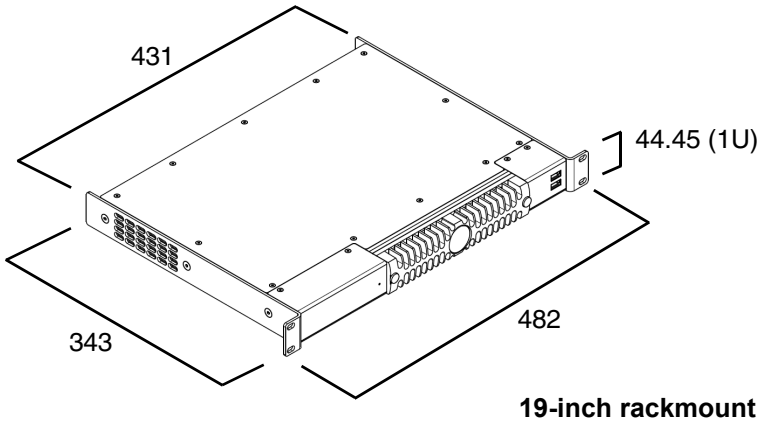
P3-175 and P3-275
System Controllers
Quick Guide

Martin® by HARMAN

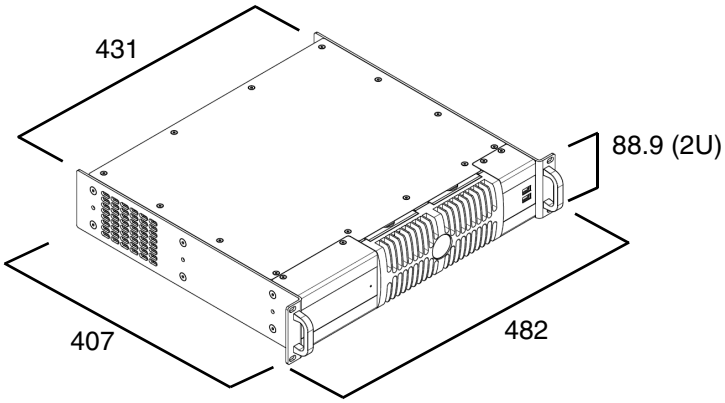
Dimensions

P3-175



19-inch rackmount 1U

P3-275



19-inch rackmount 2U

All dimensions are in millimeters

HARMAN PROFESSIONAL DENMARK ApS, Olof Palmes Allé 44, 8200 Aarhus N, Denmark
HARMAN PROFESSIONAL SOLUTIONS U.S., 8500 Balboa Blvd., Northridge CA 91329, USA

www.martin.com

P3-175 and P3-275 System Controllers Quick Guide, Multi-language, P/N 5140730-00 Rev. A

Contents

Safety Information

WARNING!
Read the safety precautions in this section before installing, powering, operating or servicing this product.

The following symbols are used to identify important safety information on the product and in this manual:

Warning! Safety hazard. Risk of severe injury or death.

Warning! Refer to manual before installing, powering or servicing.

Warning! Hazardous voltage. Risk of lethal or severe electric shock.

Warning! Fire hazard.

This product is for professional use only. It is not for household use.

Read this guide before installing, powering or servicing this product, follow the safety precautions listed below and observe all warnings in this guide and printed on the product.

Technical Support

If you have questions about how to install or operate the fixture safely, please contact Harman Professional® Technical support:

- For technical support in North America, please contact: HProTechSupportUSA@harman.com Phone: (844) 776-4899
- For technical support outside North America, please contact your national distributor.

PROTECTION FROM ELECTRIC SHOCK

- Connect the product to AC mains power at 100-240 V, 50/60 Hz only.
- Use only a source of AC mains power that complies with local building and electrical codes and has both overload and ground-fault (earth-fault) protection.
- Ensure that the product is electrically connected to ground (earth).
- Isolate the product from AC mains power if the power cable or power plug is in any way damaged, defective or showing signs of overheating. Do not reapply power until the faulty item is replaced.
- For pluggable equipment, the socket outlet shall be installed near the equipment and shall be easily accessible.
- Disconnect the product from AC mains power when not in use.
- There are no user-serviceable parts inside the product. Do not attempt to open the product. If service is required, contact your Martin® supplier or a Martin service partner.
- The product is for use in a dry location with humidity 10-90% non-condensing only. Protect it from moisture. Do not allow it to become wet.
- Do not operate the product if the ambient temperature (Ta) falls below 0° C (32° F).

PROTECTION FROM FIRE

- Do not modify the product in any way.
- Do not operate the product if the ambient temperature (Ta) exceeds 50° C (122° F).
- Particular attention must be paid to cooling; under no circumstances should the airflow to the heat sinks be restricted. A rack fan cooling unit to maintain the correct ambient temperature should be considered when multiple units are stacked together.
- The internal CR2032 lithium button cell battery must be replaced by Martin Professional or its authorized service agents. Do not try to recharge the battery, or you will create a risk of explosion.
- Risk of explosion if battery replaced by incorrect type. Dispose of used batteries according to the manufacturer's instructions.

Précautions d’emploi

FRENCH / FRANCAIS

ATTENTION !
Lisez les précautions d’emploi de cette section avant d’installer, de mettre sous tension, d’utiliser ce produit ou d’en faire la maintenance.

Les symboles suivants correspondent à des consignes de sécurité importantes, présentes sur le produit et dans ce document :

Attention! Risque important. Risque de blessure sévère voire mortelle.

Attention! Reportez-vous au manuel avant d’installer, d’allumer ou de réparer cet appareil.

Attention! Tensions dangereuses. Risque de blessure sévère voire mortelle par électrisation.

Attention! Risque d’incendie.

Ce produit est réservé à un usage professionnel et doit être installé par un technicien qualifié. Il n’est pas prévu pour un usage domestique.

Lisez ce manuel et suivez les précautions d’emploi listées ci-dessous avant d’installer, d’allumer ou de réparer le produit et observez toutes les mises en gardes imprimées dans ce manuel comme sur le produit.

Assistance technique

Si vous avez des questions sur la façon d’installer ou d’utiliser l’appareil en toute sécurité, veuillez contacter l’Assistance technique de Harman Professional :

- pour contacter l’Assistance technique en Amérique du Nord, veuillez écrire à l’adresse suivante : HProTechSupportUSA@harman.com
  Téléphone : (844) 776-4899
- pour contacter l’Assistance technique à l’extérieur de l’Amérique du Nord, veuillez contacter votre distributeur national.

PROTECTION CONTRE LES ELECTRISATIONS

- Ne connectez à ce produit qu’une source d’alimentation 100-240 V, 50/60 Hz.
- N’utilisez qu’une source d’alimentation compatible avec les normes locales en vigueur et protégée contre les surcharges et les défauts différentiels.
- Assurez-vous que le projecteur est relié à la terre électrique.
- Isolez le produit si le câble ou sa fiche sont endommagés, défectueux ou bien s’ils montrent des signes évidents de surchauffe. Ne le mettez pas sous tension avant que tous ces défauts aient été réparés.
- Pour les appareils équipés d’un câble enfichable, la prise de courant doit être située à proximité et doit être aisément accessible.
- Déconnectez le produit du secteur lorsqu’il n’est pas utilisé.
- Il n’y a aucun composant réparable par l’utilisateur dans le produit. N’essayez pas d’ouvrir le produit. En cas de besoin, contactez votre revendeur Martin ou un partenaire Martin agréé.
- Ce produit ne doit être utilisé que dans des lieux secs avec une humidité entre 10% et 90% sans condensation. Protégez-le de l’humidité. Ne le laissez pas se mouiller.
- N’utilisez pas le produit si la température ambiante (Ta) est moins de 0° C (32° F)

PROTECTION CONTRE LES RISQUES D'INCENDIE

- Ne modifiez l'appareil en aucun cas.
- N'utilisez pas le produit si la température ambiante (Ta) dépasse 50° C (122° F).
- Une attention particulière doit être apportée à la ventilation : ne laissez jamais s'amoindrir le flux d'air sur les radiateurs. En cas d'installation dans une baie avec plusieurs unités empilées, envisagez une ventilation forcée pour maintenir une température ambiante correcte.
- La pile au lithium CR2032 interne ne peut être remplacée que par Martin Professional ou ses agents agréés. N'essayez pas de recharger la batterie, ou vous créerez un risque d'explosion.
- Remplacer la batterie par un modèle incorrect peut créer un risque d'explosion. Utilisez les circuits de recyclage préconisés par le fabricant de la batterie pour vous débarrasser des batteries usagées.

Sicherheitshinweise

GERMAN / DEUTSCH

WARNUNG!
Lesen Sie die Sicherheitshinweise, bevor Sie das Produkt installieren, in Betrieb nehmen, verwenden oder reparieren.

Die folgenden Warnhinweise werden in dieser Anleitung und auf dem Produkt verwendet:

Warnung! Sicherheitsrisiko. Verletzungs- oder Lebensgefahr.

Warnung! Bedienungs-anleitung beachten.

Warnung! Hochspannung. Verletzungs- oder Lebensgefahr durch elektr. Schlag.

Warnung! Feuergefahr.

Dieses Produkt ist nur für den professionellen Einsatz zugelassen. Die Verwendung in Haushalten ist unzulässig.

Lesen Sie diese Anleitung, bevor Sie das Produkt installieren, in Betrieb nehmen oder reparieren. Befolgen Sie die Sicherheitshinweise und beachten Sie alle in dieser Anleitung oder auf dem Produkt gegebenen Warnungen.

Technische Unterstützung

Wenn Sie Fragen zur sicheren Installation und zum sicheren Betrieb dieses Produkts haben, wenden Sie sich bitte an den technischen Support von Harman Professional:

- Nordamerika: HProTechSupportUSA@harman.com, Telefon: (844) 776-4899
- Rest der Welt: Bitte wenden Sie sich an Ihren nationalen Vertrieb.

SCHUTZ VOR ELEKTRISCHEM SCHLAG

- Schließen Sie das Produkt nur an eine zulässige Stromversorgung im Bereich 100 - 240 V, 50/60 Hz an.
- Verwenden Sie nur eine Wechselstromquelle, die den allgemeinen und lokalen Sicherheitsvorschriften entspricht. Die Stromquelle muss mit einer Überlastsicherung und einem Fehlerstrom-Schutzschalter (RCD) abgesichert sein.
- Erden Sie das Gerät immer elektrisch.
- Trennen Sie das Produkt sofort von der Stromversorgung, wenn Netzstecker oder Netzleitung beschädigt, defekt oder verformt sind oder Anzeichen von Überhitzung aufweisen. Nehmen Sie das Produkt erst in Betrieb, nachdem die Schäden behoben wurden.
- Die Steckdose soll sich in der Nähe des Geräts befinden und leicht erreichbar sein.
- Trennen Sie das Produkt allpolig von der Stromversorgung, wenn es nicht in Gebrauch ist.
- Im Inneren des Produkts befinden sich keine vom Anwender zu wartenden Komponenten. Öffnen Sie das Produkt nicht. Wenden Sie sich im Falle einer Reparatur an Ihren Martin-Händler oder Servicepartner.
- Der Produkt ist für den Gebrauch im trockenen Innenraum mit Luftfeuchtigkeit 10-90% nichtkondensierend geeignet. Setzen Sie es niemals Regen oder Feuchtigkeit aus.
- Verwenden Sie das Produkt nicht bei Umgebungstemperaturen (Ta) unter 0° C (32° F).

SCHUTZ VOR FEUER

- Verändern Sie das Produkt nicht.
- Verwenden Sie das Produkt nicht bei Umgebungstemperaturen (Ta) über 50° C (122° F).
- Achten Sie besonders auf ausreichende Kühlung. Der Luftstrom um die Kühlrippen darf unter keinen Umständen beeinträchtigt werden. Verwenden Sie einen Racklüfter, wenn Sie mehrere Geräte in einem Rack montieren
- Die interne CR2032 Lithium Pufferbatterie darf nur von Martin Professional oder einem autorisierten Servicepartner ersetzt werden. Versuchen Sie nicht, die Batterie aufzuladen, da sonst Explosionsgefahr besteht.
- Bei Verwendung einer ungeeigneten Batterie besteht Explosionsgefahr. Entsorgen Sie die verbrauchte Batterie den Vorschriften entsprechend.

Introduction

Thank you for selecting a product from the Martin Professional® P3 System Controller family.

This Safety and Installation Manual is supplied with the controller and available for download from the P3-175 and P3-275 System Controllers areas of the Martin website at www.martin.com. Before installing, operating or servicing a P3 System Controller, please check the Martin website and make sure that you have the latest user documentation for the product. If you have any difficulty finding user documentation, please contact your Martin supplier for assistance.

Not all product specifications are included in this manual. The P3-175 and P3-275 System Controllers areas of the Martin website contain full product specifications as well as information to help you order accessories such as cables, flightcases etc. and software updates.

This manual explains how to install and connect P3-175 and P3-275 System Controllers to send video and/or lighting control data to a system of P3-compatible fixtures developed by Martin®. It gives important safety information for installers, technicians and operators.

For information about *operating* the P3-175 and P3-275 System Controllers see the training videos on the Martin website at www.martin.com

For information about installing Martin P3-compatible fixtures, see the user documentation supplied with devices and available for download from the Martin website at www.martin.com

Warning! Read "Safety Information" on page 4 before installing, powering or operating a P3 System Controller.

Thank you for selecting a product from the Martin P3 System Controllers family.

Martin P3-175 and P3-275 System Controllers allow easy set up and configuration of an installation with Martin fixtures supporting the P3 protocol. The P3 System Controllers can feed the fixtures with Art-Net/sACN controls from a lighting desk, a video feed from a media server or a mix of both.

Martin P3-PC software application

P3-PC is a Windows application available from Martin that can also be used in a system of P3-compatible fixtures. P3-PC has four useful functions:

- You can use P3-PC as an offline editor for P3 System Controllers. You can prepare show files offline on your PC and then transfer them to a P3 System Controller via a USB memory device.
- You can address P3-compatible fixtures, update their firmware and run test patterns. You connect to the P3 network via your PC's network port.
- You can also use P3-PC as a stand-alone P3 System Controller, receiving Art-Net/sACN from a lighting desk and/or a video feed from a media server, and merge it towards the fixtures.
- P3-PC can also be installed directly onto a media server or standard computer running video and/or lighting control software to create a compact, all-in-one solution.

Physical installation

Rackmounting P3-175 and P3-275 System Controllers

Martin Professional P3 System Controllers are designed to be rack-mounted in a central control location for fixed installations or mounted in a flightcase rack for touring applications. The enclosure and 19” rack mounting comply with IEC 60297. P3 System Controllers can also simply be placed on a flat surface.

P3 System Controllers have been qualified to operate in a dry environment with humidity 10-90% non-condensing and within a temperature range of 0° C to 50° C (32° F to 122° F). Do not operate a P3 System Controller in an ambient temperature above 50° C (122° F), or you may cause damage that is not covered by the product warranty.

When rackmounting a P3-175 or P3-275 System Controller:

- Carefully review “Safety Information” on page 4.
- Check that the local AC power voltage is within the ranges listed on the P3 System Controller’s serial number label.
- Fasten the controller securely to the mounting rails in the rack using screws through all four of the holes provided in the controller’s front panel.
- Ensure adequate ventilation and free, unobstructed airflow around heatsinks.
- If multiple devices are installed in a rack, install a rack cooling fan if necessary to control ambient temperature.

Additional support for the P3-275

Besides front mounting using four screws through the front panel as described above, the P3-275 must also be held securely at the rear of the device by fastening it to a back rail or similar means of support. For added convenience, you can also install a rack slide kit.

To support the rear of the P3-275, use the M4 threaded holes provided in the sides of the housing to fasten brackets or a rack slide kit to the P3-275. Respect the following precautions:

- Do not insert screws in the M4 threaded holes in the side of the housing any deeper than maximum 10 mm (0.4 inches) from the outer surface of the housing.
- Do not remove any of the existing screws from the housing of the P3-275.
- Do not drill new holes into the housing.

System installation

The schematic diagrams in this section are given as examples only. For full details of installing Martin lighting and creative LED devices – including important safety information – refer to the user documentation supplied with devices and available for download free of charge from www.martin.com

Example system layout – entertainment applications

Figure 1 shows how a system consisting of a P3 System Controller with Martin entertainment lighting and creative LED products should be laid out and connected.

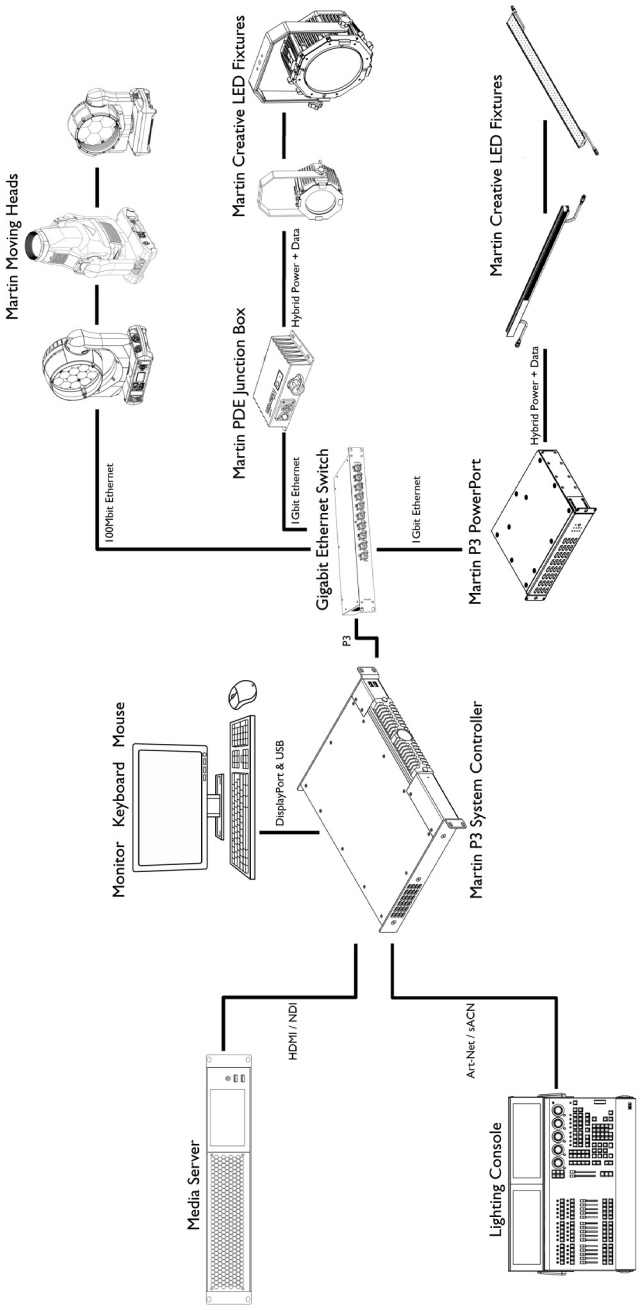


Figure 1: Example system layout – entertainment applications

Example system layout – architectural applications

Figure 2 shows how a system consisting of a P3 System Controller with Martin creative LED products should be laid out and connected.

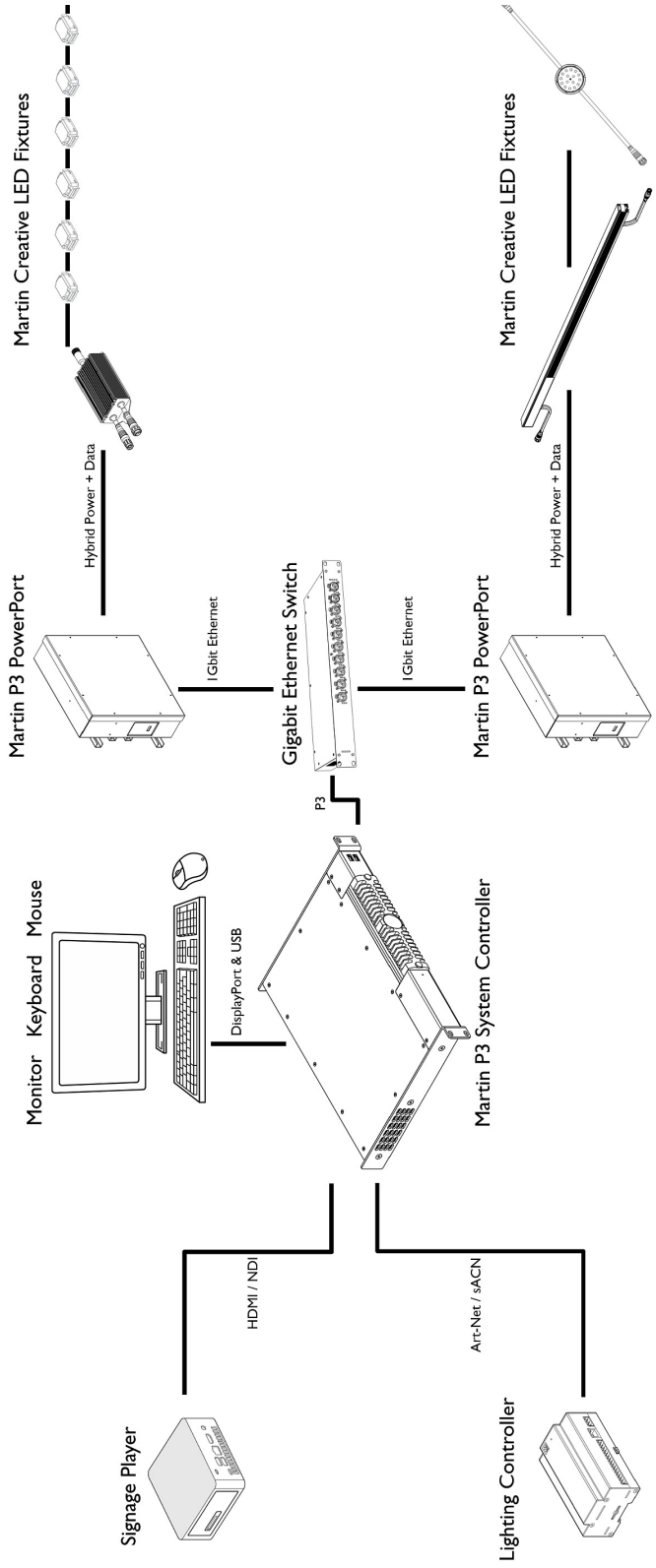


Figure 2: Example system layout – architectural applications

Connections: general

To connect P3-175 and P3-275 System Controllers and prepare them for use, see the system layout diagrams on the previous pages and see later in this chapter for connections panel information depending on the controller that you want to connect.

Note that you must connect the Ethernet data cable from P3-compatible fixtures to the port marked **P3 OUT** (on the P3-175), or one of the ports marked **P3 OUT 1** and **P3 OUT 2** (on the P3-275). Ports marked **MGMT**, **NDI IN** or **EDMX** cannot send a P3 signal to P3-compatible fixtures.

Connecting a P3-175 or P3-275 System Controller to power

Warning! Before connecting a P3 System Controller to AC mains power, read "Safety Information" on page 4.

Important! Connect the video source (media server, switcher, etc.), the P3 System Controller and the installation of P3-compatible fixtures to the same grounded/earthed power source to eliminate ground/earth loop problems and avoid any differences in potential that may damage devices.

P3-175 and P3-275 System Controllers are mains powered via an internal power supply unit (PSU) that is compatible with worldwide mains supply standards. However, to avoid differences in potential that may damage devices, the controller must be connected to the same grounding-type (earthed) mains power outlet as the video source device and the installation of P3-compatible fixtures that it is connected to. Alternatively, appropriate steps must be taken to eliminate differences in potential at different points in the installation. Martin Professional cannot be held responsible for any damage caused if devices are not connected to AC mains power and ground/earth as specified in this guide.

A power on/off switch is provided next to the power cable input on P3-175 and P3-275 System Controllers. If this switch is inaccessible, apply and shut down power using an external switch at the power outlet or at the main switchboard.

Do not apply power by inserting or removing live power connectors, as this will cause arcing at the connector contacts that may damage devices and connectors.

Important! Use the Shutdown button in the P3 System Controller software and allow the software to close down before cutting power to the P3 System Controller. Do not shut down or disconnect power during a software update or while saving a configuration file, as this will cause corruption of data that may make the controller inoperable.

Current draw

The P3 System Controllers draw the following maximum current:

- P3-175: 0.4 A at 100-120 V, 0.2 A at 200-240 V
- P3-275: 0.8 A at 100-120 V, 0.4 A at 200-240 V

Power cable

Power cables that will allow you to connect the P3 System Controller to AC mains power are supplied together with the product.

P3-175 connections and status

P3-175 connections panel

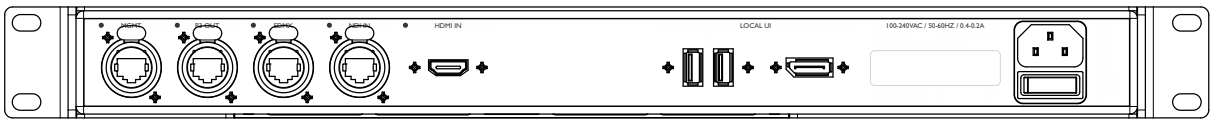


Figure 3: P3-175 connections panel

The LED at each connector on the connections panel lights up when a link is present and flashes when there is data activity on that connector.

See Figure 3. The connections panels on the rear of the P3-175 offers the following features:

MGMT – Management network interface port. Has several functions:
- Communication with the P3-175's internal webserver for retrieval of status information.
- Connection to external syslog client for monitoring.
- Communication with remote user interface.
- Connection to Internet for automatic download of fixture firmware and personality files.

P3 Out – P3 signal output. Connect to the installation of P3-compatible devices via an Ethernet cable. Can communicate with an installation of devices containing a total of up to 520 000 pixels.

EDMX – EDMX port for connection to:
- EDMX (Art-Net or sACN) source.
- Motion control (Kinesys K2, Tait Navigator, etc.) source.

NDI IN – Ethernet port for NDI video input.

HDMI IN – HDMI port for digital video input.

LOCAL UI – For connection of local user interface elements:
- **Two USB 2.0 ports** for mouse, keyboard, USB memory device etc.
- **DP+ + port** for connection to a monitor (1920x1080 or better). This port supports adapters to VGA, DVI or HDMI.

Mains Input – Male IEC socket, accepts AC mains power at 100 - 240 V, 50/60 Hz. A power on/off switch for the System Controller is integrated into the IEC socket.

P3-175 front panel

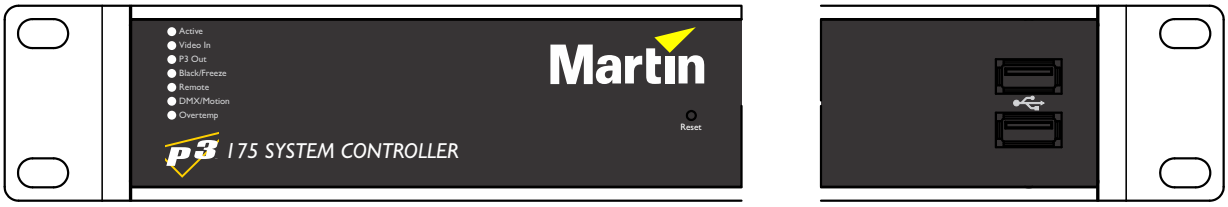


Figure 4: P3-175 front panel

See Figure 4. The LED status indicators, Reset button and USB ports on the front panel of the P3-175 have the following functions:

Active flashes during startup and lights continuously during operation.

Video In indicates that the currently selected video input is valid.

P3 Out indicates that the P3-175 is sending a P3 data signal on its P3 output port.

Black/Freeze indicates that a Blackout or Freeze command is currently applied.

Remote indicates that the P3-175 is currently being controlled remotely via the management network interface port.

DMX/Motion lights when a valid EtherDMX (Art-Net or sACN) or Motion Control (Kinesys K2, Tait Navigator, etc.) signal is present at the EDMX Input connector on the rear panel.

Overtemp flashes if the P3-175 is approaching maximum safe operating temperature. Overtemp lights constantly if it has exceeded this temperature. A thermal protection circuit throttles down the processor if the temperature is exceeded.

The **Reset** button lets you carry out a forced reset (if the System Controller's P3 application freezes and you cannot reboot the processor normally, for example). Use the tip of a ballpoint pen to push the button. The System Controller constantly stores data in its onboard flash memory, so you are unlikely to lose data if the application fails.

The two **USB 3.1 ports** on the front panel can be used for any USB peripheral including the keyboard and mouse, but are most conveniently placed for portable memory devices. The keyboard and mouse can be connected to the two USB 2.0 ports on the rear connections panel.

P3-275 connections and status

P3-275 connections panel

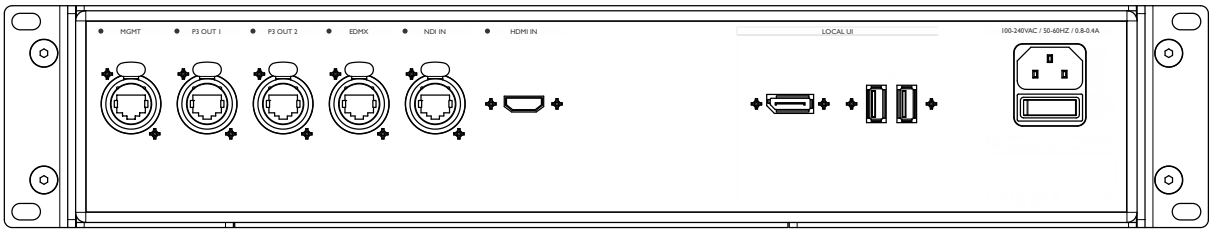


Figure 5: P3-275 connections panel

The LED at each connector on the connections panel lights up when a link is present and flashes when there is data activity on that connector.

See Figure 5. The connections panel on the rear of the P3-275 has the following features:

MGMT – Management network interface port. Has several functions:
- Communication with P3-275's internal webserver for retrieval of status information.
- Connection to external syslog client for monitoring.
- Communication with remote user interface.
- Connection to Internet for automatic download of fixture firmware and personality files.

P3 OUT 1 and P3 OUT 2 – P3 signal output. Connect to the installation of P3-compatible devices via an Ethernet cable. Each of the two P3 output ports can communicate with an installation of devices containing a total of up to 1 040 000 pixels (520 000 pixels per port).

EDMX – EDMX port for connection to:
- EDMX (Art-Net or sACN) source.
- Motion control (Kinesys K2, Tait Navigator, etc.) source.

NDI IN – Ethernet port for NDI video input.

HDMI IN – HDMI port for digital video input.

LOCAL UI – For connection of local user interface elements:
- **Two USB 2.0 ports** for mouse, keyboard, USB memory device etc.
- **DP+ + port** for connection to a monitor (1920x1080 or better). This port supports adapters to VGA, DVI or HDMI.

Mains Input – Male IEC socket, accepts AC mains power at 100 - 240 V, 50/60 Hz. A power on/off switch for the System Controller is integrated into the IEC socket.

P3-275 front panel

Figure 6: P3-275 front panel

See Figure 6. The LED status indicators and Reset button on the P3-275 front panel have the following functions:

Active flashes during startup and lights continuously during operation.

Video In indicates that the currently selected video input is valid.

P3 Out indicates that the P3-275 is sending a P3 data signal on one or both of its P3 output ports.

Black/Freeze indicates that a Blackout or Freeze command is currently applied.

Remote indicates that the P3-275 is currently being controlled remotely via the management network interface port.

DMX/Motion lights when a valid EtherDMX (Art-Net or sACN) or Motion Control (Kinesys K2, Tait Navigator, etc.) signal is present at the EDMX Input connector on the rear panel.

Overtemp flashes if the P3-275 is approaching maximum safe operating temperature. Overtemp lights constantly if it has exceeded this temperature. A thermal protection circuit throttles down the processor if the temperature is exceeded.

The **Reset** button lets you carry out a forced reset (if the System Controller's P3 application freezes and you cannot reboot the processor normally, for example). Use the tip of a ballpoint pen to push the button. The System Controller constantly stores data in its onboard flash memory, so you are unlikely to lose data if the application fails.

The two **USB 3.1 ports** on the front panel can be used for any USB peripheral including the keyboard and mouse, but are most conveniently placed for portable memory devices. The keyboard and mouse can be connected to the two USB 2.0 ports on the rear connections panel.

System status information

You can view system status information in the P3 System Controller application. To see this information, click on the ***Settings*** button (see Figure 7) and select ***About*** from the menu. The ***About*** window shows the P3 System Controller software version, serial number, uptime (since the controller was last powered on), temperatures and more.

Figure 7: Settings button

Service

There are no user-serviceable parts inside the P3-175 and P3-275 System Controllers. Each controller is protected against overcurrent by a thermal cutout: there is no internal fuse. Apart from the operations described below, do not open any cover or attempt to modify or repair the unit. Doing so will void the product warranty. Refer all service not described below to Martin Professional or its authorized service agents.

Air filter replacement

Warning! Disconnect the power cable before replacing the air filters. Replace with new items from Martin only.

P3-175 and P3-275 System Controllers have air filters in the cooling fan air intakes on the front face of the unit. Check the filters regularly for signs of dirt, dust, condensate from smoke fluid, etc. and replace both the filters at the same time with new items when any more than slight contamination is visible. The filters are white to make it easy to see contamination. If you shine a light through the grill on the front of the unit, you can check filters without having to remove them.

New air filters are available in packs of ten from Martin suppliers.

Always replace air filters as a set.

P3-175

To replace the air filters on a P3-175:

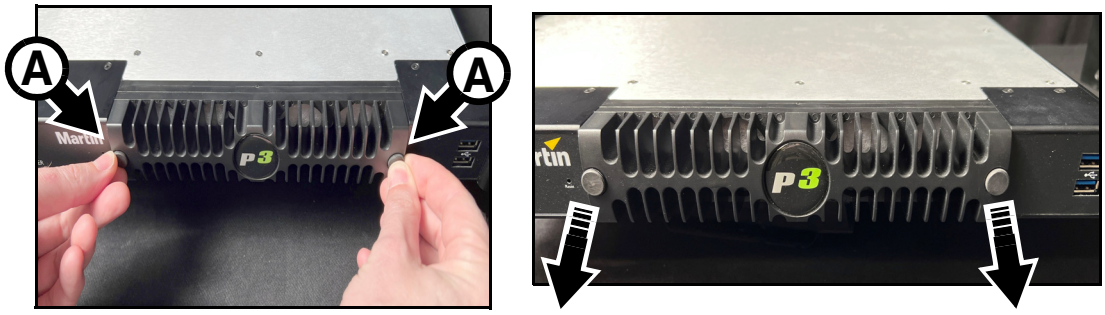


Figure 8: Access to air filters, P3-175

1. Switch off power at the IEC socket on the back of the controller and disconnect the power cable.
2. See Figure 8. Loosen the two thumbscrews **A** in the fan grill (arrowed) and unhook the fan grill from the controller.
3. See Figure 9. You can now see the air filters. Remove the used filters **B** and insert the new filters in their place.

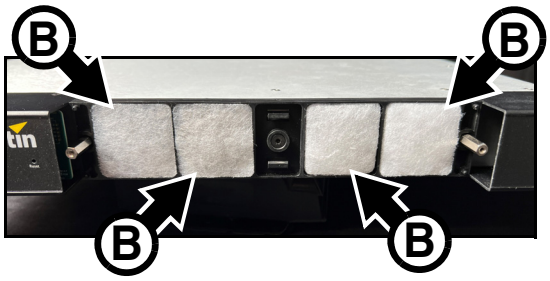


Figure 9: Replacing air filters, P3-175

4. Making sure that the filters stay in place and fully cover the air intakes, hold the fan grill up to the front of the controller and locate its four corner pins in their holes in the front of the controller. Then tighten the two thumbscrews **A** until the fan grill sits tightly in position.

P3-275

To replace the air filters on a P3-275:

1. Switch off power at the IEC socket on the back of the unit and disconnect the power cable.
2. See Figure 10. Using a flat-bladed screwdriver in the slot provided (arrowed), lever the filter holder up slightly, then pull it vertically up and out of the unit.
3. Remove the old filter and place a new one in the filter holder.
4. Slide the filter holder back down into the front of the unit, making sure that the filter stays in place and fully covers the air intake.
5. Replace the other filter using the same procedure.

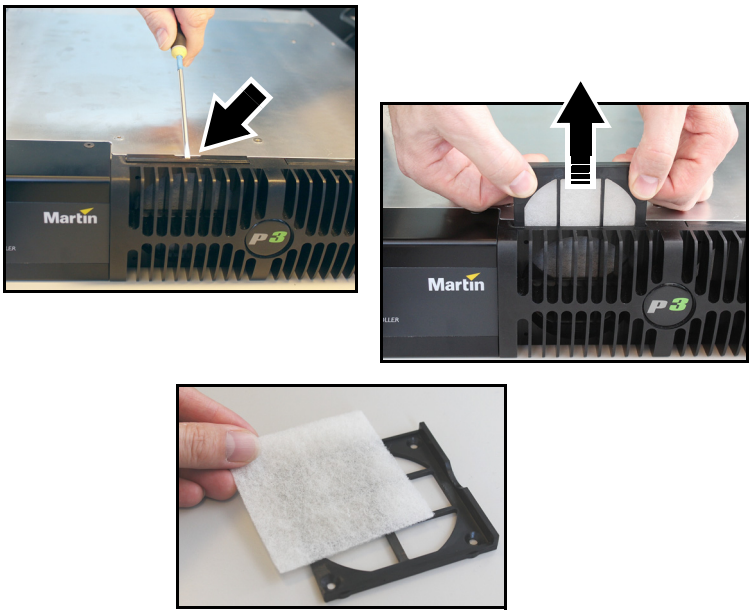


Figure 10: Replacing an air filter, P3-275

Updating and reloading P3-175 and P3-275 System Controllers software

Important! Martin releases new software for P3-175 and P3-275 System Controllers each time the software can be improved and new features added. Check the product support pages on the Martin website at www.martin.com when you first receive the controller and at regular intervals to make sure that the controller has the latest software installed. Check software release notes carefully before you update software.

Do not shut down or disconnect power while updating software in a P3 System Controller, as this will probably corrupt the data and may make the controller inoperable.

The P3-175 and P3-275 System Controllers software can be reloaded – overwriting the existing software – if an update becomes available or if you suspect that the software has become corrupted. The software is available for download from the P3-175 and P3-275 System Controllers area of the Martin website at www.martin.com.

To reload the software in a P3-175 or P3-275 controller:

1. Download the latest software for the controller from its product page on www.martin.com.
2. Copy the software to a USB memory device.
3. Connect the USB memory device to one of the controller's USB ports.
4. Select **Hardware Settings** in the **Settings** menu.
5. The current software version is displayed in the **Software** panel. Click on the **Reload** button and browse to the correct software file on the USB memory device. Click on **Open** and wait while data is copied.
6. If the file is copied successfully, a dialog box opens asking you to restart the controller. Click on **OK** and wait while the controller reboots on the new software. If the new software is corrupted or incorrect, the controller will return to the last valid software.

If the software on the P3 System Controller becomes corrupted and the machine no longer starts up correctly (it is impossible to open the **Hardware Setting** menu), consult the support pages at www.martin.com. A *Recovery Tool* is available to recover the machine to a working software version.

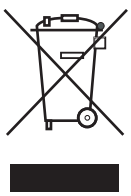
Internal battery

P3-175 and P3-275 System Controllers have CR2032 lithium button cell battery backup to maintain real-time clock operation when the unit is not powered. Batteries should last for at least 10 years and can be replaced when necessary. If you suspect that an internal battery is no longer providing backup power, contact Martin Professional for replacement. Use only the correct battery type. Do not try to recharge the battery, or you will create a risk of explosion.

Troubleshooting

Problem	Probable cause(s)	Remedy
Controller is completely dead.	No power to controller.	Check that power switch on back of controller is powered on. Check power and connections to controller.
	Thermal protection activated.	Disconnect power cable. Allow device to cool. Try to reconnect and switch on the device. If the problem happens repeatedly, disconnect the power cable and contact an authorized Martin service partner.
One or more P3-enabled fixtures not showing up on the P3 System Controller or behaving incorrectly.	Incorrect or faulty connection on P3 link.	Inspect connections and cables. Correct poor or incorrect connections. Repair or replace damaged cables.
	Incorrect device addressing.	Check addressing setup in controller software.
	Device defective.	Have faulty device serviced by an authorized Martin service partner.
	Other device (e.g. Ethernet switch) on P3 link defective.	Replace with a device known to be operating correctly. Have faulty device tested and serviced.
All devices and/or monitor screen display video incorrectly or do not display video at all.	Unusable video signal or defective video source.	Check video source.
	Fault on P3 link.	Inspect connections and cables. Correct poor connections. Repair or replace damaged cables.
	Device on P3 link defective.	Replace with a device known to be operating correctly. Have faulty device tested and serviced.
Controller cuts out (**Overtemp** LED gives warning)	Controller is too hot.	Allow controller to cool. Ensure free airflow around controller. Clean heatsinks on front and rear panels. Check that ambient temperature does not exceed max. permitted level. If problem persists, contact an authorized Martin service partner.

Table 1: Troubleshooting



Disposing of this product

Martin products are supplied in compliance with Directive 2012/19/EC of the European Parliament and of the Council of the European Union on WEEE (Waste Electrical and Electronic Equipment), where applicable.

Help preserve the environment! Ensure that this product is recycled at the end of its life. Your supplier can give details of local arrangements for the disposal of Martin products.

This product contains a lithium battery. Ensure that it is disposed of correctly and responsibly by an authorized recycling or waste disposal center at the end of its life. Where applicable, Martin participates in schemes whose aim is to ensure that local recycling and/or waste disposal centers accept batteries from Martin products.