

**Exhibit 6**

**BRIEF DESCRIPTION  
OF  
CIRCUIT FUNCTIONS**

## Function Description

### 1. General

The 18.1" TFT flat panel monitor is specified as a display peripheral with analog video signal input and 18.1" TFT LCD display. Horizontal scan range is 31 - 82 K Hz and the refresh range is 56 - 75 Hz. This scan range allows it to display resolution up to 1280\*1024 non-interlaced at 75 Hz refresh rate. The image can be adjusted through OSD control. These adjustments can be stored in an onboard memory including 30 factory preset modes and 30 user definable modes.

### 2. Power supply

Main voltage : AC 90 - 264 V rms, 50 - 60 Hz

power consumption: 66 W max

power indicator : LED ( on: green, standby: amber, new mode: blinking green)

Auto power Saving : EPA, Nutek, VESA DPMS

### 3. Input signal

Horizontal scan : 31 - 82 K Hz

Vertical scan : 56 - 75 Hz

#### Input signals

#### 1. Signal input level

Video : 0.7 Vp-p linear / 75 ohms

Sync : H/H+V, V TTL level, composite sync, sync on green

#### 2. Impedance

Video : Terminated with 75 ohms

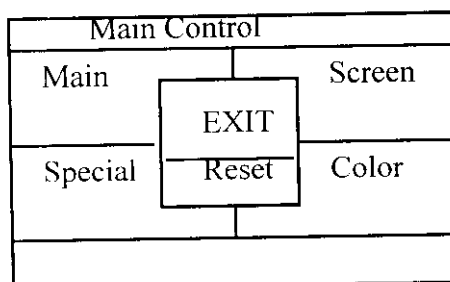
Sync : Terminated with 2K2 ohms

Factory preset modes ( 28 modes )

### 4. OSD ( On Screen Display ) function

Software control function via OSD/ Control

-Adjustable functions :



Main : Brightness, Contrast, Volume  
 Screen : H - position, V - position, Phase adjustment, Clock adjustment  
 Color : 9300 K, 6000 K, 5500 K, User preset.  
     - Preset color temperature automatic display while icon is selected  
     - User preset - 3 user preset  
 Sepecial : - Language, OSD control, Video input priority, Power saving, Rotary  
             function default  
     Language : multi - language ( 5 language )  
     OSD control : OSD H - position, V - position, timer  
     Video input priority: D-sub or BNC input  
     Power saving : On-enable power saving  
                     Off - disable power saving  
     Rotary default : Brightness, contrast or volume

## 5. LCD panel

Type : 18.1" LCD flat panel  
 Dimensions : 18.1"  
 Pitch : 0.28 mm  
 Color pixel arrangement : R.G.B. vertical stripes  
 Display surface : low reflection, antiglare with hard coating  
 Number of color : 256 gray level ( 8 bits )  
 Backlight : CCFL edge light system  
 Active area ( W\*H ) : 359\*287 mm ( 18.1" diagonal )

## 6. Function block

### Video amplifier

- amplifier the input signal to ADC ( analog to digital converter ) acceptable range
- brightness control
- contrast control
- R.G.B. sub contrast control

### ADC

- sample the input video signal according to its pixel rate to form a digital data for format converter IC

### PLL clock generator

- phase lock to the input horizontal sync signal

- output clock rate controlled by microprocessor according to input signal pixel rate

#### Microprocessor

- monitor the input horizontal and vertical sync signal to judge input video mode
- send the parameters to format converter IC according to the input mode
- process the control data listed in OSD section

#### Front panel switch control

- used by OSD function
- five push button ( confirm, auto, mute, contrast/ brightness, signal selection )
- rotary switch combined with confirm switch to select the OSD item

#### Format converter

- convert the data from ADC to a LCD panel acceptable data format
- zoom the input video to a full screen display

#### Inventor

- accept +18 V DC voltage
- output 800 V rms voltage to CCFL ( Cold Cathode Fluorescent Tube, backlight )

#### Power supply

- AC adapter : the AC power input from 90 V AC to 264 V AC, can generate 18 V / 4 A AC power
- DC DC converter : convert 18 V to 12 V , 9 V , 5 V , 3.3 V to system

#### USB function

- device function: one up stream port
- hub function : one upstream port, for down stream ports