

## 21" COLOR DISPLAY UNIT CDU2107GD/FI01 (DSM 60-210)

This display unit is manufactured by FIMI and is identified as **DSM 60-210** on the front and rear of the case, and in the Progetto di Gestione. This unit is also identified as **CDU2107GD/FI01** on the homologation plate on the rear of the case.

### CHARACTERISTICS

VGA-compatible, high resolution, multiscan analog color monitor with the power management and DDC-1/2B features, OSD function (On Screen Display).

5

- CRT size: 21" diagonal  
Deflection angle: 90° diagonal  
Trio spacing: 0.26 mm trio dot pitch
  - Horizontal size data area: 300 ± 1.5 mm (640x480/800x600/1024x768/1600x1200)  
356 ± 1.5 mm ( for 1280x1024 resolution)  
Vertical size data area: 285 ± 1.5 mm
  - Input voltage: 85-270 Vac RMS  
Line frequency: 47 - 63 Hz  
Degaussing: Manual and automatic at power on  
Power dissipation: 180 W max
  - Video input signals: Separate Red, Green, Blue, H.s. and V.s.  
Composite Red, Green, Blue, H.s. and V.s.  
Composite Red, Green, Blue, H.s. and V.s. on Green
- Video input: 75 Ω to ground  
Level: 0-714 mV  
Polarity: Positive  
Rise/fall time: ≤ 8 ns
- Input timing limits

| Parameter   | Horizontal            | Vertical              |
|-------------|-----------------------|-----------------------|
| Frequency   | 30 - 107 KHz          | 50 - 170 Hz           |
| Blanking    | ≥ 2.4 μs              | ≥ 0.4 ms              |
| Back Porch  | ≥ 0.8 μs              |                       |
| Front Porch | >(Back Porch - 0.3)μs | <(Back Porch - 0.3)ms |
| Sync Pulse  | > 0.8 μs              | > 0.03 ms             |

- Preset timings

|                       |       |       |       |       |       |       |       |       |       |       |       |       |
|-----------------------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| <b>HORIZ. (DOTS)</b>  | 720   | 640   | 800   | 800   | 1024  | 1024  | 1024  | 1024  | 1280  | 1280  | 1600  | 1600  |
| <b>FREQ. (KHz)</b>    | 31.47 | 43.27 | 53.67 | 76.13 | 60.02 | 68.67 | 80.41 | 96.72 | 79.97 | 91.14 | 93.75 | 106.9 |
| <b>VERT. (LINES)</b>  | 400   | 480   | 600   | 600   | 768   | 768   | 768   | 768   | 1024  | 1024  | 1200  | 1200  |
| <b>FREQ. (Hz)</b>     | 70.08 | 85    | 85.06 | 119.9 | 75.03 | 84.99 | 99.64 | 119.8 | 75.02 | 85.02 | 75    | 85.02 |
| <b>INTERL.</b>        | NO    |
| <b>V/H POLARITY</b>   | +/-   | -/-   | +/+   | +/+   | +/+   | +/+   | -/-   | -/-   | +/+   | +/+   | +/+   | +/+   |
| <b>PIXEL R. (MHz)</b> | 28.32 | 36    | 56.25 | 81    | 78.75 | 94.5  | 110   | 130   | 135   | 157.5 | 202.5 | 232.7 |

**NOTE:** The monitor is compatible with additional modes within the specified frequency ranges provided that they are different at least for 1 % for horizontal and vertical frequency. These additional modes setting can be stored in 16 memory positions.

- Power Management

| STATE    | HORIZON. SYNC | VERTICAL SYNC | VIDEO   | POWER SAVING | RECOVERY TIME | LED STATUS |
|----------|---------------|---------------|---------|--------------|---------------|------------|
| ON       | PULSE         | PULSE         | ACTIVE  | < 180 W      | NONE          | GREEN      |
| STAND-BY | NO PULSE      | PULSE         | BLANKED | < 15 W       | < 3 SEC       | YELLOW     |
| SUSPEND  | PULSE         | NO PULSE      | BLANKED | < 15 W       | < 3 SEC       | YELLOW     |
| OFF      | NO PULSE      | NO PULSE      | BLANKED | < 1.5 W      | < 30 SEC      | AMBER      |

- CONNECTORS

There are seven connector on the rear part of the monitor:

- One 15 pins mini **D-SUB** connector VESA DDC-1/2B
- One 9 pins **D-SUB** serial connector **RS-232**
- Five **BNC** connectors
- 15 pins mini **D-SUB** connector VESA DDC-1/2B

- 1 Red video input
- 2 Green video input
- 3 Blue video input
- 4 Ground
- 5 Ground
- 6 Red video ground
- 7 Green video ground
- 8 Blue video ground
- 9 Not connected
- 10 Logic ground
- 11 Identify output (Connected to pin 10)
- 12 SDA (Serial Data)
- 13 Horizontal synchronism
- 14 Vertical synchronism
- 15 SCL (Serial Clock)

- Serial input 9 pins D-SUB connector **RS-232**

|   |               |
|---|---------------|
| 1 | Not connected |
| 2 | RX            |
| 3 | TX            |
| 4 | Not connected |
| 5 | GND           |
| 6 | Not connected |
| 7 | Not connected |
| 8 | Not connected |
| 9 | +5 V          |

- BNC Connettors

|          |  |
|----------|--|
| <b>H</b> | Horizontal Sync or Horizontal + Vertical Sync    |
| <b>V</b> | Vertical Sync                                    |
| <b>R</b> | Red video input                                  |
| <b>G</b> | Green video input with or without composite sync |
| <b>B</b> | Blu video input.                                 |

5

- User Controls

This display device has the following user controls:

- User controls located in front panel
- Hardware OSD user controls
- Interactive software OSD.
- User controls located in front panel:
  - . Power on/off switch
  - . Input select D-SUB/BNC
  - . Manual degauss
  - . Select OSD
  - . Save OSD
  - . Adjust +/- OSD
  - . Brightness
  - . Contrast
- Hardware OSD user controls
  - . HORIZONTAL SIZE/CENTERING
  - . VERTICAL SIZE/CENTERING
  - . PINCUSHION
  - . TRAPEZOID
  - . CLEAR CHANGE
  - . PRESET RECALL
  - . SYSTEM STATUS
  - . MOIRÉ REDUCTION
  - . LANGUAGE SELECTION (ENGLISH/GERMAN/ITALIAN/FRENCH/SPANISH)
  - . COLOR TEMPERATURE SELECTION
  - . CUSTOM COLOR TEMPERATURE ADJUSTMENT
  - . TILT
  - . SIMMETRY
  - . PARALLELOGRAM
  - . POWER MANAGEMENT
  - . DEGAUSS
  - . CLEAR USER AREA
  - . KEY LOCK
  - . OSD OPTION

– Interactive software OSD

The OSD software, with appropriate software, allows the user to controls the monitor functions also by PC keyboard or mouse. The control functions are the same provided by the hardware OSD with the following differences:

- LANGUAGE SELECTION: with Interactive Software the selection of the language must be done during the installation procedure
- CLEAR USER AREA / KEY LOCK / OSD OPTIONS : not available

This software is available for the following operating system: DOS, WINDOWS, OS/2 (supported only if used with DOS or WINDOWS).

**NOTE:** For a more detailed description of the controls and adjustments, the service engineer should consult the monitor's User Guide.

