USER MANUAL

ANIMATE TILE

YG-LED107 ANIMATE TILE

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1 INTRODUCTION

1.1 PRODUCT INTRODUCTION

The LED FLOOR TILE is a system that is suitable for a wide range of indoor applications such as architectural lighting, stage lighting and floor effect applications. The system is controlled using the simple and quick to learn LEDstudio software allowing the user to display many different formats of pictures, videos, text and graphics.

On receiving this product, please carefully check that there has been no damage caused in transportation and that the following parts are enclosed:

LEDstudio SOFTWARE

TRANSMITTER CARD（ref.no. T6A）	1pc
DVI SIGNAL CABLE	1pc*
RS232 SIGNAL CABLE	1pc
LEDstudio CD-ROM	1pc
USER MANUAL	1pc
NET CABLE	1pc
SIGNAL CABLE	1pc
LED R16-HUB (RECEIVER)	1pc
LED R16-HUB EXTERNAL POWER SUPPLY	1pc

LED FLOOR TILE

LED FLOOR TILE	1pc
POWER CABLE	1pc
SIGNAL CABLE	1pc

* - For a LED MATRIX screen where the Width (W) <192 columns of pixels and the Height (H)<128 rows of pixels. If a larger resolution is required, then extra RECEIVERS and connecting wires will be required. Please review section 2.1 & 2.2 in order to understand the requirements for your application. Please consult with your supplier before assembling your installation.

1.2 SYSTEM REQUIREMENTS

Operating System
Windows XP/XP2

Hardware
CPU: >200MHz
Internal Memory:32M
Display: Standard VGA256 Display(or better)
Display Card: ATI display card (note that the NVIDIA display card is not
            compatible)

1.3 HOW TO USE THIS USER MANUAL

Carefully read the introduction, paying special attention to the SAFETY WARNING.

Read Section 2 describing how to design a system and how the hardware should be installed.

Follow the instructions in Section 3 explaining settings for INTERFACE CARDS.

Section 4 describes how to install and operate the LEDstudio software

PLEASE READ ALL OF THIS USER MANUAL CAREFULLY BEFORE STARTING INSTALLATION AND OPERATION

1.4 SETUP: QUICK REFERENCE

1- Install the LED SCREEN panels according to the instructions in Section 2.

2- Connect all cables as described in Section 2.3 and 3.4

3- Install the TRANSMITTER CARD in the PC and connect the TRANSMITTER CARD and DISPLAY CARD as shown in Section 3.3

4 - Set the DISPLAY CARD settings as described in Section 3.6

5 - Set the RECEIVER CARD settings as shown in Section 3.5

6 - Install the LEDstudio software, refer to Section 4

7 - Verify that the HARDWARE SETUP settings in LEDstudio are correct by checking   with Section 4.3

8 - Test system setup using the tools in the <TEST> menu of the LEDstudio software.

1.5 SAFETY WARNING

IMPORTANT

ALWAYS READ THE USER MANUAL BEFORE OPERATION. PLEASE CONFIRM THAT THE POWER SUPPLY STATED ON THE EXTERNAL POWER SUPPLY UNITS IS THE SAME AS THE SUPPLIED MAINS POWER IN YOUR AREA.

This product must be installed by a qualified professional.
Always operate the equipment as described in the user manual.
A minimum distance of 0.5m must be maintained between the equipment and any combustible surface.
The receiver and power supply units must be placed in a well ventilated area.
Always make sure that the equipment is installed securely.
Keep this equipment away from any form of water or moisture.
DO NOT stand close to the equipment and stare directly into the LED clusters.
Always disconnect the power before attempting any maintenance.
Always make sure that the supporting structure is firmly secured.
The earth wire must always be connected to the ground.
Do not touch the product or power cables if your hands are wet.

⚠ ATTENTION ⚠

This product left the place of manufacture in perfect condition. In order for safe operation and to maintain this condition, the user must always follow the instructions and safety warnings described in this user manual.
Avoid shaking or strong impacts to any part of the equipment.
Make sure that the all parts of the equipment are kept clean and free of dust.
Always make sure that the power connections are connected correct and secure.
If there is any malfunction of the equipment, contact your distributor immediately.
When transferring the product, it is advisable to use the original packaging that the unit left the factory in.

1.6 FEATURES

LEDstudio

Intelligent Tracker - Use the mouse to select and lock area of LED MATRIX.

User Friendly - Software allows the user to operate all functions from the operating windows of the LEDstudio software.

Multimedia - The software allows the user to display a wide range of different picture, animation, video, text and other graphic formats (including BMP / JPG / GIF / PCX / MPG / MPEG / MPV / MPA / AVI / VCD / SWF / RM / RA / RMJ / ASF．．)．

SYSTEM CARDS AND CONNECTIONS

Direct DVI Input - Multi-media card is not necessary

Single Net Cable - Transmitting full color 768×512

Overload Capability - Transmitter (768×512) Receiver (192×128)

Universal Compatibility - Transmitters are universal with all receivers

Multi-application Card - Control Card is compatible with software programs or external software programs

Long-Range Transmission - High-speed data transmission allows the user to control the LED MATRIX from distances of over 100m. (Factory tested at 130m)

LED MATRIX

Color Contrast & Dimming - Independent control of Red, Blue and Green LEDs

Wide Application Range - Suitable for a wide range of indoor large/small architectural, stage lighting, advertisement & information board applications, etc)

Bright LED cluster - Each LED cluster contains 6 red, 6 blue & 6 green LEDs giving out a high light output at each pixel.

1.7 SPECIFICATIONS

Gray Scale	Red/Green/Blue 256 grade(8 BIT)
Colors	256×256×256 = 16M
Supports Display	640×480\800×600\1024×768
Supports Display Card	DVI Connector Display Card
Interface Cards (1 set)	Data Collection Card 1PC,Display Driver Card 2pcs
Range	768X512
Dimmer	Hardware 16 grade,Software 256 grade
Frequency	16Mhz、12Mhz、8Mhz、6Mhz(Adjustable)
Sweeping Frequency	>90HZ
Scan mode	8 rows/area
Output Port	2x50
Signal Cable	5-core Net Cable
Maximum Signal Transmission Distance	High Speed>100m(no breaks)
Common Power	+5V

2 LED MATRIX (HARDWARE)

2.1 LIMITATIONS

VERTICAL:

Min.	1 panel = 8 rows of LED clusters = 8 vertical pixels
Max. (1 RECEIVER)	16 panels= 128 rows of LED clusters = 128 vertical pixels

HORIZONTAL :

Min.	1 panel = 8 columns of LED clusters = 8 horizontal pixels
Max. (1 RECEIVER)	32 panels= 256 columns of LED clusters = 256 horizontal pixels

RESOLUTION:

Min.	1×1
Max. (1 RECEIVER)	32×16

2.2 LED MATRIX PANEL INSTALLATION

The Animate tile is connected together as shown in section 2.3. The units must be installed so that they are on a flat plane. It is advisable that a spirit level is used in aligning th animate tiles.   Use the rubber feet to adjust the height of each tile..

2.3 RECEIVER to PANEL connections

Each RECEIVER has 16 output ports (J1-J16) with one output port controlling 1 row of ANIMATE TILE units.

The number of output ports used is determined by the length (L) of the ANIMATE TILE LED MATRIX screen (see section 3.4

for further details on connection of RECEIVER output ports). Please note that the orientation of the

connection must be as in figure 2.3e-1 with the raised "tongue" on the left.

EXAMPLE:

If the application requires a length of 2m, then this will require connection to the RECEIVER as follows:

J1- first row of ANIMATE TILES
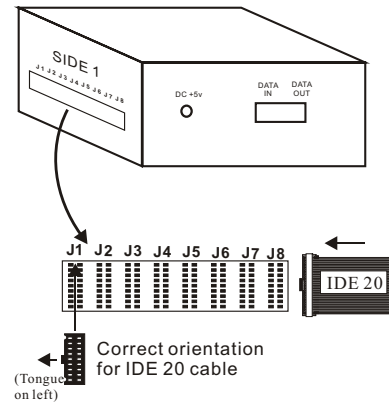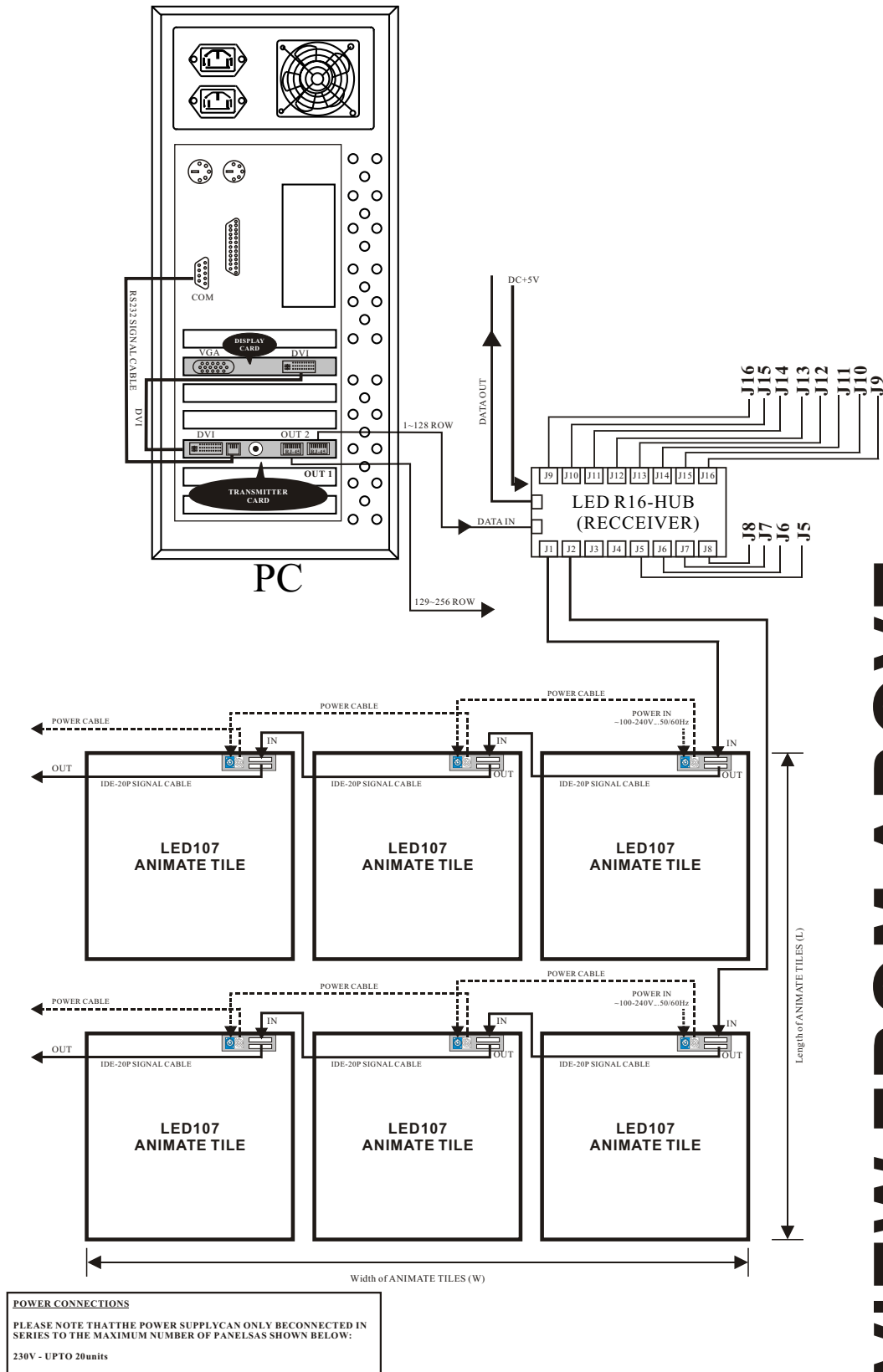J2- second row of ANIMATE TILES

SIDE 1

J1 J2 J3 J4 J5 J6 J7 J8

IDE 20

Correct orientation
for IDE 20 cable

(Tongue on left)

Fig.2.3e-1

2.4 SYSTEM SETUP DIAGRAM

PC

RS232 SIGNAL CABLE

COM

DISPLAY CARD

VGA   DVI

DVI

DVI   OUT 2

OUT 1

TRANSMITTER CARD

1~128 ROW

129~256 ROW

DC+5V

DATA OUT

DATA IN

J16 J15 J14 J13 J12 J11 J10 J9

J9 J10 J11 J12 J13 J14 J15 J16

LED R16-HUB
(RECCEIVER)

J1 J2 J3 J4 J5 J6 J7 J8

J8 J7 J6 J5

POWER CABLE

POWER CABLE

POWER CABLE

POWER IN
~100-240V...50/60Hz

IN

OUT

IN

OUT

IN

OUT

IDE-20P SIGNAL CABLE

IDE-20P SIGNAL CABLE

IDE-20P SIGNAL CABLE

LED107
ANIMATE TILE

LED107
ANIMATE TILE

LED107
ANIMATE TILE

POWER CABLE

POWER CABLE

POWER CABLE

POWER IN
~100-240V...50/60Hz

IN

OUT

IN

OUT

IN

OUT

IDE-20P SIGNAL CABLE

IDE-20P SIGNAL CABLE

IDE-20P SIGNAL CABLE

LED107
ANIMATE TILE

LED107
ANIMATE TILE

LED107
ANIMATE TILE

Length of ANIMATE TILES (L)

Width of ANIMATE TILES (W)

VIEW FROM ABOVE

POWER CONNECTIONS

PLEASE NOTE THATTHE POWER SUPPLYCAN ONLY BECONNECTED IN
SERIES TO THE MAXIMUM NUMBER OF PANELSAS SHOWN BELOW:

230V - UPTO 20units

2.5 SETUP CHECKING

Check that connection from the LED CLUSTERS to the DRIVERS are correct

Check that the POWER SUPPLY units are correctly connected and that the power load has not been exceeded(220V-upto 16 panels in series / 120V-upto 8 panels in series)

Confirm that that POWER SUPPLY units stated voltage is the same as your local area

Check that all connecting wires with the PC are correct and secure

Connect the power and confirm that the LED on each DRIVER is red. If the LED is not red please check the DRIVER and replace with a new one.

Start the i.TOP LEDSTUDIO software, if the LED MATRIX is not detected the software will hint to the user that the "LED MATRIX" is not found. Please check all connecting cables and hardware.

Select <Grid Test> from the Control Panel. Select <Color Change 3 color>. If the LED MATRIX screen changes from one color to the other with a grid of diagonals then all connecting cables are connected correctly.

3 SYSTEM CARD SETTINGS

3.1 <u>TRANSMITTER CARD</u>

The TRANSMITTER CARD is installed in the PC and acts as an interface between the PC hardware & software and the LED MATRIX screen hardware.

DVI PORT   AUX PORT   DATA OUT2   DATA OUT1

Fig.3.1-1 TRANSMITTER CARD

The PIN definitions of the DVI Port must correspond to the PIN definitions of the Display Card. The DVI cable provided must be used to connect the DVI Port to the Display Card.

OUT 1 & OUT 2 PORTS

OUT 1 & OUT 2 are 8P Double-Net Card Ports. OUT 1 is connected to the RECEIVER using the Net Cable. Each port is capable of transmitting 256 rows of information. At OUT 1 the data value ranges from row 1 to row 256. At OUT 2 the data value ranges from row 257 to row 512.

AUX PORT

This port is a standard 6P telephone connection port. Connect the provided cable with the RS232 port. This port allows control of the r variable, gray scale, LED MATRIX active area, LED MATRIX lock & LED MATRIX range.

POWER SUPPLY

Power Supply port is a 5V power supply connection for when Transmitter Card is operating external of the PC.

3.2 SYSTEM CARDS INSTALLATION

Insert the Transmitter Card in the relevant available PCI slot in the PC.

Connect the TRANSMITTER CARD and the DISPLAY CARD together using the DVI cable provided.

Connect the serial port (OUT 1) to the RECEIVER card using the net cable.

Connect the TRANSMITTER AUX Port and the PC COM Port using the cable provided.

Check that all connections are secure.

Calculate the correct positions for the RECEIVER switches.

Turn on the computer and test the system

NOTE:

If the PC automatically reboots or turns off, please remove the DVI cable from the TRANSMITTER and try again. After the Windows desktop has loaded reconnect the DVI cable.
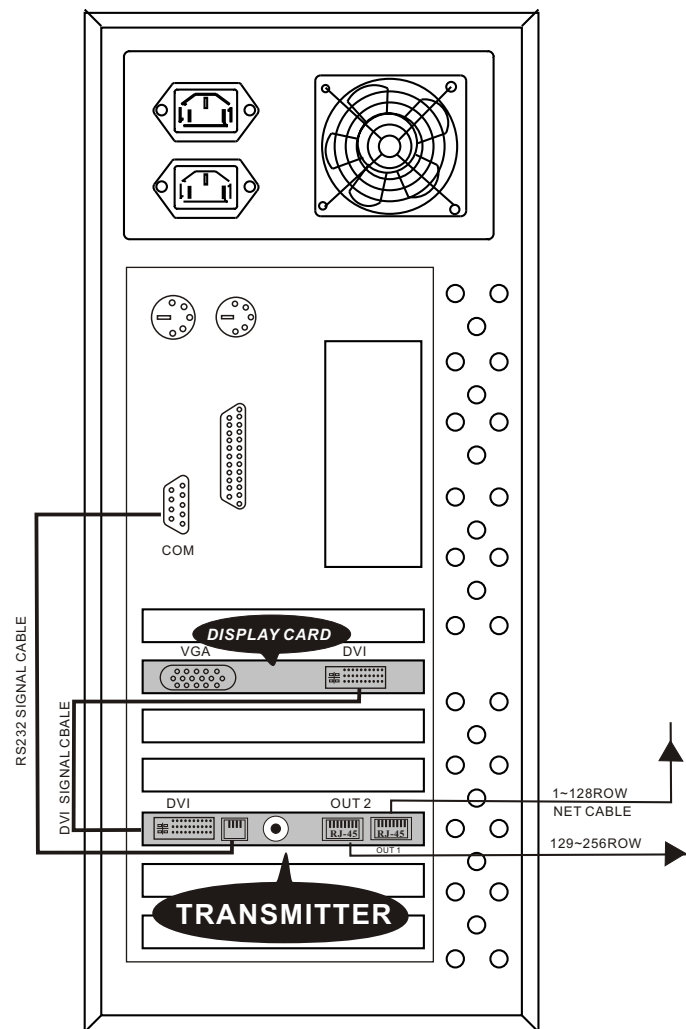
Figure 3.2-1 DISPLAY CARD & TRANSMITTER CARD installation

3.3 RECEIVER OUTPUT CONNECTIONS

When installing the RECEIVER it is necessary to calculate the number of RECEIVER output ports required. This is calculated on the vertical height of the LED MATRIX screen in number of rows (H). Figure 3.4-1 shows the RECEIVER output ports J1-J16
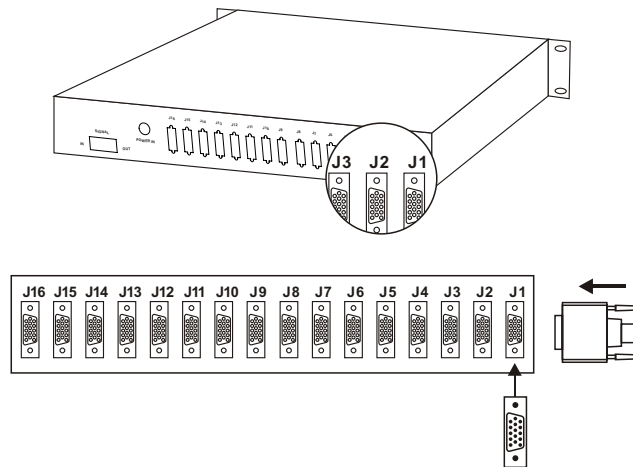

Figure 3.3-1 RECEIVER output ports

In order to calculate the number of RECEIVER output ports required, please refer to the table below (Fig.3.4-2). H refers to the number or rows (vertical pixels) of the LED MATRIX screen.

Number of Pixel Rows (H)	Number of Panels (Vertical)	Receiver Output Connections
16	2	J1-J2
32	4	J1-J4
48	6	J1-J6
64	8	J1-J8
80	10	J1-J10
96	12	J1-J12
112	14	J1-J14
128	16	J1-J16

Figure 3.3-2 RECEIVER Output Connections

EXAMPLE:

An ANIMATE TILE screen of length 12 units (or 12m) would consist of " 12 × 8 " rows = " 96 " rows. Therefore the RECEIVER output ports J1to J12 must be connected to the LED FLOOR TILE.

3.4 RECEIVER SETTINGS

When installing the RECEIVER it is necessary to calculate the position settings for the RECEIVER JP1 switches. This is calculated on the length of the ANIMATE TILE screen in number of columns (L). The diagram below shows the RECEIVER default switch settings where a black square represents the position of the switch (i.e. JP2 switches 1-5 are OFF, switches 6 & 7 are ON). The installation of the RECEIVER must be in accordance with the size of the ANIMATE TILE screen. JP1 switches 3,4,5,6,7,8 & 11 are control switches for the WIDTH in columns (W) of the ANIMATE TILE screen
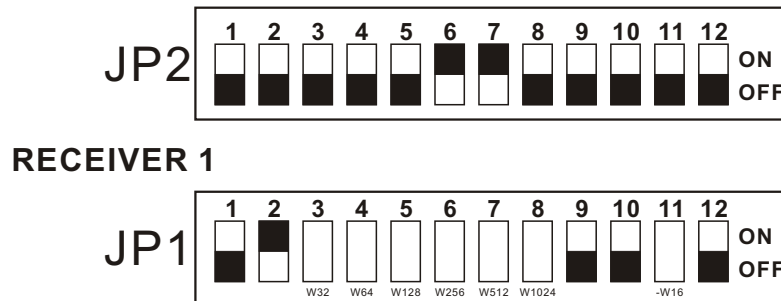
RECEIVER 1

Figure 3.5-1 Example RECEIVER switch settings

JP1 switches correspond to the following values.

3 = +W32   4 = +W64   5 = +W128   6 = +W256   7 = +W512   8 = +W1024   11 = −W16

In order to calculate which switches must be ON to correctly operate the LED MATRIX please refer to the below table.

Number of Pixel Columns (W)	Number of Panels (Horizontal)	1	2	3	4	5	6	7	8	9	10	11	12
16	2	0	1	0	0	0	0	0	0	0	0	1	0
32	4	0	1	0	0	0	0	0	0	0	0	0	0
48	6	0	1	1	0	0	0	0	0	0	0	1	0
64	8	0	1	1	0	0	0	0	0	0	0	0	0
80	10	0	1	0	1	0	0	0	0	0	0	1	0
96	12	0	1	0	1	0	0	0	0	0	0	0	0
112	14	0	1	1	1	0	0	0	0	0	0	1	0
128	16	0	1	1	1	0	0	0	0	0	0	0	0
144	18	0	1	0	0	1	0	0	0	0	0	1	0
160	20	0	1	0	0	1	0	0	0	0	0	0	0
176	22	0	1	1	0	1	0	0	0	0	0	1	0
192	24	0	1	1	0	1	0	0	0	0	0	0	0

Figure 3.4-1 RECEIVER switch settings

Example: An LED FLOOR TILE of width 22M would consist of " 22 x 8 " columns = " 176 " columns. The start value of JP1 is 32, so therefore 176=32+144, referring to the table 3.5-2, RECEIVER switches 5(W128), 3(W32) and 11(-W32) must be in the ON position. Please refer to figure 3.5-2 for all columns and switch settings.. The diagram below shows to correct settings for the RECEIVER when the width of the LED MATRIX screen is 176 columns.

JP2

1	2	3	4	5	6	7	8	9	10	11	12	
OFF	OFF	OFF	OFF	OFF	ON	ON	OFF	OFF	OFF	OFF	OFF	ON / OFF

RECEIVER 1

JP1

1	2	3	4	5	6	7	8	9	10	11	12	
OFF	ON	ON	OFF	ON	OFF	OFF	OFF	OFF	OFF	ON	OFF	ON / OFF
	W32	W64	W128	W256	W512	W1024				-W16		

Figure 3.5-3 Example RECEIVER switch settings

3.5 ATI DISPLAY CARD SETTINGS

5 Click<Theater mode options>

1 Right click the mouse on the open space of the desktop. The following menu will appear.

2 Click <Properties> and select <Settings>. The <Display Properties> menu will appear

Arrange Icons By ▶
Refresh

Paste
Paste Shortcut
Undo Move   Ctrl+Z

New ▶

Properties

Fig.3.5-1

These overlay settings are only available in dual-controller Clone mode and extended desktop configurations, and not single-display configurations.

Figure 3.5-5

Figure 3.5-2

Figure 3.5-4

4 For video settings select <Overlay>

3 Select <Advanced> and select the <Displays> window
* Click the small red triangle at the top left- side of the FPD box (the button will turn green)
* Click <Apply>

Figure 3.5-3

3.6 SYSTEM CHECKING

STEP 1:

Check that the green LED on the TRANSMITTER card is flashing. If the green LED is flashing, please move to step 3. If the green LED is not flashing, please restart your computer and check the status of the green LED during the start up of your PC. If the green LED is flashing please move to step 2. If the problem is not solved check that the DVI cable is connected properly as there is likely an error at the TRANSMITTER CARD, DISPLAY CARD or at the DVI cable. Please eradicate possible areas of error and repeat step 1.

STEP 2:

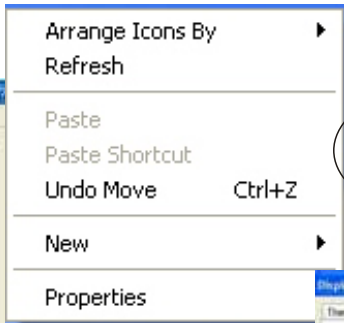Please follow out the instructions in Section 3 to verify all settings and/or re-install and then once again verify the settings. Please repeat this step until the green LED is flashing. If the green LED is still not flashing, please check and repeat step 1.

STEP 3:

Check that the green LED on the RECIEVER and the green LED on the TRANSMITTER CARD are flashing in step. If the two are in step, please move onto step 5. If the red LED (power supply) is on please move to step 4. If the red LED is not on, please check the status of the yellow LED (Power Supply Protection). If the yellow LED is not lit, please check that the Power Supply is connected correctly and that there is power supplied from the mains. If the yellow LED is lit, please check that the voltage is 5V. Disconnect the power, and check that all the connections in the RECEIVER are correctly connected. If the problem is still not eradicated, replace the RECEIVER and repeat step 3.

STEP 4:

Check that the net cable is corrected correctly and that the length does not exceed that recommended in this user manual. If the problem is not solved, please replace the RECEIVER and then repeat step 3.

STEP 5:

Check the LED to the Screen POWER SUPPLY is lit. If not lit, please repeat step 4. Disconnect the power, and check that all the connections in the RECEIVER are correctly connected.

STEP 6:

Check that the RECEIVER switch settings are correct. Please see section 3.5 for further explanation.

3.7 MAKING ADDITIONAL NET CABLE

NOTE:

Standard NET CABLE cannot be used to replace the NET CABLE required to transmit the information for the LED MATRIX system.

Please follow the following instructions in order to create extra NET CABLE.

Bear back the outer casing of the wire by around 30mm
The wires should now be colored as follows:

1-	white & orange
2-	orange
3-	white & green
4-	green
5-	blue
6-	white & blue
7-	white & brown
8-	brown

Twist the following pairs together so that only the plastic is touching (the metal wires must not touch) 1&2, 3&4, 5&6, 7&8
Insert each wire into an RJ45 connector with the white & orange wire connected to PIN 1, the orange wire connected to the second PIN, etc.
 Both ends of the NET WIRE are connected in this way.

4 LEDstudio (SOFTWARE)

4.1 <u>INSTALLATION</u>

LEDstudio is compatible with most modern PCs. Please see the requirements below before installing the software into your PC.

Operating System
Windows XP/XP2

Hardware
CPU: >200MHz
Internal Memory: 32M
Display: Standard VGA256 Display(or better)
Display Card: ATI display card (note that the NVIDIA display card is not compatible)

Insert the CD-ROM
Select the required version of the software for installation   LEDStudioD.exe (demo version) or LEDStudio.exe（Standard Version）
The LEDstudio installation wizard will start
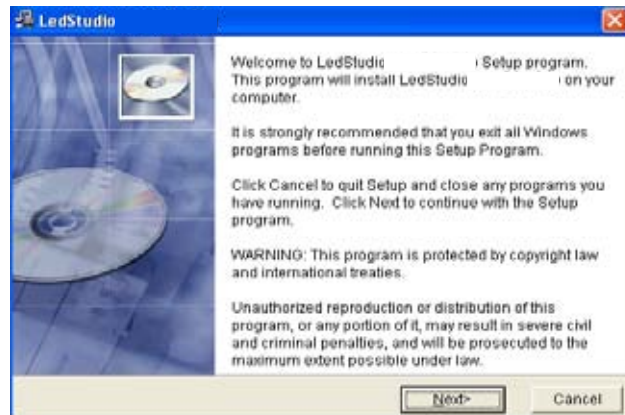
Figure 4.1-1 Installation wizard

Proceed installing according to the prompts. Note: This software is protected by a serial number. The correct serial number must be input in order to continue installing the software. The current serial number for this product is 36121080.
After completing the steps in the installation wizard, the LEDstudio software will appear in the <Start-Programs>. Select <LEDstudio> to start.
There will also be a new short-cut icon created on the DESKTOP <Shortcut to LEDstudio>. Double click on this icon to start the software.

Figure 4.1-2

4.2   UNINSTALL

The LEDstudio software also includes a complete program removal function. This allows the user to easily delete all LEDSTUDIO files, shortcuts & programs. The user may delete all the relevant files by selecting <ADD/DELETE> from the <CONTROL PANEL>Select <Automatic> in order to remove all relevant files.
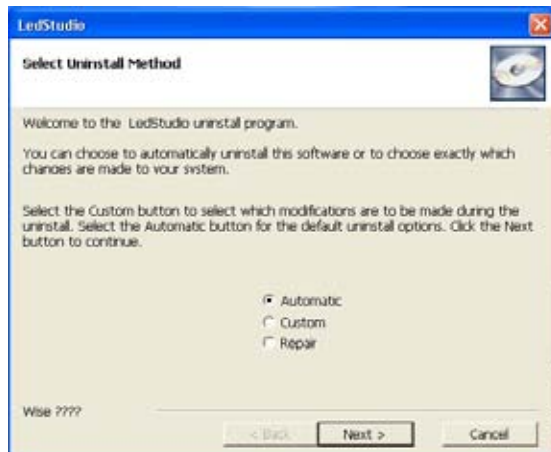
Figure 4.2 Uninstall LEDstudio

4.3   GETTING STARTED

Hardware Setup after installing the software please check that your Hardware is setup with the default settings as shown below. Please follow the steps in order to check that your default settings are correct.

Check that the default settings for all three windows are as below. Please note that it is important that the system is set as 8 rows/zone in <System Setup>.

Once the LEDMATRIX hardware and interface cards are set up as described in sections 2 & 3. The LED MATRIX screen will now automatically display the area at the top-left corner of the <DESKTOP DISPLAY> on the PC MONITOR. The size of the area displayed will correspond directly to the resolution of the LED MATRIX screen. If the LED MATRIX screen's resolution is 256 x 128 (i.e 256 columns x 128 rows of LED CLUSTERS then the top-left 256 x 128 pixels of the <DESKTOP DISPLAY> will be seen on the LED MATRIX by starting theLED studio software it is possible to select a different area of the <DESKTOP DISPLAY> to be displayed by the LED MATRIX screen.

Starting the LEdstudio software will allow the user to create, save and play programs designed to be automatically displayed in the defined area. This allows for simple display and editing of any file imported into the LEDstudio software.

4.4 MAIN OPERATION CONTROL PANEL & DISPLAY SCREEN

The main operation of this software is comprised of 2 operation windows: <Display window> and <Control Panel>.
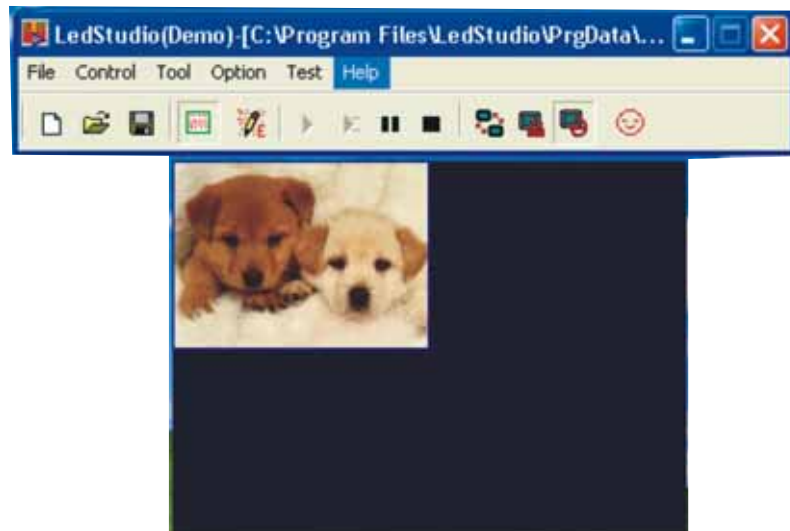
Figure 4.4 Display Window & Control Panel
.

4.4-1 DISPLAY WINDOW

Display window shows the images that will be displayed on the LED MATRIX screen. The user can view all images whether it be text, pattern, photo, animations..etc. The images displayed in the Display window will be in-step with the images displayed on the LED MATRIX screen. More than one window may be opened at any time with each window displaying different images in-step with the LED MATRIX screen.

4.4-2 CONTROL PANEL

The user can control all of the functions of the LEDstudio software from the <Control Panel>. The main function menus in the <Control Panel> are <File>, <Control>, <Tool>, <Option>, <Test> & <Help>.

4.5 FILE MENU

Open:
  Open an existing
  LEDstudio file

New:
  Create a new
  LEDstudio file

Save:
  Save file

Open Demo File:
  Open demo file

Save As:
  Save file as…

Open "recent" files:
  Open files recently
  opened in LEDstudio

Exit:
  Exit LEDstudio

Figure 4.5 File Menu

4.6 CONTROL MENU

Play:
Display current
LEDstudio file

Pause:
Pause the LEDstudio file
currently being displayed.

Stop:
Stop the LEDstudio
file currently being
displayed.

Stop PowerPoint File:
Stop PowerPoint
File currently being
displayed.

Play PowerPoint File:
Display PowerPoint file.

Send File:
Send the current file
to the LED MATRIX
screen server.

Play VCD/DVD:
Display VCD/DVD

Connect to Screen Server:
Connect to Screen Server
when multiple Screen Servers
are in simultaneous operation.

Figure 4.6 Control Menu

Send Current Program:
Send the current Program
to the LED MATRIX screen server.

4.7 TOOL MENU

Direct access to <MS Word>, <MS Excel>, <Paint>, <Notepad> & <Calc>

Please note that when opening <MS Word> and <Paint> from the <Tool> menu, the page size created in <MS Word> or <Paint> will automatically be the same as the preset screen area (factory setting).

<MS Excel> and <Notepad> do not have this function.

<Calc> - Calculator is simply to allow the user to carry out simple calculations.

Figure 4.7 Tool Menu

4.8 OPTION MENU

Restore to Default:
reset to factory settings

Screen Area:
Move the Display
Window to a new
location. Please
note that when
displaying the

Turn OFF/ON LED screen power:
Remote ON/OFF of LED screen

Schedule Table:
Schedule commands
to be performed in the
software

Screen Brightness/Contrast/Color:
set the brightness, contrast & color
(see figure 4.8-2)

Figure 4.8-2 LED Screen Brightness/Contrast/Color

Play Background:
Select to show the
<Display Window>
on the second monitor.
For normal use this
function is not required.

Figure 4.8-1 Option Menu

Schedule Hide Setup:
Schedule the hide/show of
the Display Window.
(see figure 4.8-3)

Figure 4.8-3 Scheduled Hide Setup

Lock/Unlock LED Screen Properties:
Lock the current display programs and settings to the LED
MATRIX screen so that further editing can be carried out
without affecting the current program on the LED MATRIX
screen. Unlock to apply updated version.

Show/Hide Play Window:
Hide the Play window
(please note: in order to
display to <desktop>)

Figure 4.8-4 Option Menu

Language:
Select the operating langauge

Software Settings:
Set software options
(Note: Password = 888. Please
note that only options in the PLAY
WINDOW can be changed, options
in other windows must be left the
same as the current default.)
(see figure 4.8-4)

Figure 4.8-4 Scheduled Hide Setup

4.9 TEST MENU

Grey Test:
Perform screen grey scale test

Grid Test:
Perform screen accuracy test on display.

Dot Test:
Perform screen high frequency test

Color Bar Test:
Perform screen color-layer test

Check Position:
Check coordinates of screen position

Check Color:
Check value of screen color

Figure 4.9 Test Menu

Hardware Setup:
Open Hardware Setup window to carry out hardware setting operations <this should only be carried out at the place of manufacture>

4.10 HELP MENU

Help:
Provide support prompts

Figure 4.10 Help Menu

About LEDstudio:
Information about current version of LEDstudio

4.11 CREATE A NEW PROGRAM

Select <New> from the <File> menu to create a new file or simply click the new file icon <⬜>

The <Screen 1> window will appear (Figure 4.11-1)

---to add step

---to create new Window

---to delete a Step/Window

---to reposition Step/Window files

---to reposition Step/Window files

Figure 4.11-1 Screen1

Add step using the add step icon <⬜> The following window will appear (Fig.4.11-2)
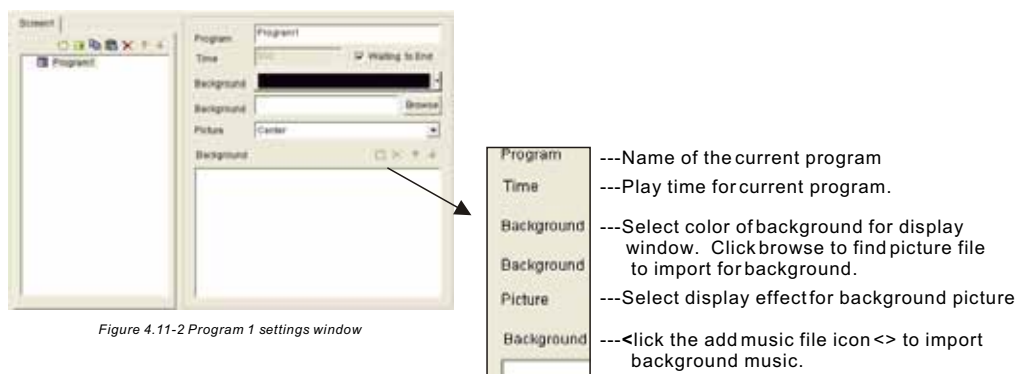
Figure 4.11-2 Program 1 settings window

Program ---Name of the current program

Time ---Play time for current program.

Background ---Select color of background for display window. Click browse to find picture file to import for background.

Background

Picture ---Select display effect for background picture

Background ---<lick the add music file icon <> to import background music.

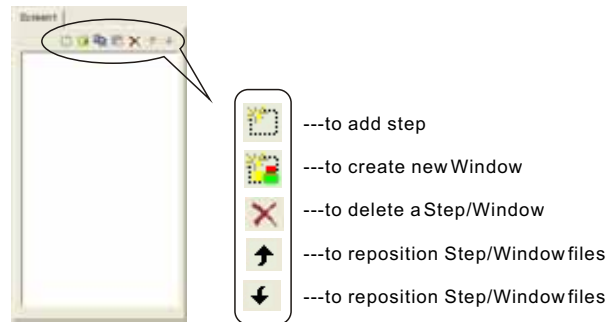After the New Program has been created and the time, background and background music settings have been designed for the application. The user may now begin to create display windows. All display windows opened in the same program will open at the same time and play for the same length of time as the program. If the file size of the file played in the display window is large, it is recommended that the user should create less display windows.

Click the New Window icon <   >.

Select new display window format by clicking on the corresponding icon. Please note that a new window can only be created once there is a New Program created or an existing Program opened.

Please refer to the following sections for further explanation on how to create and edit display windows.

4.12 DISPLAY TEXT

Text can be displayed in four different display window formats: <Text window>, <Single Line Text Window>, <Static Text Window> & <File Window>

4.12-1 DISPLAYING TEXT IN TEXT WINDOW

This function is most suitable for simple text such as short welcome notes, notices, names…etc.

Click the Create New Window button < 🔲 > and select <Text Window>.
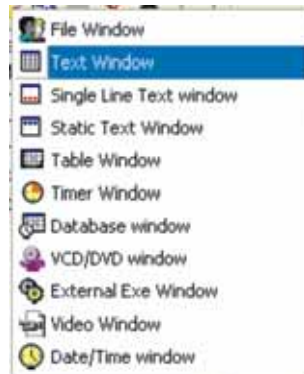
Figure 4.12-1 New Window

The following window will appear.

Figure 4.12-2 Text Window

Width:
Set the width of frame

Name:
Name of current display window

Frame:
Set the width and color of the border frame

Start X:
Select the screen start X-coordinate for display window

Start Y:
Select the screen start Y-coordinate for display window

Height:
Set the width of frame
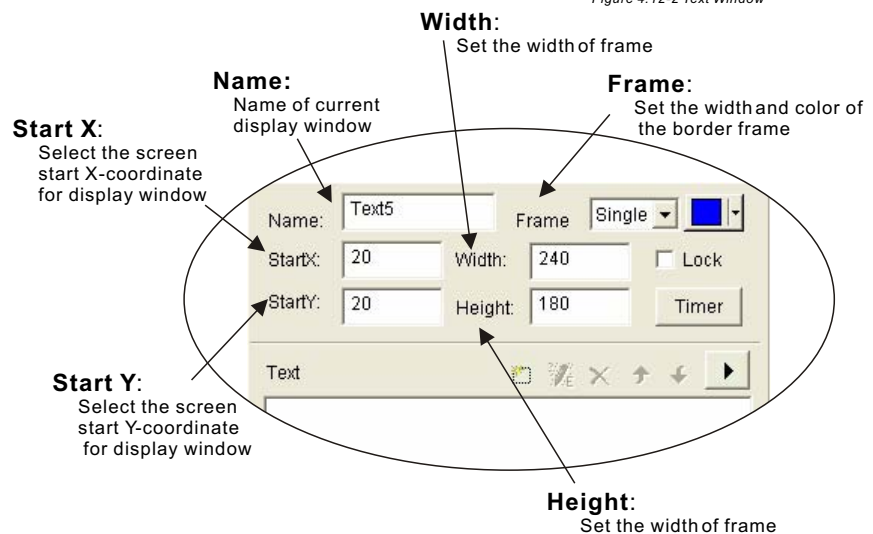
To insert/edit text click the Add Text icon < 🔳 > (The following window Will appear)

Figure 4.12-3 Text Edit

Text may be directly input or copied into the <Text Edit> window. In this window all text formatting operations may be performed such as change font, color, background, paragraph format, reveal speed, reveal action, pause time…etc.

Close the Text Edit window in order to return to the Text Window. All text and formatting operations will be stored and a Text file will be created.

to add Text Frame
(Text1, Text2, Text3...default
Text Frame names)

to edit Text Frame
(or double click on
Text Frame)

to delete Text Frame

to reposition
Text Frame
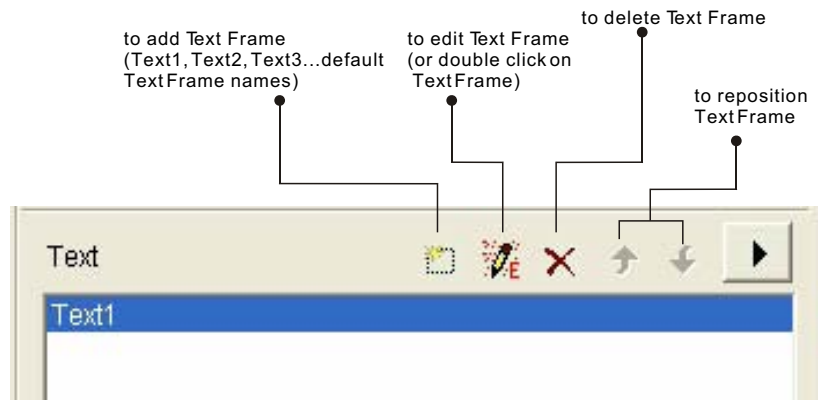
Text

Text1

Figure 4.12-4 Text 1

4.12-2 SINGLE LINE TEXT WINDOW

Text may be directly input into this window and all simple text formatting, font selection, colors, reveal actions, etc. may be directly performed in this window.

Click the Create New Window button < > and select <Text Window>.

File Window

Text Window

Single Line Text window

Static Text Window

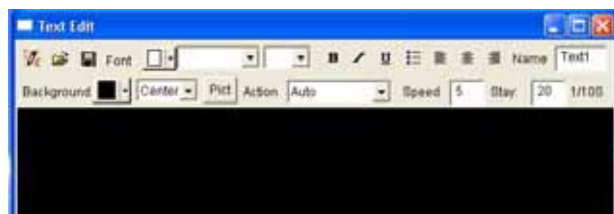Table Window

Timer Window

Database window

VCD/DVD window

Figure 4.12-5 New Window

The following window will appear

Figure 4.12-6 Single Text Window settings

Directly input text into the text box and perform the required format and effect operations. (Note that for scrolling, please select left/right in the action box)

4.12-3 DISPLAYING TEXT IN FILE WINDOW

Click the Create New Window button <📇> and select <File Window>

Figure 4.12-7 New Window

The following window will appear.

Figure 4.12-8 File Window settings

Width:
Set the width of frame

Name:
Name of current display window

Frame:
Set the width and color of the border frame

Start X:
Select the screen start X-coordinate for display window

Start Y:
Select the screen start Y-coordinate for display window

Height: Set the width of frame
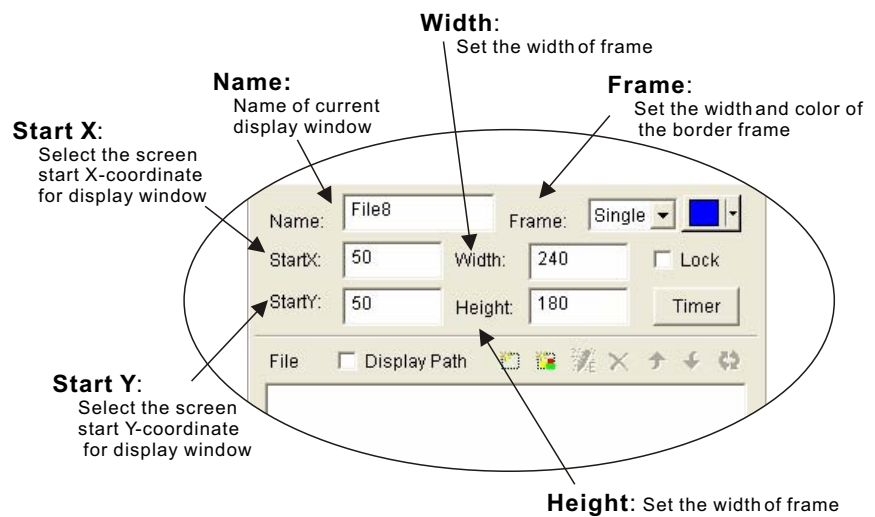
Click the Add File icon < >

Figure 4.12-9

Select file to be opened and then perform the required format and effect operations.

4.12-4 DISPLAYING TEXT IN STATIC TEXT WINDOW

Click the Create New Window button <> and select <Static Text Window>
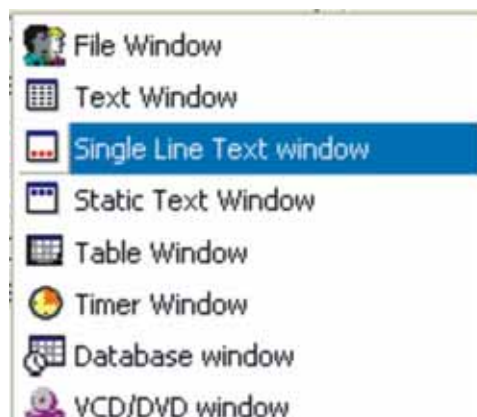

Figure 4.12-10 New Window

The following window will appear.

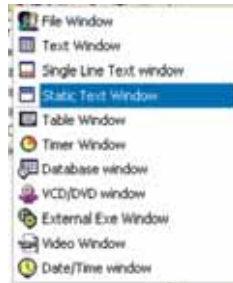*Figure 4.12-11 Static Text window settings*

Input text directly into the Text box.
Perform the desired format and action operations

4.13 DISPLAYING PICTURE FILES

Click the Create New Window button <📷> and select "File Window".

Figure 4.13-1 New Window

Figure 4.13-2 File Window settings

Width:
Set the width of frame

Name:
Name of current display window

Frame:
Set the width and color of the border frame

Start X:
Select the screen start X-coordinate for display window

Start Y:
Select the screen start Y-coordinate for display window

Height: Set the width of frame

Click the Add File icon <🖼>

Figure 4.13-3 Open File window

Select file to be opened.
After the Picture File is selected, effects operations can be performed using the tools shown in figure (4.13-4)
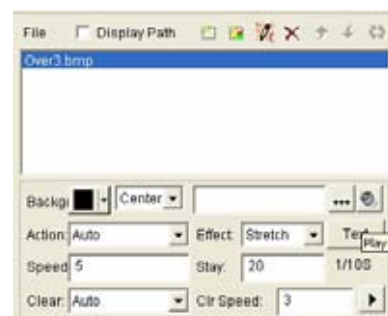
Figure 4.13-4 Picture File action and format window

To insert Background click the browse icon . Select the Picture File to import as the background and click open.
To insert Music click the sound icon . Select the Sound File to insert and click open.
To insert Text click the Text box button. The following window will appear.

Figure 4.13-5 Picture/Text

Click the <Add> button to open the Text Edit window.
Input text into the Text Edit window.
Perform required formatting, font and other text effect actions.
Closing the Text Edit will automatically store all actions to the Picture/Text window and will automatically be displayed when the program is played.
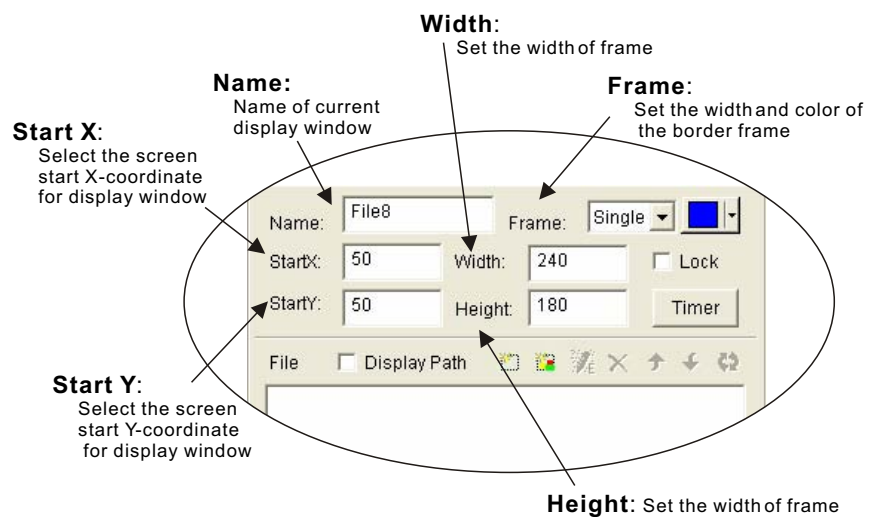
4.14 DISPLAYING ANIMATIONS

Click the Create New Window button and select "File Window" .

Figure 4.14-1 New Window

Figure 4.14-2 File Window settings

Width:
Set the width of frame

Name:
Name of current display window

Frame:
Set the width and color of the border frame

Start X:
Select the screen start X-coordinate for display window

Start Y:
Select the screen start Y-coordinate for display window

Height: Set the width of frame
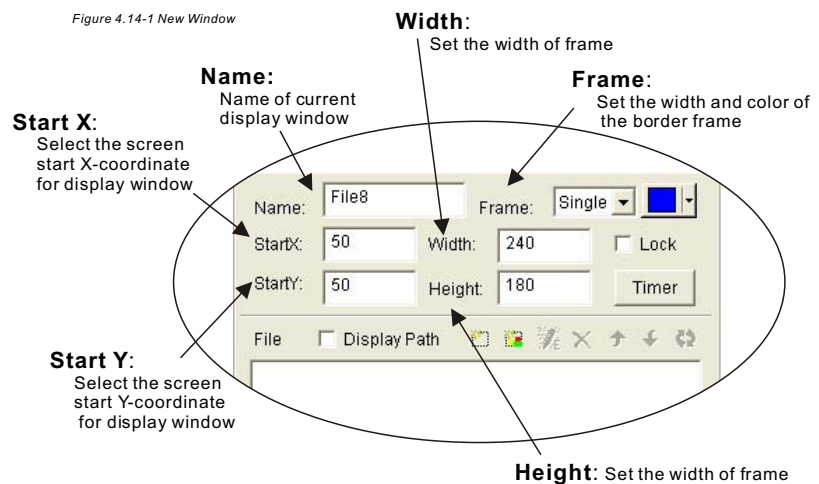
Click the Add File icon < ■ >
Select file to be opened.
After the Flash File is selected, effects operations can be performed using the tools
shown in figure (4.14-3)

Figure 4.14-3 Animation file actions window

4.15 DISPLAYING A TABLE

There are two methods of displaying a table in the LEDstudio software. The user may either use the LEDstudio software directly to create a table in *Table Window* or by importing an existing table from Word or Excel (please see section 4.12 for more explanation).
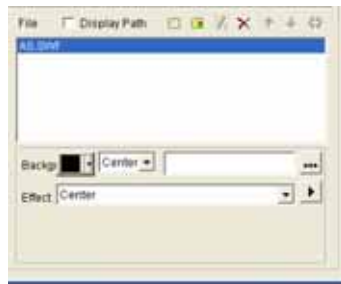
Click the Create New Window button < ■ > and select "Table Window".
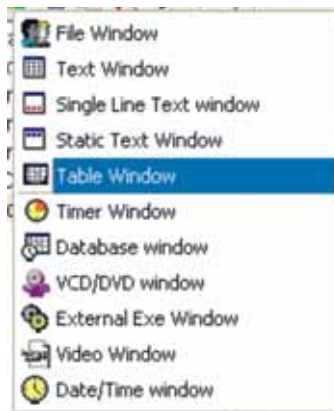
Figure 4.15-1 New Window

The following window will appear.

Figure 4.15-2 File Window settings

Width:
Set the width of frame

Name:
Name of current
display window

Frame:
Set the width and color of
the border frame

Start X:
Select the screen
start X-coordinate
for display window

Start Y:
Select the screen
start Y-coordinate
for display window

Height: Set the width of frame
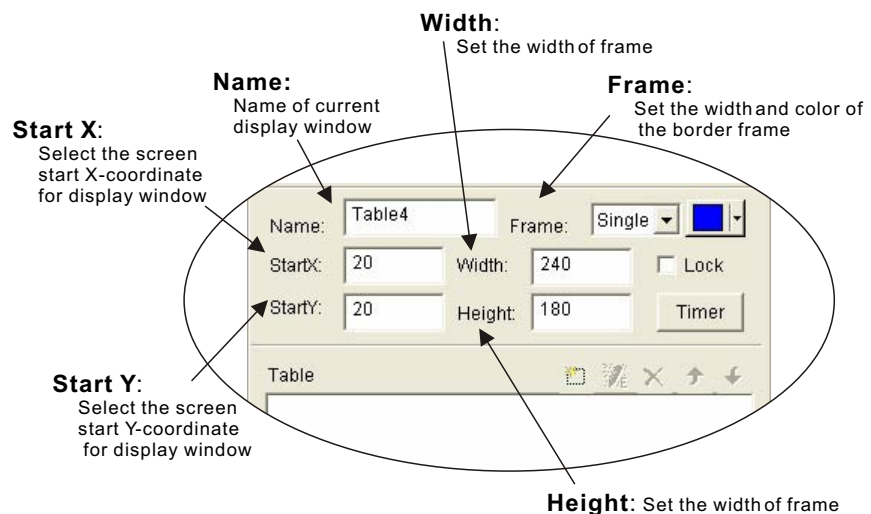
4.15-1 ADD TABLE

Click the Add Table icon < >
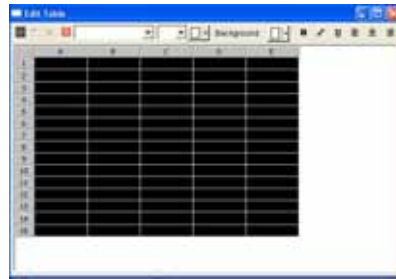
Figure 4.15-3 Edit Table

 - --to set Table properties

 - --to add row/column

 --- to delete row/column

 --- to join/split selected rows & columns

4.15-2 TABLE PROPERTIES

Click the < > button in order to set the Table properties. The user may perform the required actions by setting the values in the diagram below.

Figure 4.15-4 Table property

4.15-3 ADD TABLE

Click the < > button in order to add row/column to the Table. The user may increase the number of rows and columns by setting the values in the diagram below.
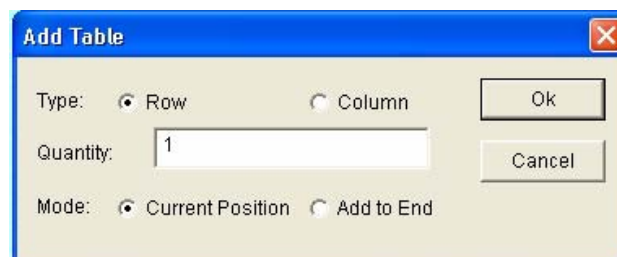
Figure 4.15-5 Add Table

4.15-4 DELETE TABLE

Click the < > button to delete the last row/column.

Figure 4.15-6 Delete Table

4.15-5 JOIN/SPLIT

Click the < > button in order to join/split the currently selected rows & columns.

Figure 4.14-7 shows the selected area being joined to make one box.
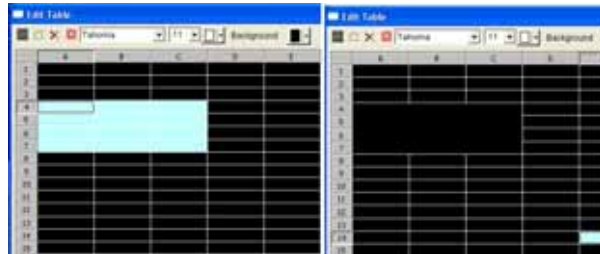
Figure 4.15-7 Join Table

Figure 4.154-8 shows the selected box being split back into its original rows and columns.
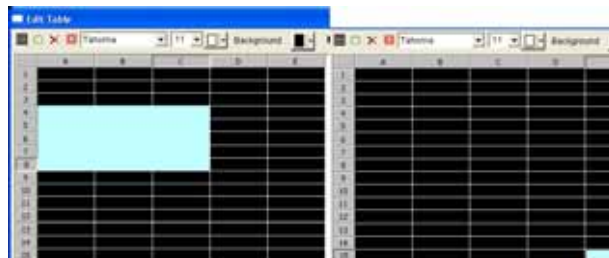
Figure 4.15-8 Split Table

4.16 DISPLAYING A WEB PAGE URL

Click the Create New Window button <🖼> and select "File Window".
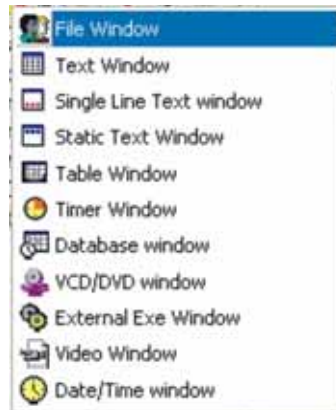
Figure 4.16-1 New Window

The following window will appear.

Figure 4.16-2 File Window settings

Width:
Set the width of frame

Name:
Name of current
display window

Frame:
Set the width and color of
the border frame

Start X:
Select the screen
start X-coordinate
for display window

Start Y:
Select the screen
start Y-coordinate
for display window

Height: Set the width of frame
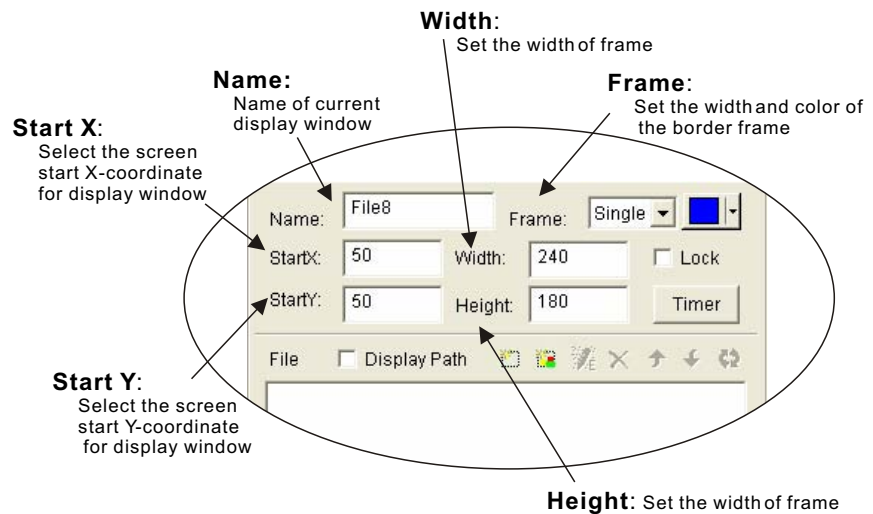
Click the <🖼> button in this window and the following Web Page URL window will appear.

Figure 4.16-3 Homepage

Input the desired Web Homepage and click Ok. (Example: www.163.com)
The screen will now return to the File Window. Here the settings can be adjusted to the
file window and different effects actions may be performed.
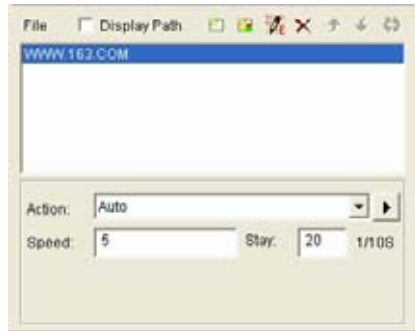
Figure 4.16-4 Homepage window settings

4.17 DATABASE WINDOW

Click the Create New Window button < > in Screen 1 and select <Database Window>.

Figure 4.17-1 New Window

The following window will appear.
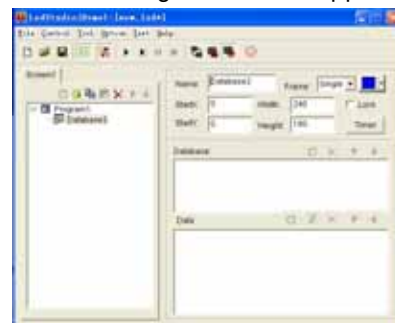
Figure 4.17-2 File Window settings

Width:
Set the width of frame

Name:
Name of current
display window

Frame:
Set the width and color of
the border frame

Start X:
Select the screen
start X-coordinate
for display window

Start Y:
Select the screen
start Y-coordinate
for display window

Height: Set the width of frame
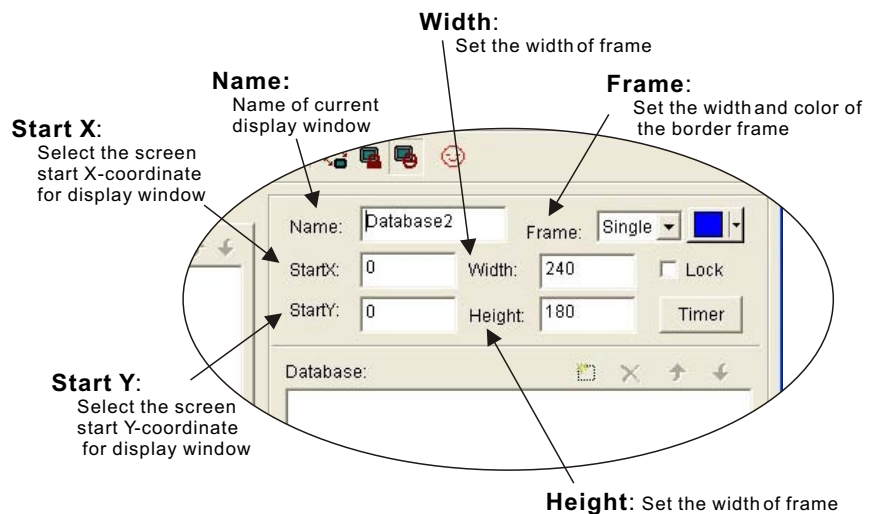
Select Database by clicking the Select Database icon <□>. The following window will appear.

Figure 4.17-3 Select Database

Figure 4.17-4 Open Access File

Select the required database files and perform the desired format and action operations.

4.18 DISPLAYING DATE/TIME

Click the Create New Window button <□> in Screen 1 and select <Date/Time Window>.
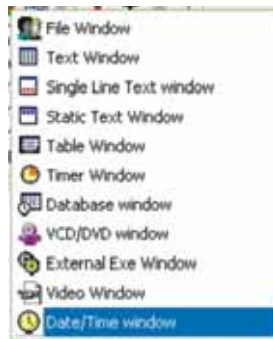
Figure 4.18-1 New Window

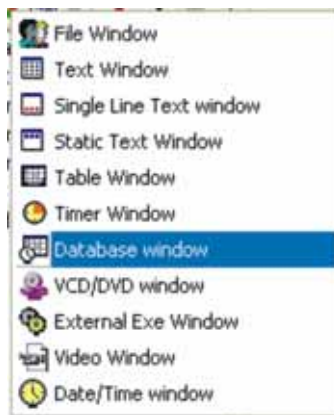The following window will appear.

Figure 4.18-2 Clock settings

Name:
Name of current window

Frame:
Set the width and color of the border frame

StartX:
Select the screen start X-coordinate for window

Width:
Set the width of frame

StartY:
Select the screen start Y-coordinate for window

Height:
Set the width of frame

Background:
Set the color of the background and the background action.

Transparency:
Select whether the clock is transparent

4.18-1 ANALOG CLOCK

Selecting this style of clock will bring up the following screen. Here the user may adjust the settings as in the diagram below in order to perform the desired actions.

Figure 4.18-3 Analog clock settings

4.18-2 DIGITAL CLOCK

Selecting the digital clock will bring up the following screen. The user may adjust settings as in the diagram below in order to create the desired Time & Date display.

Figure 4.18-4 Digital clock settings

4.19 DISPLAYING EXTERNAL EXE FILES

Click the Create New Window button <◆> in Screen 1 and select <External Exe Window>.

Figure 4.19-1

The following window will appear.

Figure 4.19-2

Width:
Set the width of frame

Name:
Name of current display window

Frame:
Set the width and color of the border frame

Start X:
Select the screen start X-coordinate for display window

Start Y:
Select the screen start Y-coordinate for display window

Height: Set the width of frame
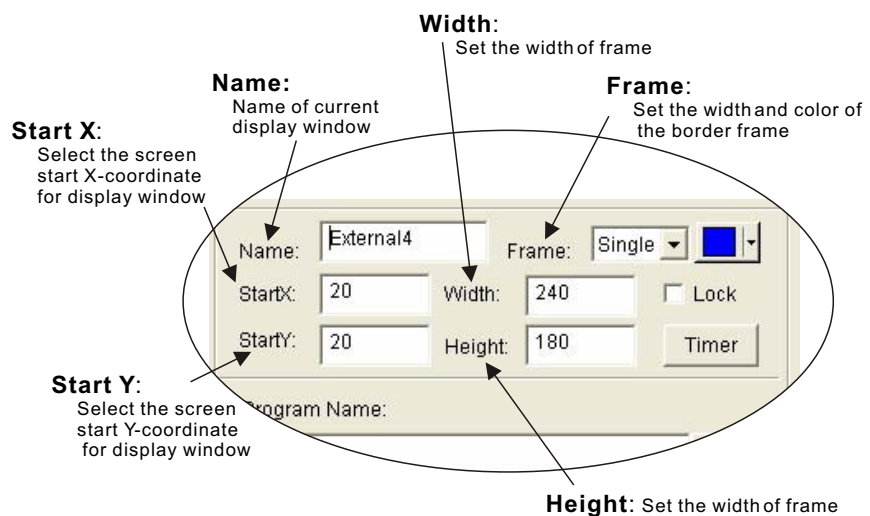
 Click the <Browse> button in this window to open the <Open> window.
Select an external (.exe) file to open. From the Open window any .exe file may be opened and displayed. In this example the Calculator is opened. (Please note that it is possible that some windows may not be displayed on the screen.）
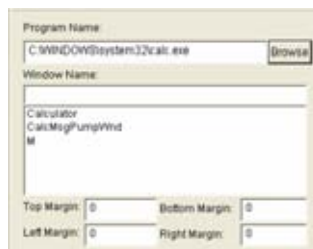
Figure 4.19-3 External File window settings

Figure 4.19-4 Calculater

4.20 DISPLAYING TIMER

The Timer Window allows the user to display a timer counting to or from a certain time and date.
Click the Create New Window button < > in Screen 1 and select <Timer Window>.
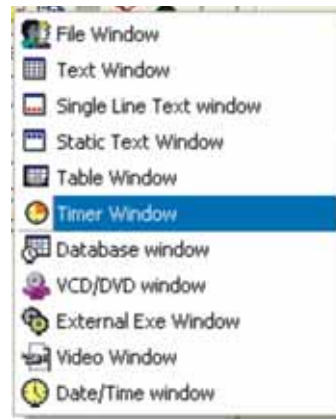
Figure 4.20-1 New Window

The following window will appear.
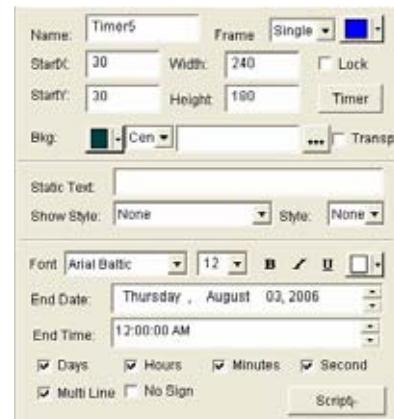
Figure 4.20-2 Timer window settings

Width:
Set the width of frame

Name:
Name of current display window

Frame:
Set the width and color of the border frame

Start X:
Select the screen start X-coordinate for display window

Start Y:
Select the screen start Y-coordinate for display window

Height: Set the width of frame
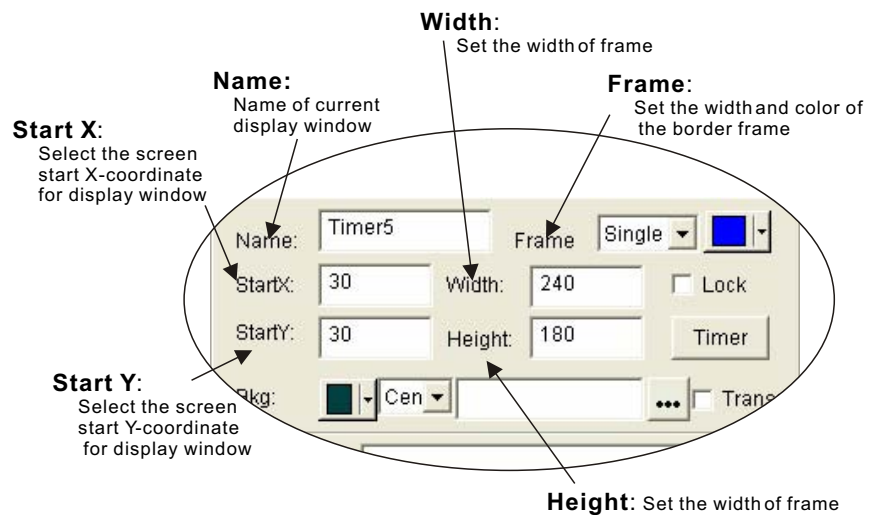
4.21 DISPLAYING VCD/DVD

VCV/DVD can be played directly from the Control Panel or from the VCV/DVD window.

4.21-1 PLAYING VCD/DVD DIRECTLY FROM THE CONTROL PANEL

Insert a VCD/DVD in the VCD/DVD reader drive. Select the file by clicking on <Play VCD/DVD> from the Control Menu.

Figure 4.21-1 Play VCD/DVD

4.21-2 DISPLAYING VCD/DVD IN VCD/DVD WINDOW

Click the Create New Window button < > and select "VCD/DVD Window". See figure 4.21-2

Figure 4.21-2 New Window

The VCD/DVD window will appear.
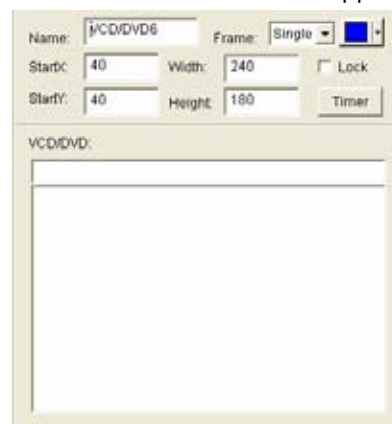
Figure 4.21-3 Timer window settings

Select the VCD/DVD by clicking once on the <VCD/DVD> File name as it appears in the VCD/DVD window.

4.22 DISPLAYING VIDEO

NOTE:

A TV/VIDEO card must be installed in the computer in order to display this format of file.

Click the Create New Window button <🖳> and select <Video Window>. See figure 4.21-1

The following window will appear.
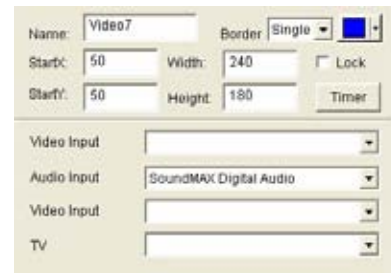
Figure 4.22-2 Video Window Settings

Figure 4.21-1 New Window

Video Input:
Select the appropriate Video card (please note that selection is of those video cards already installed in the computer)

Audio Input:
Select the appropriate Sound card (please note that Video/TV card may require a Sound Card in order to have sound output)

Video Input:
Select the Video source (Note: most Video/TV cards have 3 signal inputs cable TV, Video & S-Video)

TV:
Select the TV channel (Note: some TV cards cannot be used To select TV channel)

4.23 DISPLAYING POWERPOINT

Select <Play PowerPoint File> from the Control Menu. See figure 4.23-1
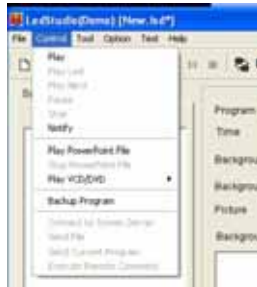
Figure 4.23-1 Play PowerPoint File

Select the desired PowerPoint file by browsing in the <Open> menu.
Click <Open> will import the PowerPoint file to the LED MATRIX screen. (Note: If the user wishes to control the order of programs, the user should use the Schedule Command Table see section 4.24)

In order to stop the PowerPoint file, click on the control menu and then select <Stop PowerPoint File>.

4.24 SCHEDULED COMMAND

Open <Schedule Table> from the <Option> menu.
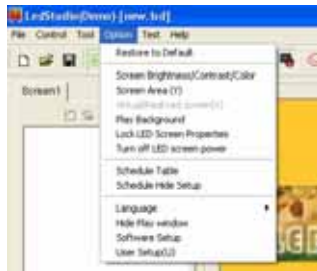
Figure 4.24-1 Open Schedule Table

The following <Scheduled Command Table> will appear.

Figure 4.24-2 Schedule Command Table

Open the <Scheduled Command> by clicking the <ADD> button (See above figure 4.24-2)
The following table will appear.

Command Properties:
Select command (Note: default command is "Turn on LED screen power"

Program File:
Select Program to be displayed (only includes: Program Files, External .exe Files & PowerPoint Files)

Execution Time:
Set start time for execution of command.

Valid Date:
Set time period for command to be effective.

Figure 4.24-3 Schedule Command window settings

Valid Days:
Select valid days for command to be effective.

Click <Ok> and the following Window will appear showing the Scheduled Command Table.

Figure 4.24-4 Schedule Command Table

4.24-1 EDIT SCHEDULED COMMANDS

Select the desired command to edit and then click the <Edit> button.

4.24-2 DELETE SCHEDULED COMMANDS

Select the desired command to delete and click the <Delete> button.
To delete all commands click the <All Delete> button.

4.24-3 START UP SCHEDULE

Click the <Start up schedule> button in order to put the Scheduled Command Table into operation.

Figure 4.24-5 Start up schedule

4.24-4 EXIT

Click <Exit> in order to store settings and return to control panel.

4.25 DESKTOP DISPLAY

NOTE:

This mode can only be realized using Windows98/XP operating systems.)
In the open area of the desktop click the right mouse button. The following window will appear.
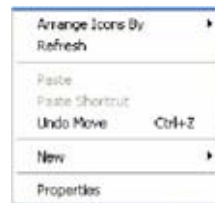

Figure 4.25-1 Properties menu

Click the <Properties> button.
Click the <Settings> button to bring up the following screen.

Figure 4.25-2 Display Properties

Select <Monitor 2> by clicking on the Monitor 2 icon <>
Select the <Extend my Windows desktop onto this monitor>
Click <Apply>

4.25-1 CANCEL DESKTOP DISPLAY

Click the <Properties> button.
Click the <Settings> button to bring up the following screen.

Figure 4.25-2 Display Properties

Select <Monitor 2> by clicking on the Monitor 2 icon <>
Deselect the <Extend my Windows desktop onto this monitor>
Click <Apply>
Reopen the <Properties Window>
Click the <Settings> button
Select <Monitor 1>
Select <Advanced> and select the <Displays> window (Fig.4.25-3)

Figure 4.25-3 Plug and Play Monitor and RADEON ....Properties

Click the small red triangle at the top left-side of the FPD box (the
button will turn green)
Click <Apply>

4.26 TROUBLE SHOOTING

4.26-1 DURING STARTUP MCI SYSTEM ERROR

Microsoft Media Player has not been installed. Please install from the CD-ROM the file Mpsetup2K.exe (using WIN2k/XP/me) or Mpsetup98.exe (using win98)

4.26-2 DURING STARTUP LED SCREEN NOT FOUND OR COMMUNICATION ERROR?

There is a connection problem between the PC and the LED MATRIX screen. Please check all connections and that the connecting cables are not damaged in any way.

4.26-3 DURING STARTUP PC AUTOMATICALLY TURNS OFF

Computer. After the Windows Desktop has loaded reconnect the DVI cable.

4.26-4 DURING PLAY NO DISPLAY WINDOW

Check the size of the display window. If the width or the height are 0, then no display window will be seen.

5 MAINTENANCE AND WARRANTY

5.1   MAINTENANCE AND CLEANING

The equipment must be kept clean at all times. Dust, dirt and smoke residues must not be allowed to buildup on or within the equipment.
Regular cleaning will guarantee that the light output of the equipment is not diminished.
Do not use organic solvents such as alcohol to clean the equipment.
If there are any parts of this equipment that need replacing. Always switch off the mains power before carrying out any repairs.
Please follow the steps described in this user manual to locate the malfunction.
Please contact your supplier for details instructions on how to carry out maintenance.

5.2   WARRANTY

This equipment left the factory in an excellent condition, all functions were operating correctly and the equipment was well packed in it's protective packaging. It is important that the user operates this equipment by following this user manual carefully.
Any damage that is caused as a result of not following this user manual will not be covered by the product warranty and the distributor cannot accept and responsibility.
The manufacturer reserves the right to make amendments to this user manual at any time.