliant with VESA DDC2B 1.X (Optional)

#### Power Requirement

- Single +12V/50W power adapter
- Single +24V/250W power adapter for LCD TV panels

#### Operating Temperature & Humidity

- 20 °C to 75°C; ~ 90%RH

#### Storage Temperature & Humidity

- 30 °C to 90°C; ~ 95%RH

#### Board Dimension

- 235 (L) mm x 123 (W) mm

### Ordering Information

- ARV-700 (DVI-I, RGB)
- ARV-720 (Video, DVI-I, RGB)
- ARV-706 (Audio, DVI-I, RGB)
- ARV-726 (Audio, Video, DVI-I, RGB)

#### Spectrah Dynamics, Inc.

Tel: 886-2-86472026 | Fax: 886-2-86472201 | E-mail: spec\_info@spectrah.com  
 Add: 5F-2, No. 188, Sec #3, Ta-tung Road, Hsi-Chi, Taipei Hsien 221, Taiwan.