

# **ATP-2000**

ADVANCED TOUCH PANEL

## **User Guide**

13-03082-230 AA

24 November 2020

## FCC Compliance

In order to comply with FCC/CFR47: Part 15 regulations, it is necessary to use high-quality, triple-screened Media or Monitor cable assemblies with integrated ferrite suppression at both ends.

## Patent Information

This product may be protected by one or more patents.

For further information, please visit: [www.grassvalley.com/patents/](http://www.grassvalley.com/patents/)

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## This Document

This document describes using a ATP-2000 Advanced Touch Panel, including: panel start up, configuration, integration into a GV Orbit system, panel operation, and customizing software panels from GV Orbit.

The ATP-2000 Advanced Touch Panel supports various Grass Valley devices for parameter control etc. The panel provides device-specific soft screens. For information about each device-specific screen, please see the separate corresponding individual device documentation.

## Related Documentation

Use the following related documentation to configure and use an *ATP-2000 Advanced Touch Panel*. You can obtain the latest product documentation from Grass Valley's website, see the 'Documentation Library' at <https://www.wapps.grassvalley.com/docs/page/>

| Part Number  | Document Title                      |
|--------------|-------------------------------------|
| -            | ATP-2000 Product Datasheet          |
| 13-03082-200 | ATP-2000 Software Release Notes     |
| 13-03082-210 | ATP-2000 Welcome Note               |
| 13-03082-230 | ATP-2000 User Guide (this document) |
| 13-03082-170 | GV Orbit Client User Guide          |



# Important Safety Information

This section provides important safety guidelines for operators and service personnel. Specific warnings and cautions appear throughout the manual where they apply. Please read and follow this important information, especially those instructions related to the risk of electric shock or injury to persons.

## Symbols and Their Meanings



Indicates that dangerous high voltage is present within the equipment enclosure that may be of sufficient magnitude to constitute a risk of electric shock.



Indicates that the user, operator or service technician should refer to the product manuals for important operating, maintenance, or service instructions.



This is a prompt to note the fuse rating when replacing fuses. The fuse referenced in the text must be replaced with one having the ratings indicated.



Identifies a protective grounding terminal which must be connected to earth ground prior to making any other equipment connections.



Identifies an external protective grounding terminal which may be connected to earth ground as a supplement to an internal grounding terminal.



Indicates that static sensitive components are present, which may be damaged by electrostatic discharge. Use anti-static procedures, equipment and surfaces during servicing.



Indicates that the equipment has more than one power supply cord, and that all power supply cords must be disconnected before servicing to avoid electric shock.



The presence of this symbol in or on Grass Valley equipment means that it has been tested and certified as complying with applicable Underwriters Laboratory (UL) regulations and recommendations for USA.



The presence of this symbol in or on Grass Valley equipment means that it has been tested and certified as complying with applicable Canadian Standard Association (CSA) regulations and recommendations for USA/Canada.



The presence of this symbol in or on Grass Valley equipment means that it has been tested and certified as complying with applicable Underwriters Laboratory (UL) regulations and recommendations for USA/Canada.



The presence of this symbol in or on Grass Valley equipment means that it has been tested and certified as complying with applicable Intertek Testing Services regulations and recommendations for USA/Canada.



The presence of this symbol in or on Grass Valley product means that it complies with all applicable European Union (CE) directives.



The presence of this symbol in or on Grass Valley product means that it complies with safety of laser product applicable standards.

## Warnings



A warning indicates a possible hazard to personnel, which may cause injury or death. Observe the following general warnings when using or working on this equipment:

- Appropriately listed/certified mains supply power cords must be used for the connection of the equipment to the rated mains voltage.
- This product relies on the building's installation for short-circuit (over-current) protection. Ensure that a fuse or circuit breaker for the rated mains voltage is used on the phase conductors.
- Any instructions in this manual that require opening the equipment cover or enclosure are for use by qualified service personnel only.
- Do not operate the equipment in wet or damp conditions.
- This equipment is grounded through the grounding conductor of the power cords. To avoid electrical shock, plug the power cords into a properly wired receptacle before connecting the equipment inputs or outputs.
- Route power cords and other cables so they are not likely to be damaged. Properly support heavy cable bundles to avoid connector damage.
- Disconnect power before cleaning the equipment. Do not use liquid or aerosol cleaners; use only a damp cloth.
- Dangerous voltages may exist at several points in this equipment. To avoid injury, do not touch exposed connections and components while power is on.
- High leakage current may be present. Earth connection of product is essential before connecting power.
- Prior to servicing, remove jewelry such as rings, watches, and other metallic objects.
- To avoid fire hazard, use only the fuse type and rating specified in the service instructions for this product, or on the equipment.
- To avoid explosion, do not operate this equipment in an explosive atmosphere.
- Use proper lift points. Do not use door latches to lift or move equipment.
- Avoid mechanical hazards. Allow all rotating devices to come to a stop before servicing.
- Have qualified service personnel perform safety checks after any service.

## Cautions



A caution indicates a possible hazard to equipment that could result in equipment damage. Observe the following cautions when operating or working on this equipment:

- This equipment is meant to be installed in a restricted access location.
- When installing this equipment, do not attach the power cord to building surfaces.
- Products that have no on/off switch, and use an external power supply must be installed in proximity to a main power outlet that is easily accessible.
- Use the correct voltage setting. If this product lacks auto-ranging power supplies, before applying power ensure that each power supply is set to match the power source.
- Provide proper ventilation. To prevent product overheating, provide equipment ventilation in accordance with the installation instructions.
- Do not operate with suspected equipment failure. If you suspect product damage or equipment failure, have the equipment inspected by qualified service personnel.
- To reduce the risk of electric shock, do not perform any servicing other than that contained in the operating instructions unless you are qualified to do so. Refer all servicing to qualified service personnel.
- This unit may have more than one power supply cord. Disconnect all power supply cords before servicing to avoid electric shock.
- Follow static precautions at all times when handling this equipment. Servicing should be done in a static-free environment.
- To reduce the risk of electric shock, plug each power supply cord into separate branch circuits employing separate service grounds.

## Electrostatic Discharge (ESD) Protection



Electrostatic discharge occurs when electronic components are improperly handled and can result in intermittent failure or complete damage adversely affecting an electrical circuit. When you remove and replace any card from a frame always follow ESD-prevention procedures:

- Ensure that the frame is electrically connected to earth ground through the power cord or any other means if available.
- Wear an ESD wrist strap ensuring that it makes good skin contact. Connect the grounding clip to an *unpainted surface* of the chassis frame to safely ground unwanted ESD voltages. If no wrist strap is available, ground yourself by touching the *unpainted* metal part of the chassis.
- For safety, periodically check the resistance value of the antistatic strap, which should be between 1 and 10 megohms.
- When temporarily storing a card make sure it is placed in an ESD bag.
- Cards in an earth grounded metal frame or casing do not require any special ESD protection.

## Battery Handling



This product may include a backup battery. There is a danger of explosion if the battery is replaced incorrectly. Replace the battery only with the same or equivalent type recommended by the manufacturer. Dispose of used batteries according to the manufacturer's instructions. Before disposing of your Grass Valley equipment, please review the *Disposal and Recycling Information* at:

[http://www.grassvalley.com/assets/media/5692/Take-Back\\_Instructions.pdf](http://www.grassvalley.com/assets/media/5692/Take-Back_Instructions.pdf)

## Cautions for LCD and TFT Displays



Excessive usage may harm your vision. Rest for 10 minutes for every 30 minutes of usage.

If the LCD or TFT glass is broken, handle glass fragments with care when disposing of them. If any fluid leaks out of a damaged glass cell, be careful not to get the liquid crystal fluid in your mouth or skin. If the liquid crystal touches your skin or clothes, wash it off immediately using soap and water. Never swallow the fluid. The toxicity is extremely low but caution should be exercised at all times.



## Mesures de sécurité et avis importants

La présente section fournit des consignes de sécurité importantes pour les opérateurs et le personnel de service. Des avertissements ou mises en garde spécifiques figurent dans le manuel, dans les sections où ils s'appliquent. Prenez le temps de bien lire les consignes et assurez-vous de les respecter, en particulier celles qui sont destinées à prévenir les décharges électriques ou les blessures.

### Signification des symboles utilisés



Signale la présence d'une tension élevée et dangereuse dans le boîtier de l'équipement ; cette tension peut être suffisante pour constituer un risque de décharge électrique.



Avertit l'utilisateur, l'opérateur ou le technicien de maintenance que des instructions importantes relatives à l'utilisation et à l'entretien se trouvent dans la documentation accompagnant l'équipement.



Invite l'utilisateur, l'opérateur ou le technicien de maintenance à prendre note du calibre du fusible lors du remplacement de ce dernier. Le fusible auquel il est fait référence dans le texte doit être remplacé par un fusible du même calibre.



Identifie une borne de mise à la terre de protection. Il faut relier cette borne à la terre avant d'effectuer toute autre connexion à l'équipement.



Identifie une borne de mise à la terre externe qui peut être connectée en tant que borne de mise à la terre supplémentaire.



Signale la présence de composants sensibles à l'électricité statique et qui sont susceptibles d'être endommagés par une décharge électrostatique. Utilisez des procédures, des équipements et des surfaces antistatiques durant les interventions d'entretien.



Le symbole ci-contre signifie que l'appareil comporte plus d'un cordon d'alimentation et qu'il faut débrancher tous les cordons d'alimentation avant toute opération d'entretien, afin de prévenir les chocs électriques.



La marque UL certifie que l'appareil visé a été testé par Underwriters Laboratory (UL) et reconnu conforme aux exigences applicables en matière de sécurité électrique en vigueur au Canada et aux États-Unis.



La marque C-CSA-US certifie que l'appareil visé a été testé par l'Association canadienne de normalisation (CSA) et reconnu conforme aux exigences applicables en matière de sécurité électrique en vigueur au Canada et aux États-Unis.



La marque C-UL-US certifie que l'appareil visé a été testé par Underwriters Laboratory (UL) et reconnu conforme aux exigences applicables en matière de sécurité électrique en vigueur au Canada et aux États-Unis.



La marque ETL Listed d'Intertek pour le marché Nord-Américain certifie que l'appareil visé a été testé par Intertek et reconnu conforme aux exigences applicables en matière de sécurité électrique en vigueur au Canada et aux États-Unis.



Le marquage CE indique que l'appareil visé est conforme aux exigences essentielles des directives applicables de l'Union européenne en matière de sécurité électrique, de compatibilité électromagnétique et de conformité environnementale.



Le symbole ci-contre sur un appareil Grass Valley ou à l'intérieur de l'appareil indique qu'il est conforme aux normes applicables en matière de sécurité laser.

## Avertissements



Les avertissements signalent des conditions ou des pratiques susceptibles d'occasionner des blessures graves, voire fatales. Veuillez vous familiariser avec les avertissements d'ordre général ci-dessous :

- Un cordon d'alimentation dûment homologué doit être utilisé pour connecter l'appareil à une tension de secteur de 120 V CA ou 240 V CA.
- La protection de ce produit contre les courts-circuits (surintensités) dépend de l'installation électrique du bâtiment. Assurez-vous qu'un fusible ou un disjoncteur pour 120 V CA ou 240 V CA est utilisé sur les conducteurs de phase.
- Dans le présent manuel, toutes les instructions qui nécessitent d'ouvrir le couvercle de l'équipement sont destinées exclusivement au personnel technique qualifié.
- N'utilisez pas cet appareil dans un environnement humide.
- Cet équipement est mis à la terre par le conducteur de mise à la terre des cordons d'alimentation. Pour éviter les chocs électriques, branchez les cordons d'alimentation sur une prise correctement câblée avant de brancher les entrées et sorties de l'équipement.
- Acheminez les cordons d'alimentation et autres câbles de façon à ce qu'ils ne risquent pas d'être endommagés. Supportez correctement les enroulements de câbles afin de ne pas endommager les connecteurs.
- Coupez l'alimentation avant de nettoyer l'équipement. Ne pas utiliser de nettoyeurs liquides ou en aérosol. Utilisez uniquement un chiffon humide.
- Des tensions dangereuses peuvent exister en plusieurs points dans cet équipement. Pour éviter toute blessure, ne touchez pas aux connexions ou aux composants exposés lorsque l'appareil est sous tension.
- Avant de procéder à toute opération d'entretien ou de dépannage, enlevez tous vos bijoux (notamment vos bagues, votre montre et autres objets métalliques).
- Pour éviter tout risque d'incendie, utilisez uniquement les fusibles du type et du calibre indiqués sur l'équipement ou dans la documentation qui l'accompagne.

- Ne pas utiliser cet appareil dans une atmosphère explosive.
- Présence possible de courants de fuite. Un raccordement à la masse est indispensable avant la mise sous tension.
- Après tout travail d'entretien ou de réparation, faites effectuer des contrôles de sécurité par le personnel technique qualifié.

## Mises en garde



Les mises en garde signalent des conditions ou des pratiques susceptibles d'endommager l'équipement. Veuillez vous familiariser avec les mises en garde ci-dessous :

- L'appareil est conçu pour être installé dans un endroit à accès restreint.
- Au moment d'installer l'équipement, ne fixez pas les cordons d'alimentation aux surfaces intérieures de l'édifice.
- Les produits qui n'ont pas d'interrupteur marche-arrêt et qui disposent d'une source d'alimentation externe doivent être installés à proximité d'une prise de courant facile d'accès.
- Si l'équipement n'est pas pourvu d'un modules d'alimentation auto-adaptables, vérifiez la configuration de chacun des modules d'alimentation avant de les mettre sous tension.
- Assurez une ventilation adéquate. Pour éviter toute surchauffe du produit, assurez une ventilation de l'équipement conformément aux instructions d'installation.
- N'utilisez pas l'équipement si vous suspectez un dysfonctionnement du produit. Faites-le inspecter par un technicien qualifié.
- Pour réduire le risque de choc électrique, n'effectuez pas de réparations autres que celles qui sont décrites dans le présent manuel, sauf si vous êtes qualifié pour le faire. Confiez les réparations à un technicien qualifié. La maintenance doit se réaliser dans un milieu libre d'électricité statique.
- L'appareil peut comporter plus d'un cordon d'alimentation. Afin de prévenir les chocs électriques, débrancher tous les cordons d'alimentation avant toute opération d'entretien.
- Veillez à toujours prendre les mesures de protection antistatique appropriées quand vous manipulez l'équipement.
- Pour réduire le risque de choc électrique, branchez chaque cordon d'alimentation dans des circuits de dérivation distincts utilisant des zones de service distinctes.

## Protection contre les décharges électrostatiques (DES)



Une décharge électrostatique peut se produire lorsque des composants électroniques ne sont pas manipulés de manière adéquate, ce qui peut entraîner des défaillances intermittentes ou endommager irrémédiablement un circuit électrique. Au moment de remplacer une carte dans un châssis, prenez toujours les mesures de protection antistatique appropriées :

- Assurez-vous que le châssis est relié électriquement à la terre par le cordon d'alimentation ou tout autre moyen disponible.

- Portez un bracelet antistatique et assurez-vous qu'il est bien en contact avec la peau. Connectez la pince de masse à une *surface non peinte* du châssis pour détourner à la terre toute tension électrostatique indésirable. En l'absence de bracelet antistatique, déchargez l'électricité statique de votre corps en touchant une surface métallique *non peinte* du châssis.
- Pour plus de sécurité, vérifiez périodiquement la valeur de résistance du bracelet antistatique. Elle doit se situer entre 1 et 10 mégohms.
- Si vous devez mettre une carte de côté, assurez-vous de la ranger dans un sac protecteur antistatique.
- Les cartes qui sont reliées à un châssis ou boîtier métallique mis à la terre ne nécessitent pas de protection antistatique spéciale.

## Manipulation de la pile



Ce produit peut inclure une pile de sauvegarde. Il y a un risque d'explosion si la pile est remplacée de manière incorrecte. Remplacez la pile uniquement par un modèle identique ou équivalent recommandé par le fabricant. Disposez des piles usagées conformément aux instructions du fabricant. Avant de vous séparer de votre équipement Grass Valley, veuillez consulter les *informations de mise au rebut et de recyclage* à:

[http://www.grassvalley.com/assets/media/5692/Take-Back\\_Instructions.pdf](http://www.grassvalley.com/assets/media/5692/Take-Back_Instructions.pdf)

## Environmental Information

European (CE) WEEE directive.



This symbol on the product(s) means that at the end of life disposal it should not be mixed with general waste.

Visit [www.grassvalley.com](http://www.grassvalley.com) for recycling information.

Grass Valley believes this environmental information to be correct but cannot guarantee its completeness or accuracy since it is based on data received from sources outside our company. All specifications are subject to change without notice.

If you have questions about Grass Valley environmental and social involvement (WEEE, RoHS, REACH, etc.), please contact us at [environment@grassvalley.com](mailto:environment@grassvalley.com).

## Further Safety Information

### Lithium Batteries

#### Battery Warning

**CAUTION**

This equipment contains a lithium battery.  
**There is a danger of explosion if this is replaced incorrectly.**  
Replace only with the same or equivalent type.  
Dispose of used batteries according to the manufacturer's  
instructions.  
Batteries **shall only** be replaced by trained service technicians.

Your Grass Valley equipment usually comes with at least one button cell (coin cell) battery located on the main printed circuit board. The batteries are used for settings backup and should not need to be replaced during the lifetime of the equipment.

#### WARNINGS

- Be careful not to short-circuit the battery by adhering to the appropriate safe handling practices.
- Do not dispose of a battery into fire or a hot oven, or mechanically crush it, or cut it, because this can result in an explosion.
- Do not dispose of batteries in a fire as they may explode.
- Batteries may explode if damaged or overheated.
- Do not dismantle, open or shred batteries.
- Do not leave a battery in an extremely high temperature surrounding environment that can result in an explosion or the leakage of flammable liquid or gas.
- Do not subject a battery to extremely low air pressure because this may result in an explosion or the leakage of flammable liquid or gas.
- In the event of a battery leak, do not allow battery liquid to come in contact with skin or eyes.
- Seek medical help immediately in case of ingestion, inhalation, skin or eye contact, or suspected exposure to contents of an opened battery.

#### Battery Disposal

Before disposing of your Grass Valley equipment, please:

- 1 Ensure the AC adapter / power cord is unplugged from the power supply.
- 2 Remove the battery as described in Appendix E, [Battery Replacement](#), on page 61.
- 3 Dispose of the battery and equipment according to your local environmental laws and guidelines.

## Display

**WARNING**

Do not drop or knock the unit/display because the front is made of glass.

**WARNING**

If the display front glass is broken, do not inhale nor lick any internal organic substance that may leak out. If any leakage touches your skin or clothes, wash it off immediately using soap and plenty of water.

**CAUTION**

Do not apply pressure to the display surface nor to its surroundings because the internal LCD cell structure of the display may be damaged.

**CAUTION**

Be careful when handling and touching the display because the polarized front surface is soft and easily scratched.

### Cleaning the Display Front

To clean a dirty display front, use an adhesion tape of the following type to lift any dirt off:

- Scotch Mending Tape No. 810 (for example, Scotch Magic™ Tape 810), or an equivalent.

**CAUTION**

Do not breathe upon a dirty display surface to clean it.

Do not wipe the display surface with a cloth.

Do not use any of the following solvents on the display surface:

- Water.
- Ketones (for example, Acetone).
- Aromatic Solvents.

## Mains Supply Voltage

Before connecting the ATP-2000 unit to a mains electricity supply with the Power Supply Unit, observe the safety warnings section and ensure that the local mains supply is within the rating stated on the rear of the Power Supply Unit.

**WARNING**

Class I Equipment. This equipment must be earthed. The power plug must be connected to a properly wired earth ground socket outlet. An improperly wired socket outlet could place hazardous voltages on accessible metal parts.

## Safety and EMC Standards

This equipment complies with the following standards:



### Safety Standards

**IEC 62368-1:2014 (Second Edition)**

Audio/video information and communication technology low voltage equipment.

**EN 62368-1:2014+A11:2017 (Second Edition)**

Audio/video information and communication technology low voltage equipment.

### EMC Standards

**EN 55032:2015+AC:2016 Class A**

Electromagnetic Compatibility of multimedia equipment - Emission requirements

**EN IEC 61000-3-2:2019 Class D**

Electromagnetic Compatibility - Limits for harmonic current emissions

**EN 61000-3-3:2013+A1:2019**

Electromagnetic Compatibility - Limits of voltage changes, voltage fluctuations and flicker

**EN 55024:2010+A1:2015**

Immunity requirements for information technology equipment.

**FCC / CFR 47:Part 15 (Class A)**

FCC Part 15 Subpart B Class A

ISED Standard(s): ICES-003 Issue 6:2016 (updated April 2019) Class A

Measurement Procedure(s): ANSI C63.4-2014

**CAUTION**

Changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.



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Note: This equipment has been tested and found to comply with the limits for a Class A digital device, pursuant to part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference when the equipment is operated in a commercial environment.

This equipment generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with the instruction manual, may cause harmful interference to radio communications.

Operation of this equipment in a residential area is likely to cause harmful interference in which case the user will be required to correct the interference at his own expense.

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## **EMC Performance of Cables and Connectors**

Grass Valley products are designed to meet or exceed the requirements of the appropriate European EMC standards. In order to achieve this performance in real installations it is essential to use cables and connectors with good EMC characteristics.

All signal connections (including remote control connections) shall be made with screened cables terminated in connectors having a metal shell. The cable screen shall have a large-area contact with the metal shell.

# toc

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# 1 Introduction

## Introduction

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## Product Overview

The ATP-2000 Advanced Touch Panel is a shallow, wide-angle 2RU touch-screen control panel. It offers a variety of soft panels for user control of device parameters, monitoring and signal routing in modern broadcast environments. The panel is used in a GV Orbit system.

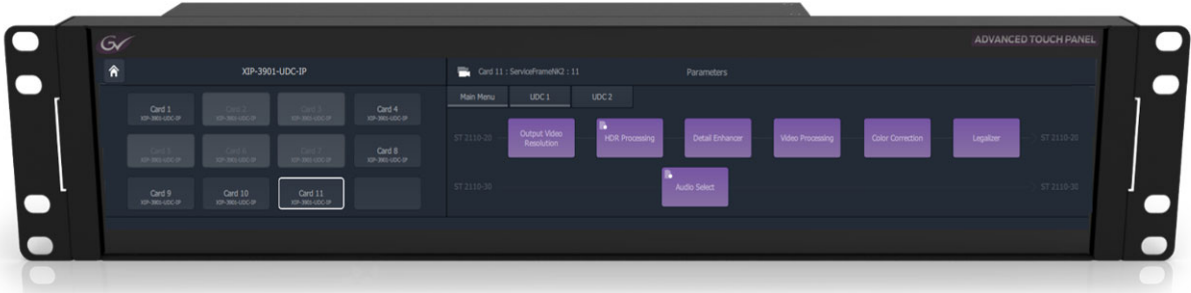


Fig. 1-1: ATP-2000 Advanced Touch Panel

Benefits and features include:

- Fan-less cooling design for low noise and reliability.
- High quality touch screen and symmetrical viewing angle.
- Flexible and optimized soft user control panels.
- Device parameter control.
- Fail-safe file system.

An ATP-2000 initially powers up and discovers devices of a Grass Valley GV Orbit system. Soft panels are available for supported devices.

## Order Codes

Table 1-1: ATP-2000 Advanced Touch Panel Order Codes

| Order Code       | ITEM  |
|------------------|---|
| <b>ATP-2000</b>  | ATP-2000 2RU Advanced Touch Panel unit<br>+ Power Supply Unit |
| <b>ATP-PS01</b>  | ATP-2000 Power Supply Unit (Field replaceable).               |
| <b>ATP-BAT01</b> | ATP-2000 replacement battery unit.                            |

## Software Versions

Table 1-2: Software Versions

| Software                 | Version   |
|--------------------------|---|
| <b>ATP-2000 software</b> | v1.0.0 or later   |
| <b>GV Orbit</b>          | v1.5.0 or later (See <b>Note 1</b> )  |
| <b>Note 1:</b>           | The panel is designed to work with a GV Orbit system and requires the system to have its DHCP facility enabled when configured. |

## Supported Devices

The ATP-2000 Advanced Touch Panel supports the ability to configure, control, and monitor parameters on IQ and Densité devices.

Table 1-3: ATP-2000 - Supported Devices

| Card            | Software Version                        | Comment   |
|-----------------|---|---|
| <b>XIP-3901</b> | XIP-3901-UDC-IP version 1.2.0 build 439 | Ability to configure basic operational parameters for an XIP-3901 device. |
|                 |   |   |
|                 |   |   |

---

Note: Refer to the *ATP-2000 Software Release Notes*, see [Related Documentation](#), on page iii, and also see documentation for the respective card/unit for more information.

---

## This Document

This document presents the ATP-2000 product, how to get started with it and how to operate it.

See:

- Chapter 2, [Panel Installation](#), on page 5, for rack installation instructions
- Chapter 3, [Getting Started](#), on page 13, for instructions on getting started with an ATP-2000 in a GV Orbit system.
- Chapter 4 [ATP-2000 Control Screen \(Web Page\)](#), on page 21, for information on the panel's configuration web page.
- Chapter 5 [Operation](#), on page 27, for operation instructions.
- Chapter 6 [Maintenance](#), on page 35, for maintenance instructions.

For ATP-2000 hardware information, see:

- Appendix A, [Hardware Specification](#), on page 47;
- Appendix B, [Unit Dimensions](#), on page 53;
- Appendix C, [Connectors, Controls, Interfaces](#), on page 55;

For power supply unit information, see:

- Appendix D, [Power Supply Unit](#), on page 59.





# 2 Panel Installation

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## Unpacking

The ATP-2000 is supplied in dedicated packaging provided by the manufacturer and should not be accepted if delivered in inferior or unauthorized materials.

- 1 Carefully unpack the components and check them against the listed items here:
  - 1x ATP-2000 control panel unit.
  - 1x Accessory box containing:
    - 1x DC power supply module;
    - AC power cords (1x US, 1x GB, 1x Eu); and
    - 1x 5m Ethernet cable.
  - 1x ATP-2000 Welcome Note.



If there is anything incorrect, then notify your Grass Valley Partner, or Grass Valley, at once. (See [Grass Valley Technical Support](#), on page 69.)

- 2 Check that the equipment has not been damaged in transit.  
If any damage has occurred notify your Grass Valley Partner (or Grass Valley directly) and the carrier immediately.
- 3 Always retain the original packing materials if possible, they could prove useful should it ever be necessary to transport or ship the equipment.
- 4 Always read the installation and the user instructions carefully, it will provide you with helpful hints and tips about care and maintenance and help you get the most out of your ATP-2000 Advanced Touch Panel.
- 5 Place the unit on a suitable surface for preliminary inspection.

## Rack Mount Installation

The ATP-2000 can be mounted into a 19 inch rack. It requires 2RU of vertical space in a desk-mount or full-rack system:

- 1 Select an equipment rack location with a nearby AC power socket.
- 2 Install the DC Power Supply Module into the rack.

**CAUTION**

Support the body of the DC Power Supply Module.  
Do not let it hang by any electrical cords.

- 3 Locate the ATP-2000 unit in the rack.

**CAUTION**

Allow 50mm (approximately 2 inches) clearance at the rear of the ATP-2000 for unit cooling airflow, mating connectors and cables.



Fig. 2-1: Rear Air Venting Grilles

- 4 Secure the ATP-2000 unit in the rack with four M6 screws and washers. Fasten it to captive nuts of the rack frame mounting strip. See Figure 2-2.

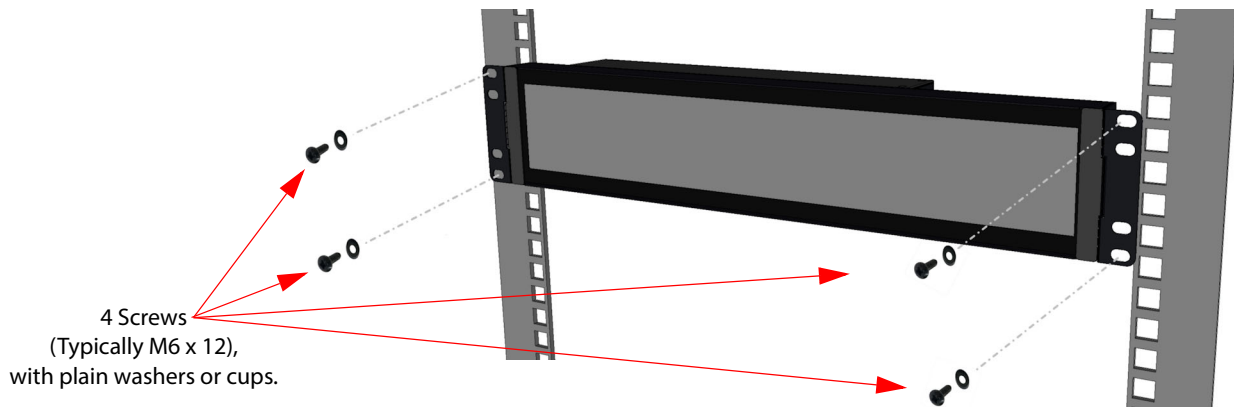


Fig. 2-2: ATP-2000 Rack Mounting

Note: See [Environmental](#), on page 49 in Appendix A, for information about the ATP-2000 unit's operating temperature range.

## Vesa Mount Installation

Alternatively, the ATP-2000 can be mounted on a suitable Vesa bracket via its Vesa 75x75 mount:

- 1 Select a location with a nearby AC power socket.
- 2 Install the DC Power Supply Module nearby.

---

**CAUTION**

Support the body of the DC Power Supply Module.  
Do not let it hang by any electrical cords.

---

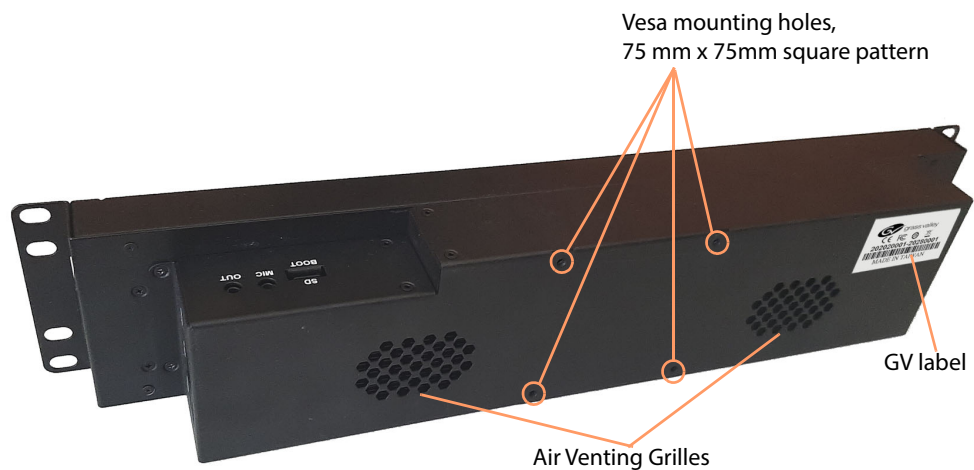
- 3 Locate the ATP-2000 unit in position.

---

**CAUTION**

Allow 50mm (approximately 2 inches) clearance at the rear of the ATP-2000 for unit cooling airflow, mating connectors and cables.

---



*Fig. 2-3: ATP-2000 Unit Rear View*

- 4 Secure the ATP-2000 unit to the Vesa mounting bracket with four M4 x 10mm screws and washers. Fasten it to captive nuts of the rack frame mounting strip.

---

Note: See [Environmental](#), on page 49 in Appendix A, for information about the ATP-2000 unit's operating temperature range.

---

## Connections

All necessary rack connections to the unit are made to the left-hand side and right-hand side of the unit. (See Figure 2-4.)

---

Note: See [Connectors, Controls, Interfaces](#), on page 55 in Appendix C, for connector details.

---

- 1 Connect an Ethernet network cable to "LAN" with a DHCP service enabled. (See Figure 2-4b.)

---

Note: The ATP-2000 unit needs to be connected to the same 'control/management' network as the GV Orbit server(s).

---

- 2 Connect the DC power lead from the power supply unit to "DC 12V". (See Figure 2-4c.)

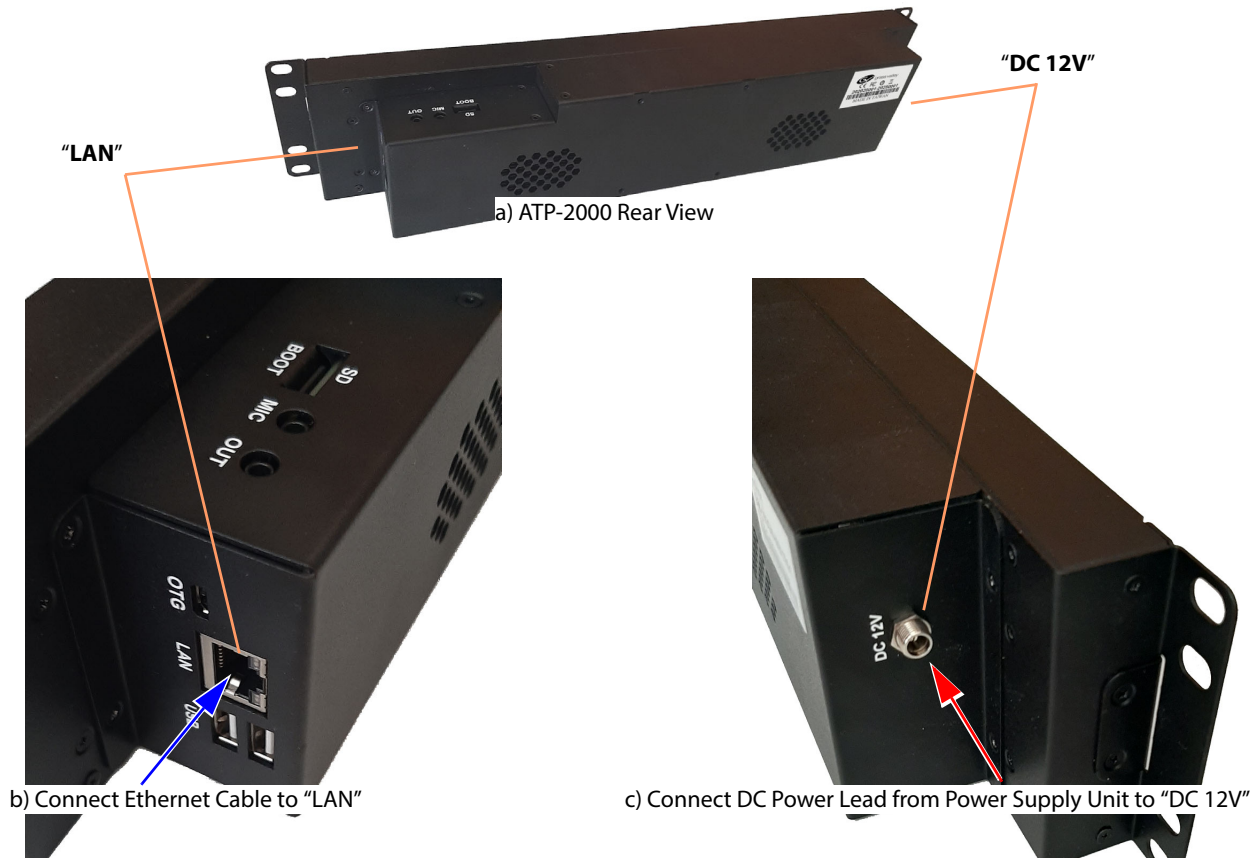


Fig. 2-4: ATP-2000 Connections

- 3 Connect the power supply unit to an AC mains supply.

---

**CAUTION** Do not make any other connections to the unit.

---

- 4 Apply AC power.

The ATP-2000 unit powers on automatically; there is no power on/off switch.

**CAUTION** An ATP-2000 Advanced Touch Panel contains two micro SD memory cards. These are fitted to two micro SD card slots in the unit and should not be removed.



Fig. 2-5: ATP-2000 Connections

## Starting Up

The panel runs through its start-up sequence when power is applied. This lasts approximately 1 minute.

Note: An ATP-2000 panel ships with DHCP enabled. The panel requires a GV Orbit system to have its DHCP facility enabled: On unit power up, an IP address is then assigned automatically by GV Orbit.

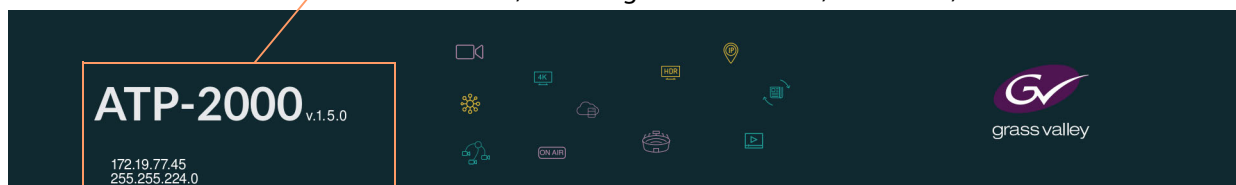
During start-up, the unit briefly displays:

- an initial screen (see Figure 2-6a); followed by
- a splash screen (see Figure 2-6b); and, after start-up,
- a home screen (see Figure 2-6c).

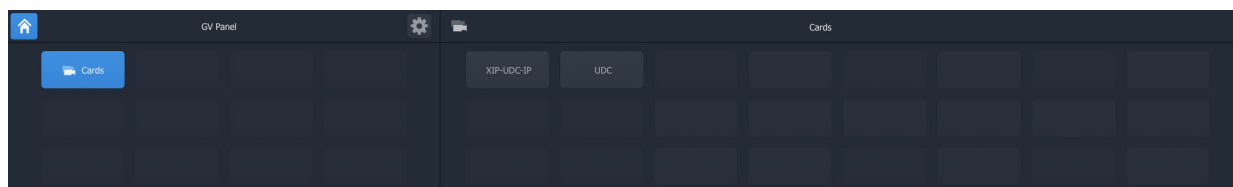


a) Initial Screen

Panel unit information, including: Model number, IP address, and software version.



b) Splash Screen



c) Home Screen

Fig. 2-6: ATP-2000 Start-Up Screens: a) Initial Screen; b) Splash Screen; c) Home Screen.

When the ATP-2000 Advanced Touch Panel is showing its **Home Screen** in the rack, then its rack installation is complete. (See [Start-Up Sequence](#), on page 14, for more information about the device's start up sequence.)

To get started, see [Getting Started](#), on page 13.



## **Powering Off**

To power off the ATP-2000 unit, turn off the DC power that enters the unit from the side. No shutdown procedure is required because the hardware and file system is fail-safe.

# 3

## Getting Started

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This chapter assumes that the ATP-2000 Advanced Touch Panel has been installed in a rack, see [Panel Installation](#), on page 5.

## Start-Up Sequence

The panel runs through its start-up sequence when powered on. This lasts approximately 1 minute. During start-up the panel briefly displays:

- 1 an **Initial Start-up Screen**; followed by
- 2 a **Splash Screen** for about 1 minute; and finally
- 3 an operating **Home Screen**.

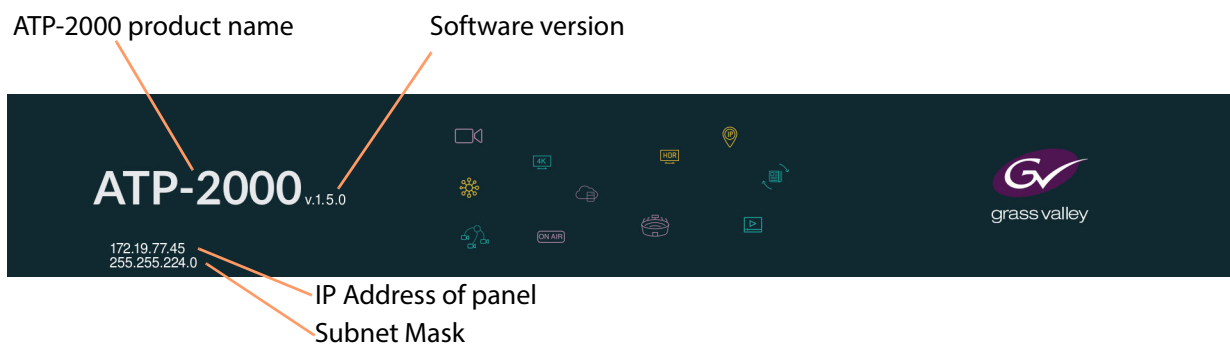
### Initial Start-up Screen

The ATP-2000 initial GV Grass Valley start-up screen is shown in Chapter 2, [Figure 2-6](#) on page 11.

### Splash Screen

During start-up, the panel briefly displays an initial screen followed by a **Splash** screen, which shows some unit information, including:

- ATP-2000 panel model number.
- ATP-2000 software version.
- Unit's IP address.



*Fig. 3-1: ATP-2000 Splash Screen*

### Home Screen

After start-up, the ATP-2000 shows an operating **Home** screen. See [Figure 3-2](#) for an example home screen.

---

Note: The operating **Home** screen shown depends on the soft panel currently loaded into the ATP-2000 Advanced Touch Panel.

---

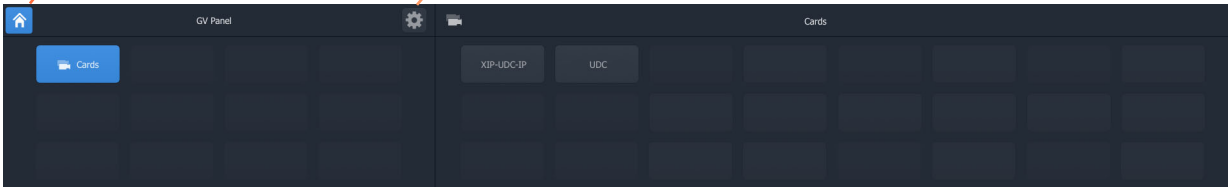
---

Note: Click the **Home** icon on any screen to return to the **Home** screen.

---

Click the **Home** icon to return to the **Home** screen.

Select icon to see panel information.



*Fig. 3-2: Example ATP-2000 Home Screen (Software version 1.0)*

---

Note: Screen brightness is controlled from the unit's control screen (web page). See [Accessing the ATP-2000 Control Screen](#).

---

# Initial ATP-2000 Panel Device Configuration

## Introduction

Configuring the ATP-2000 panel device is done from its control screen (web page). The IP address of the unit is shown on the splash screen at power on. (See [Figure 3-1](#) on page 14.)

### IP Address Assignment

The ATP-2000 panel ships with DHCP enabled in its network settings. If a static IP address is required, then this can be set up from the unit's control screen (web page) along with other network interface settings. (See [Step 1: Network Settings](#), on page 18.) If the panel is connected to a network with a DHCP service enabled, then a suitable IP address is automatically assigned to the unit at power on.

### Panel ID Assignment

The ATP-2000 panel ships with no Panel ID set. This means that the panel will be presented in the **Network** window of GV Orbit Client in the discovered devices section, without a Panel ID yet being set.

A unique Panel ID must be set. (See [Step 2: GV Orbit Server Settings](#), on page 18.)

---

Note: The Panel ID takes the form of a RollCall address which must be unique in a GV Orbit system.

---

### Panel Discovery

GV Orbit Client can automatically discover the panel (and its IP address) if the panel is connected to a network with DHCP enabled *and with* multicast data packets enabled as part of a GV Orbit system; the panel is presented in the Client's **Network** window. If the panel's Panel ID has not yet been set up, then the ATP-2000 appears in the 'unassigned devices' section of the **Network** window.

---

Note: An ATP-2000 panel is discoverable, if multicast network traffic is enabled and is visible to the Client and to the panel. See *ATP-2000 Software Release Notes* for IP port information. (See [Related Documentation](#), on page iii.)

---

The control screen of the ATP-2000 panel can be opened from GV Orbit Client via the **Network** window (right-click on the panel item and select 'Control').

---

Note: A web browser can be used to see the ATP-2000 panel's control screen (web page), by entering the panel's IP address into the browser.

---

### Device List

In a GV Orbit system, the ATP-2000 automatically advertises its presence to the GV Orbit server(s), and it receives a list of devices that it may control and it populates its **Home** screen, listing the devices etc.

In this way, the ATP-2000 automatically joins the GV Orbit system and is seen by all GV Orbit Clients and appears as a device in a GV Orbit Client's **Network** window.

## Accessing the ATP-2000 Control Screen

### From GV Orbit Client

When DHCP is enabled on the ATP-2000 panel (default) and when the network that the GV Orbit system uses has multicast enabled, then an ATP-2000 panel can be discovered and appear in the **Network** window of the GV Orbit Client. If the panel has not yet been set up, then it appears in the 'unassigned devices' section of the **Network** window.

In this case, to view the control screen (web page):

- 1 Right-click on the ATP-2000 item in the **Network** window and select 'Control'.  
The unit's control screen web page is shown. See Figure 3-3.  
(See [ATP-2000 Control Screen \(Web Page\)](#), on page 21 for a full description.)

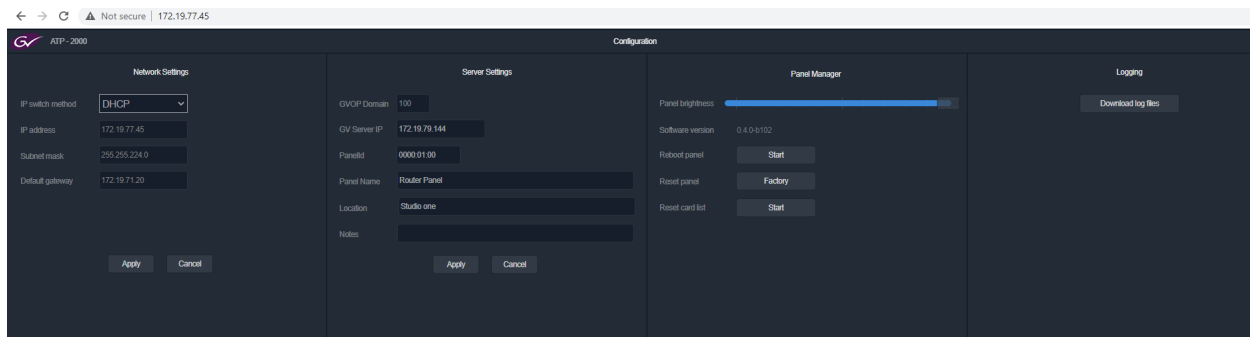


Fig. 3-3: ATP-2000 Web Page

Note: The ATP-2000 control screen (web page) is wide. Use pan/scroll bars to navigate the extent of the screen, if necessary.

### From a Web Browser

To initially display the device's control screen (web page) *without* a GV Orbit system:

- 1 Note down the IP address of the unit, shown on its splash screen at start up (see [Figure 3-1](#) on page 14).
- 2 Enter the IP address of the unit into a web browser (for example, Chrome).  
The unit's control screen (web page) is shown. See [Figure 3-3](#) on page 17.

## Configure Initial Settings in the Control Screen

The minimum initial settings needed to get started with the panel are described below. On the ATP-2000 control screen (web page), configure the following items:

- [Step 1: Network Settings](#)
- [Step 2: GV Orbit Server Settings](#)
- [Step 3: Panel Manager Settings](#)

### Step 1: Network Settings

- 1 In the default panel configuration, DHCP is enabled on the panel. In this case, no further network settings action is required and proceed to [Step 2: GV Orbit Server Settings](#).

However,

if other, particular network settings are required then do the following:

- 2 Configure the unit's network settings for the following, as required:
  - DHCP or static IP address enabled; and
  - for the static IP address case:
    - IP Address.
    - Subnet mask.
    - Default gateway IP address.
- 3 Click **Apply** to apply any network settings changes.

---

Note: An ATP-2000 panel is discoverable by the GV Orbit Client, if multicast network traffic is enabled and is visible to both the Client and the panel. See *ATP-2000 Software Release Notes* for IP port information. (See [Related Documentation](#), on page iii.)

---

### Step 2: GV Orbit Server Settings

- 1 Configure GV Orbit server settings:
  - **GVOP Domain** - GV Orchestration Protocol (GVOP) Domain number.
  - **GV Server IP** - IP address of the GV Orbit server in the system.
  - **PanelId** - 'Panel Id' for the ATP-2000 unit in the GV Orbit system. This is a RollCall address (for example E000:01:00) which must be unique in a system.
  - **Panel Name** - Enter a unique and meaningful 'Panel Name' for the ATP-2000 unit in the system (for example, 'Eng GV Panel').

---

Note: **Panel Name** will identify the panel, for example, in the **Network** window of GV Orbit Client.

---

- Optionally, enter:
    - **Location** - A location for the panel (for example, 'Studio A'); and
    - **Notes** - Any operational, informative notes to accompany the panel.
- 2 Click **Apply** to apply the server settings.

### Step 3: Panel Manager Settings

- 1 Adjust the unit's display 'Panel Brightness' with the slider bar.

Finally:

- 2 At **ReBoot Panel**, click the **Start** button to restart (reboot) the panel.  
The panel restarts.

### Connect to Network

When the panel has restarted:

- 1 Connect the panel to the GV Orbit system 'control/management' network, if not already connected.

The GV Orbit system will discover it.

This has now set up the minimum settings to get started with the panel. For details about the unit's web page and other settings, see [ATP-2000 Control Screen \(Web Page\)](#), on page 21.

---

Note: For full functionality, the following must have network connectivity with multi-cast data enabled on the network:

- ATP-2000 panel;
  - GV Orbit Client computer; and
  - GV Orbit server(s).
-





# 4

## ATP-2000 Control Screen (Web Page)

### **ATP-2000 Control Screen (Web Page)**

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| <i>From a Web Browser</i> .....                 | 22 |
| <i>From GV Orbit Client</i> .....               | 22 |
| <i>ATP-2000 Control Screen (Web Page)</i> ..... | 23 |

## Introduction

The ATP-2000 unit's control screen is its web page. This can be accessed using a web browser (for example, Chrome), or the control screen can be accessed from the GV Orbit Client tool.

## Accessing ATP-2000 Control Screen

### From a Web Browser

- 1 Enter the ATP-2000 panel's IP address into the browser.

The web page is shown. See [Figure 4-2](#) on page 23.

### From GV Orbit Client

---

Note: **GV Orbit Client:**

An ATP-2000 panel device can appear in the **Network** window of the GV Orbit Client if:

- DHCP is enabled on the ATP-2000 panel;
- there is network connectivity between the panel, client and GV Orbit servers; and
- multicast is enabled on the network that the GV Orbit system uses.

- 1 Right-click on the ATP-2000 item in the **Network** window and select 'Control'.

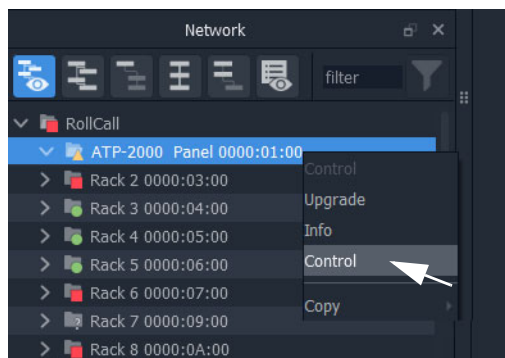


Fig. 4-1: ATP-2000 Web Page

The ATP-2000 web page is shown in the GV Orbit Client, see [Figure 4-2](#).

# ATP-2000 Control Screen (Web Page)

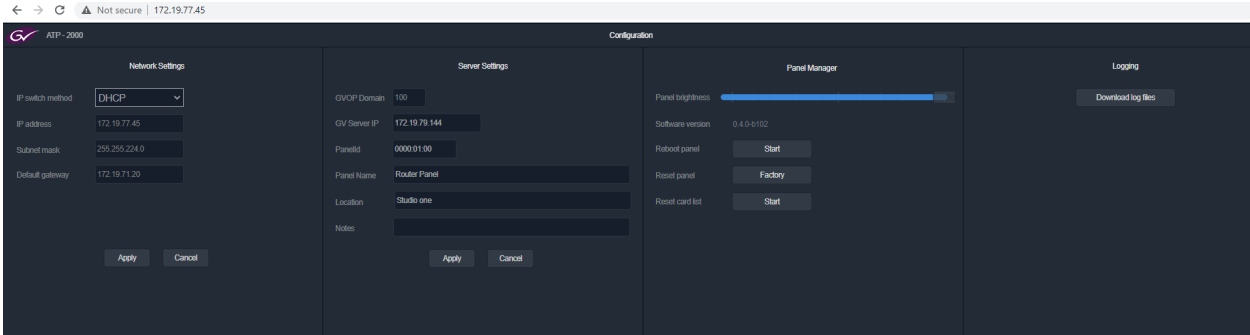


Fig. 4-2: ATP-2000 Web Page

Note: The ATP-2000 web page is wide.  
View the web page in a browser window or a GV Orbit Client window which is at least 1920 pixels wide.

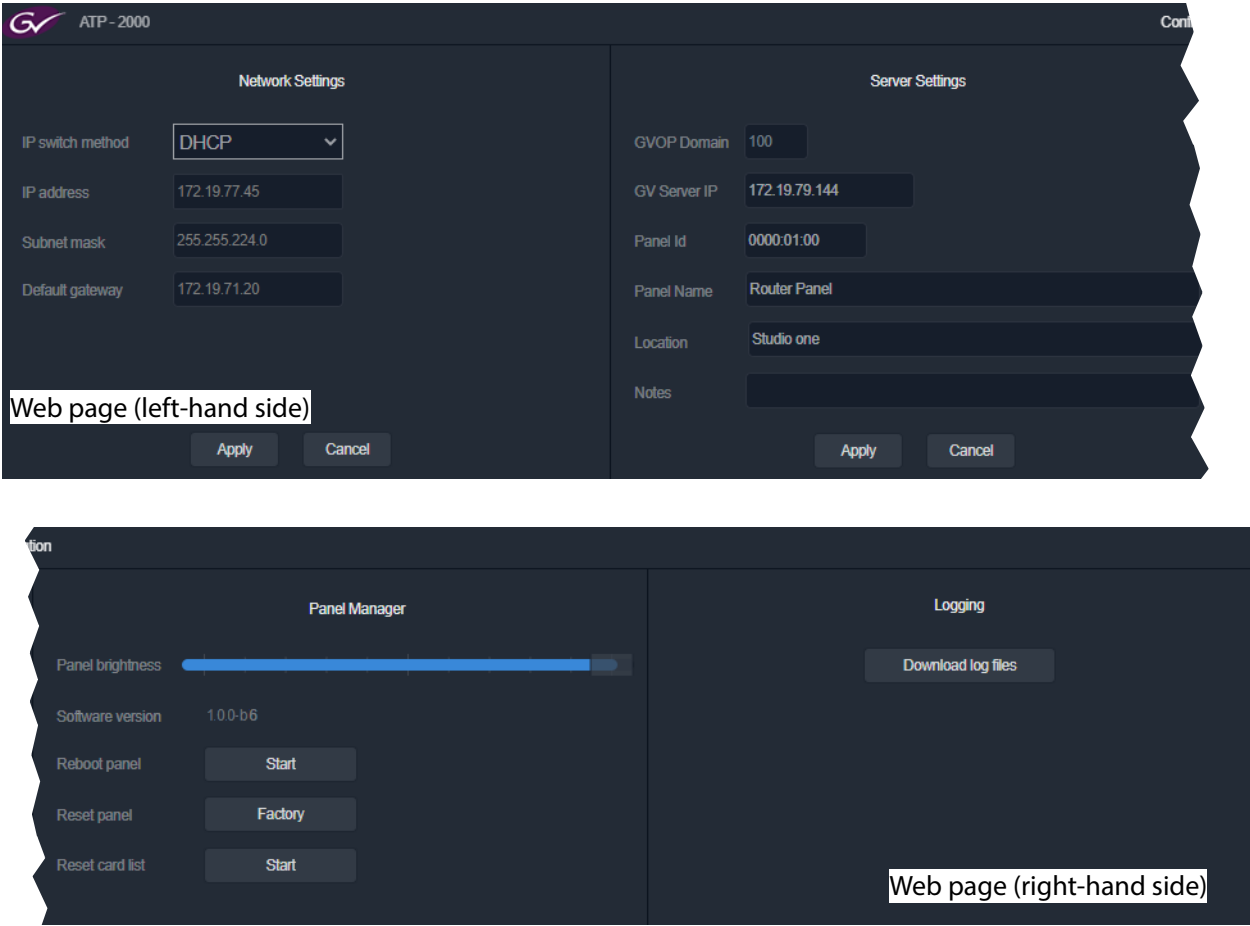


Fig. 4-3: ATP-2000 Web Page (Zoomed-in)

Table 4-1: ATP-2000 Web Page Settings

| Item                     | Description  |
|--------------------------|--|
| <b>Network Settings:</b> |  |
| <b>IP Switch Method</b>  | Select IP address allocation method: <ul style="list-style-type: none"> <li>• <b>DHCP</b> - Use DHCP on the network (default).</li> <li>• <b>Static</b> - Use a static IP address.</li> </ul>                            |
| <b>IP Address</b>        | Displays the allocated IP address.<br>Enter an IP address if 'static' method selected.   |
| <b>Subnet Mask</b>       | Displays the allocated sub-net mask.<br>Enter a sub-net mask if 'static' method selected.  |
| <b>Default Gateway</b>   | Displays the allocated default gateway IP Address.<br>Enter an IP address if 'static' method selected.   |
| <b>Apply</b>             | Click to apply any <b>Network Settings</b> changes.  |
| <b>Server Settings:</b>  |  |
| <b>GVOP Domain</b>       | Displays the GV Orbit Protocol Domain number assigned to the ATP-2000 panel. This is automatically discovered and assigned to the panel.<br>The Domain number can be entered here if required.<br>Default domain is 100. |
| <b>GV Server IP</b>      | Enter the IP Address of the GV Orbit server in the GV Orbit system.  |
| <b>Panel Id</b>          | Displays the Panel ID (RollCall address) of the panel in the GV Orbit system.<br>Enter the unique Panel ID here as part of the set up of a panel. (See <a href="#">Getting Started</a> , on page 13.)                    |
| <b>Panel Name</b>        | Enter a human-readable name to identify the panel by.  |
| <b>Location</b>          | Enter a note about the location of the panel device. This is information for system users.   |
| <b>Notes</b>             | Enter any notes about the panel device. This is information for system users.  |
| <b>Apply</b>             | Click to apply any <b>Network Settings</b> changes.  |
| <b>Panel Manager:</b>    |  |
| <b>Panel Brightness</b>  | Slider control. Adjust the brightness of the panel device's front panel user display.  |
| <b>Software Version</b>  | Displays the software version running on the panel.  |
| <b>ReBoot Panel</b>      | Click to reboot the panel. (Click <b>Start</b> button.)  |
| <b>Reset Panel</b>       | Click to carry out a soft restart of the panel. (This avoids having to do a physical reset of the panel.)  |

*Table 4-1: ATP-2000 Web Page Settings (continued)*

| <b>Item</b>   | <b>Description</b>   |
|---|--|
| <b>Reset Card List</b>                                  | <p>Click to update the list of cards shown by the panel. Devices will be rediscovered and the list will be rebuilt.</p> <p>For example, if a card is removed from the GV Orbit system and the card will be shown as 'not found'. <b>Reset Card List</b> will flush out 'unfound' cards from the card list.</p>   |
| <p><b>Logging:</b></p> <p><b>Download Log Files</b></p> | <p>Click to download ATP-2000 panel's log files to the client computer. A zip file is downloaded to the client computer running the web browser. The zip file contains a flat list of one or more 'log.txt' files.</p> <p>Logs include panel software application logs and system logs.</p> <p>Log file entry has a date, a category (warning/error) and a log message string.</p> |



# 5 Operation

## **Operation**

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## Start Up Splash Screen

While an ATP-2000 device starts up, a splash screen is shown. See [Start Up Splash Screen](#), on page 28, for more information.

When the device has started up, the ATP-2000 panel shows a **Home** screen. See Figure 5-1.

## ATP-2000 Home Screen

The **Home** screen allows a user to browse GV Orbit system cards and to control card parameters. All of the soft panels have been designed so that a user can navigate the panel and carry out control functions with a minimum number of user actions.

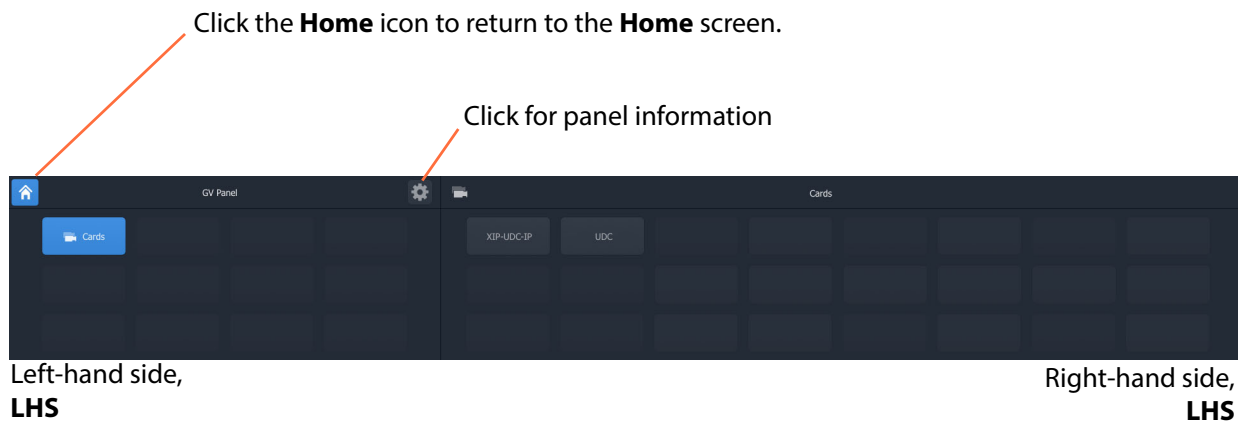


Fig. 5-1: ATP-2000 Home Screen Example

The **Home** screen has a fixed layout:

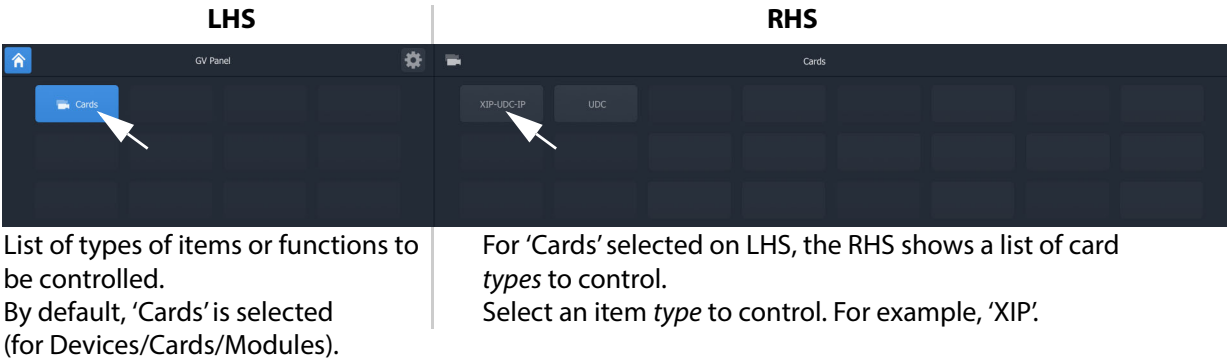
| <b>LHS</b>  | <b>RHS</b>   |
|---|--|
| is used to navigate the panel to access panel or card/device functions. | is used to:<br>show a list of card types:<br>to select a card to control or other operations; and<br>to show (device-specific) card parameters to be controlled. |

## Select Items

From the **Home** screen, items, cards and functions can be selected:

- 1 Select 'Cards' on the left-hand side of the panel (LHS).

All cards/devices that the GV Orbit system can manage are listed on the right-hand side of the panel.



List of types of items or functions to be controlled.  
By default, 'Cards' is selected (for Devices/Cards/Modules).

For 'Cards' selected on LHS, the RHS shows a list of card types to control.  
Select an item type to control. For example, 'XIP'.

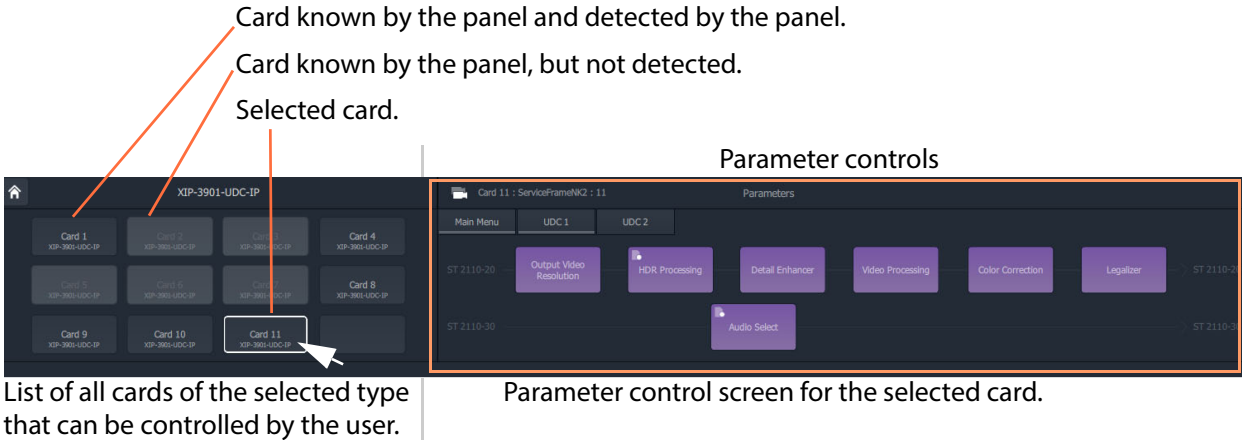
Fig. 5-2: Home Screen - Select 'Cards' and 'Card Type'

Note: Supported card types are listed in Appendix A, [Supported Devices](#), on page 45.  
Early panel software version support a reduced list of devices and the list will be expanded in further software versions.

- 2 Select 'Card Type' on the right-hand side of the panel (RHS). For example, 'XIP-UDC'.  
On the RHS, the **Card Home** screen is shown for the selected card type.  
On the LHS, all cards/devices of the selected type that the GV Orbit system can manage are listed on the left-hand side of the panel.

Note: Items on screen may be grayed out if there are no cards/devices present of that type in the system, or if they are not supported by the ATP-2000 panel.

- 3 Select a card to control on the LHS.  
Parameter controls are available on the RHS. See Figure 5-3.



List of all cards of the selected type that can be controlled by the user.

Parameter control screen for the selected card.

Fig. 5-3: Parameter Controls Example

## Card Screens

Note: **Card Screens:**

Parameters for a particular device/module/card type are device-specific and the corresponding card 'home' screens, and any subsequent card screens, are also device-specific.

For device-specific information, please see the individual documentation for each device/card/module type.

Device-specific information is *not* covered in this document.

## Accessing a Parameter Control Screen

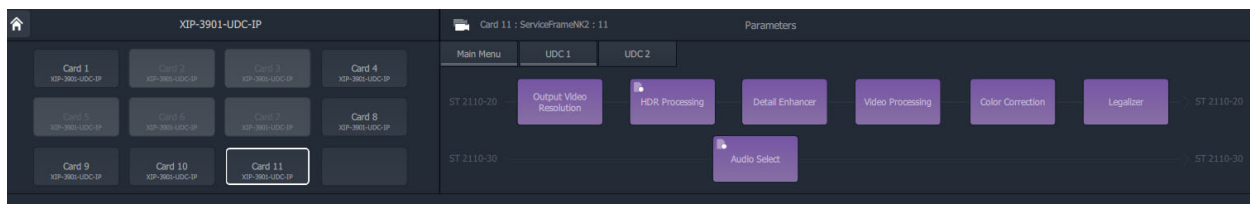
At the ATP-2000 **Home** screen:

- 1 On the LHS, select the function to control. (For example, select 'Cards'.)
- 2 On the RHS, select the card type to control. (For example, select 'XIP'.)
- 3 On the LHS, select the particular card to control. (For example, select XIP 'Card 6'.)

The selected card is named on the right-hand side. Card parameters may now be changed, see [Generic Parameter Control Screen](#).

When a particular card type is selected, the **Card Home** screen is shown which:

- lists all cards of the selected type that can be parameter-controlled (on left-hand side); and
- shows the card's adjustable parameters (on right-hand side).



Card List Grid

Card Parameter Controls, device-specific

Fig. 5-4: Generic Card Home Screen

## Card List Grid

All cards of the selected type that can be parameter-controlled are listed on the left-hand side of the panel in a **Card List**.

Depending on the number of card items needing to be listed, the full list of cards may need to be navigated with 'Next' and 'Previous' buttons, to allow forwards and backwards navigation. The card list grid adjusts automatically, adding '>Next' and '<Prev' buttons appropriately.

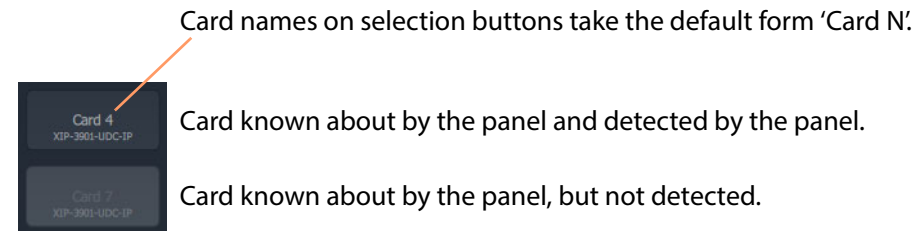
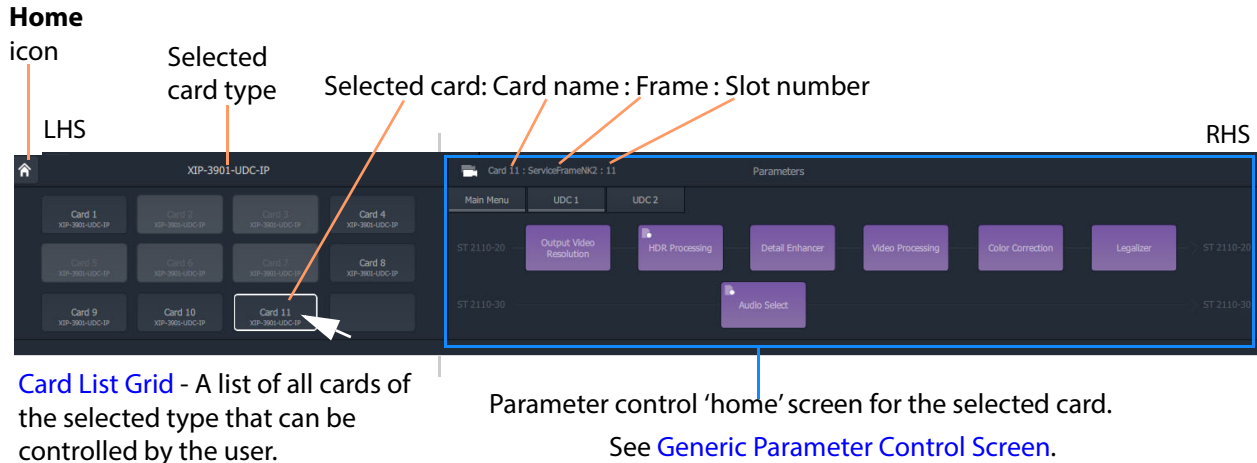


Fig. 5-5: Parameter Control - Card Home Screen

## Generic Parameter Control Screen

Note: Parameter control for any particular card/device is specific to that card/device and for full instructions on how to change parameters for a particular card etc., please see the corresponding card/device documentation.

This section describes parameter change operations that can be done using a soft panel on the ATP-2000 Advanced Touch Panel.

These are *generic* actions and are not specific to any card/device.

For parameter controls for specific cards, see the corresponding card documentation.

- [Generic Parameter Control Operation](#)
- [Change Card Being Controlled](#)
- [Back to 'Home' Card or Card-Channel Main Screen](#)

### Generic Parameter Control Operation

A selected card will have certain functionality/status and may comprise one or more channels of processing, from a functional control and monitoring perspective. This is presented on a graphical **Parameter Control** screen on the RHS of the Card Screen, typically in the form of a block diagram. (Blocks are shown dimmer where parameters are not controllable.)

Click to return to 'home' parameter control screen of the card or card-channel.

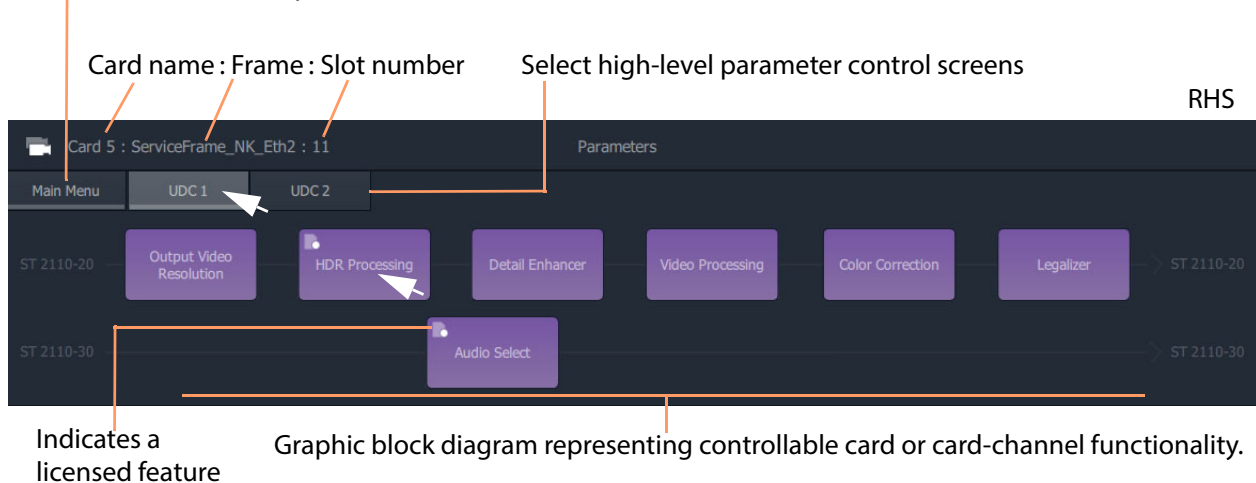


Fig. 5-6: Example Card Parameter Control Screen - Main Menu Example for XIP Card Shown

- 1 Select the high-level parameter control screen for card or card-channel. For example, 'UDC 1'. (See Figure 5-6.)
- 2 Select a card function to control. For example, 'HDR Processing'. (See Figure 5-6.) Controls are presented for the selected function. (See Figure 5-7 for an 'HDR processing' example.)

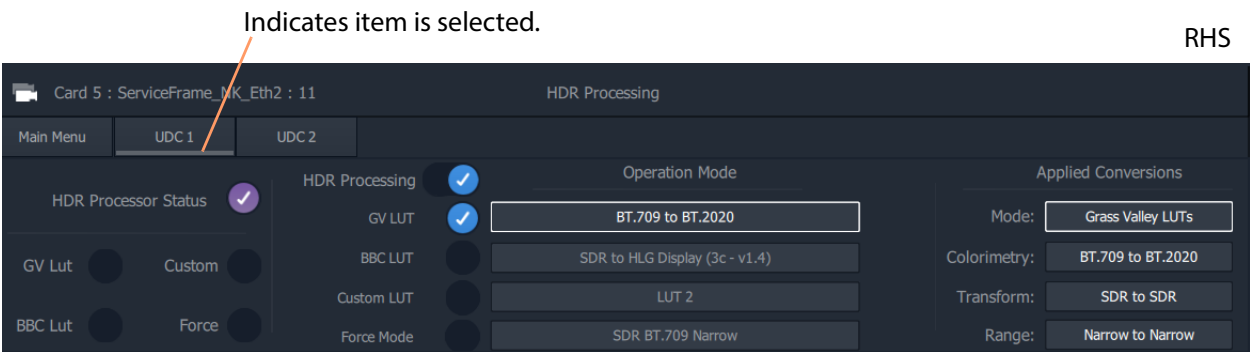


Fig. 5-7: Example HDR Processing Parameter Controls (Example shown is for XIP Card)

- 3 Some card parameter control screens are further broken down into sub-screens which are selectable with further navigation controls. This is shown for the XIP card example in Figure 5-8.  
Select a sub-screen.

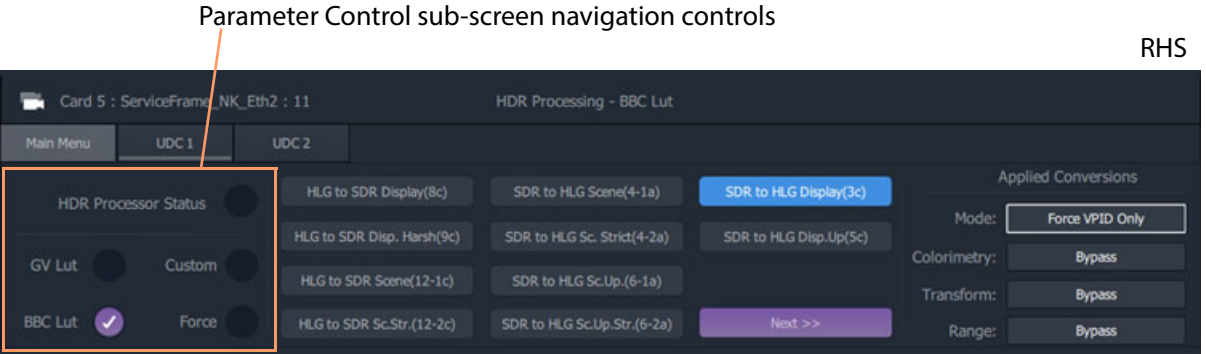


Fig. 5-8: Parameter Controls Screen Navigation Controls (Example shown is for XIP Card)

- 4 Adjust parameter values as required. (Refer to specific card documentation.)

### Change Card Being Controlled

The user can change the card being controlled and remain on the *same* Parameter Control screen on the RHS in order to quickly change parameters across different cards.

To change the card being controlled at any time:

- 1 Select another card in the Card List on the LHS of the Card Screen.  
The 'Card being controlled' on the RHS changes to be the selected card, showing parameters for the selected card on the RHS.

### Back to 'Home' Card or Card-Channel Main Screen

- 1 Click **Main Menu** to go back to the 'Home' card or card-channel Parameter Control screen.

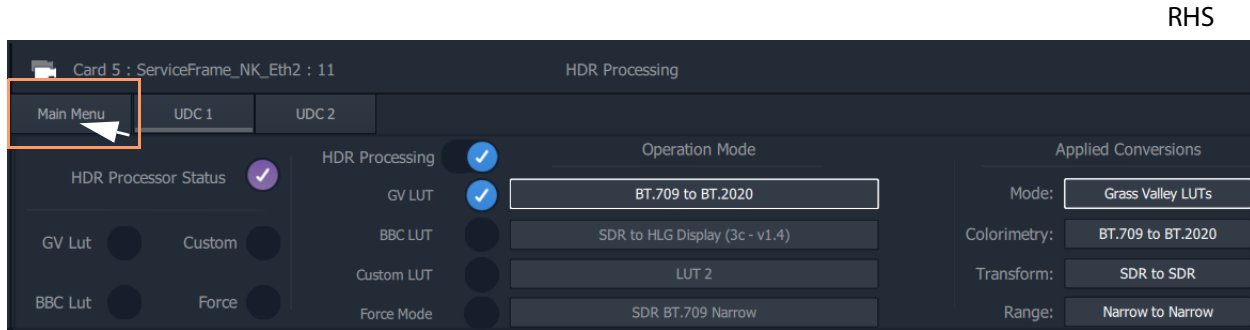


Fig. 5-9: Click Main Menu - Example shown is for XIP Card

# 6 Maintenance

## **Maintenance**

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## Re-Boot Panel

To restart/reboot the ATP-2000, on the web page. Under the **Panel Manager** section of the web page:

- 1 At 'Reboot Panel', click **Start**. See Figure 6-2.
- 2 Click **OK** to any prompts to restart the panel.

The panel restarts.

At 'Reboot Panel', click **Start** to restart/reboot ATP-2000 panel.

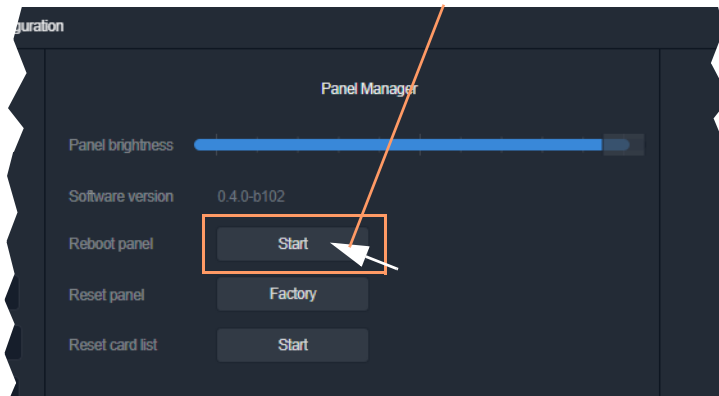


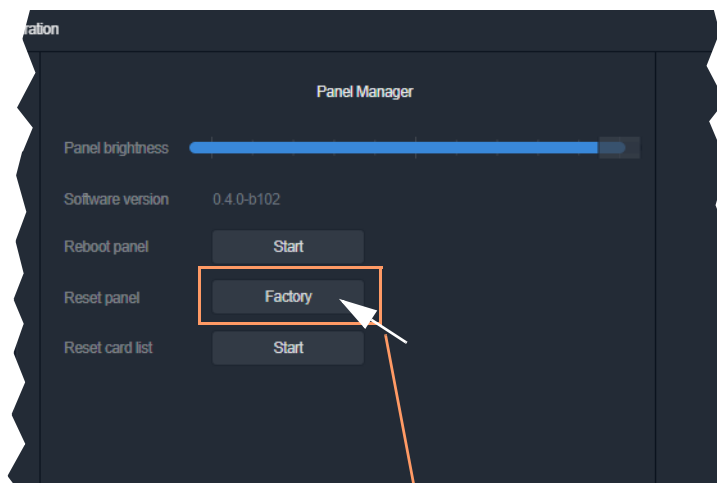
Fig. 6-1: ReStart/ReBoot from ATP-2000 Web Page

## Factory Reset

To reset the ATP-2000 back to factory settings, on the web page:

- 1 Click **Factory** under the **Panel Manager** section of the web page. See Figure 6-2.
- 2 Click **OK** to any prompts to reset the panel.

The panel returns to its shipped state but with the current software version.



Click **Factory** to set ATP-2000 back to factory settings.

Fig. 6-2: Factory Reset from ATP-2000 Web Page


## Panel System Information

System information about a ATP-2000 device can be viewed from GV Orbit Client:

- [Panel Information from Home Screen](#)
- [Panel Information in Client Details Dialog](#)
- [Panel Information on Web Page](#)

### Panel Information from Home Screen

From the front panel of the **ATP-2000**:

- 1 Select the settings cog (  ) on the front panel.  
A **Panel Info** pop-up dialog is shown, displaying device information.

Select the 'settings cog' icon to see panel information.

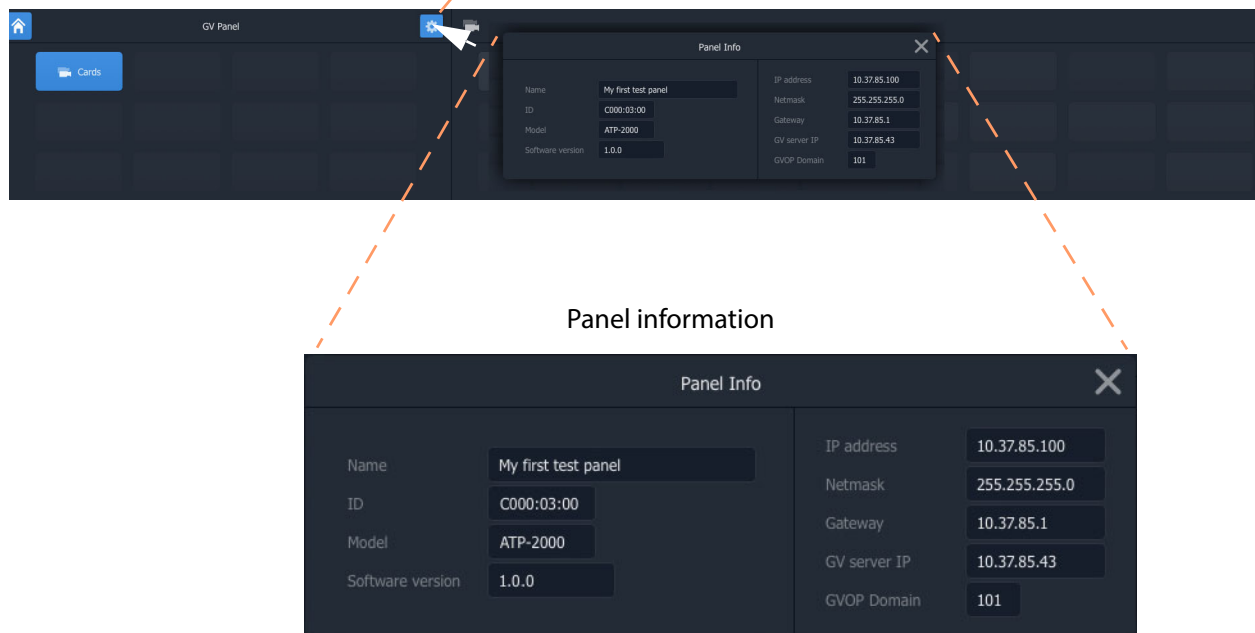




Fig. 6-3: ATP-2000 Unit Panel Info

- 2 To close the **Panel Info** dialog, either:
  - click on the  in the top right of the dialog; or
  - click on the cog icon on the front panel (  ) to deselect it.

## Panel Information in Client Details Dialog

In the **Network** window in an open project in GV Orbit Client:

- 1 Locate the ATP-2000 device in the tree-list, right-click on it and select 'Info'.  
A **Details** window is shown for the device, displaying device information.

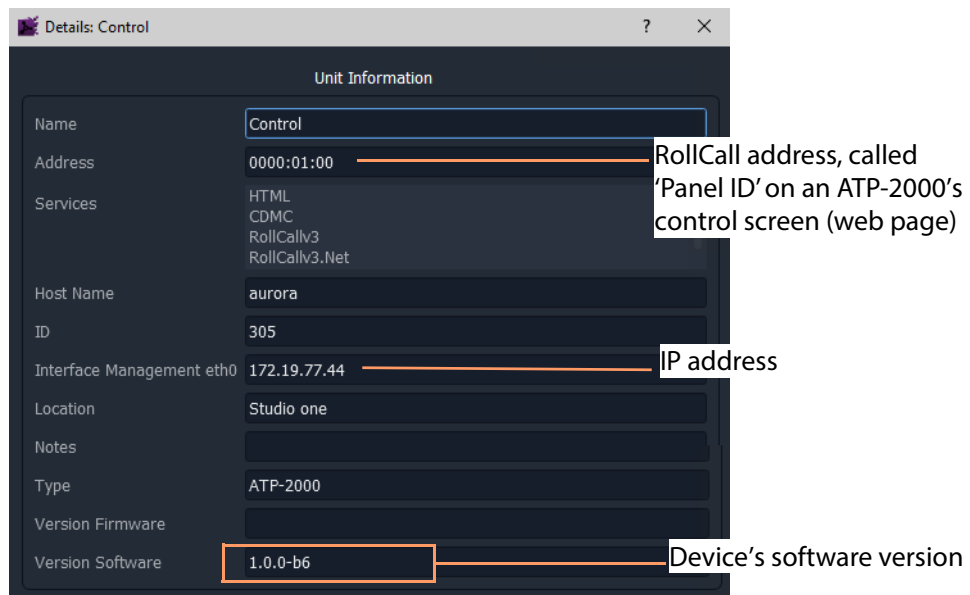


Fig. 6-4: ATP-2000 Unit Information in Details Window

- 2 Close the **Details** window.

## Panel Information on Web Page

In the **Network** window in an open project in GV Orbit Client:

- 1 Locate the ATP-2000 device in the **Network** window's tree-list, right-click on it and select 'Control'.

The ATP-2000's web page is shown in GV Orbit Client.

(See Chapter 4, [ATP-2000 Control Screen \(Web Page\)](#), on page 21.)

Click **x** to close tab showing web page.

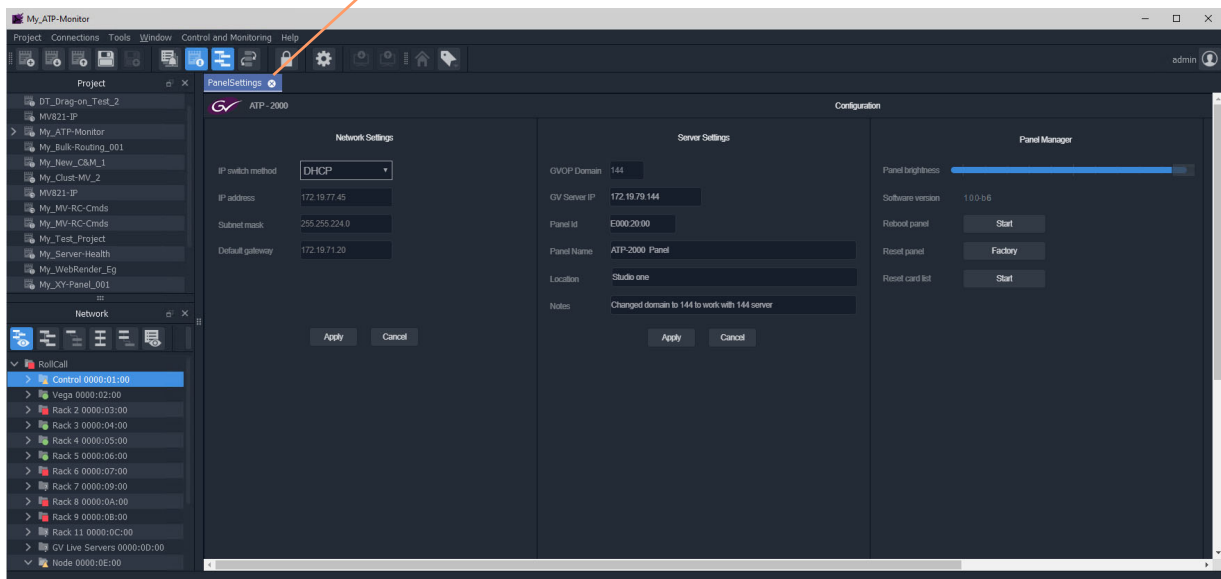


Fig. 6-5: ATP-2000 Web Page in GV Orbit Client

- 2 Close the tab to close the ATP-2000 web page in GV Orbit Client.

## Software Upgrade

### Introduction

The ATP-2000 Advanced Touch Panel unit is software-upgraded via the GV Orbit Client tool.

To upgrade a device with GV Orbit Client, the **Network** window must be open and showing the ATP-2000 device to be upgraded.

(Refer to the *GV Orbit Client User Guide* for information about the **Network** window etc. in GV Orbit Client.)

Steps:

- [Step 1: Check Current Software Version](#), on page 40.
- [Step 2: Import Upgrade Package](#), on page 41.
- [Step 3: Upgrade the ATP-2000](#), on page 42.
- [Step 4: Finally, Check the Upgraded Software Version](#), on page 42.

### Upgrade Package

Upgrade packages for ATP-2000 panels comprise a version of software and supporting files bundled together in a .zip file and are available from the software download section of the ATP-2000 web page.

---

Note: Before starting, ensure that the upgrade package file is:

- accessible by GV Orbit Client;
- correct for the ATP-2000 product; and is
- the correct version required.

Contact Grass Valley customer support for advice about upgrade packages.

---

### Step 1: Check Current Software Version

- 1 Open the **Network** window.
- 2 Locate the ATP-2000 device to be upgraded, right-click on it and select **Info**.

A **Details** window is shown for the device, displaying information which includes the device's current version of software.

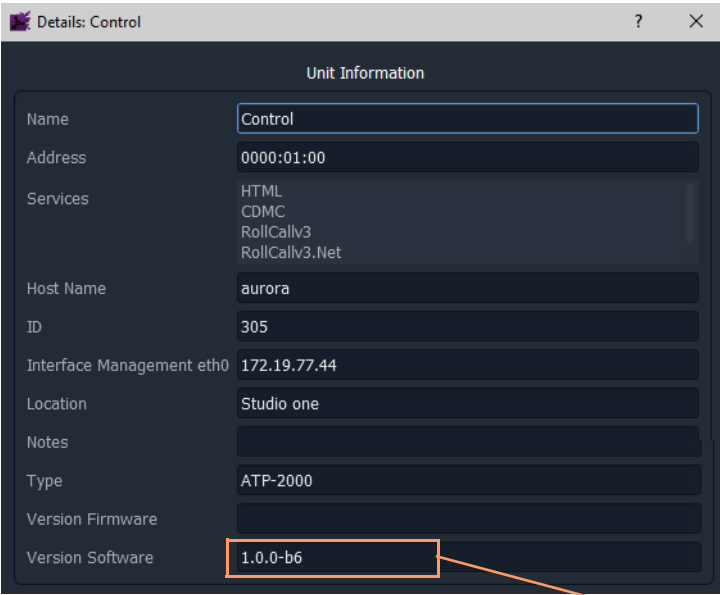


Fig. 6-6: ATP-2000 Unit Information in Details Window

3 Close the **Details** window.

### Step 2: Import Upgrade Package

1 Right-click on the **Network** tree-view device item and select 'Upgrade'.

The **Orbit Upgrade** window is shown. Any software upgrade packages that might have been previously uploaded are shown listed on the left-hand side, under 'Available Packages'.

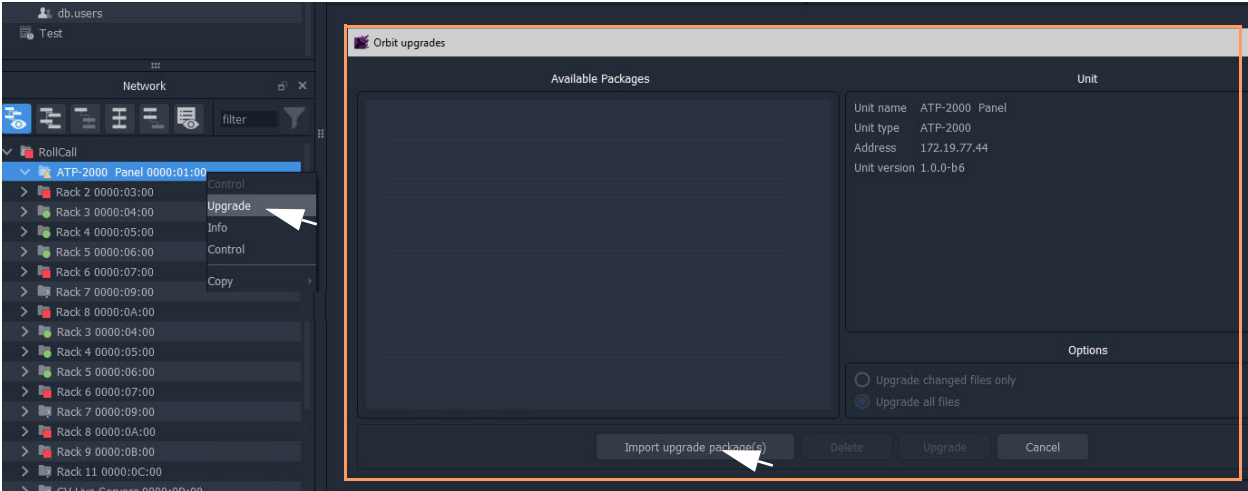


Fig. 6-7: ATP-2000 Orbit Upgrade Window

- 2 Click **Import Upgrade Package(s)** in the dialog and browse to the upgrade package to be uploaded.
- 3 Select the package and click **Open**.

The package is imported into GV Orbit Client.

After the package has been imported, it is listed under 'Available Packages' in the **Orbit Upgrade** window.

### Step 3: Upgrade the ATP-2000

- 1 Select a package in the 'Available Packages' list of the **Orbit Upgrade** window.
- 2 Select **Upgrade All Files** in the 'Options' pane to upgrade *all files* on the device, regardless of whether a file is the same on the device and in the upgrade package. (Deselect **Upgrade All Files** for a quicker upgrade.)

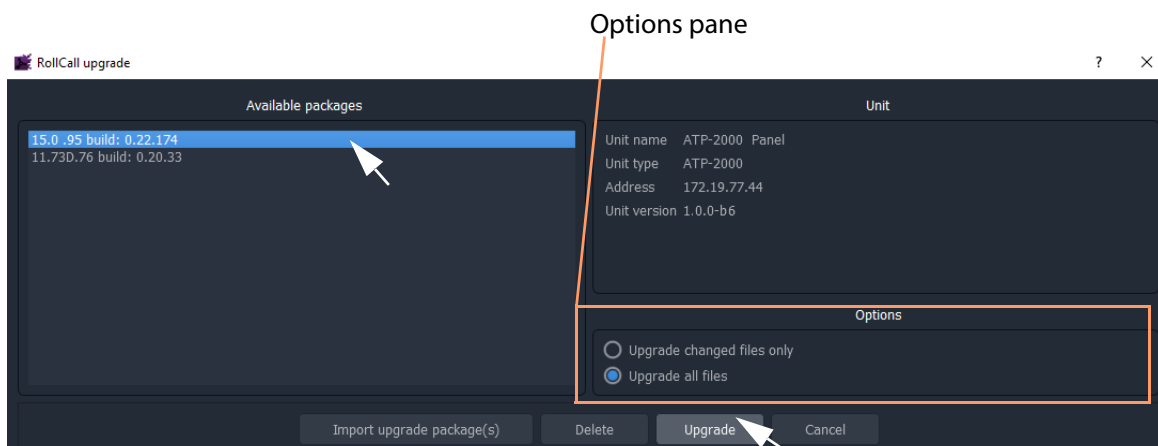


Fig. 6-8: Example Orbit Upgrade Window

- 3 Click the **Upgrade** button to start the upgrade of the device.

A message box appears informing you that the upgrade has started and will proceed in the background. Click **OK**.



Note: The user may continue using the GV Orbit project in the Client while the upgrade proceeds.  
However, *only one upgrade can be running at any one time.*

- 4 When the device has been upgraded, this is indicated by a pop-up notification message in the Windows™ system tray.

### Step 4: Finally, Check the Upgraded Software Version

- 1 Right-click on the **Network** window upgraded-device item and select 'Info'.  
A **Details** window is shown displaying unit information.
- 2 Check that the ATP-2000's current (upgraded) version of software/firmware is correct.

## Monitoring ATP-2000 Panel Alarms

The ATP-2000 issues information about its health and status which conforms to the GV Orchestration Protocol (GVOP). These alarms may be viewed in GV Orbit Client in a GV Orbit system.

Note: In order for the panel's alarms etc. to be visible to GV Orbit Client, the following must have network connectivity (for example, be on the same VLAN) with multicast data packets enabled:

- ATP-2000 panel
- GV Orbit Client
- GV Orbit server(s)

To see the alarm/status information for an ATP-2000 in GV Orbit Client:

- 1 In the **Network** window, expand the **Network** tree and locate the ATP-2000 panel device.
- 2 Right-click on the ATP-2000 panel device and select 'Alarm List'.

The **Alarm List** window is shown for the ATP-2000 device.

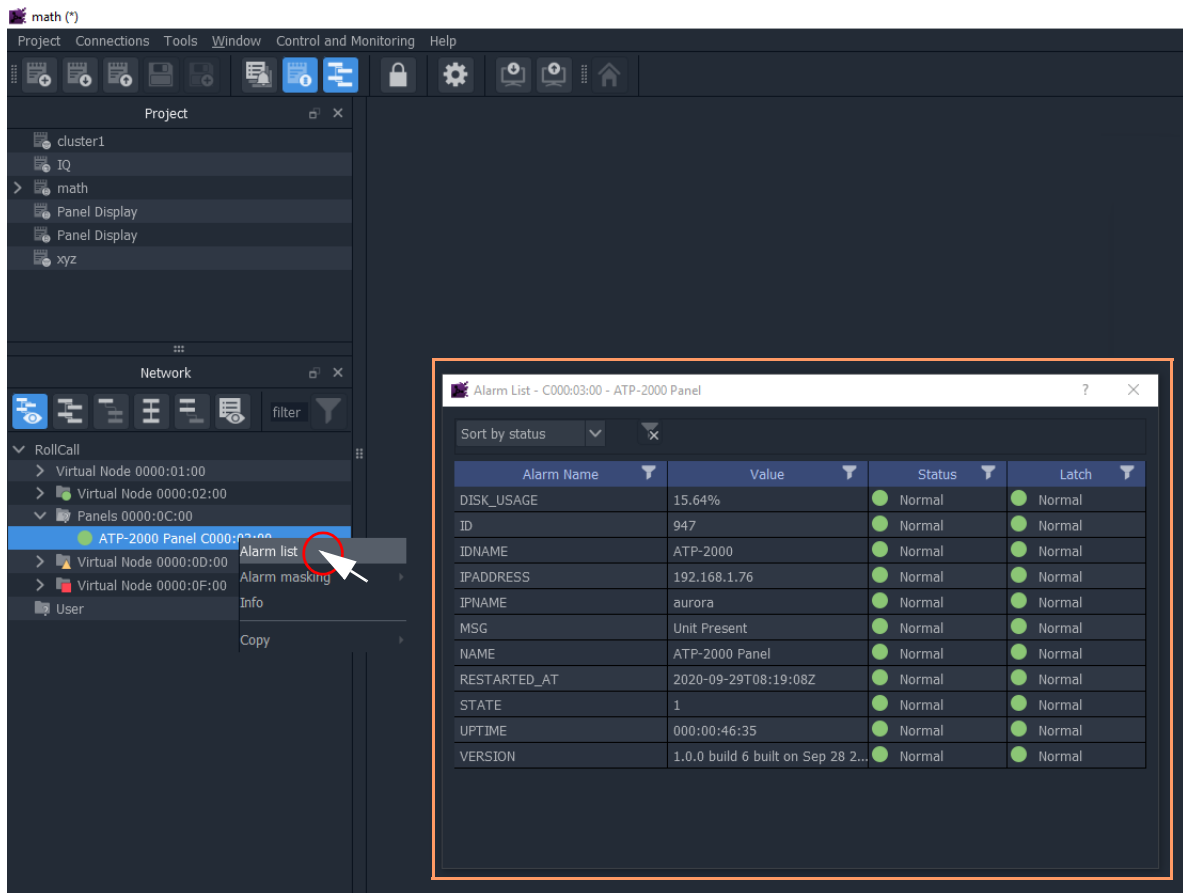


Fig. 6-9: ATP-2000 Alarm List Window



*Table 6-1: ATP-2000 Alarms*

| <b>Item</b>         | <b>Description</b>   |
|---------------------|--|
| <b>DISK_USAGE</b>   | The remaining disk space.  |
| <b>ID</b>           | Unit type Id in the RollCall database.                               |
| <b>IDNAME</b>       | Unit type name in the RollCall database.                             |
| <b>IPADDRESS</b>    | IP address of the panel.   |
| <b>IPNAME</b>       | Host name.   |
| <b>MSG</b>          | "Unit Present"   |
| <b>NAME</b>         | The name of the panel.<br>This is used in the <b>Network</b> window. |
| <b>RESTARTED_AT</b> | The date and time when the panel was last started                    |
| <b>STATE</b>        | Overall alarm state of the panel.                                    |
| <b>UPTIME</b>       | The period that the panel has been continuously running for.         |
| <b>VERSION</b>      | Software build version number.                                       |

## Getting Panel Log Files

- 1 Open the 'Control Screen' of the ATP-2000 panel (web page).
- 2 Click **Download Log Files**.

The ATP-2000 panel's log files are downloaded to the client computer. A single zip file is downloaded which contains one or more 'log.txt' files.

## Replacing the Battery

Your Grass Valley ATP-2000 panel contains an internal battery which is a button cell (coin cell). The battery is used for settings backup and should not need to be replaced during the lifetime of the panel. However, if the cell needs replacing, please follow the procedure described in Appendix E [Battery Replacement](#), on page 61.



# Hardware Specification



## **Hardware Specification**

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This appendix provides specification details of the ATP-2000, including: details of the physical characteristics of the panel; the operational environment; and connectors on the rear panel.

## Unit Views

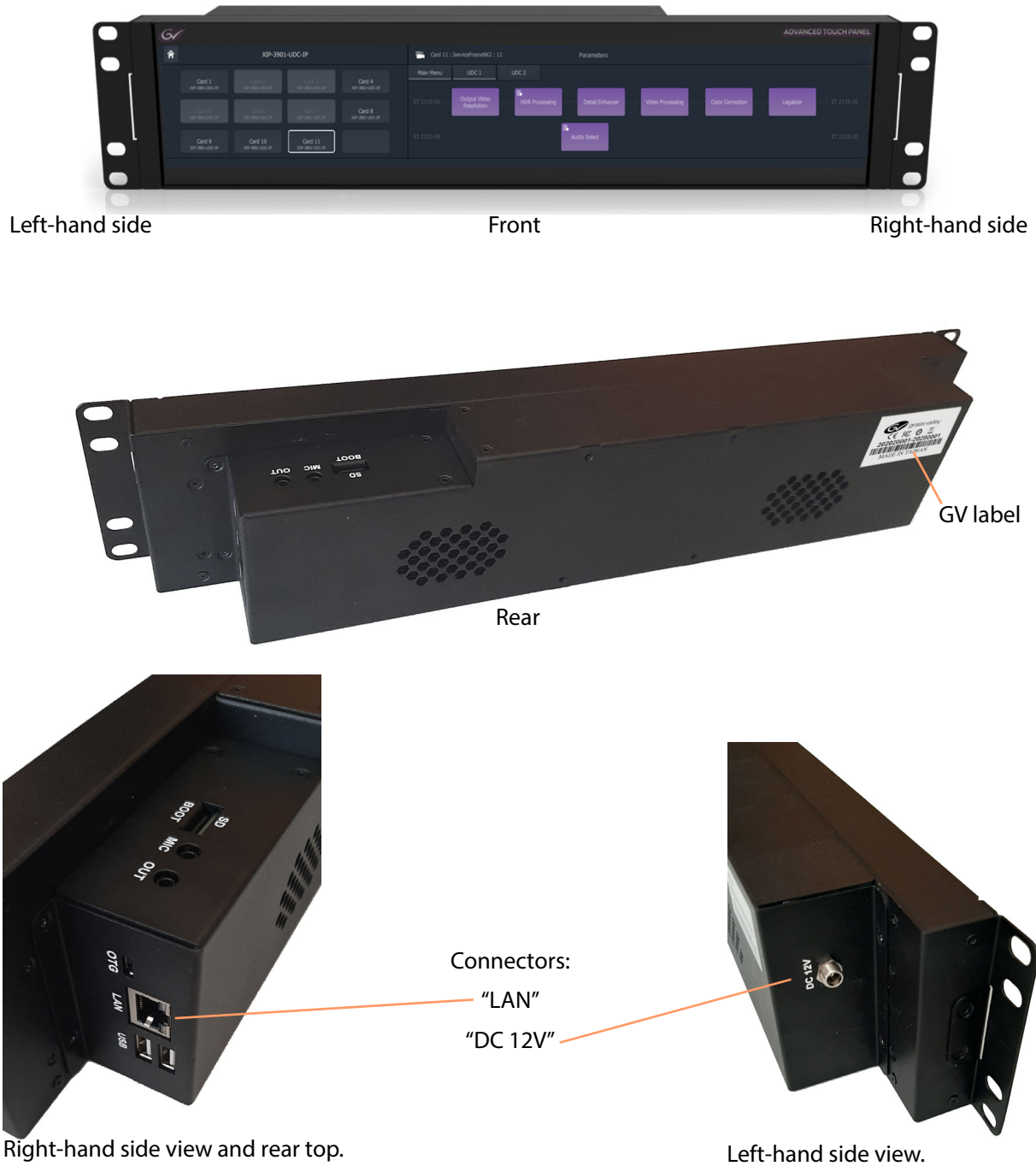


Fig. A-1: ATP-2000 Advanced Touch Panel Unit Views

## Unit Specification

### Physical

| Physical               |   |
|------------------------|---|
| Rack mounting          | 19 inch rack  |
| Rack mounting height   | 2RU   |
| Dimensions (W x H x D) | 483 x 87.6 x 68.8 mm<br>See <a href="#">Unit Dimensions</a> , on page 53 for a unit dimensions drawing. |
| Weight                 | 2 kg  |
| Vesa Mount             | 75 x 75   |

### Electrical

| Electrical                      |  |
|---------------------------------|--|
| Unit Power Consumption          | 30 W max.                                    |
| Unit Supply Voltage<br>"DC 12V" | +12 V nominal; (10.8V min, 13.2V max)        |
| Unit Current Consumption        | 1.5 A (typ.), 2.5 A (max.)                   |
| Connector                       | 1x DC Power Jack.<br>Center pin is positive. |
| Cell inside:                    | CR2032, as part of a battery assembly.       |

### Environmental

| Environmental       |                                     |
|---------------------|-------------------------------------|
| Operating temp      | 0 to +50°C                          |
| Storage temp        | -10 to +55°C                        |
| Relative Humidity   | 95% at 40°C, non-condensing         |
| Operating Vibration | 1Grms, 5Hz to 500Hz, IEC 60068-2-64 |
| Non-operating Shock | 30Grms, 11ms, IEC 60068-2-27        |
| ESD Protection      | 8kV contact, 15kV air               |
| EMI                 | FCC class A                         |

| <b>Unit Cooling</b> |   |
|---------------------|---|
| Type                | Fan-less, heatsink  |
| Clearance           | Allow 50mm (approximately 2 inches) rear mounting clearance at the rear of the unit for cooling air flow, mating connectors and cables. |

## Display Specification

| <b>Display</b>  |  |
|-----------------|--|
| Type            | TFT LCD  |
| Size            | 16.3" diagonal   |
| Active area     | 408.96mm x 60.75 mm  |
| Resolution      | 1920 x 285 pixels  |
| Pixels per inch | 119 ppi  |
| Viewing Angle   | 178°(H) and 178°(V)  |
| Brightness      | 540 nits (min.), 700 nits (typ.)<br>i.e. 540cd/m <sup>2</sup> (min), 700cd/m <sup>2</sup> (typ.) |
| Resolution      | 1920 x 285 pixels  |
| Color depth     | 24-bit color, 16.4M colors   |
| Contrast Ratio  | 1000:1 (typ.)  |

| <b>Touchscreen</b> |                 |
|--------------------|-----------------|
| Type               | PCAP            |
| Multi-touch        | 10 touch points |
| Surface            | Anti-glare      |

## Operating System

Information about the embedded operating system on the ATP-2000 Advanced Touch Panel:

| <b>OS</b> |   |
|-----------|---|
| Processor | Quad-core ARM® Cortex   |
| Type      | Embedded Linux.   |
| Storage   | 2x micro SD cards: <ul style="list-style-type: none"> <li>• 1x 16GB - OS and panel application.</li> <li>• 1x 16GB - for panel application data.</li> </ul> |

---

Note: There is no unit shutdown procedure for powering down the unit; the file system used is fail-safe.

---

## Defaults

### Default IP Settings

The control panels are supplied with factory Ethernet interface IP default settings with DHCP enabled.

### External Connectors

See [Connectors, Controls, Interfaces](#), on page 55.





# Unit Dimensions

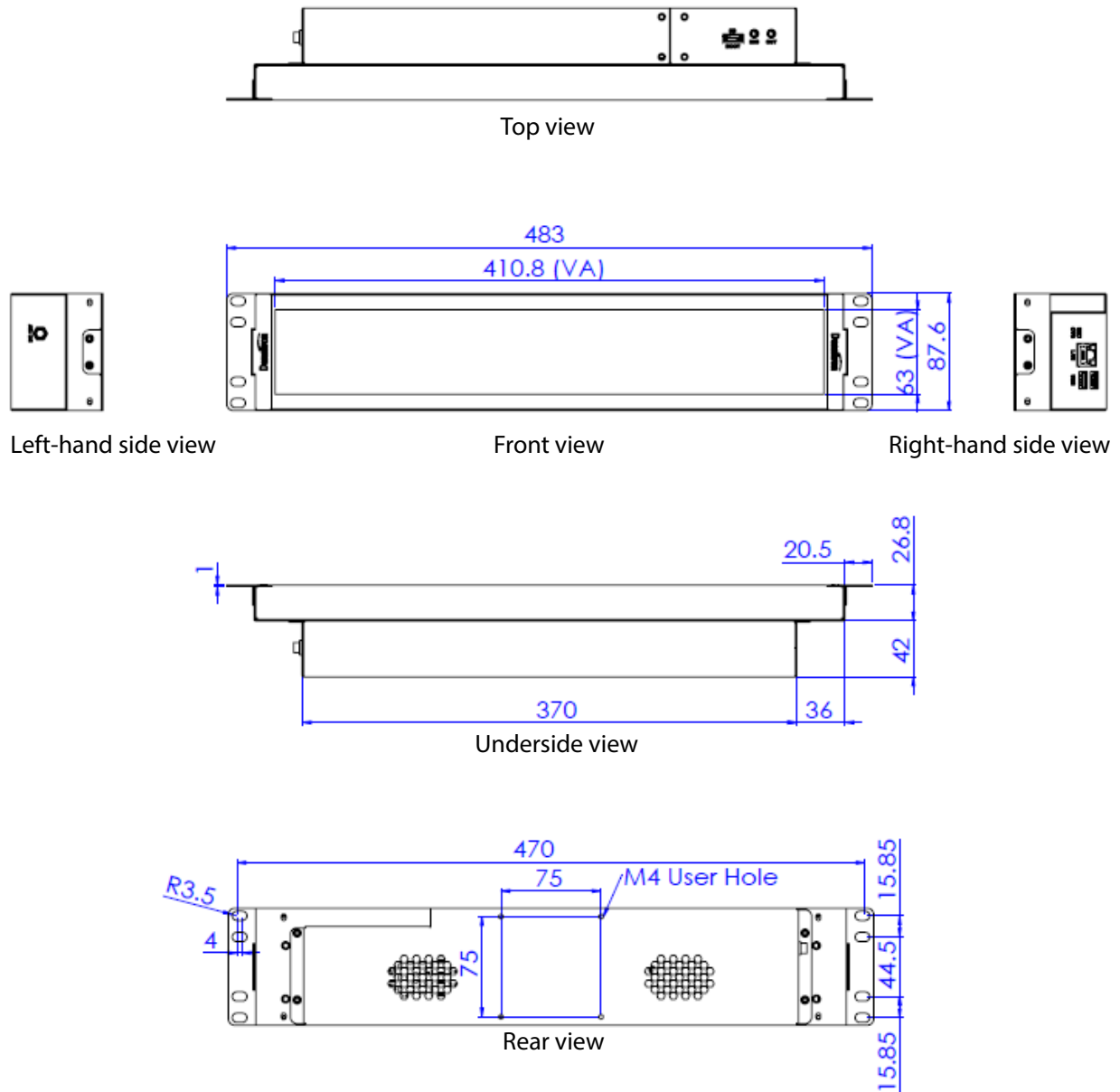


Fig. B-1: ATP-2000 Product Dimensions (mm)



# Connectors, Controls, Interfaces

## Connectors, Controls, Interfaces

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This appendix describes each connector on the ATP-2000 unit. There are no external controls on the unit.

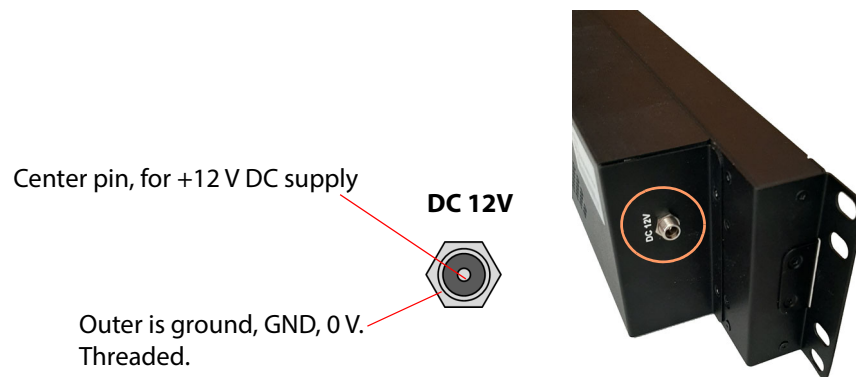
## Unit On/Off

There is no power on/off switch on the unit. The ATP-2000 Advanced Touch Panel unit turns on when power is applied.

There is no shutdown procedure for powering down and the file system is fail-safe.

## DC Power Connector

One 12 V DC power jack connector (input) on the left-hand side of the unit (as viewed from the front of the unit).



## Ethernet Connector

One RJ45 Ethernet network connector (“LAN”) on right-hand side of the unit (as viewed from the front of the unit). This provides:

- A 1G/100M/10M Ethernet interface.
- Auto-negotiation of connection speed.
- Automatic cross-over.

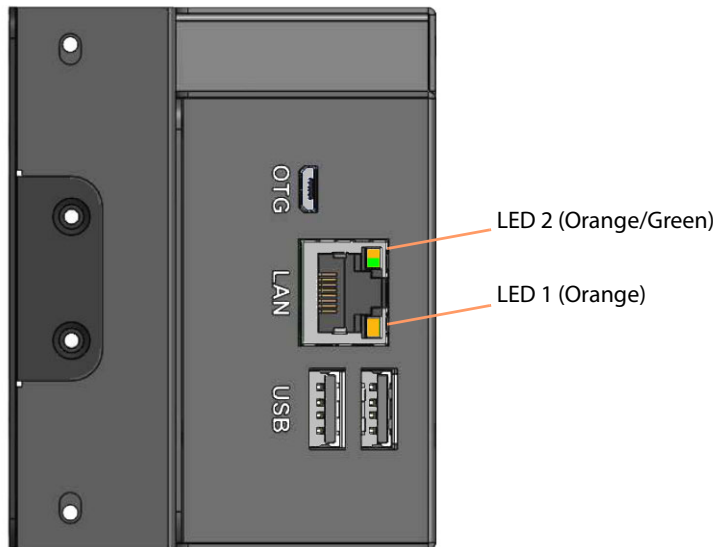


Fig. C-2: Ethernet Network Connector

**CAUTION** Do not connect a telephone cable to the Ethernet connector.

Tab. C-1: Network Interface Link State

| Link State        | LAN LEDs |       | Comment            |
|-------------------|----------|-------|--------------------|
|                   | LED 2    | LED 1 |                    |
| Off/ disconnected |          |       | Off + Off          |
| 10Mbps            |          |       |                    |
| No activity       |          |       | Off + Orange       |
| Activity (Rx, Tx) |          | BLINK | Off + Blink Orange |
| 100Mbps           |          |       |                    |
| No activity       |          |       | Orange + Off       |
| Activity (Rx, Tx) | BLINK    |       | Blink Orange + Off |
| 1000Mbps          |          |       |                    |
| No activity       |          |       | Green + Off        |
| Activity (Rx, Tx) | BLINK    |       | Blink Green+ On    |

## Micro SD Card Slots

A dual micro SD card slot is located on the top of the unit on one side. Two micro SD cards are fitted to the unit in the factory and are used by the unit for storage of its operating system, application and data. These should not be removed.

### CAUTION

Do not ordinarily remove either of the two micro SD cards fitted to the unit.  
Do not ordinarily fit *any* micro SD cards into the unit.



Micro SD Card 'double-slot', for two micro SD cards.

**Note:** Micro SD cards should not normally be removed

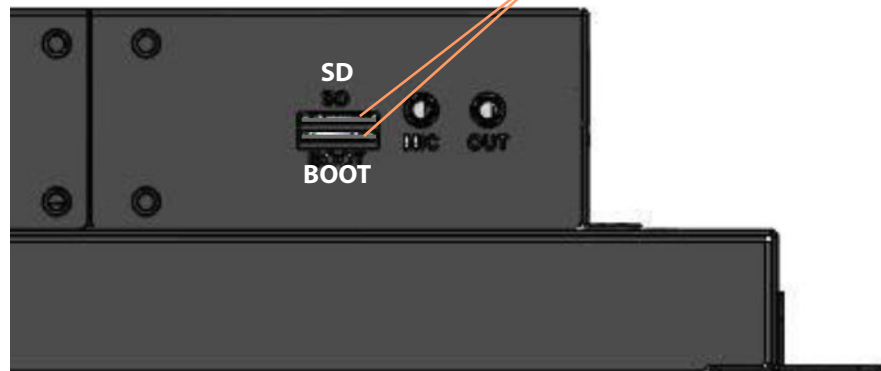


Fig. C-3: Micro SD Card Slots (Do Not Remove Micro SD Cards)

## 'Not Used' Connectors

Other connectors on the rear of ATP-2000 are reserved and are not used.

This includes:

- On the right-hand side of unit (as viewed from the front of the unit), the following connectors are reserved and not used:
  - 1x "OTG": Micro USB On-The-Go (OTG) connector.
  - 2x "USB": USB type A connectors.
- On the top side of unit, the following connectors are reserved and not used:
  - "MIC": Audio 3.5 mm jack, microphone input.
  - "OUT": Audio 3.5 mm jack, stereo left/right channels output.

### CAUTION

Do not connect anything to the connectors that are 'Not Used' by the ATP-2000 Advanced Touch Panel.

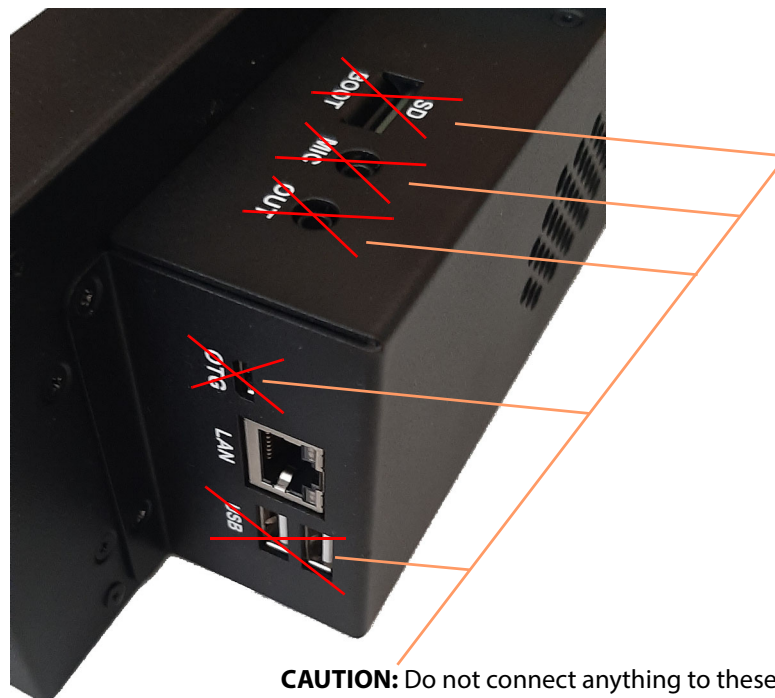


Fig. C-4: 'Not Used' Connectors Etc (Do Not Connect to These)

# D Power Supply Unit

## **Power Supply Unit**

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## DC Power Supply Module

An ATP-2000 Advanced Touch Panel ships with a DC Power Supply Unit which is also available as a field replaceable unit:

**ATP-PS01** ATP-2000 power supply. (AC mains to DC power supply unit.)

### Physical

| Physical               |                    |
|------------------------|--------------------|
| Dimensions (W x H x D) | 125 x 50 x 31.5 mm |
| Weight                 | 0.28 kg            |

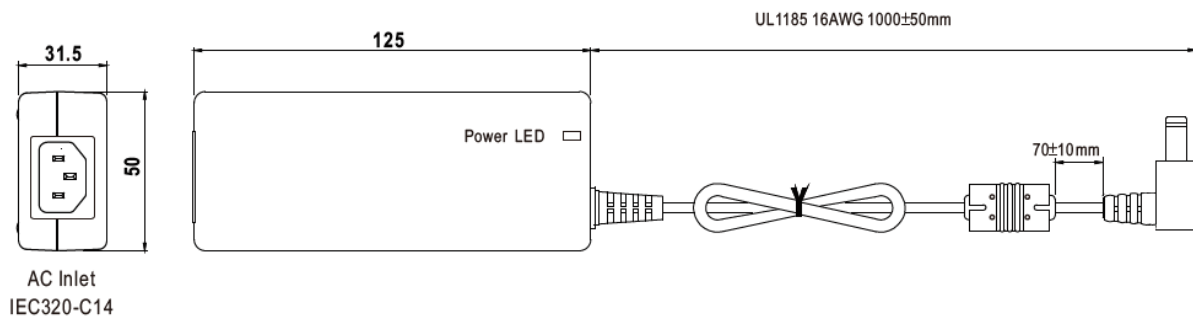
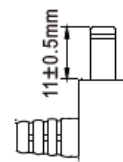
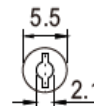


Fig. D-1: PSU Module Dimensions Drawing

### Electrical

|                        |  |
|------------------------|--|
| <b>AC Input</b>        |  |
| Power Consumption      | 40 W max.  |
| Input AC Voltage range | 90VAC to 264VAC  |
| AC Inlet type          | IEC 320-C14  |
| Efficiency             | 89.5%  |
| <b>DC Output</b>       |  |
| Output DC Voltage      | +12 V DC   |
| Output DC Current      | 0 to 3.34 A  |
| DC Connector           | 1x DC Power Jack. Right-angled, threaded.<br>Center pin is +12V. |



# Battery Replacement



## **Battery Replacement**

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## **Introduction**

The internal battery is a button cell (coin cell) and should last for the lifetime of the panel. The button cell powers the small, internal real-time clock function within the panel when it is powered down.

However, if the cell needs replacing, please follow the procedure described in Appendix E [Battery Removal Procedure](#), on page 62.

## Battery Removal Procedure

### Preliminaries

#### IMPORTANT

Follow static precautions at all times when handling this equipment. Servicing should be done in a static-free environment.



Take note of the warnings and cautions in [Important Safety Information](#), on page v. In particular, take note of the:

- battery handling warnings (see [Battery Handling](#), on page viii);
- electrostatic discharge (ESD) cautions and protection advice (see [Electrostatic Discharge \(ESD\) Protection](#), on page viii);
- lithium battery warnings (see [Lithium Batteries](#), on page xiv); and
- battery disposal information (see [Battery Disposal](#), on page xiv).

### Requirements

- An anti-static work surface.
- A soft cloth on which to place the unit, display-side down, to protect the display.
- Replacement battery unit:  
Battery unit: Grass Valley Part Number ATP-BAT01

### Tools Required

- Small tweezers.
- Medium sized Philips screwdriver.
- Double-sided adhesive tape.

### Removal Procedure Steps

The battery replacement procedure is described below and assumes that the unit is rack-mounted:

- [Step 1: Uninstall ATP-2000 Panel Unit from Rack](#)
- [Step 2: Panel Unit Disassembly](#)
- [Step 3: Remove Battery Unit](#)
- [Step 4: Refit Battery Unit](#)
- [Step 5: Panel Unit Reassembly](#)
- [Step 6: Re-Install in Rack](#)

## Step 1: Uninstall ATP-2000 Panel Unit from Rack

- 1 Turn off the AC power to the ATP-2000 panel's power supply unit.
  - 2 Disconnect the DC power lead to the ATP-2000 panel unit.  
(See [DC Power Connector](#), on page 55, for connector location.)
  - 3 Remove the panel unit from the rack.
  - 4 Place unit on an anti-static work surface.
- Now proceed to [Step 2: Panel Unit Disassembly](#).

## Step 2: Panel Unit Disassembly

### Step 2.1: Removal of Micro SD Cards

Two micro SD cards are fitted into the micro SD card double-slot on the side-rear of the unit. This may be under an adhesive label.

- 1 Locate the micro SD double-slot on the unit.  
(See [Micro SD Card Slots](#), on page 57, for slot location.)
- 2 Remove any covering label and retain it.
- 3 There are two micro SD cards fitted to the double-slot.

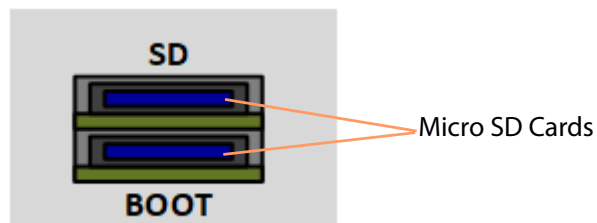


Fig. E-1: Micro SD Card(s) in Double-Slot

Both micro SD cards must be removed. Care must be taken when handling micro SD cards. Repeat for each card present in the panel unit:

- 4 Select one of the micro SD cards and note which slot it is fitted to ("SD" or "BOOT").
- 5 Gently push the selected card inwards.  
This will eject the card.
- 6 Remove the card, noting its orientation as you remove it. Tweezers may be required.
- 7 Keep the card in a safe place and remember its slot location.
- 8 Repeat for the other card.

#### IMPORTANT

It is important that each micro SD card is refitted into its original, correct slot. The two micro SD cards *must not be mixed up*.

Now proceed to [Step 2.2: Unit Disassembly](#).

### Step 2.2: Unit Disassembly

- 1 Place the unit display-side-down on a soft protecting cloth.  
The unit's metal rear cover is facing you.
- 2 Locate the four rear cover retaining screws. (See Figure E-2.)



Fig. E-2: Rear Cover Retaining Screws

- 3 Remove these four retaining screws and keep them for the reassembly step.

#### CAUTION

Do not lift the rear cover fully away from the unit because there is a wire attached to the rear cover within the unit. Do not disconnect this wire.

- 4 Gently lift the cover away from the unit, turn it over and place it on the work surface next to the unit.  
There is a wire connecting the rear cover to the unit. Do not disconnect.  
See Figure E-3.

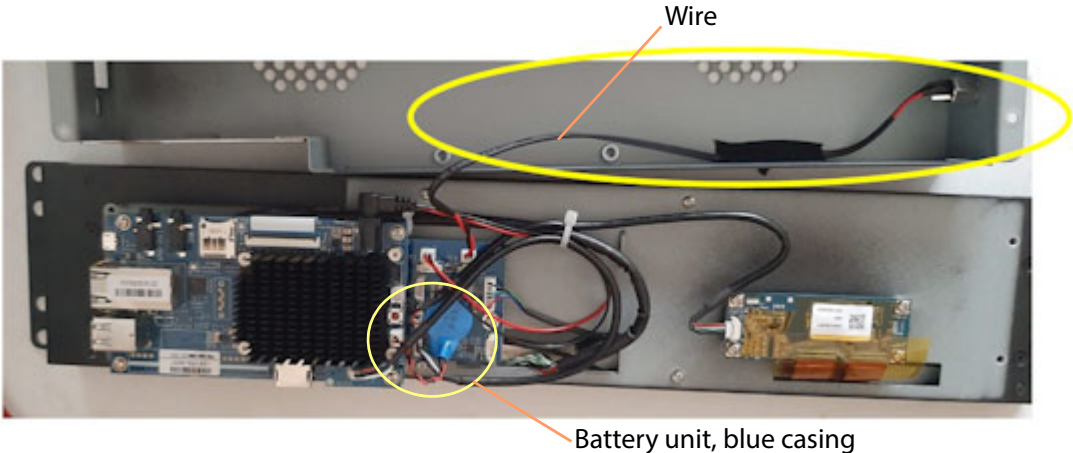


Fig. E-3: Rear Cover Removed

Now proceed to [Step 3: Remove Battery Unit](#).

### Step 3: Remove Battery Unit

- 1 Locate the battery unit in the unit. It is a blue casing with a pair of wires (twisted black/red) going to it from a white, 2-pin header-style connector.

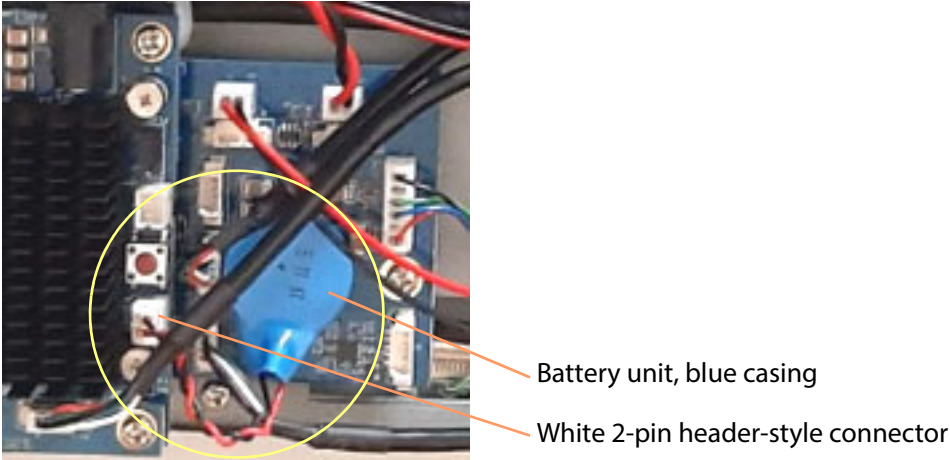


Fig. E-4: Battery Unit Location

- 2 Disconnect the black/red twisted wires from the 2-pin header connector, noting the orientation of the wires to the connector for reassembly.

- 3 The battery unit's blue casing is held down with double-sided adhesive tape. Slowly and gently peel the battery unit away from the panel unit.

This has removed the battery unit.



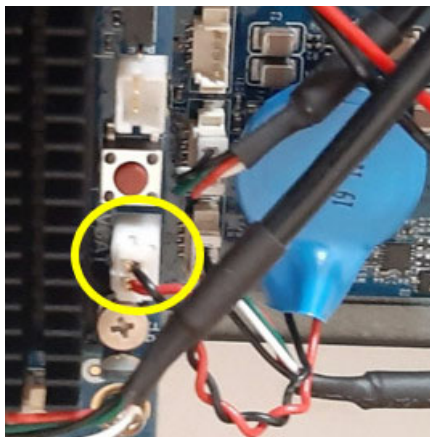
Gently peel away blue casing from unit

Now proceed to [Step 4: Refit Battery Unit](#).

## Step 4: Refit Battery Unit

With the new, replacement battery unit:

- 1 Connect the twisted wires of the new battery unit to the 2-pin header-style connector.



*Fig. E-5: Reconnected Battery Unit*

- 2 Fasten the battery unit down with double-sided adhesive tape to the same position as the removed battery unit.

This has refitted the battery unit.

Now proceed to [Step 5: Panel Unit Reassembly](#).

## Step 5: Panel Unit Reassembly

- 1 Relocate the rear cover and secure with the four fastening screws.
- 2 Refit both micro SD cards in their correct card slots.

If possible at this stage outside of the rack:

- 3 Apply DC power to the panel and check it is functioning.

Now proceed to [Step 6: Re-Install in Rack](#).

## **Step 6: Re-Install in Rack**

- 1 Install the panel into the rack.
- 2 Apply DC power and check the panel unit is functioning.

This has replace the battery unit in the ATP-2000 panel unit.

Done.







## **Grass Valley Technical Support**

For technical assistance, contact our international support center, at 1-800-547-8949 (US and Canada) or +1 530 478 4148.

To obtain a local phone number for the support center nearest you, please consult the Contact Us section of Grass Valley's website ([www.grassvalley.com](http://www.grassvalley.com)).

An on-line form for e-mail contact is also available from the website.

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