FLYING PIG SYSTEMS

ROAD HOG

Quick Start Guide

ROAD HOG™
ROAD HOG™ FULL BOAR

High End
S Y S T E M S ®

Road Hog Console Quick Start Guide
P/N 60600273 V 2.0
December, 2007

Declaration of Conformity
According to ISO/IEC Guide 22 and EN45104

Manufacturer's name: High End Systems, Inc.
Distributor's name: High End Systems, Inc.
Distributor's address: 2105 Gracy Farms Lane, Austin, Texas, 78758

Declares that the product:
　　　　Product Name: Road Hog
　　　　All Product Number: ALL
　　　　All Product Options: ALL

Conforms to the following EEC directives:
　　　　73/23/EEC, as amended by 93/68/EEC
　　　　89/336/EEC, as amended by 92/31/EEC and 93/68/EEC

Equipment referred to in this declaration of conformity was first manufactured in compliance with the following standards in 2007:
　　　　Safety:　 EN60950:2000
　　　　EMC:　 EN55022: 1998: Class A ITE
　　　　　　　　EN61000-3-2
　　　　　　　　EN61000-3-3
　　　　　　　　EN55024:1998
　　　　　　　　EN61000-4-2: Level 3, Class 2
　　　　　　　　EN61000-4-3: 1995 Level 2 (3V/m)
　　　　　　　　EN61000-4-4: 1995 Level 2 (1/.5kV)
　　　　　　　　EN61000-4-5: 1995 Level 3 (2/1kV)
　　　　　　　　EN61000-4-6: 1965 Level 2 (3Vrms)
　　　　　　　　EN61000-4-11:1994

I, the undersigned, hereby declare that the equipment specified above conforms to the above Directives and Standards.

USA, April 13, 2007
Kenneth Stuart Hansen, Compliance Engineer

Warranty Information

Limited Warranty: Unless otherwise stated, your product is covered by a one year parts and labor limited warranty. It is the owner's responsibility to furnish receipts or invoices for verification of purchase, date, and dealer or distributor. If purchase date cannot be provided, date of manufacture will be used to determine warranty period.

Returning an Item Under Warranty for Repair: It is necessary to obtain a Return Material Authorization (RMA) number from your dealer or point of purchase BEFORE any units are returned for repair. The manufacturer will make the final determination as to whether or not the unit is covered by warranty.

Any Product unit or parts returned to High End Systems must be packaged in a suitable manner to ensure the protection of such Product unit or parts, and such package shall be clearly and prominently marked to indicate that the package contains returned Product units or parts and with an RMA number. Accompany all returned Product units or parts with a written explanation of the alleged problem or malfunction. Ship returned Product units or parts to: High End Systems, 2105 Gracy Farms Lane, Austin, Texas 78758.

Note: Freight Damage Claims are invalid for products shipped in non-factory boxes and packing materials.

Freight: All shipping will be paid by the purchaser. Under no circumstances will freight collect shipments be accepted.

REPAIR OR REPLACEMENT AS PROVIDED FOR UNDER THIS WARRANTY IS THE EXCLUSIVE REMEDY OF THE CONSUMER. HIGH END SYSTEMS, INC. MAKES NO WARRANTIES, EXPRESS OR IMPLIED, WITH RESPECT TO ANY PRODUCT, AND HIGH END SPECIFICALLY DISCLAIMS ANY WARRANTY OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE. HIGH END SHALL NOT BE LIABLE FOR ANY INDIRECT, INCIDENTAL OR CONSEQUENTIAL DAMAGE, INCLUDING LOST PROFITS, SUSTAINED OR INCURRED IN CONNECTION WITH ANY PRODUCT OR CAUSED BY PRODUCT DEFECTS OR THE PARTIAL OR TOTAL FAILURE OF ANY PRODUCT REGARDLESS OF THE FORM OF ACTION, WHETHER IN CONTRACT, TORT (INCLUDING NEGLIGENCE), STRICT LIABILITY OR OTHERWISE, AND WHETHER OR NOT SUCH DAMAGE WAS FORESEEN OR UNFORESEEN.

Warranty is void if the product is misused, damaged, modified in any way, or for unauthorized repairs or parts. This warranty gives you specific legal rights, and you may also have other rights specific to your locality.

Product Modification Warning

High End Systems products are designed and manufactured to meet the requirements of United States and International safety regulations. Modifications to the product could affect safety and render the product non-compliant to relevant safety standards.

Mise En Garde Contre La Modification Du Produit

Les produits High End Systems sont conçus et fabriqués conformément aux exigences des règlements internationaux de sécurité. Toute modification du produit peut entraîner sa non conformité aux normes de sécurité en vigueur.

Produktmodifikationswarnung

Design und Herstellung von High End Systems entsprechen den Anforderungen der U.S. Amerikanischen undinternationalen Sicherheitsvorschriften. Abänderungendieses Produktes können dessen Sicherheit beeinträchtigen und unter Umständen gegen die diesbezüglichen Sicherheitsnormen verstoßen.

Avvertenza Sulla Modifica Del Prodotto

I prodotti di High End Systems sono stati progettati e fabbricati per soddisfare i requisiti delle normative di sicurezza statunitensi ed internazionali. Qualsiasi modifica al prodotto potrebbe pregiudicare la sicurezza e rendere il prodotto non conforme agli standard di sicurezza pertinenti.

Advertencia De Modificación Del Producto

Los productos de High End Systems están diseñados y fabricados para cumplir los requisitos de las reglamentaciones de seguridad de los Estados Unidos e internacionales. Las modificaciones al producto podrían afectar la seguridad y dejar al producto fuera de conformidad con las normas de seguridad relevantes.

ROAD HOG™ & ROAD HOG™ FULL BOAR

A New Breed of Hog

Wholehog Compatibility

Road Hog and Road Hog Full Boar console show files are completely compatible with show files pro-grammed on any Wholehog control system console, but NOT compatible with older Wholehog 2 systems. Since the Road Hog console uses the standard Wholehog control system, you can refer to the Wholehog User Manual (http://www.flyingpig.com/support/hog3/manuals/) for detailed software information.

The User Manual is available in several languages and is also accessible within the Wholehog software by pressing the Help key located within most windows as well as the upper left corner of the right touchscreen.

Patching

The Wholehog application pre-configures the Road Hog console's four internal DMX outputs, mapping them to the first four DMX outputs of DP #1 in the Wholehog control system. The Wholehog software utilizes one "virtual" DP when patching to these four outputs. Road Hog Full Boar utilizes two virtual DPs for its eight DMX outputs. Refer to the Wholehog user manual or help system for details on patching fixtures to a DP for DMX output.

Trackball Preferences

Changes made to the pointer mode for the trackball in the **Preferences** window regarding the bottom two buttons will be ignored by the Road Hog console. They will always behave as left and right click options when in pointer mode. These buttons can still be modified when in ball mode.

Shutting Down the Console

To exit the show file, press **Setup** then **Quit**. A dialog appears with the following options:

- **Shut Down** quits the application and shuts down the Road Hog console.
- **Restart Console** reboots the Road Hog console.
- **Log Off** exits the current show and returns to the Wholehog start screen.
- **Cancel** cancels the exit procedure.

Timecode Input

The Road Hog console supports one input of timecode in a SMPTE format via the optional USB LTC Widget. Road Hog Full Boar has direct SMPTE input on the back panel of the console. Other timecode formats available with the Wholehog control system are not available with the Road Hog console.

Desklights

You can adjust the brightness of the desklights by holding down the **Setup** key and adjusting the third parameter wheel. By default, the desklights are on while the console is being used and turn off after a period of inactivity; the period is determined by the **Desk and Worklight Off** setting in the **Appearance** pane of the User Preferences window. You can also use the fourth (right hand) wheel on the front panel to adjust the LED brightness.

Worklight

The front white worklight of the Road Hog console provides illumination of paperwork and the table surface. You can adjust the brightness of the worklight by holding down the **Setup** key and adjusting the second wheel. By default, the work light is on while the console is being used and turns off after a period of inactivity; the period is determined by the **Desk and Worklight Off** setting in the **Appearance** pane of the User Preferences window. The worklight can also be quickly toggled On or Off by pressing **PIG + Setup.** The blue side marker lights on the front of the console are alwayson when the console is powered on.

Setting up the Console

Unpacking

Road Hog™ and Road Hog™ Full Boar consoles ship with the following components:

- Console, with two LED desk lights and desk cover
- European and Edison power cords
- 1GB USB Flash Drive inserted in top of console
- End cap for USB Flash Drive

Road Hog Full Boar consoles include these additional items:

- 2 VGA to DVI adaptors
- Full Boar Road Case

If you find components missing or damaged, notify both the shipping agent and the sales agent immediately. Before sending anything to the factory, call your High End Systems dealer/distributor for a Return Material Authorization (RMA) number. The factory cannot accept any goods shipped without an RMA number.

Road Hog and Road Hog Full Boar Consoles and Accessories	
Road Hog Console	A2020001
Road Hog Full Boar Console *	A6020001
Road Hog Road Case	A2070001
USB Flash Drive	90903025
USB LTC Widget	61040028
USB Playback Wing	61040039
USB Expansion Wing	75020001
USB Hub	61040035
DP2000 *	61040035
17" USB TouchScreen monitor *	61040021

* For Full Boar Console only

Device Support

In addition to AC power, the rear panel provides connections for DMX output and two external USB devices.

The Windows® XPe operating system installed on the Road Hog console supports most USB storage devices for show file backup and storage as well as software upgrades.

Some additional USB devices such as keyboards and mice will function with the Road Hog console.

Before removing any USB device, click on the **USB Remove** button in the **File Management** tab of the **Shows** window.

A confirmation dialog will indicate when it is safe to remove the USB device.

Note: Ejecting the USB Flash drive correctly protects the flash drive from becoming corrupt. Failure to follow the above procedure may result in the data no longer being recognized in any Windows machine.

USB Device Type	Connection Notes
USB Keyboards and Mice USB LTC Widget USB Hubs USB Playback and Expansion Wings USB Flash Drives, CDRW, and Hard Drives ELO TouchScreen monitor	Plug and Play (can be connected or reconnected without restarting the console)
USB DMX Widgets & Super widgets	The Road Hog console does not support the addition of USB DMX Widgets or Super Widgets. Road Hog Full Boar DOES support the use of 4 additional USB DMX widgets or 1 additional Super Widget
USB Printers	Printing functionality is currently not supported.
All other USB Devices	The Road Hog console does not recognize or support USB devices other than those listed above.

* For Full Boar Console only

Starting the Console

After the system has been connected to AC power, check that the AC power switch on the back panel of the console is toggled to ON.

Once the Road Hog console boots, a startup animation will play. Touching the screen anywhere or a click on the mouse stops the animation and starts the application.

If no action is taken before the animation ends, the Road Hog console launches Wholehog software and displays the start screen.

Note: Turning on the AC power switch will boot up the console without having to press the ⏻ power button. However if the console was shut down from the software and the AC power switch is already on, then locate the power switch marked ⏻ on the console's top panel, and press to power up the console.

Configuring the Console

Hardware Configuration

As part of setting up your Road Hog console, you may want to calibrate the touchscreens and set the time and date. These and other hardware settings are configured in the software's **Control Panel**. For information on other hardware settings, see the *Wholehog User Manual*.
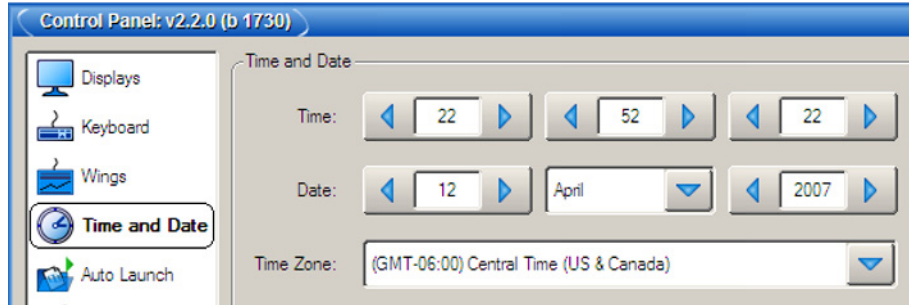
Setting Time and Date

Selecting the **Time and Date** tab of the **Control Panel** displays dialog boxes to set the time, date, andtime zone as well as daylight savings options. After making needed adjustment, press **OK** to **Apply**.

Calibrating Touchscreens

Select the **Displays** tab of the **Control Panel** then, Press the **Calibrate Touchscreen** button. A screen with directions to touch a target at each corner of the monitor screen will appear. After the first touchscreen calibration is completed, the calibration screen closes and calibration of the second screen begins. The calibration will terminate if no touch is received on the screen within 10 seconds.
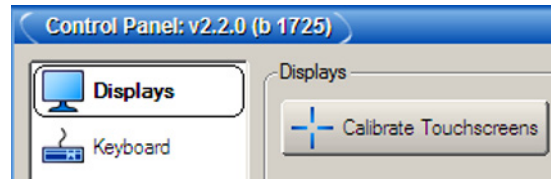
Hardware Diagnostics

When the **Control Panel** is launched from the Start screen, a Diagnostics tab allows you to access tools for several functional categories. These tests are primarily for use by authorized HES technicians. For further details email support@flyingpig.com.

Road Hog Information

The System Info tab of the **Control Panel** displays important version information for this Road Hog console. **Note: You will need the information on this screen whenever contacting High End Systems for support.**
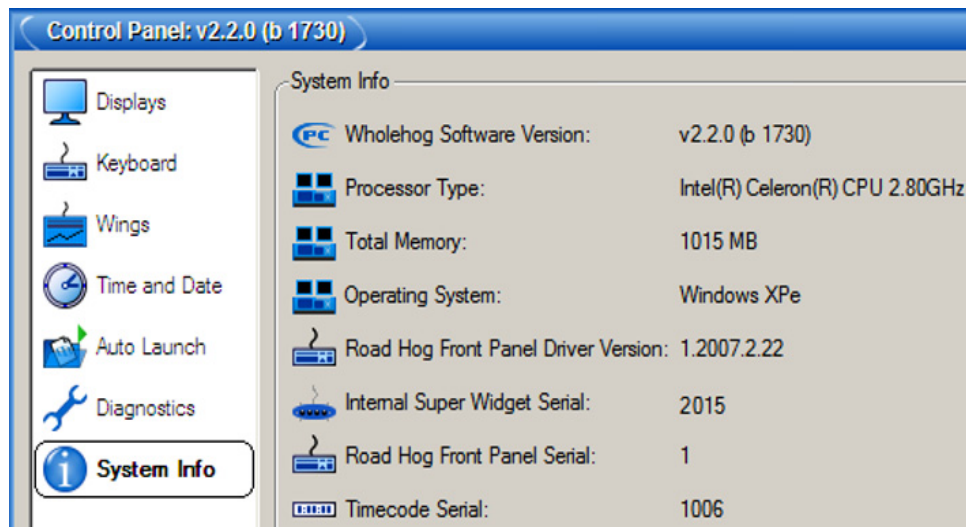
System Restore

The Road Hog system restore routine allows reinstallation of the software from a location on the internal hard drive or from external USB drives.

System Restore from Internal Drive

The Road Hog console includes a system restore routine that can restore the original software and XPe image on the console. A protected partition on the hard drive stores the files needed to create a clean restore of the Road Hog console software. Newer versions of software may be available at www.flyingpig.com. To restore your system files from the hard drive, you'll need a USB Keyboard.

Using the Road Hog System Restore Image

1. Connect a keyboard to the console.

2. As the system boots up, press any key on the keyboard when the boot manager screen is displayed. *Note: This screen is displayed for only one second during the boot process.*

3. *Select* Road Hog System Restore from the boot manager
   screen and press Enter on the keyboard. **Note: Selecting** *Road Hog Console* will boot the console normally.

4. A recovery screen will prompt you to select a Partial recovery or Exit. **Note: The partial recovery process will reinstall the XPe image and the Wholehog software without erasing your show files.**

5. The console immediately begins drive restoration. The process may take anywhere from 10-15 minutes, and will automatically reboot your console when finished. Do not touch any keys or attempt to interrupt the restore process. If the process is interrupted for any reason, simply reboot and return to Step 1 to ensure theRoad Hog console is completely restored.

System Restore from USB Drive

The Road Hog console system restore routine can restore the original software or upgrade the XPe image from external USB drives (Flash, CD, ZIP, etc). Newer versions of software may be available at www.flyingpig.com. To restore your system files, you'll need a USB keyboard and a Road Hog System Restore image on a USB drive (flash, CD, or Zip drive) **Note: The image must be an ISO image properly extracted to a CD or bootable flash drive. Instructions on creating a bootable flash drive follow.**

Using the Road Hog System Restore Image

1. Connect a keyboard and your USB drive containing the System restore image.

2. As the system boots up, press F8 on the keyboard to display the boot device selection screen.

3. Select the USB device that contains the system restore image from the list.

4. A recovery screen will prompt you to select a Full or Partial recovery. A full recovery will erase the show files on the hard drive and a partial will not.

   CAUTION: The Full recovery process will remove ALL data from the Road Hog hard drive including show files. The partial recovery process will reinstall the XPe image and the Wholehog software without erasing your show files.

5. The console immediately begins drive restoration. The process may take anywhere from 10-15 minutes, and will automatically reboot your console when finished. Do not touch any keys or attempt to interrupt the restore process. If the process is interrupted for any reason, simply reboot and return to Step 1 to ensure the Road Hog console is completely restored.

6. Once the system is restored and rebooted, remove the System Restore USB drive and store in a safe place.

Restoring Touchscreen Configuration after a Full Restore

Following the completion of a full system restore process, use the following steps to calibrate the touchscreens.

1. Navigate to the **Displays** tab in the **Control Panel**.

2. Press the **Calibrate Touchscreens** button and follow the on-screen instructions.

3. Press **Setup**->**Quit** then select **Shutdown**. Once shutdown, reboot the console to confirm the screens are calibrated.

Creating a Bootable USB Flash Drive

The Road Hog console system restore routine also contains a utility to create bootable USB flash drives with or without a restore image.

CAUTION: This process will remove ALL files from the USB flash drive.

To create a bootable USB flash drive, you'll need: a Road Hog System flash drive or other bootable capable flash drive greater than 500 MB and a USB Keyboard.
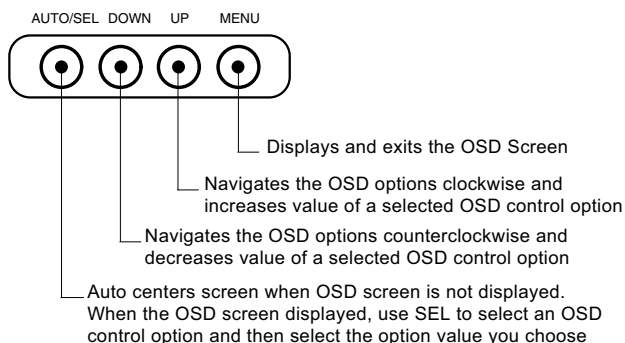
Using the Road Hog System Restore Utility

1. Connect a keyboard and make sure the bootable USB flash drive is not connected to the console.

2. As the system boots up, press any key on the keyboard when the boot manager screen is displayed. **Note: This screen is displayed only for one second during the boot process.**

3. **Select** *Road Hog System Restore* from the boot manager screen and press Enter on the keyboard. **Note: Selecting** *Road Hog Console* will boot the console normally.

4. The recovery screen will be displayed; at the bottom of the screen select the button labeled *Create bootable flash drive*.

5. Insert the USB flash drive and select it from the drop down list to make bootable.

6. To place the current XPe image from this Road Hog console on the flash drive, select the check box labeled *Add restore files to the flash drive*.

7. Press **Select** to create the USB bootable flash drive image.

8. When complete, select **Exit** from the restore screen to boot the console.

9. Once the USB flash drive is made bootable, you can use a computer to extract an ISO image from the Flying Pig website containing the latest Road Hog image.

Monitor Controls

On Screen Display (OSD) menu control buttons are located on the top of the console above each monitor screen. Use these buttons to access the OSD menu system's monitor controls.

To adjust an OSD option:

1. Press the MENU button to display the OSD Menu.

2. Press the UP button or the DOWN button to navigate to a OSD control option.

3. When the function you want to change is displayed, press the SELECT button.

4. To adjust the Value of the function:

5. Press the UP button increases the value of the selected OSD control option.

6. Press the DOWN button decreases the value of the selected OSD control option.

7. After adjusting the values, press the SELECT button again and the monitor automatically saves the changes.

AUTO/SEL   DOWN   UP   MENU

Displays and exits the OSD Screen

Navigates the OSD options clockwise and increases value of a selected OSD control option

Navigates the OSD options counterclockwise and decreases value of a selected OSD control option

Auto centers screen when OSD screen is not displayed. When the OSD screen displayed, use SEL to select an OSD control option and then select the option value you choose

OSD Control Option Descriptions

Contrast	adjusts the contrast or the values of color gain (RED, GREEN or BLUE)
Brightness	adjusts the background Luminance of the LCD panel
V-Position	adjusts the display window vertically on the screen
H-Position	adjusts the display window horizontally on the screen
Recall Defaults	resets the factory OSD default settings.
RGB	selects Color Temperature and sets R, G, B gain.
Volume	(not used)
Sharpness	adjusts the color intensity and tint
Phase	(not used)
Clock	(not used)
OSD H-Position	positions the OSD menu screen horizontally in the monitor display
OSD V-Position	positions the OSD menu screen vertically in the monitor display
OSD Timeout	adjusts the amount of time in which the OSD will disappear
Auto Adjust	automatically refreshes the screen and exits the OSD
Language	chooses between English, French, German, Spanish and Japanese for OSD
Info	displays the current monitor resolution and refresh rate

Note: The OSD screen will disappear if no input activities are detected for 45 seconds.

Troubleshooting

The table below describes basic troubleshooting for the Road Hog console hardware. For software troubleshooting, refer to the Wholehog User Manual or on-line help.

If a problem persists after you try the suggestions listed in the following table, contact High End Systems Support at 800.890.8989 or support@flyingpig.com.

Problem	Suggestion(s)
The console does not boot	Check that the AC power switch at the back of the console is ON. Press the ⏻ power button to boot the console.
No DMX output	Check that fixtures are properly patched Turn the AC power switch at the back of the console to OFF, wait 10 seconds and turn it back on. Look for DMX indicators on fixtures or with a DMX tester.
No Timecode Input	Check that timecode is properly enabled and that the USB LTC widget is properly connected. Turn the AC power switch at the back of the console to OFF, wait 10 seconds and turn it back on. Confirm timecode source is valid with a timecode tester. Confirm the Grand Master fader (usually master #1) is up.
No intensity control on fixtures	Confirm the master for the cuelist is up. If fixtures are in the programmer or editor, turn off the Blind function. Check to ensure intensity values are not parked.
The software has frozen or quit unexpectedly	Press Pig + Open + Backspace to open the Launched Processes window and kill processes that are not responding by right clicking on them and selecting Kill. Then restart the process by right clicking and selecting Restart.
The process window will not open after the software has frozen or quit unexpectedly	Press and hold the ⏻ power button located on the top of the console for 10 seconds to reboot the console.

Cleaning the Road Hog Console and Touchscreens

To clean the console and touchscreens, use only a soft cloth damped with water. Glass cleaner or other solvents will dull the finish of

the console. **Do not** use alcohol (methyl, ethyl or isopropyl) or any strong solvent. **Do not** use thinner or benzene, abrasive cleaners or compressed air. Do not wipe the screens with a cloth or sponge that could scratch the surface.

Upgrading the Wholehog Application

The Wholehog control software is being upgraded continually and it is likely that there is a newer version available. You can find the latest versions at the Flying Pig Systems website (http://www.flyingpig.com/support/hog3/downloads/index.shtml)

Refer to Section 37 of the Wholehog user manual for a description of how to upgrade the Wholehog application.

Safety Information

WARNING: For Continued Protection Against Electric Shock, this equipment requires connection to a branch circuit having a maximum overload protection of 20 A.

1. If this equipment was received without a line cord plug, attach the appropriate line cord plug according to the following code:
   - brown - live
   - blue - neutral
   - green/yellow - earth

2. Class I equipment. This equipment must be earthed.

3. Equipment suitable for dry locations only. Do not expose this equipment to rain or moisture.

4. Disconnect power before servicing.

5. Refer servicing to qualified personnel; no user serviceable parts inside.

Importantes Informations Sur La Sécurité

Mise En Garde: Pour Une Protection Permanente Contre Les Chocs Électriques

1. Si cet équipement est livré sans prise de cable, veuillez connecter la prise de cable correcte selon le code suivant:
   - marron - phase
   - bleu - neutre
   - vert/jaune - terre

2. Débrancher le courant avant d'effectuer des réparations.

3. Cet équipement doit être uniquement utilisé dans des endroits secs. Ne pas l'exposer à la pluie ou l'humidité.

4. À l'intérieur de l'équipement il n'y a pas de pièces remplaçables par l'utilisateur. Confiez l'entretien à un personnel qualifié.

5. Equipement de Classe I. Cet équipement doit être mis à la terre.

Información Importante De Seguridad

Advertencia: Para Protección Continua Contra Incendios. Este equipo debe conectarse a un circuito que tenga una protección máxima contra las sobreca gas de 20 A.

1. Si se recibió este equipo sin el enchufe de alimentacion, monte usted el enchufe correcto según el clave siguiente:
   - moreno - vivo
   - azul - neutral
   - verde/amarillo - tierra

2. Desconecte el suministro de energía antes de prestar servicio de reparación.

3. Este equipo se adecua a lugares secos solamente. no lo exponga a la lluvia o humedad.

4. Derive el servicio de reparación de este equipo al personal calificado. El interior no contiene repuestos que puedan ser reparados por el usuario.

5. Equipo de Clase I. Este equipo debe conectarse a la tierra.

Wichtige Hinweise Für Ihre Sicherheit

Warnung: Zum Schutz Vor Brandgefahr Dieses Gerät darf nur an eine Zweigleitung mit einem Überlastungsschutz von höchstens 20 A angeschlossen werden.

1. Wenn dieses Gerät ohne einen Netzkabelstecker erhalten wurde, ist der entsprechende Netzkabelstecker entsprechend dem folgenden Code anzubringen:
   - Braun - Unter Spannung stehend
   - Blau - Neutral
   - Grün/Gelb - Erde

2. Dieses Gerät gehört zur Klasse I. Dieses Gerät muß geerdet werden.

3. Diese Geräte sind nur zum Einbau in trockenen Lagen bestimmt und müssen vor Regen und Feuchtigkeit geschützt werden.

4. Vor Wartungsarbeiten stets den Netzstecker ziehen.

5. Servicearbeiten sollten nur von Fachpersonal ausgeführt werden. Das Gerät enthält keine wartungsbedürftigen Teile.

Importanti Informazioni Di Sicurezza

Avvertenza: Per Prevenire Incendi Questa apparecchiatura e' da collegarsi ad un circuito con una protezzione da sovraccarico massima di 20 amperes.

1. Se questa apparecchiatura è stata consegnata senza una spina del cavo di alimentazione, collegare la spina appropriata del cavo di alimentazione in base ai seguenti codici:
   - marrone - sotto tensione
   - blu - neutro
   - verde/giallo - terra

2. Disinnestare la corrente prima di eseguire qualsiasi riparazione.

3. Questa apparecchiatura e' da usarsi in ambienti secchi. Non e' da essere esposta ne alla pioggia ne all' umidita'.

4. Per qualsiasi riparazione rivolgersi al personale specializzato. L' utente non deve riparare nessuna parte dentro l' unita'.

5. Aparecchio di Classe I. Questa apparecchiatura deve essere messa a terra.

安全に関する情報

警告：火災からの継続的な保護の為に
- この装置には分岐回線への接続の為の最大 20 A の過負荷防止機構を持っています。

警告：感電に対する継続的な保護の為に
1. プラグの付いていない状態でこの装置を受け取った場合は、以下のコード表にしたがって、適切にプラグを取り付けて下さい。：
   - Brown（茶色）−Live（ライブ）
   - Blue（青）−Neutral（ニュートラル）
   - Green/Yellow（緑/黄色）−Earth（アース）

2. ここで説明されている各部品に関する色があなたの持っているプラグの端末の色と対応していない場合があります。以下にしたがって接続して下さい。：
   - Green/Yellow（緑/黄色）のケーブルを、プラグの端末に E もしくはアースのシンボル⏚の表記のある物に接続するか、Green/Yellow（緑/黄色）の物に接続して下さい。
   - Blue（青）のケーブルを、プラグの端末に N が表記された物もしくは黒に塗られた物に接続して下さい。
   - Brown（茶色）のケーブルを、プラグの端末に L が表記された物もしくは赤に塗られた物に接続して下さい。

3. この装置は ClassI機器です。この為この装置はアースしなければなりません。

4. この装置は乾燥した状態でのみ使用出来ます。この装置を雨又は湿気にさらさないで下さい。

5. 修理点検を行う場合は事前に電源を切り離して下さい。

6. 整備点検の項目は資格を持った技師の為の物です。;ユーザーによって修理点検を行えるパーツは存在していません。