

# Монитор DM-285BD-MPGR01, DM-285BD-MPGR01

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# MONITOR DISPLAY MODULE

## *Product Specification*

Customer	Standard		
Product Number	DM-285BD-MPGR01		
Ordering Part Number	DM-285BD-MPGR01		
Customer Approval		Date:	

### Internal Approvals

Product Mgr	Doc. Control	Electr. Eng.
Bazile Peter	Bazile Peter	Filip Kaczorowski
Date: 14/08/2018	Date: 14/08/2018	Date: 14/08/2018





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## 1.0 General Descriptions

### 1.1 Introduction

This is a 28.5" bar cut Monitor with a PCT touch, 1920 x 540 resolution, 16.7M colour, 178-degree wide viewing angle, providing high image quality from the analogue RGB, DVI-D.

### 1.2 Main Features

Item	Contents
Screen Size	28.5"
Display Format	1920(H) x 540(V)
Colour	16.7M
Touch	PCT 10 finger touch
Overall Dimensions	757.30 (W) × 255.60(H) × 57.0 (D) mm
Active Area	698.40 (W) x 196.43 (H) mm
Pixel Pitch	0.3637 (H) x 0.3637 (W) mm
Viewing Angle	L/R: 178° U/D: 178°
Contrast Ratio	6000: 1 (Typ.)
Brightness	700 CD/m2
I/O	1 x VGA, 1 x DVI-D, 1 x HDMI
Backlight	LED
Mechanism	Bezel Frame (Chassis Frame)
Plug & Play	DDC2B (VESA Standard)
Response time (G to G)	8ms
Touch Panel	PCT
Touch Interface	USB (B Type)
Operating temperature	0°C ~ +50°C
Storage temperature	-20°C ~ +60°C

### 1.3 Scanning Frequency

Item	Contents
Horizontal	31.5 ~ 80KHz
Vertical	55 ~ 75Hz

### 1.4 Input Resolution [Analog RGB & DVI-D & HDMI]

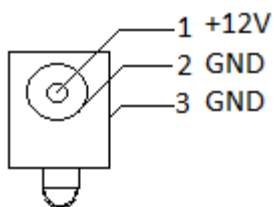
Item	Contents
Recommended Resolution	1920x1080@ 60Hz
Supported Input Resolution	640x480@60/72/75 Hz 800x600@56/60/72/75 Hz 1024x768@60/70/75 Hz 1280x1024@60/75 Hz 1920x1080@60 Hz

### 1.5 Input Signal

Item	Contents
RGB (VGA)	Analog RGB Amplitude: $0.7 \pm 0.05V$ Input Impedance: $75 \pm 2\% \text{ ohm}$ Sync: H/V Separate (TTL Level)
DVI-D, HDMI	Swing Voltage: $400mV \leq V_{\text{sing}} \leq 600mV$ Termination Resistance: $50 \pm 10\% \text{ ohm}$

### 1.6 Power Supply Rating

Power Input (DC Jack,  $\varnothing 2.5$ )

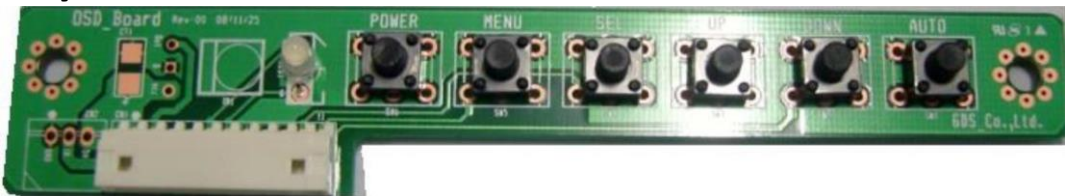


Item	Contents
Power Consumption	38.71 Watt (Typ.) @Set
DC Output	12Vdc 6.0A
AC input	100~240Vac

## 1.7 User Controls

Item	Contents
OSD Key Button	6 Key
OSD Language	English

## 1.8 Key Button Function



Button	Function
Power	Turns On/Off the system
Menu	Activates the OSD menu or Previous Menu, Exit
Select	Select input function (hotkey) or Sub Menu select
Up	Adjust Button/ Brightness & Contrast menu on Move the bar right to increase the Adjustment Move the main menu or sub menu Brightness & Contrast menu on
Down	Adjust Button/ Brightness & Contrast menu on Move the bar left to increase the Adjustment Move the main menu or sub menu
Auto	Adjustment RGB(Hotkey), disabled main menu



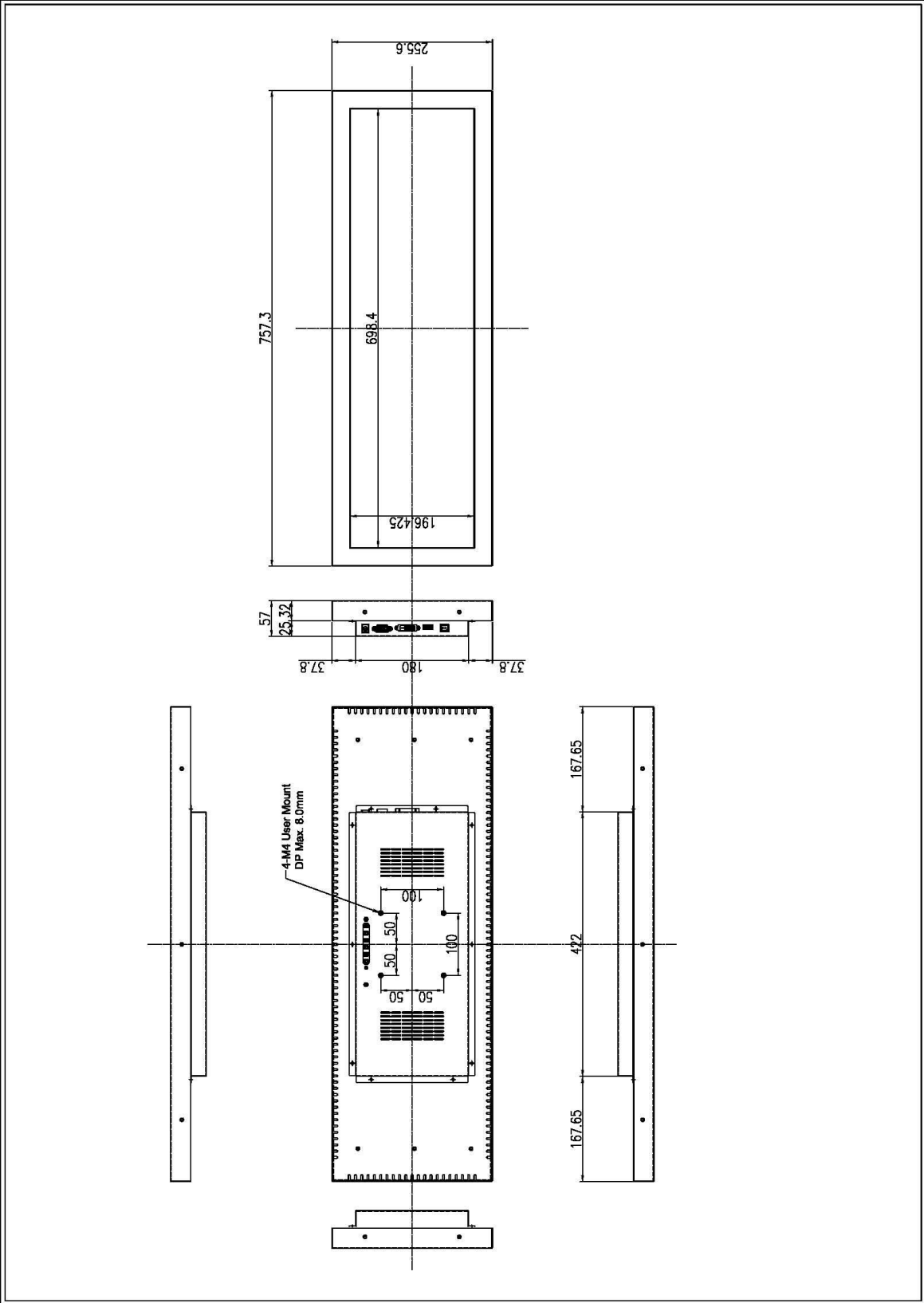
## 2.0 Mechanical Specification

### 2.1 Mechanical Characteristics

Item	Characteristic	Unit
Display Format	1920(H) x 540(V)	Dots
Overall Dimensions	757.30 (W) × 255.60(H) × 57.0 (D)	mm
Active Area	698.400 (W) x 196.425 (H)	mm
Display colour	16.7M	
Mounting	User hole for M4 Screw depth max 5mm 100 x 100 mm	

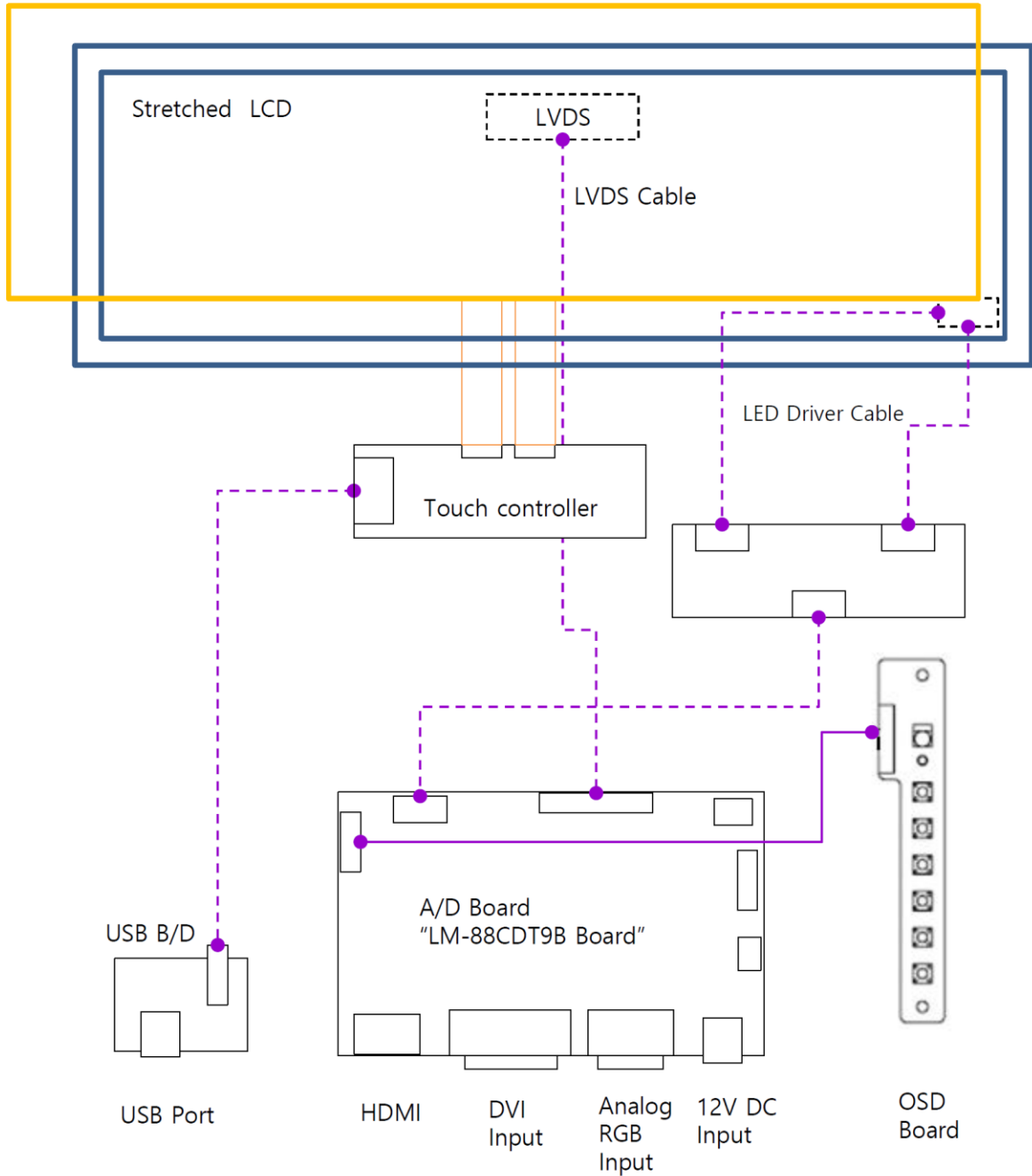


## 2.2 Mechanical Drawing



## 2.3 Block Diagram

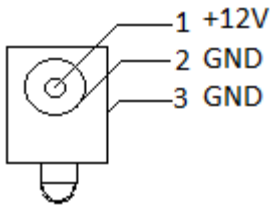
P-cap Touch



## 3.0 Electrical Specification

### 3.1 Power

Power Input (DC Jack,  $\varnothing 2.5$ )



Item	Remark
Normal Input Voltage Range	12V DC $\pm 10\%$
Power Connector	Molex 5559-04P
Power Consumption	38.71W Typical



## 4.0 Timing Characteristics

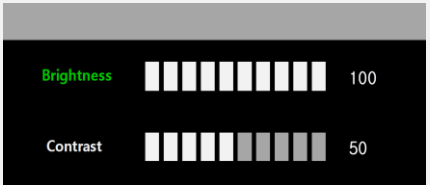
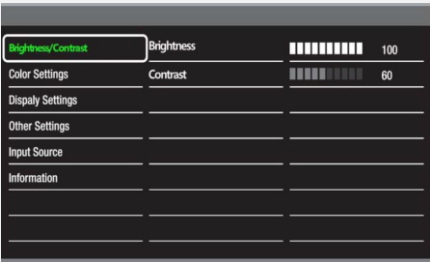

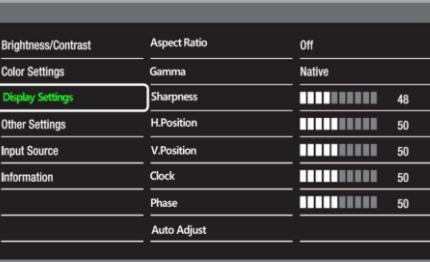

PC/DVI/HDMI Signal resolution (DTV)

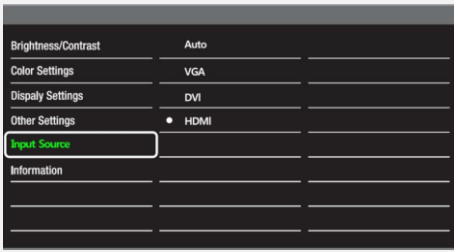
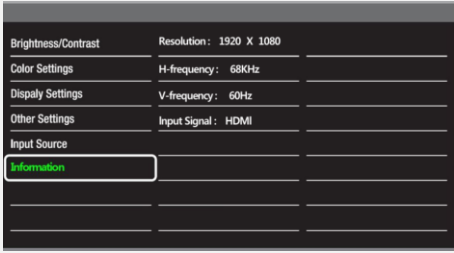
No.	Resolution	V-freq.(Hz)	Proposed
1	720*480	60.00	SDTV 480p
2	720*576	50.00	SDTV 576p
3	1280*720	50.00	HDTV 720p 50Hz
4	1280*720	60.00	HDTV 720p 60Hz
5	1920*540	60.00	HDTV 540p 60Hz

PC/DVI/HDMI Signal Resolution (PC)

No.	Resolution	V-freq.(Hz)	Proposed
1	640*480	60.00	
2	800*600	56.00	
3	800*600	60.00	
4	1024*768	60.00	
5	1280*1024	60.00	
6	1280*768	60.00	
9	1920*540	60.00	

## 5.0 OSD function

Menu	Pictures	Function
Brightness /Contrast		Brightness: Adjust Back Light Brightness Contrast: Adjust the Contrast
Main Menu		Adjustment menu contents
Colour Setting		Adjust the colour temperature: 1000K, 9300K, 6500K User Preset: Adjust the colour gain Red/Green/Blue
Display Setting		Aspect Ratio: Not available Gamma: Set the Gamma, Native / 2.2 / 1.8 Sharpness: Adjust the picture sharpness Clock: Adjust the clock (frequency) of the screen Phase: Adjust the phase of the screen, move the image position Auto Adjust: Adjust clock and the phase of display automatically
Other Settings		Language: Select language for OSD menu OST Timeout: Adjust the OSD off timer Anti-Image Retention: moving the horizontal position of OSD menu Set ID: SET ID (RS-232 Option)

Menu	Pictures	Function
<p>Input Source</p>		<p>Auto: Select the signal input automatically VGA, DVI, HDMI: Select the input</p>
<p>Information</p>		<p>Displays Information regarding the current input signal</p>



## 6.0 Optical Specification

### 6.1 Optical Characteristics

Characteristics	Symbol	Conditions	Min.	Typ.	Max.	Unit
Brightness	L <sub>br</sub>		-	700	-	cd/m <sup>2</sup>
Dark Room Contrast	CR		-	6000:1	-	
View Angle			-	178/178	-	degree

## 7.0 Environmental Specification

### 7.1 Environmental Characteristics

Item	Remark
Operating Temperature	0°C ~ +50°C
Storage Temperature	-20°C ~ +60°C
Storage Humidity	10~90% RH
Operating Humidity	10~90% RH



## 8.0 Densitron Part numbering

Ordering Part number	Description
DM-285BD-MPGR01	28.5" Button Deck, 700 Nits, Metal Bezel, PCT, Generic AD board

1	O	Densitron Monitor
2	M	
3	-	
4~6	0	TFT Size: 043=4.3", 057=5.7", 070=7", 101=10.1"
	4	
	3	
7~8	G	SKUs: GN: Generic, BD: Button deck, 3D:3D, TP: Transparent, WT: Wide temp, DP: Dual Side, NB: Narrow Bezel, FM: Floating monitor, PT: Player Tracker
	N	
9	-	
10	O	Bezel: O: Open frame, M: Metal bezel, P: Plastic bezel, F: Flat surface K: Display kit only
11	P	Touch Screen: G: Glass, R: Resistive, S: SCT, P: PCT, D: DST, A: Acoustic, N: No need
12	1	- Control Board(AD Board): ranges from 1 to 9 (a to z if needed) - G: Generic - X: X86 Platform - Y: Arm Platform
13	R	Revision
14~15	0	Code for different configuration, ranges from 01 to 99 (a to z if needed)
	1	



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