

# DynaScan

# DS-0706B

**Outdoor Series—Ground Stand**  
**360° LED Video Display**  
*Hardware User's Manual*  
Edition 2

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# 1. Important Safety Precautions:

## a. Preface:

Please read this comprehensive manual carefully to realize how to perform the functions of the display system and how to ensure your safety. If you have questions not mentioned in this manual, please feel free to consult local dealers or contact DynaScan directly for help. Our technical teams will be pleased to service you.

## b. Safety Warnings:

### General Safety Prescriptions



#### **DANGER**

- After you shut down the power, do not touch Printed Circuit Boards (PCB) and their components until the indicators of inverter, AC/DC converter and power extinguish completely.
- If you want to connect any electrical wires or check any components on the PCBs, turn off the power of the system and unplug the power cord from the power outlet first.
- Do not arbitrarily disassemble and change the electric connecting dispositions, cords or components inside the display system.
- Check that the operating voltage of the display system is identical with the voltage of your local power supply.
- Ensure that the display system is grounded correctly.
- After you shut down the power, do not move the display system if the rotating screen does not come to a full stop.
- Do not allow anything falling into the drum screen chamber or the base.
- Do not tilt the display system.

### Unsuitable Installation Surroundings



#### **WARNING**

Keep DynaScan display system away from:

- Erosive gases and liquids
- Salty environments
- Metal chips and dust
- Extremely humidity
- Flammable materials
- A messy place
- Unstable or soft grounds
- The location where the ambient temperature is under  $-20^{\circ}\text{C}$  or over  $45^{\circ}\text{C}$ .

## 2. Operation Safety Precautions

### ◆ Before turning on the power



#### **DANGER**

- Check that the display system is earthed correctly to avoid electric shock.
- If the Neutral and Ground terminals of power cord are connected incorrectly, the display system will short-circuit and probably go up in flames.
- Check that the operating voltage of the display system is identical with the voltage of your local power supply.



#### **WARNING**

- Do not place anything heavy upon power cords or signal cables.
- Ensure all the cable connectors and the power plugs are connected securely in place before turning on the display system.
- For the first time operating device or long-time stored device, the device may not work normally due to the low temperature. Please use some proper tools to warm up the main board, e.g. heater. After the warm up, you can turn on the device.
- If the Input electrical voltage is not stable, please install AVR beside the Display to prevent the display shutdown.
- Please don't decorate the base to keep better air-circulation of the air condition for heat dissipation.
- Please keep the air condition's surrounding area (30cm around base) clear to have better heat dissipation.
- Please provide opaque coat / shield for outdoor displays if unused for more than two days.

### ◆ When Display is operating



#### **DANGER**

- Do not disassemble any safety shields.
- Prevent the display system from being tilted.



#### **WARNING**

- Do not unplug the display system while in use; otherwise, its components may be damaged due to such sudden surge of electricity.
- Do not change default settings or try to adjust any devices inside the base under the guidance of professional technicians or engineers.
- Do not move the display system while operating.

### 3. Maintenance Safety Precautions

#### ❖ Before doing maintenance work



- Ensure that the power has been shut down, and move after the rotating screen has come to a full stop.
- Ensure disconnecting the power cord from the power outlet first.
- Ensure the display unit is well-supported when moving otherwise it's easy to be tilted or fallen down.

#### ❖ While doing maintenance work



- Do not make any object fall into the drum or base to prevent the display system from breaking down during operation.
- Please do “not” use toluene (methyl benzene), thinner, gasoline, or any acidic dissolvent to clean the screen shield.
- Be careful not to scratch the screen shield surface.
- Do not touch any components on the PCBs. Hold the PCBs by the edge to protect the components on the PCBs from being damaged by the electrostatic on the body through hands.
- Do not change default settings or try to adjust any devices inside the base without the guidance of professional technicians or engineers from DynaScan.

#### ❖ About This User's Manual:



**DANGER:** The symbol is intended to alert the user that: If operating the display system improperly, you might expose yourself or others to considerable danger.



**WARNING:** The symbol is intended to alert the user that: If you operate the display system improperly, it may cause damage to the display system.



**CAUTION:** The symbol is intended to warn the user to be careful about something when completing a task.



**NOTE:** Notes as References

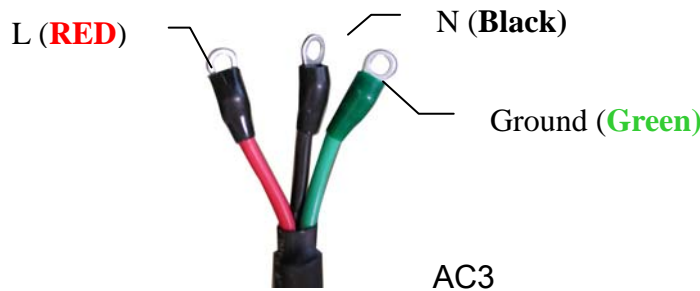
# 1 Installation Guide

The first part of the Manual is the instruction of cable installation, and CF Card Player connection. The second part is Power On Instruction.

## 1.1 The System Cables Connection

### 1.1.1 Power input and requirement

The 110V(100~120V) Power input consists of two cables. AC3 cable has three lines, (L/N and ground). AC1 and 2 are for Air Con. and Inverter. AC1 consists of red line and black line. AC2 consists of white line and green line.



AS for the detail of the cable, please refer to the table as below.

	AC1	AC2	AC3
Line Number	2	2	3
Descriptions	Line (Red) Neutral (Black)	Line (White) Neutral (Green)	Line (Red) Neutral (Black) Ground (Green)
Requirement	5A (Maximum)	15A (Maximum)	19A (Peak)

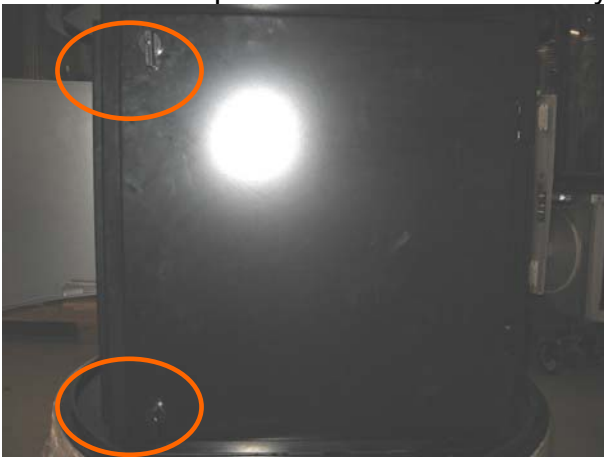


## 1.1.2 Power ON/OFF

1. Open the case door with the key and release the locks on the case



2. Open the Control box door by releasing the locks



After opening the door, you will see the Power Control box and ISC Panel

## Power Control Box

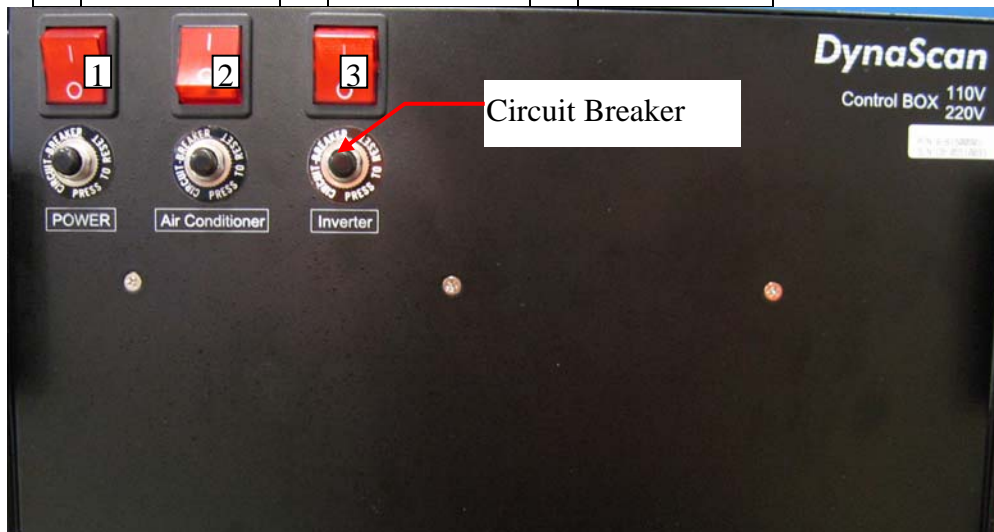
Power Control Box Panel contains Power switches, breakers

### Power ON/OFF Steps

The Panel contains Power switch, breaker

1. Turn ON/OFF the display. Please Press the Power switch (1).
2. Turn ON/OFF the Inverter (3).
3. Turn ON/OFF the Air Conditioner (2).

1	Power	2	Air Conditioner	3	Inverter (100V)
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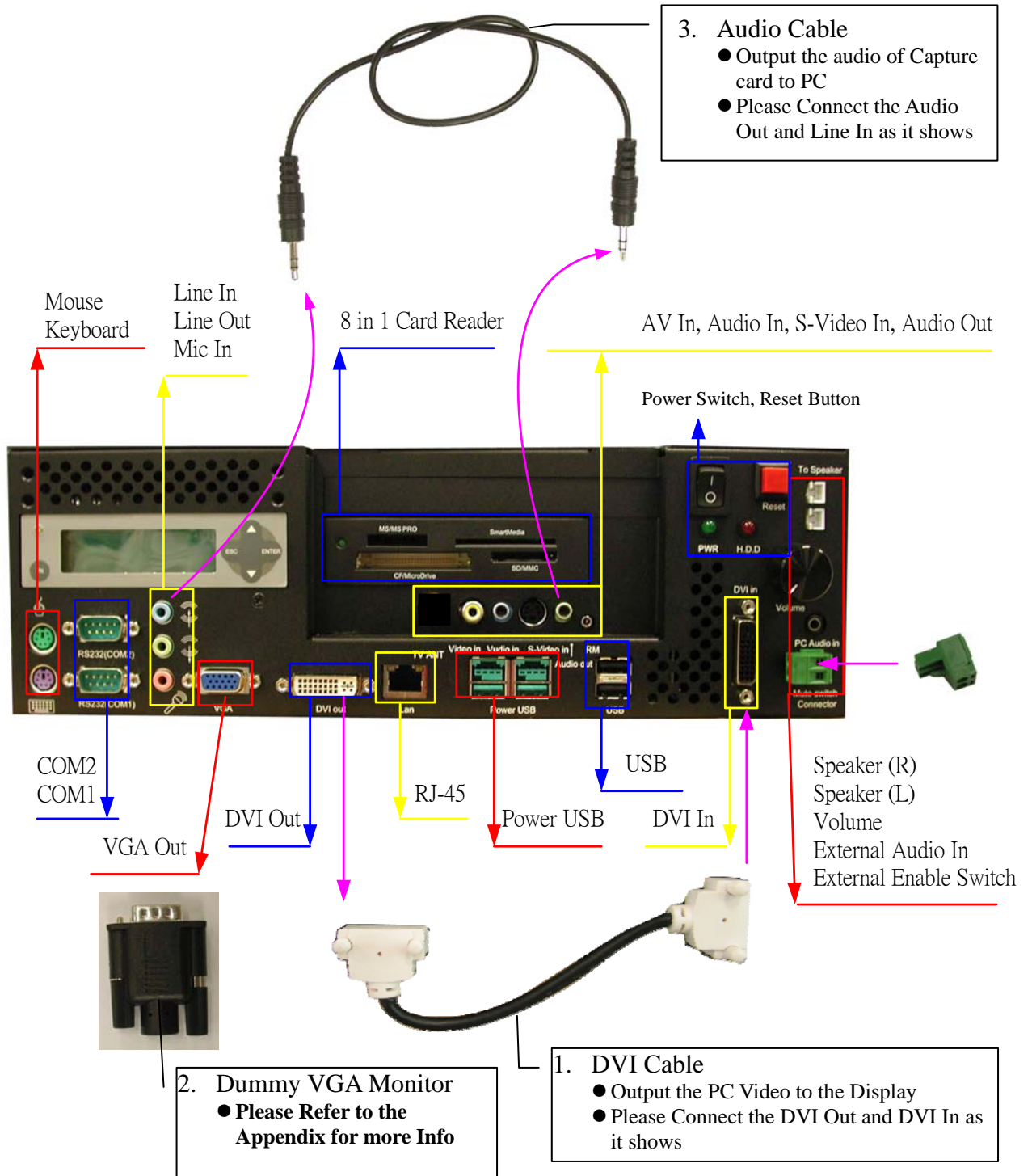




## 1.2 IPC Front Panel

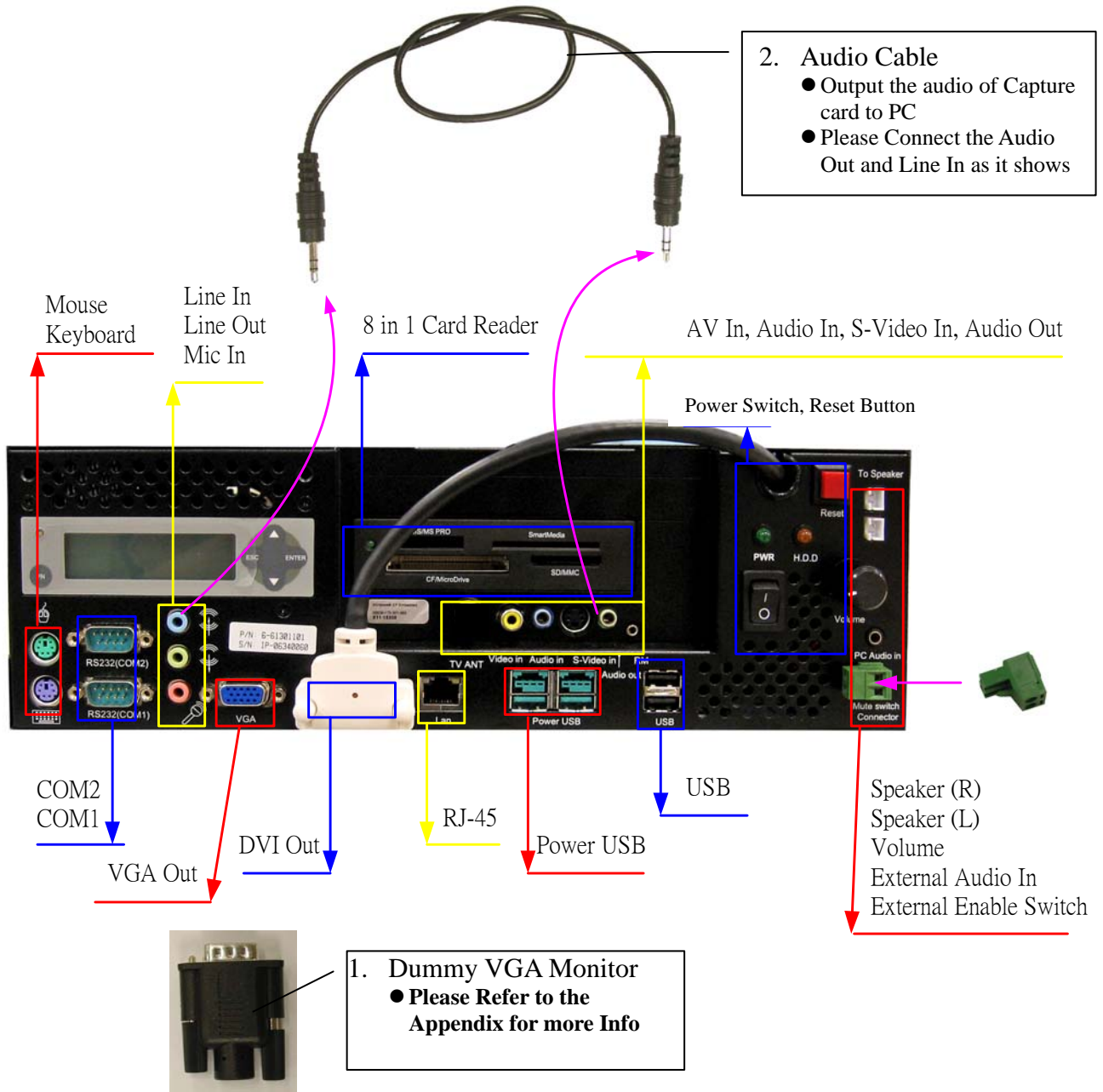
There are two kinds of IPC panels (different DVI Cable). Please choose the one you have for reference.

### Panel A



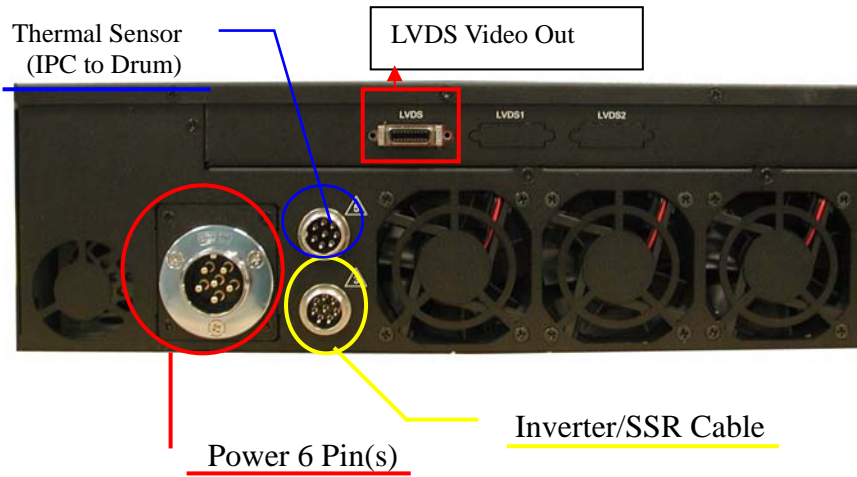
**Please install 1. DVI Cable 2. Dummy VGA Monitor 3. Audio Cable as the diagram shows.**

## Panel B



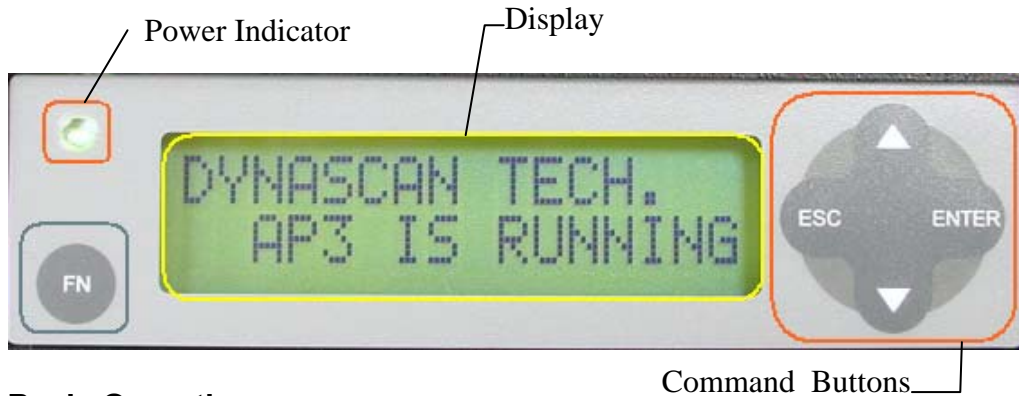
Please install 1. Dummy VGA Monitor 2. Audio Cable as the diagram shows.

# Back Panel



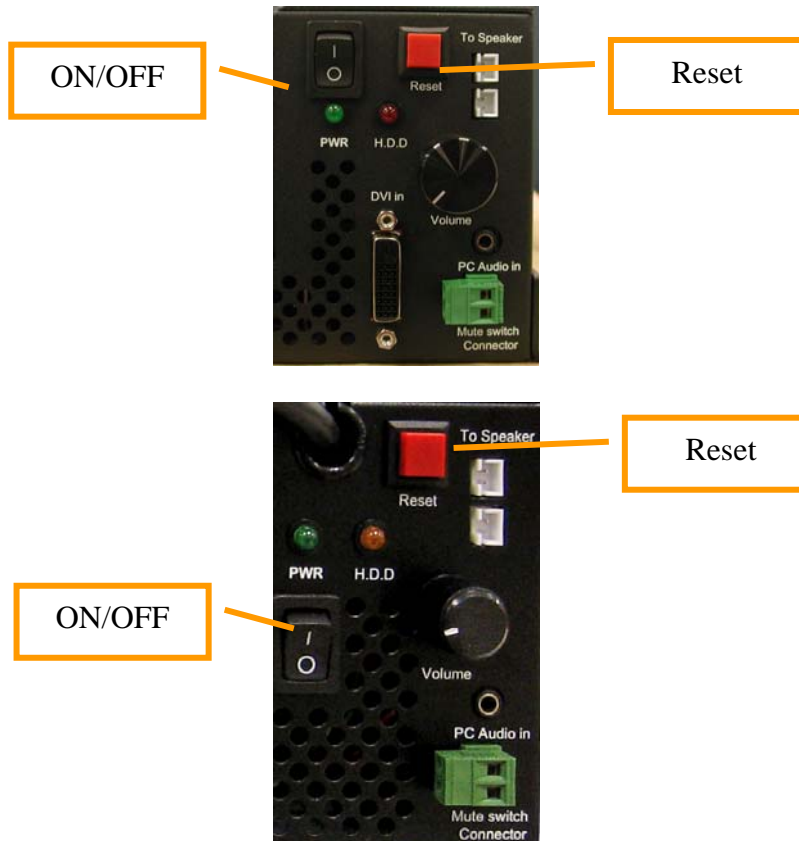
## 1.3 LCD Panel Operation

You can use LCD Panel to operate the IPC without using keyboard and mouse.



### Basic Operation :

1. **ENTER** : Enter the selected item or save the setting
2. **ESC** : Go back or Chancel the setting
3. **Up/Down** : Move the Cursor (>) or change the setting



**Power ON/OFF** : Press the ON/OFF switch to turn the IPC ON/OFF.

**System Reset** : Press Reset Button to reset the IPC.

### **WARNING:**

The data/settings of IPC may be destroyed or deleted if the shut-down procedure is not adequate, e.g. by Reset, pressing I/O switch more than 5 seconds, and power off.

 **NOTE:** For more operation of IPC, Please refer to the IPC User Manual.

## 2 Shield Cleaning and System Maintenance

### 2.1 Screen Shield Cleaning

Before you start cleaning

1. Please use clean, soft, hairless type cloth to lightly wipe dirt and dust off the screen.
2. Ensure 360 Degree LED Display is shut down.
3. Do not spread or spill any kinds of liquids onto the 360 Degree LED display or the screen shield.
4. Do “not” use Toluene (Methyl Benzene), thinner, gasoline, or any acidic dissolvent to wipe the screen shield.



IF the Screen shield is stained with oil or other things that can't be cleaned with the clean water, you need to use the anti-static cleaner (as the following picture) and soft, hairless type cloth to lightly wipe dirt and dust off the screen.

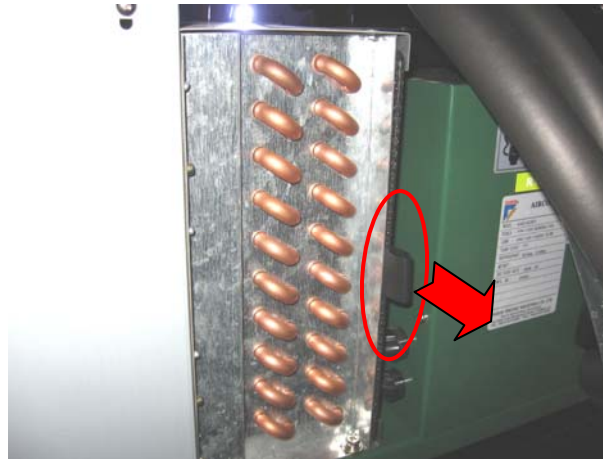
ANTI STATIC CLEANER defends the static, and you must select the static sanitizer without damage the plastic to use (SAFE ON PLASTICS)

## 2.2 Filter Cleaning for Air Conditioner

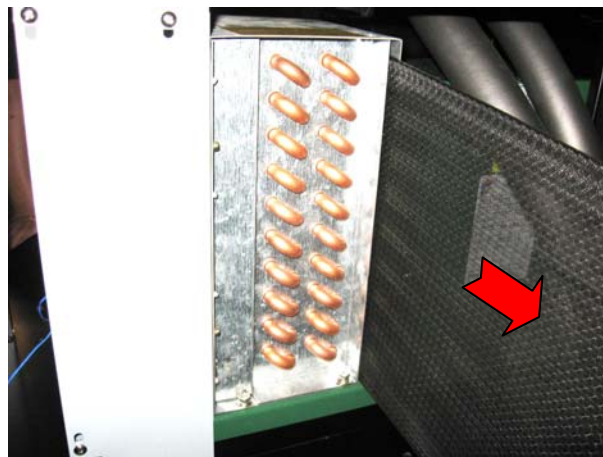
Please clean the air conditioner filter according to the operation conditions, once a month at least, to ensure the performance and reliability of air con.

Please clean the filter according to the following steps:

1. The filter of air conditioner lies in the base, please move and cover besides base first, shown as the figures below.



2. Pull the filter of air conditioner outwards along the regular track.



3. After the filter being away from base completely, please wash the filter with the water and soft brush. After being dry, move forward along the regular track.

### 3 Q&A

If you encounter any problems with the display, please double check the following quick solutions. If this troubleshooting section does not solve your problems with regard to the display, please contact local dealers or DynaScan Technology Corp. directly.

<b>Problem:</b>	<b>Recommended Solution:</b>
Q: No Power. Q: Insufficient power supply.	<ul style="list-style-type: none"> <li>⊙ Check the connections of all cables, and plugs. Check if the power has been turned on.</li> <li>⊙ Do not plug too many electronic appliances in the same power outlet.</li> </ul>
Q: No video on the screen	<ul style="list-style-type: none"> <li>⊙ Check the IPC's power switch</li> <li>⊙ Check the power of display</li> <li>⊙ For the first time operating device or long-time non-operating device, the device may not work normally due to the low temperature. Please use some proper tools to warm up the main board, ex. Heater. After the warm up, you can turn on the device.</li> </ul>
Q: Screen is flashing unstably.	<ul style="list-style-type: none"> <li>⊙ Please restart the player.</li> <li>⊙ If the same problem still exists, please check the power and the connection of the power plug.</li> </ul>
Q: Abnormal color and sound. Q: No images. Q: Screen displays improperly. Q: Flickering.	<ul style="list-style-type: none"> <li>⊙ Please contact your nearest local dealer or DynaScan.</li> </ul>

## 4 Appendix

### 4.1 Specifications

#### 1. Display

Model:	DS0706B
LED Type:	Lamp
Pitch (H x V):	2.0mm x 2.0mm
Resolution:	1092 x 304 x 1 picture 546 x 304 x 2 pictures
Luminance:	>5000 cd/m <sup>2</sup>
Color:	16.7 millions
Contrast Ratio:	> 5000 : 1
Screen Size (Diagonal):	50" Diagonal x 2
Total Displaying Area (W x H):	1.09 M x 0.61 M x 2
Viewing Angle (HxV)	>170 degrees x 60 degrees
Dimension (DxH):	Φ0.82M x 2.03M
Physical Weight:	350Kg
Power Supply :	100~120 VAC, 50/60 Hz, 1Φ (110V), 50A or 200~240 VAC, 50/60 Hz, 1Φ (220V),25A
Color Spectrum:	Red: 660nm, Green: 525nm, Blue: 470nm
Safe Ambient Temperature:	From -20° to 45° C

#### 2. IPC

Video Interface	DVI	
Media Integration	IPC (Composite, S-Video included)	
Media Player Application	DynaScan AP3.0 (for Computers)	
Monitor System AP	DynaScan Monitor System (access from Computers)	
Built-in Speakers with Amp.	2 Channels	
Computer (Embedded IPC)	CPU: Intel P4 2.8GHz	RAM: 512 MB
	2.0GB CF Card for OS	OS: WinXP Embedded
	Integrated VGA/DVI Controller	
	Internal Multi-Card Reader	
	Ethernet Function	

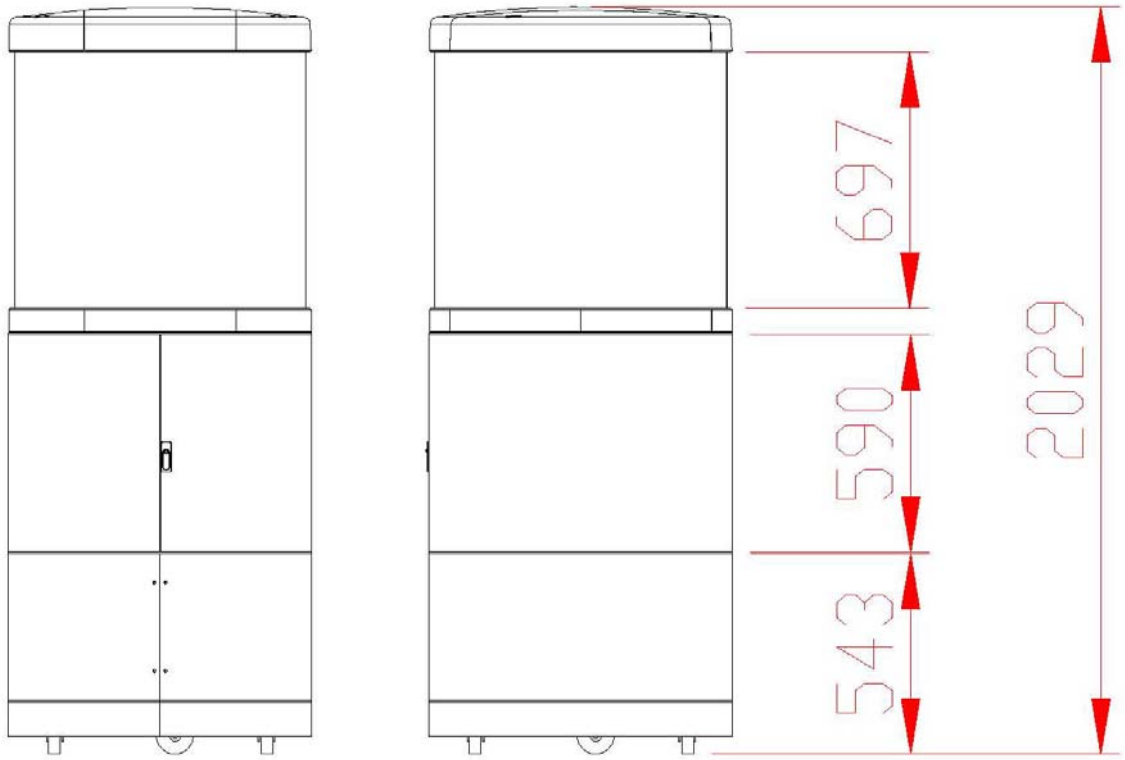
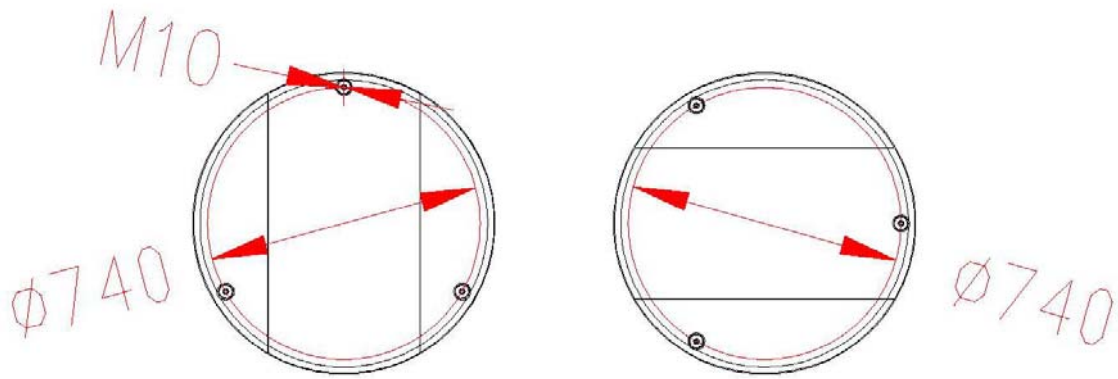


## 4.2 Temperature Protection System (TPS)

DynaScan's products have a system of temperature protection to implement some procedures in order to extend their lifetime. If the sensors inside DynaScan's products detect the temperature out of the range from 5°C to 35°C when starting, they will take some actions to protect the products. The following table shows the status and actions for different protection.

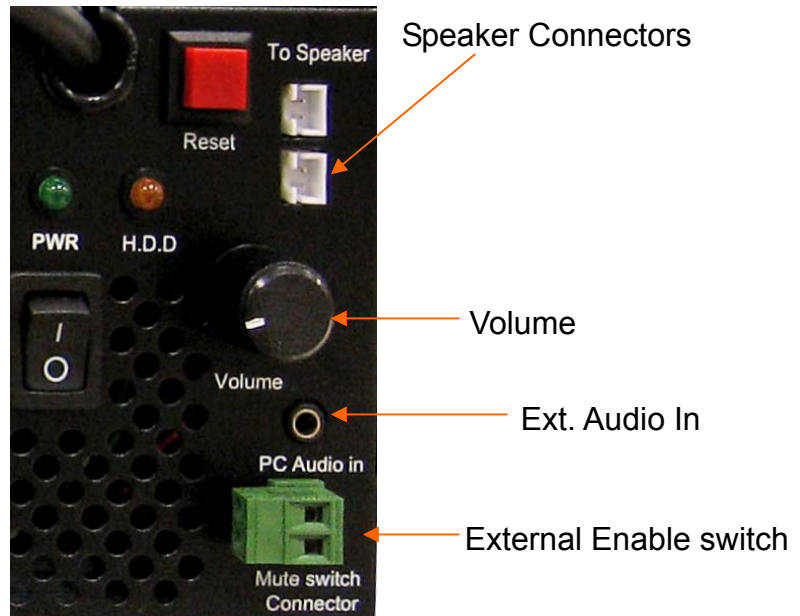
Timing	Status	Action	Release Condition
Start	<5°C	Pre-heating(No display, motor still)	>5°C or 7.5 min later
Start	>35°C	Pre-cooling(No display, motor running)	<35°C or 5 min later
Operating	>60°C	Cooling(No display, motor running)	<50°C
Shut down	--	Cooling(No display, motor running for 6 min)	6 min later

### 4.3 Dimension



## 4.4 External Audio Switch

You can use External Enable switch to choose Audio output or External Audio as the Audio source. When the status of it is open (default), the source is Audio output. When it is shorted, the source is External Audio.



## 4.5 Decoration Limitation

When a customer want to add some decoration on the display,

1. Please don't disassemble any parts of the display to prevent damaging the display and water-proof measures. Exception: some parts are removable, such as eyebolts, or some screws, etc... Please follow the instruction in the related manuals to setup.
2. We suggest that a decoration should be an independent structure to prevent putting the weight loading directly on the top cover frames of the display.
3. The top of the display can support the total static weight less than 50Kg, which must be allocated in average on each metal support.
4. Before you design a decoration, please especially consider and consult those factors first, Height, Weight, Water stagnancy\*, Snow stagnancy, Natural Disasters, Typhoon, Earthquake, and Wind to prevent causing public safety accidents.

**\*Some decorations may cause water stagnancy on the decoration itself or the screw holes on the top cover. It may cause some dangers.**

5. If the decorations on the display either damage the display structures or causes any public danger, our company won't either warrant the display or be responsible for any loss.
6. To ensure the capability of heat dissipation of air conditioner in the base, not to decorate around is recommended.
7. To ensure the capability of heat dissipation of air conditioner in the base, to keep 30cm clear around is recommended.
8. Please consider the safety and suitable tools for the transportation and installation of the decorations, and most important of all, please consult the qualified technicians to design and setup the decorations.

## 4.6 Legal Notices

### **Intellectual property; limited license to users**

The hardware and software of our products are protected by copyright, trademark, patent, and/or other intellectual property laws, and any unauthorized use of the software, trademarks containing herein may violate such laws and the software license agreement. Except as expressly provided herein, DynaScan and its suppliers do not grant any express or implied rights to use any product related hardware and software.

DynaScan is registered trademark of DynaScan Technology Corp. in R.O.C and/or other countries. Microsoft is registered trademark of Microsoft Corp. Moonlight is registered trademark of Moonlight cordless Ltd. IBM is registered trademark of IBM Corporation. Other trademarks are trademarks of their respective owners.

### **Disclaimer**

Specifications and information contained herein are furnished for informational use only. Revisions are periodically made to the information herein; these revisions will be incorporated in later editions. Improvements or changes in the products or the programs described may be made at any time and are subject to change without notice, and should not be construed as a commitment made by DynaScan. This manual could include mistyping or typographical errors. DynaScan assumes no responsibility or liability for any errors or inaccuracies that may appear in this manual.

### **Exclusion of Damages:**

DynaScan Technology Corporation's liability is limited to the cost of repair or replacement of the product.

DynaScan Technology Corporation shall not be liable for:

1. Damages to other property caused by any defect in the product, damages based upon inconvenience, loss of use of the product, loss of time, loss of profits, loss of business opportunity, loss of goodwill, interference with business relationships, or other commercial loss, even if advised of the possibility of such damages.
2. Any other damages, whether incidental, consequential or otherwise.
3. Any claim against the customer by any other party.

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## 4.7 Disposal Notices

Do not dispose of electrical appliances as unsorted municipal waste, use separate collection facilities. Contact your local government for information regarding the collection systems available. If electrical appliances are disposed of in landfills or dumps, hazardous substances can leak into the groundwater and get into the food chain, damaging your health and well-being. When replacing old appliances with new one, the retailer is legally obligated to take back your old appliances for disposal at least for free of charge.



## 4.8 Certificates

**SGS Taiwan Ltd.  
EMC Services**

134, Wu Kung Road,  
WuKu Ind. Zone, Taipei,  
Taiwan, R.O.C.  
Tel: +886-2-2299-3279  
Fax: +886-2-2298-0488



**SGS**

### FCC / DECLARATION OF CONFORMITY (DOC)

This certifies that the following designated product

**LED Video Display  
MODEL NO. : DS 0808; DS 0706**

( Product Identification )

It is herewith confirmed and found to comply with the requirements set up by ANSI C63.4 & FCC PART 15 regulations for the evaluation of electromagnetic compatibility.

This Device complies with Part 15 of the FCC rules, operation is subject to the following two conditions.

- (1) This device may not cause harmful interference and,
- (2) This device must accept any interference received, including interference that may cause undesired operation.

( Identification of regulations / standards )

This declaration is the responsibility of the manufacturer / importer

**DynaScan Technology Corp.  
66 Hwa-Ya 1<sup>st</sup> Rd., Hwa-Ya Technical Park, Kuei-Shan Hsiang,  
Taoyuan Hsien, Taiwan, R.O.C.**

( Name / Address )

#### MANUFACTURER / IMPORTER

*John Wang*  
.....  
( Name )

*Apr. 10. 2006*  
.....  
( Date )

#### TEST LABORATORY

This is the result of test, that was carried out from the submitted type-samples of a product in conformity with the specification of the respective standards. The certificate holder has the right to fix the FCC-mark for EMI on the product complying with the inspection sample.

*Jason Lin*  
.....  
(Mr. Jason Lin )

.....  
( Date ) *Feb. 24. 2006*

This document is issued, on the Client's behalf, by the Company under its General Conditions of Service printed overleaf. The Client's attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein.

Any other holder of this document is advised that information contained herein reflects the Company's findings at the time of its intervention only and within the limits of Client's instructions, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents.

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**SGS Taiwan Ltd.  
MD Services**

134, Wu Kung Road,  
WuKu Ind. Zone, Taipei,  
Taiwan, R.O.C.  
Tel: +886-2-2299-3279  
Fax: +886-2-2298-0488



**SGS**

Certificate No. : ED/2005/B0093-1

## VERIFICATION OF EMC COMPLIANCE

SGS-TW Reference No. : ED/2005/B0093-1  
Factory Applicant : DynaScan Technology Corp.  
Address of Applicant : 66 Hwa-Ya 1<sup>st</sup> Rd., Hwa-Ya Technical Park, Kuei-Shan Hsiang,  
Taoyuan Hsien, Taiwan, R.O.C.  
Product Name : LED Video Display  
Model No. : DS 0808; DS 0706  
SGS approved laboratory : SGS Taiwan  
Date of Issue : February 08 2006  
Test(s) Required : SGS Onsite Test Standard: 2002  
EN 61000-6-2: 2001, EN 61000-6-4: 2001

### Conclusion

The equipment complies with the principal protection requirement of the directive 89/336/EEC amended by directives 92/31/EEC and 93/68/EEC. The apparatus meets the requirements of the above standards.

\*This certification is only valid for the equipment and configuration described, and in conjunction with the test data detailed above. It contains the result of the single examination of the subject being in hand and does not represent any universally valid decision concerning the quality of any other subject of the current production.

Authorized Signatory:

SGS TAIWAN LTD.  
Jason Lin



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This document is issued, on the Client's behalf, by the Company under its General Conditions of Service printed overleaf. The Client's attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein.

Any other holder of this document is advised that information contained hereon reflects the Company's findings at the time of its intervention only and within the limits of Client's instructions, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents.

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SGS

## VERIFICATION OF LVD COMPLIANCE

**Certificate No.:** EL/2005/B0003C  
**Date of Issue:** 2006-09-06  
**Applicant:** DynaScan Technology Corp.  
66 Hwa-Ya 1<sup>st</sup> Rd., Hwa-Ya Technical Park, Kuei-Shan Hsiang, Taoyuan  
**Applicant of address:** Hsien, Taiwan, R.O.C.  
**Name of product :** 360° LED Video Display  
**Trademark:** DynaScan  
**Model No:** DS0706  
**Protection class:** Class I  
**Test Required:** IEC 60950-1:2001 (1<sup>st</sup> Edition) and/or EN 60950-1:2001

**Conclusion:** The submitted samples comply with the requirements of the above standard and hence fulfills the electrical safety requirements of Directive 73/23/EEC as amended by Directives 93/68/EEC.

This certificate refers only to the unit submitted for test.

The CE mark as shown below can be used, under the responsibility of the manufacturer, after completion of an EC Declaration of Conformity and compliance with all relevant EC Directives.



\*This certification is only valid for the equipment and configuration described, and in conjunction with the test data detailed above. It contains the result of the single examination of the subject being in hand and does not represent any universally valid decision concerning the quality of any other subject of the current production.

Authorized Signatory:

*Dino Chiang*

SGS TAIWAN LTD.  
Dino Chiang

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Any other holder of this document is advised that information contained hereon reflects the Company's findings at the time of its intervention only and within the limits of Client's instructions, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents.

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## 4.9 Product Warranty Product Warranty

DynaScan Technology Corp. warrants its products to be free from defects in both material and workmanship within the warranty period. If a product under warranty proves to be defective, the company will either repair it or replace it with similar product. Replacing products or parts may include remanufacturing or refurbishing parts or components.

### **Warranty Duration for the DynaScan 360-degree Display:**

DynaScan Technology Corp. provides a 12-month warranty for this product from the date of purchase.

### **What the Warranty Does Not Cover:**

1. Any product on which the serial number has been defaced, modified, or removed.
2. Damage, deterioration or malfunction resulting from
  - ⊙ Natural disasters such as fire, flood, lightning, earthquake, and so on.
  - ⊙ Accident, misuse, neglect, unauthorized modification or repair.
  - ⊙ Shipment.
  - ⊙ Removal or installation.
  - ⊙ Power fluctuations or failure.
  - ⊙ Using accessories or parts, which are not meeting DynaScan's specifications.
  - ⊙ Any other cause that is not related to a product defect.

### **How to get the Warranty Service:**

1. To get the warranty service, please contact DynaScan Marketing Department.
2. Before contacting us, please prepare the followings: ( 1. ) Date of purchase documentation ( 2. ) Your name ( 3. ) Your address ( 4. ) Brief description of the problem ( 5. ) Product serial number.
3. Send or ship the product with the original container to your DynaScan dealer, or any DynaScan service centers.
4. Please contact us for any further questions.

# Warranty

<b>Name</b>		<b>Telephone</b>	
<b>Address</b>		<b>Fax</b>	

- ※ Please fill in all the items above.
- ※ Once the warranty duration expires, any repair or replacement will be charged.
- ※ The product serial number and the dealer's signature and stamp are necessary for the validation of this warranty.

<i>DynaScan dealer's signature and stamp</i>
     <b>Product Serial #:</b>

**7F, No.66, Hwa-Ya 1st Rd., Hwa-Ya Technical Park,  
Kuei-Shan Hsiang, Taoyuan County, Taiwan, R.O.C.  
TEL : +886-3-396-0541 FAX : +886-3-396-0545**

## **DynaScan Technology Corporation**

7F, No.66, Hwa-Ya 1st Rd., Hwa-Ya Technical Park,  
Kuei-Shan Hsiang, Taoyuan County, Taiwan, R.O.C.

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Edition 2, Jan. 2007



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