



## LCM TESTER MODEL 27012

To meet the large size and low price requirements for LCM test device, Chroma 27012 that integrates the signal and power source provide a complete test solution for LCD Module. It's LVDS / TTL(Optional) signal source fully complies with the digital signal standard, meanwhile with the 24V/12V/5V/3.3V DC source output it is able to supply power to Vdd Backlight for LCM test without obtaining external power source. Equipped with the interface of single key to switch the timing / pattern/program rapidly for test in auto or manual mode, the 27012 is able to provide a direct and convenient test environment for LCM TV by its complete hardware configuration and easy operation.

To fulfill the standard test signal requirements of various panels, this device supports LVDS signal with optional TTL signal available for use. It has 16 timings, 64 patterns, auto image rotation display system and multiple test functions settings. In addition an editor software is available for editing Timing / Pattern / Program at PC site to create a product specific test program. The design of signal and power source integration for 27012 allows it to be utilized extensively in R&D/Quality Assurance/ Quality Inspection/After Sales Services/ Sales fields for LCM related tests.

The Programmable Logic Device is used in 27012 as the image generator to test the LCD TV Module. It supports VGA~UXGA (see specification)and 1 Link / 2 Link digital signal output. This test device provides LVDS signal primarily, however, users can purchase the optional TTL signal conversion board for use to cope with the LCM features.

Besides the power source input of AC 100V~240V, it has the 12V / 5V / 3.3V DC power switch required by the LCM Vdd in the market and the 24V / 12V / 5V power for Backlight Inverter. Moreover, it has Signal/Vdd power on sequence to fit in the LCM TV Turn On test sequence.

As regards operation, 27012 can switch the Timing / Pattern and Program by the Mode key on the front panel directly to show the status on a 7-segment display. Users can select the required Timing and switch it to Pattern mode by pressing the Mode key, or switch it to program for test program editing; and then conduct the test automatically or manually. It can execute tests easily and quickly with the convenient operation method and multiple function keys.

## MODEL 27012

### Key Features :

- Support LCD Module Testing
- LVDS signals output
- TTL (Optional) signals output
- Pixel rate up to 162 MHz (LVDSX2 Link)
- Display size up to UXGA 1920X1080 @ 60Hz
- 16 timings for selection
- 64 patterns library
- 16 programs (total 3553 sequence)
- 24V / 12V / 5V output for Vbl
- 12V / 5V / 3.3V output for Vdd
- Power on sequence for signal / Vdd
- Timing / Pattern editing & download
- Timing / Pattern Auto / Manual Run
- Low cost



**Chroma**

## PANEL DESCRIPTIONS



## SPECIFICATIONS

<b>Model</b>	<b>27012</b>		
<b>Output</b>	LVDS		
<b>Option</b>	TTL (A270111) / TMD5 (A270112) / Data Bank (A270100)		
<b>Pixel Range</b>			
<b>Pixel Rate</b>	1 Link up to 81 MHz	2 Link up to 162 MHz	
25.175MHz	VGA (25.175MHz)	-	
40MHz	SVGA (40MHz)	-	
32.5MHz	XGA (65MHz)	XGA (65MHz)	
54MHz	-	SXGA (108MHz)	
81MHz	-	UXGA (162MHz)	
<b>Signal Interface</b>			
<b>Signal</b>	LVDS (6 or 8 bit)		
<b>Connector</b>	Box Header 34 Pin (Compatible with 27011)		
<b>Power Requirement</b>			
<b>Input (AC)</b>	1Ø 110~240V ±10% V <sub>LH</sub> 47~63Hz		
<b>Output (DC)</b>	5V / 1.5A ; 12V / 7A ; 24V / 6.5A max. (for Vbl) ; 12V / 5V / 3.3V / 3.5A (for Vdd)		
<b>Power Sequence Resolution</b>			
	Vdd	Signal	Vbl
Turn-on	1ms	1ms	1ms
Turn-off	1ms	1ms	1ms
<b>Operation</b>			
<b>Pattern Control</b>	64 sets auto / manual (32 sets by editing)		
<b>Timing Control</b>	16 sets auto / manual		
<b>Program Control</b>	16 programs (Total 3553 sequence max.)		
<b>Environment</b>			
<b>Operation Temperature</b>	0 ~ 40°C		
<b>Storage Temperature</b>	-20 ~ +70°C		
<b>Humidity</b>	0 ~ 70 %		
<b>Dimension (H x W x D)</b>	69.6 x 310.5 x 273 mm / 2.74 x 12.22 x 10.75 inch		
<b>Weight</b>	3.3 kg / 7.27 lbs		

\* All specifications are subject to change without notice.

## PATTERNS

1		12		23	
2		13		24	
3		14		25	
4		15		26	
5		16		27	
6		17		28	
7		18		29	
8		19		30	
9		20		31	
10		21		32	
11		22		33 ~ 64	For Customer Design

## ORDERING INFORMATION

**27012** : LCM Tester  
**A270100** : Data Bank  
**A270103** : Editor Software  
**A270111** : LVDS to TTL Signal Adapter

**HEADQUARTERS**  
**CHROMA ATE INC.**  
 66 Huaya 1st Road,  
 Guishan, Taoyuan  
 33383, Taiwan  
 T +886-3-327-9999  
 F +886-3-327-8898  
 www.chromaate.com  
 info@chromaate.com

**U.S.A.**  
**CHROMA ATE INC. (U.S.A.)**  
 7 Chrysler, Irvine, CA 92618  
 T +1-949-421-0355  
 F +1-949-421-0353  
 Toll Free +1-800-478-2026  
 www.chromaus.com  
 info@chromaus.com

**EUROPE**  
**CHROMA ATE EUROPE B.V.**  
 Morsestraat 32, 6716 AH Ede,  
 The Netherlands  
 T +31-318-648282  
 F +31-318-648288  
 www.chromaeu.com  
 sales@chromaeu.com

**JAPAN**  
**CHROMA JAPAN CORP.**  
 888 Nippa-cho, Kouhoku-ku,  
 Yokohama-shi, Kanagawa,  
 223-0057 Japan  
 T +81-45-542-1118  
 F +81-45-542-1080  
 www.chroma.co.jp  
 info@chroma.co.jp

**CHINA**  
**CHROMA ELECTRONICS**  
**(SHENZHEN) CO., LTD.**  
 8F, No.4, Nanyou Tian An  
 Industrial Estate, Shenzhen,  
 China PC: 518052  
 T +86-755-2664-4598  
 F +86-755-2641-9620  
 www.chroma.com.cn  
 info@chromaate.com

**SOUTHEAST ASIA**  
**QUANTEL PTE LTD.**  
 (A company of Chroma Group)  
 46 Lorong 17 Geylang # 05-02  
 Enterprise Industrial Building,  
 Singapore 388568  
 T +65-6745-3200  
 F +65-6745-9764  
 www.quantel-global.com  
 sales@sg.quantel-global.com