

# AMS600 PLOTTER OPERATING INSTRUCTIONS



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## 1. INTRODUCTION

Thank you for purchasing the **AMS600**, a flexible plotter that helps you label marking elements quickly and easily.

- Rugged construction in stylish aluminum
- Labelling area 422 mm x 305 mm
- Easy to change fixtures to suit a variety of marking elements
- Automatic fixture recognition largely avoids the need to select marking elements
- Optimum plotter pen seal. Pens can be stored in the plotter's pen station during operation
- Auto calibration no adjustment necessary
- Capable of labelling marking elements up to 10.5 mm in height. Special solutions for up to 15 mm are possible
- Universal power supply of 100-240V AC / 50-60Hz, various adaptors available
- The special start-up function for the plotter pens ensures neat labelling right from the very first marking element
- PC interface: USB port
- Control language: HPGL
- I/O interface for connecting peripheral equipment, such as engraving option
- Possible to update **AMS600** firmware through PC connection and downloading from the Internet

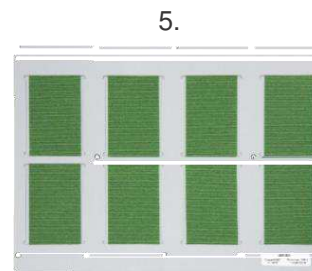
## 2. ITEMS SUPPLIED

Please check you have received all the items supplied with your labelling device (see list below).

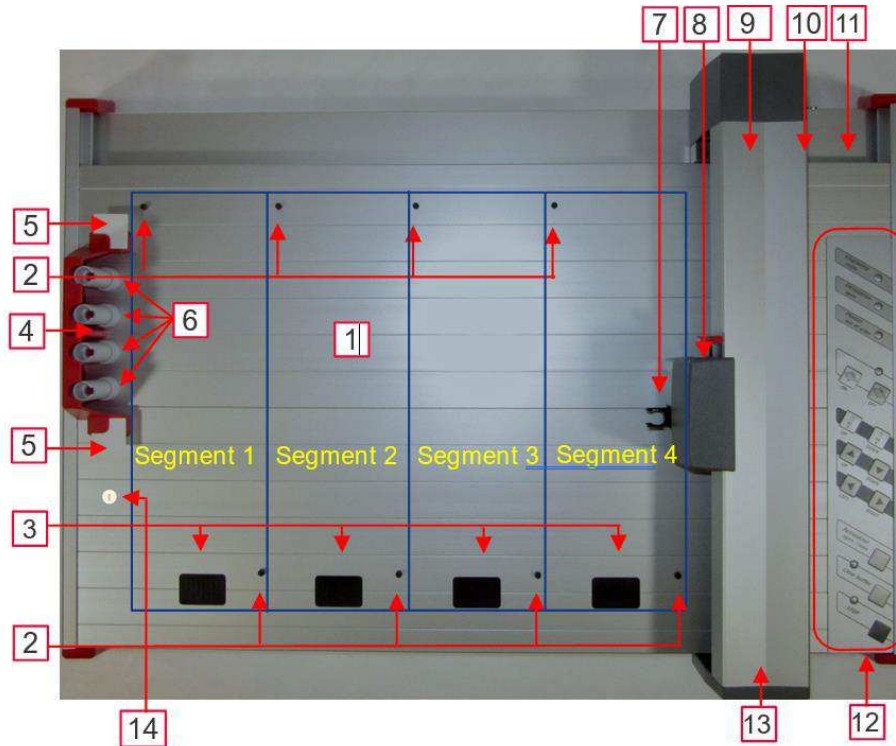
Please retain the packaging in case you need to return the device.

The following items are supplied as standard:

- 1. Plotter **AMS600**
- 2. AMS Software CD
- 3. AMS Power supply cable
- 4. AMS USB cable
- 5. Support plate SPRC-1



## 3. PRODUCT OVERVIEW



- 1) Plotting area
- 2) Pin stops for fixtures
- 3) Fixture recognition sensors
- 4) Pen station
- 5) Start-up writing area, priming plates
- 6) Sealed storage holders in pen station
- 7) Clip adaptor for holding the plotter pen
- 8) Pen holder
- 9) USB port
- 10) Interface for optional external devices
- 11) Power supply connection
- 12) Control panel/control keys
- 13) Plotter arm
- 14) Plug for positioning stud for zero setting engraving tool

## INSTRUCTION



#### 4. SETTING UP THE AMS600 PLOTTER

##### LOCATION

A dry, dust-free room is the ideal environment for the plotter. If possible, do not install the device in damp or very dusty areas. Do not expose the system to direct sunlight. Please ensure that the connections on the back right-hand side of the device are accessible at all times. Position the **AMS600** firmly on the work surface where it is to be used, ensuring it is level.

Please ensure that the writing arm can move freely and is not obstructed by other objects.

##### CONNECTIONS

Plug the device into a correctly installed mains socket using the power supply included with the product.

The power supply features a variable AC input voltage of 100-240V AC / 50-60Hz. The power connection can be replaced by way of adapter plugs.

Plug the connector from the output cable on the power supply into the back right-hand side of the plotter.

Then hook up the device using the USB cable provided. The respective port is located on the back right-hand side of the **AMS600**.

→ *Please note:* Please follow the instructions of installing the device driver accordingly.

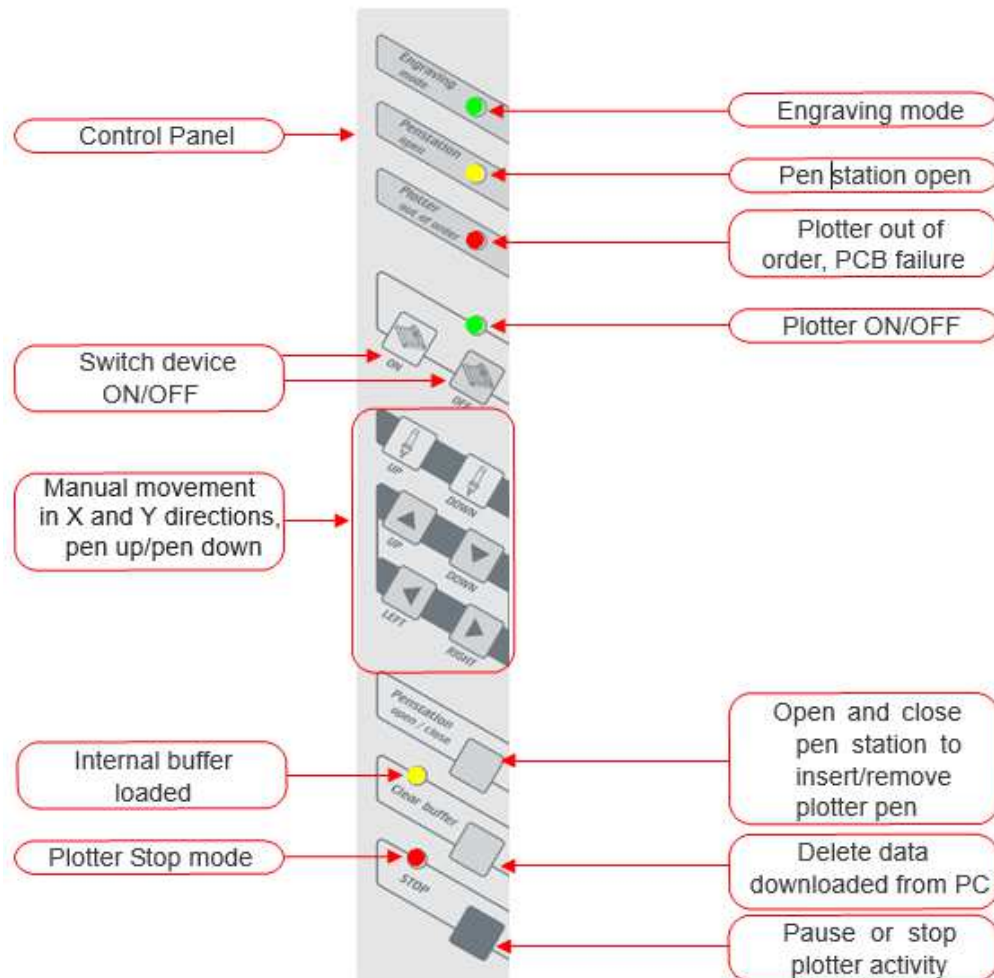


## 5. OPERATION

Once you have installed the **AMS600** and connected the power supply and data cable, you can switch the plotter on.

**Important:**

Before switching the device on please ensure that there are no objects on the writing/plotting area which might prevent the writing arm from moving freely. All settings and commands are entered using the control panel.





## INSTRUCTION

**ON/OFF buttons**

The **ON/OFF** buttons are used to activate and deactivate the device. When the plotter is switched on, the writing arm moves to the top right-hand corner of the labelling area and auto calibration takes place. The green light comes on when the system is ready for use and to receive data from the PC.

**Clear buffer**

If the **AMS600** contains data, the yellow light will come on. You can delete this data by pressing the **Clear buffer** key.

To do this the system must be in stop mode (red light on).

**Open/close pen station**

Before using the **AMS600**, insert the plotter pen with the desired tip width into the pen station.

***Important:***

Only plotter pens of the types shown here may be used as the sealing system is designed specifically for these plotter pens. Using other plotter pens and writing instruments may damage the device.

To insert plotter pens into the pen station, press the Pen station **open/close** key. This is only possible when the system is in stop mode. When the pen station has been opened, you can insert the plotter pens into the corresponding storage holders and then re-close the pen station by pressing the **open/close** key again.

**→ Please note:**

The pen station will close automatically after 2 minutes or power off as there is a danger the pens will dry out. You can leave plotter pens for the daily work in the pen station because the optimised seal largely prevents pens from drying out. If the storage inserts become soiled over time you can replace them. The procedure for changing the storage inserts can be found in the accessories section.

**→ Please note:**

Should you wish to use other plotter pens with HP fixing system, you must insert them directly into the clip adaptor of the pen holder and ensure that they are not stored in the pen station.

**→ Please note:**

The plotter always re-calibrates prior to first plotting.



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→ *Please note:*

In the engraving mode the key is used to move the tool to the position of the indication for standardizing the engraving needle, zero setting.

**Stop-key**

If the **stop**-key is activated while the plotter is in action, the job will pause immediately, the plotter pen brought back to the pen station and the plotter will move into the top right-hand corner. The red light will signal the interruption. Pressing the key again the plotter will continue with the job. The red light will go out.

**Cursor keys & Pen up/down keys**

These keys can be used to move the writing arm manually in all directions. The **pen up/down** key lowers and raises the plotter pen. The system must be in stop mode.

→ *Please note:*

These key functions are not used for normal operation. They are intended solely for adjusting settings and carrying out servicing.

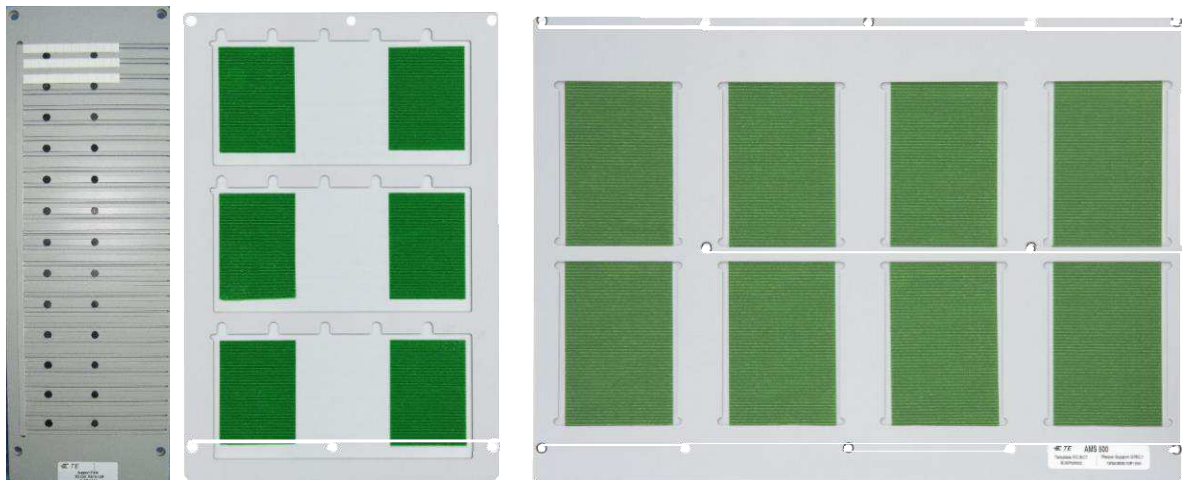
## INSTRUCTION



### Placing the support plates(fixture) on the Plotter

There are eight pin stops on the plotting area where up to four different support plates can be loaded. Different support plates are available depending on the size of the marking elements. They can occupy one, two or four segments on the plotting area.

Different sized support plates (fixtures):



1 segment

2 segments

4 segments

### Placing the elements in the support plates

Choose the appropriate support plates for the elements to be labelled and insert the elements carefully into the support plate. You can also add the elements first and then place the support plate on the plotter.

→ *Please note:* The plotter always re-calibrates prior to first plotting.



## 6. CLEANING AND PRODUCT CARE

Protect the **AMS600** from dust and other dirt. When not in use, cover the plotter. A special cover is available as an accessory.

Wipe the device occasionally after use with a dry, lint-free cloth or a mild cleaning agent.

If the pen station storage inserts and priming plates are heavily soiled, please replace them.






















The description for the sealed unit can be found in the section on accessories.

***Important:***

Under no circumstances use harsh cleaning products to clean the plotter.  
Never lubricate the mechanical parts of the plotter.



7. ACCESSORIES

	Plotter Pen-R	available in six tip-widths  0.18 mm  0.25 mm  0.35 mm  0.50 mm  0.70 mm  1.00 mm	
	Ink Cartridges		Pen storage stand
	Plotter Pen-D	available in six tip-widths  0.18 mm  0.25 mm  0.35 mm  0.50 mm  0.70 mm  1.00 mm	
	Cleaning Set		Pen Cleaner
			Cleaning Fluid
	Dust Protection Cap		Service Kit for Pen-Station

TO EXCHANGE A SEALING INSERT IN THE PEN STATION:		
To remove the sealing insert from the pen station:	To insert the sealing insert into the pen station:	To adjust the sealing insert in the pen station:
		

TO REMOVE ONE OF THE SEALING INSERTS FROM THE PEN STATION:  
Firstly, open the pen station by pressing the **Open/Close** button.  
Apply the enclosed key to the sealing insert as illustrated and carefully lever the sealing insert out of the holding device.

TO INSERT AND ADJUST ONE OF THE SEALING INSERTS:  
Insert the new sealing insert into the pen station press the sealing inserts carefully up to the limit-stop into the aluminium tube. Now, by use of the key, adjust the sealing insert until the key is rectangular towards the plotter arm. The gap at the side of the sealing unit should now be centered.

TO EXCHANGE THE PRIMING PLATES (for starting the plotter pen):  
The small plates can be removed by pulling them out sideways. Insert the new plates by sliding them into the slot until they fit tightly.

## INSTRUCTION



### 8. TROUBLE SHOOTING

If your **AMS600 plotter** is not functioning correctly, please check the following:

Functional error	Potential solution
Device fails to switch on	Check whether the mains plug and connecting plug are plugged in and switched correctly. Check whether the socket being used is functioning properly. Is the green light on the power supply illuminated? If not, please replace the power supply.
Plotter does not respond to data downloaded from PC	Is the interface cable connected properly? Replace the data cable if necessary. Is the device driver installed properly?
No labelling is taking place even though a plotter pen has been inserted.	Check whether the plotter pen has dried out or if there is sufficient ink in the pen. Refill or replace the pen if necessary.
Poor labelling quality, uneven line thickness, missing items	The plotter pen tip may be soiled. Clean the tip carefully using a lint-free cloth dipped in special cleaning fluid. Replace the plotter pen if necessary.



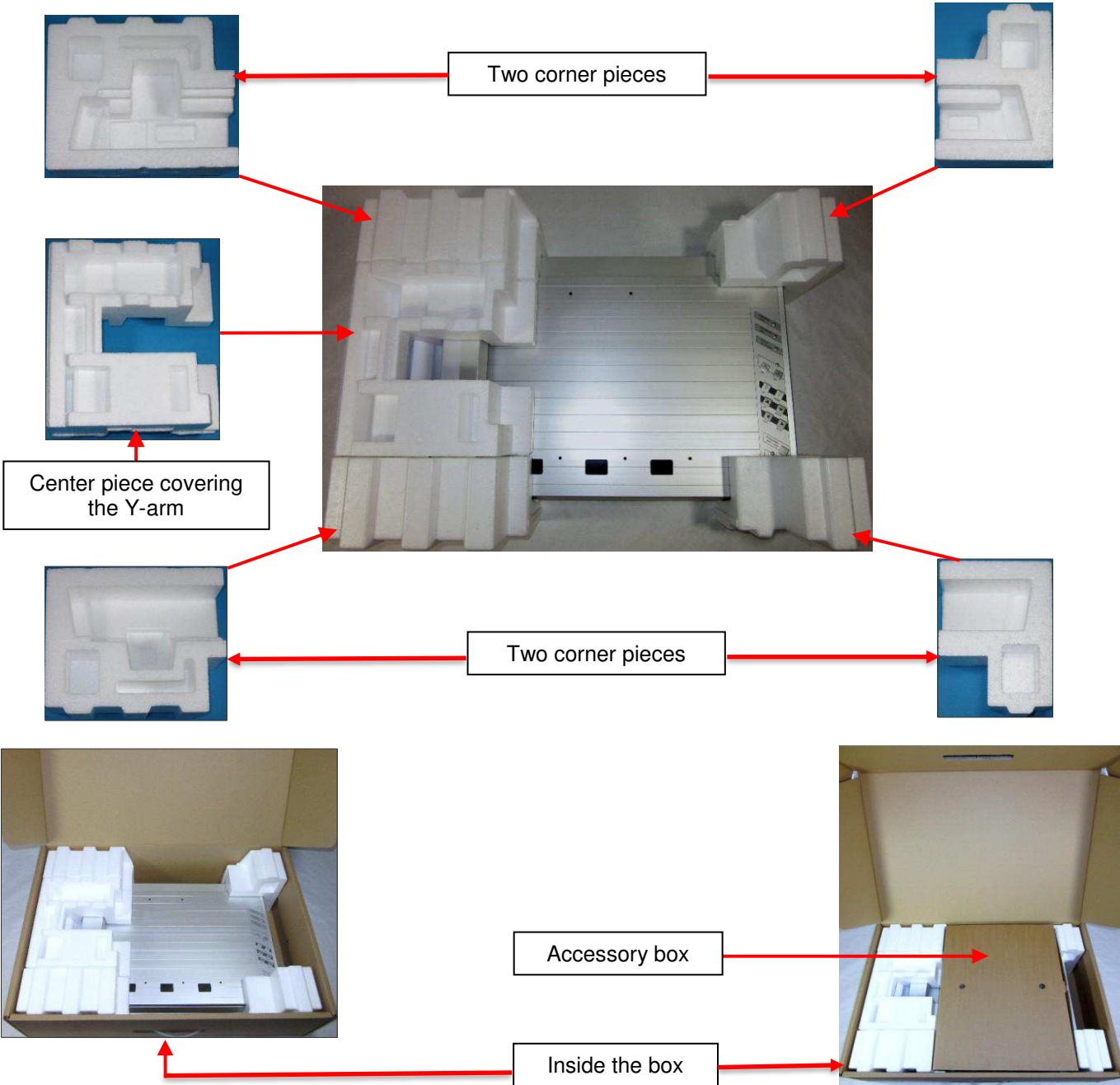
## 9. TECHNICAL INFORMATION

### AMS600 plotter specifications

Type of plotter:	Flatbed plotter
Maximum plotting area:	422 mm x 305 mm
Plotting speed with pen:	up to 40 mm/s
Plotter pen:	Special plotter pens with HP fixing
Ports:	USB Level 2.0
Control language:	Based on HP-GL 7475A      16 MB
Buffer:	16 MB
Drive:	Two-phase step motor
Pen station:	Max. 4 plotter pens with double seal
Addressable resolution:	0.01 mm
Repeat accuracy:	0.05 mm
Repeat accuracy after pen change:	0.05 mm with optimum pen
Power supply:	Via separate power supply with exchangeable mains power connection
Power supply input voltage:	100-240V AC / 50-60Hz
Power supply input current:	0.7 A max. Power supply output
Power supply output voltage:	24 V DC
Power supply output current:	1.25 A max.
Environmental conditions:	In use: 10°C-35°C 35%-75% relative humidity Storage: -10°C-50°C 10%-90% relative humidity
Safety certificate:	EN 60950-1
Interference safety compliance:	EN 55022 B EN 61000-4-2, -4-3, -4-4, -4-5, -4-6
Dimensions:	690 mm x 480 mm x 155 mm
Weight:	8.3 kg



10. INSTRUCTIONS FOR PACKAGING THE AMS600







## 11. SAFETY INSTRUCTIONS

### Safety instructions

- Keep the operating instructions in a safe place.
- This device complies with all recognised technical standards and all relevant safety regulations.
- The mains power supply used must correspond with that specified on the name plate.
- Use in dry conditions only.
- Disconnect the device from the mains socket by pulling the plug, not the cord.
- All repairs, including replacement of mains power supply components, must be performed by a qualified service technician.

### Säkerhetsföreskrifter

- Förvara bruksanvisningen på säker plats.
- Denna apparat är tillverkad enligt modern teknik och i enlighet med gällande säkerhetsföreskrifter för elektriska apparater.
- Kontrollera uppgifterna på typmärket innan anslutning till eluttag.
- Apparaten får endast användas i torra utrymmen.
- Dra inte ur kontakten ur eluttaget genom att rycka i sladden.
- Reparationer av denna apparat, inklusive utbyte av el-sladd, får endast utföras av fackman.

### Sicherheitshinweise

- Bewahren Sie die Gebrauchsanweisung sorgfältig auf.
- Dieses Gerät entspricht den anerkannten Regeln der Technik und den einschlägigen
- Sicherheitsbestimmungen für Gerätesicherheit.
- Elektrische Anschlussbedingungen und Angaben auf dem Typenschild müssen übereinstimmen
- Gerätenutzung nur in trockenen Räumen
- Netzstecker nicht am Kabel aus der Steckdose ziehen
- Reparaturen an diesem Gerät, einschließlich der Austausch der Netzzuleitung, dürfen nur von Fachkräften durchgeführt werden

## INSTRUCTION

Instructions de sécurité

- Conserver ces instructions dans un endroit sûr.
- Cet appareil répond aux normes techniques et satisfait toutes les règles de sécurité.
- Le courant utilisé doit être identique à celui spécifié sur l'appareil.
- Ne pas utiliser cet appareil dans un environnement humide.
- Débrancher l'appareil en tirant sur la prise, pas sur le câble.
- Toutes les réparations y compris le remplacement des composants électriques, doivent être effectuées par un technicien qualifié.

Instrucciones de Seguridad

- Conserve las instrucciones de seguridad en un lugar seguro.
- Este equipo cumple con todas las normas técnicas de seguridad eléctrica y requisitos de seguridad eléctrico aplicables en el país de uso.
- La fuente de alimentación debe corresponderse con los valores de tensión y corriente citados en la placa de identificación del producto.
- Las características de la fuente de alimentación a utilizar con el producto son las siguientes : entrada : 100-240Vca, 50/60Hz, 700mA. Salida : 24Vcc/1,25A
- Utilice el equipo en condiciones secas únicamente.
- Desconecte el equipo de la red de alimentación por medio de la ficha, nunca tirando del cordón.
- Todas las reparaciones, incluyendo el reemplazo del cordón de alimentación, deben ser realizadas por personal técnico calificado.