

## Wireless Collaboration Systems

# ShareLink 250 W

Wireless Collaboration Gateway



# Safety Instructions

## Safety Instructions • English

**WARNING:** This symbol, ⚠, when used on the product, is intended to alert the user of the presence of uninsulated dangerous voltage within the product's enclosure that may present a risk of electric shock.

**ATTENTION:** This symbol, ⚠, when used on the product, is intended to alert the user of important operating and maintenance (servicing) instructions in the literature provided with the equipment.

For information on safety guidelines, regulatory compliances, EMI/EMF compatibility, accessibility, and related topics, see the Extron Safety and Regulatory Compliance Guide, part number 68-290-01, on the Extron website, [www.extron.com](http://www.extron.com).

## Instructions de sécurité • Français

**AVERTISSEMENT :** Ce pictogramme, ⚠, lorsqu'il est utilisé sur le produit, signale à l'utilisateur la présence à l'intérieur du boîtier du produit d'une tension électrique dangereuse susceptible de provoquer un choc électrique.

**ATTENTION :** Ce pictogramme, ⚠, lorsqu'il est utilisé sur le produit, signale à l'utilisateur des instructions d'utilisation ou de maintenance importantes qui se trouvent dans la documentation fournie avec le matériel.

Pour en savoir plus sur les règles de sécurité, la conformité à la réglementation, la compatibilité EMI/EMF, l'accessibilité, et autres sujets connexes, lisez les informations de sécurité et de conformité Extron, réf. 68-290-01, sur le site Extron, [www.extron.com](http://www.extron.com).

## Sicherheitsanweisungen • Deutsch

**WARNUNG:** Dieses Symbol ⚠ auf dem Produkt soll den Benutzer darauf aufmerksam machen, dass im Inneren des Gehäuses dieses Produktes gefährliche Spannungen herrschen, die nicht isoliert sind und die einen elektrischen Schlag verursachen können.

**VORSICHT:** Dieses Symbol ⚠ auf dem Produkt soll dem Benutzer in der im Lieferumfang enthaltenen Dokumentation besonders wichtige Hinweise zur Bedienung und Wartung (Instandhaltung) geben.

Weitere Informationen über die Sicherheitsrichtlinien, Produkthandhabung, EMI/EMF-Kompatibilität, Zugänglichkeit und verwandte Themen finden Sie in den Extron-Richtlinien für Sicherheit und Handhabung (Artikelnummer 68-290-01) auf der Extron-Website, [www.extron.com](http://www.extron.com).

## Instrucciones de seguridad • Español

**ADVERTENCIA:** Este símbolo, ⚠, cuando se utiliza en el producto, avisa al usuario de la presencia de voltaje peligroso sin aislar dentro del producto, lo que puede representar un riesgo de descarga eléctrica.

**ATENCIÓN:** Este símbolo, ⚠, cuando se utiliza en el producto, avisa al usuario de la presencia de importantes instrucciones de uso y mantenimiento recogidas en la documentación proporcionada con el equipo.

Para obtener información sobre directrices de seguridad, cumplimiento de normativas, compatibilidad electromagnética, accesibilidad y temas relacionados, consulte la Guía de cumplimiento de normativas y seguridad de Extron, referencia 68-290-01, en el sitio Web de Extron, [www.extron.com](http://www.extron.com).

## Инструкция по технике безопасности • Русский

**ПРЕДУПРЕЖДЕНИЕ:** Данный символ, ⚠, если указан на продукте, предупреждает пользователя о наличии неизолированного опасного напряжения внутри корпуса продукта, которое может привести к поражению электрическим током.

**ВНИМАНИЕ:** Данный символ, ⚠, если указан на продукте, предупреждает пользователя о наличии важных инструкций по эксплуатации и обслуживанию в руководстве, прилагаемом к данному оборудованию.

Для получения информации о правилах техники безопасности, соблюдении нормативных требований, электромагнитной совместимости (ЭМП/ЭДС), возможности доступа и других вопросах см. руководство по безопасности и соблюдению нормативных требований Extron на сайте Extron: [www.extron.com](http://www.extron.com), номер по каталогу - 68-290-01.

## 安全说明 • 简体中文

**警告:** ⚠ 产品上的这个标志意在警告用户该产品机壳内有暴露的危险电压, 有触电危险。

**注意:** ⚠ 产品上的这个标志意在提示用户设备随附的用户手册中有重要的操作和维护(维修)说明。

关于我们产品的安全指南、遵循的规范、EMI/EMF 的兼容性、无障碍

使用的特性等相关内容, 敬请访问 Extron 网站, [www.extron.com](http://www.extron.com), 参见 Extron 安全规范指南, 产品编号 68-290-01。

## 安全記事 • 繁體中文

**警告:** ⚠ 若產品上使用此符號, 是為了提醒使用者, 產品機殼內存在著可能會導致觸電之風險的未絕緣危險電壓。

**注意:** ⚠ 若產品上使用此符號, 是為了提醒使用者, 設備隨附的用戶手冊中有重要的操作和維護(維修)說明。

有關安全性指導方針、法規遵守、EMI/EMF 相容性、存取範圍和相關主題的詳細資訊, 請瀏覽 Extron 網站: [www.extron.com](http://www.extron.com), 然後參閱《Extron 安全性與法規遵守手冊》, 準則編號 68-290-01。

## 安全上のご注意 • 日本語

**警告:** この記号 ⚠ が製品上に表示されている場合は、筐体内に絶縁されていない高電圧が流れ、感電の危険があることを示しています。

**注意:** この記号 ⚠ が製品上に表示されている場合は、本機の取扱説明書に記載されている重要な操作と保守(整備)の指示についてユーザーの注意を喚起するものです。

安全上のご注意、法規遵守、EMI/EMF適合性、その他の関連項目については、エクストロンのウェブサイト [www.extron.com](http://www.extron.com) より『Extron Safety and Regulatory Compliance Guide』(P/N 68-290-01) をご覧ください。

## 안전 지침 • 한국어

**경고:** 이 기호 ⚠ 가 제품에 사용될 경우, 제품의 인클로저 내에 있는 접지되지 않은 위험한 전류로 인해 사용자가 감전될 위험이 있음을 경고합니다.

**주의:** 이 기호 ⚠ 가 제품에 사용될 경우, 장비와 함께 제공된 책자에 나와 있는 주요 운영 및 유지보수(정비) 지침을 경고합  .

안전 가이드라인, 규제 준수, EMI/EMF 호환성, 접근성, 그리고 관련 항목에 대한 자세한 내용은 Extron 웹 사이트([www.extron.com](http://www.extron.com))의 Extron 안전 및 규제 준수 안내서, 68-290-01 조항을 참조하십시오.

## FCC Class B Notice

**NOTE:** This device complies with part 15 of the FCC rules. Operation is subject to the following two conditions: (1) This device may not cause harmful interference, and (2) This device must accept any interference received, including interference that may cause undesired operation.

This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to part 15 of the FCC rules. These limits provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. There is no guarantee that interference will not occur. If this equipment does cause interference to radio or television reception, which can be determined by turning the equipment off and on, you are encouraged to try to correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician for help.

In order to maintain compliance with FCC regulations, shielded cables must be used with this equipment. Operation with non-approved equipment or unshielded cables is likely to result in interference to radio and TV reception. The user is cautioned that changes and modifications made to the equipment without the approval of the manufacturer could void the user's authority to operate this equipment.

## FCC Radio Frequency Interference – Safety Notices

This device is restricted to indoor use due to its operation in the 5.15 to 5.25 GHz frequency range. FCC requires this product to be used indoors for the frequency range 5.15 to 5.25 GHz to reduce the potential for harmful interference to co-channel Mobile Satellite systems.

### Antenna Warnings

**WARNING:** The radiated output power of the wireless network device is far below the FCC radio frequency exposure limits. Nevertheless, the unit should be used in such a manner that the potential for human contact during normal operation is minimized. To avoid the possibility of exceeding the FCC radio frequency exposure limits, you should keep a distance of at least 20 cm between you (or any other person in the vicinity) and the antenna that is built into the unit. Details of the authorized configurations can be found at <https://www.fcc.gov/general/fcc-id-search-page#block-menu-block-4> by entering the FCC ID number on the device.

**AVERTISSEMENT :** La puissance de sortie rayonnée de l'appareil réseau sans fil est bien inférieure aux limites d'exposition aux radiofréquences de l'organisme américain FCC (Federal Communications Commission). Néanmoins, l'unité doit être utilisée de telle sorte que le contact humain éventuel durant le fonctionnement régulier de l'appareil soit réduit. Afin d'éviter toute possibilité de dépassement des limites d'exposition aux radiofréquences de la FCC, vous êtes tenu de conserver une distance de 20 cm (8") au minimum entre vous (ou toute autre personne située à proximité) et l'antenne intégrée à l'unité. Des informations détaillées relatives aux configurations autorisées sont disponibles sur <https://www.fcc.gov/general/fcc-id-search-page#block-menu-block-4> en entrant le numéro d'identification FCC inscrit sur l'appareil.

**NOTE:** The wireless network device must be installed and used in strict accordance with Extron Electronics' instructions as described in the user documentation that comes with the product. Any other installation or use will violate FCC Part 15 regulations.

### Local Restrictions on 802.11a, 802.11b, 802.11g, and 802.11n Radio Usage

**CAUTION:** Due to the fact that the frequencies used by 802.11a, 802.11b, 802.11g, and 802.11n wireless LAN devices may not yet be harmonized in all countries, 802.11a, 802.11b, 802.11g, and 802.11n products are designed for use only in specific countries, and are not allowed to be operated in countries other than those of designated use. As a user of these products, you are responsible for ensuring that the products are used only in the countries for which they were intended and for verifying that they are configured with the correct selection of frequency and channel for the country of use. Any deviation from the permissible power and frequency settings for the country of use is an infringement of national law and may be punished as such.

**ATTENTION :** Étant donné que les fréquences utilisées par les appareils LAN sans fil compatibles avec les normes 802.11a, 802.11b, 802.11g, et 802.11n peuvent ne pas être identiques dans tous les pays, les produits 802.11a, 802.11b, 802.11g, et 802.11n sont adaptés à une utilisation dans certains pays uniquement et ne peuvent être utilisés dans d'autres pays que ceux dans lesquels l'utilisation est prévue. En tant qu'utilisateur de ces produits, vous devez vous assurer que les produits sont utilisés uniquement dans les pays dans lesquels leur utilisation est prévue, et vérifier qu'ils sont configurés avec le choix correct de fréquence et de canal pour le pays d'utilisation. Toute entorse aux paramètres autorisés de gestion de l'alimentation et de fréquence pour le pays d'utilisation constitue une violation de la législation nationale et peut entraîner à ce titre une sanction.

## Compliance IC

### Canada, Industry Canada (IC) Notices

#### **CAN ICES-3 (B)/NMB-3(B)**

This device complies with Industry Canada licence-exempt RSS standard(s). Operation is subject to the following two conditions: (1) this device may not cause interference, and (2) this device must accept any interference, including interference that may cause undesired operation of the device.

This device complies with RSS247 of Industry Canada.

This Class B digital apparatus complies with Canadian ICES-003, Issue 4, and RSS-247, No 4.

To prevent radio interference to the licensed service, this device is intended to be operated indoors and away from windows to provide maximum shielding. Equipment (or its transmit antenna) that is installed outdoors is subject to licensing.

#### **IC Antenna Statement**

Under Industry Canada regulations, this radio transmitter may only operate using an antenna of a type and maximum (or lesser) gain approved for the transmitter by Industry Canada. To reduce potential radio interference to other users, the antenna type and its gain should be so chosen that the equivalent isotropically radiated power (e.i.r.p.) is not more than that necessary for successful communication.

This radio transmitter has been approved by Industry Canada to operate with the antenna types listed below with the maximum permissible gain and required antenna impedance for each antenna type indicated. Antenna types not included in this list, having a gain greater than the maximum gain indicated for that type, are strictly prohibited for use with this device.

**Type:** Dipole

**Maximum Peak Gain:** 2 dBi

**Impedance:** 50 Ohm

### **Radio Frequency (RF) Exposure Information**

This equipment complies with IC RSS-102 radiation exposure limits set forth for an uncontrolled environment. This equipment should be installed and operated with minimum distance 20 cm between the antenna and your body.

## IC conformité

### Canada, avis d'Industry Canada (IC)

#### CAN ICES-3 (B)/NMB-3(B)

Cet appareil est conforme aux normes des cahiers des charges sur les normes radioélectriques (CNR) de l'ISDE applicables aux appareils exempts de licence. Son utilisation est subordonnée aux deux conditions suivantes : (1) Cet appareil ne doit provoquer aucune interférence, et (2) cet appareil doit accepter toute interférence, y compris l'interférence susceptible de compromettre son fonctionnement.

Cet appareil est conforme aux normes CNR-247 de l'ISDE.

Cet appareil numérique de classe B est conforme aux normes canadiennes NMB-003, 4ème édition, et CNR-247, 4ème édition.

Afin d'éviter toute interférence électromagnétique avec le service faisant l'objet d'une licence, cet appareil doit être utilisé dans des applications intérieures et être éloigné des fenêtres afin de garantir une protection maximale. L'équipement (ou son antenne d'émission) installé dans des applications extérieures fait l'objet d'une licence.

### Note du ministère ISDE Canada relative aux antennes

En vertu de la réglementation d'Industrie Canada, cet émetteur radio doit être utilisé uniquement avec une antenne d'un certain type et d'un gain maximal (ou inférieur) approuvé pour l'émetteur par le ministère. Afin de réduire les éventuelles interférences électromagnétiques préjudiciables aux autres utilisateurs, il est essentiel de choisir le type d'antenne et son gain de telle sorte que la puissance isotrope rayonnée équivalente (EIRP) se révèle inférieure aux besoins requis pour garantir une communication satisfaisante.

Le fonctionnement de l'émetteur radio avec les types d'antenne listés ci-dessous a été approuvé par Industrie Canada. Le gain maximal autorisé et l'impédance requise pour chaque antenne sont par ailleurs indiqués. L'utilisation des types d'antenne non inclus dans cette liste, qui possèdent un gain supérieur au gain maximal indiqué pour chaque type, est strictement interdite avec cet appareil.

**Type** : dipôle

**Gain d'antenne maximal** : 2 dBi

**Impédance** : 50 ohms

### Informations sur les limites d'exposition aux radiofréquences

Cet équipement est conforme aux limites d'exposition aux radiations CNR-102 établies pour un environnement non contrôlé. Il doit être installé et contrôlé à une distance minimale de 20 cm entre l'antenne et votre corps.

## European Union

The low band 5.15 -5.35 GHz is for indoor use only.

This equipment complies with the essential requirements of the European Union directive (see the Declaration of Conformity at [www.extron.com](http://www.extron.com))

## Union européenne

La bande faible de fréquence comprise entre 5,15 et 5,35 GHz est destinée à un usage en intérieur uniquement.

Cet appareil est conforme aux exigences essentielles de la directive de l'Union européenne (consultez la déclaration de conformité sur [www.extron.fr](http://www.extron.fr))

## Conventions Used in this Guide

### Notifications

The following notifications are used in this guide:

**ATTENTION:**

- Risk of property damage.
- Risque de dommages matériels.

**NOTE:** A note draws attention to important information.

### Specifications Availability

Product specifications are available on the Extron website, [www.extron.com](http://www.extron.com).

### Copyright

© 2016 Extron Electronics. All rights reserved.

### Trademarks

All trademarks mentioned in this guide are the properties of their respective owners.

**The following registered trademarks<sup>®</sup>, registered service marks<sup>(SM)</sup>, and trademarks<sup>(TM)</sup> are the property of RGB Systems, Inc. or Extron Electronics:**

**Registered Trademarks<sup>(®)</sup>**

Extron, AVTrac, Cable Cubby, CrossPoint, DTP, eBUS, EDID Manager, EDID Minder, Flat Field, FlexOS, Global Configurator, GlobalViewer, Hideaway, Inline, IP Intercom, IP Link, Key Minder, LinkLicense, LockIt, MediaLink, MediaPort, NetPA, PlenumVault, PoleVault, PowerCage, PURE3, Quantum, SoundField, SpeedMount, SpeedSwitch, System *INTEGRATOR*, TeamWork, TouchLink, V-Lock, VersaTools, VN-Matrix, VoiceLift, WallVault, WindoWall, XTP, XTP Systems

**Registered Service Mark<sup>(SM)</sup> :** S3 Service Support Solutions

**Trademarks<sup>(TM)</sup>**

AAP, AFL (Accu-Rate Frame Lock), ADSP (Advanced Digital Sync Processing), Auto-Image, CableCover, CDRS (Class D Ripple Suppression), DDSP (Digital Display Sync Processing), DMI (Dynamic Motion Interpolation), Driver Configurator, DSP Configurator, DSVP (Digital Sync Validation Processing), eLink, Entwine, EQIP, FastBite, FOX, FOXBOX, IP Intercom HelpDesk, MAAAP, MicroDigital, ProDSP, QS-FPC (QuickSwitch Front Panel Controller), Room Agent, Scope-Trigger, ShareLink, SIS, Simple Instruction Set, Skew-Free, SpeedNav, Triple-Action Switching, True4K, Vector<sup>(TM)</sup> 4K, WebShare, XTRA, ZipCaddy, ZipClip

# Contents

---

<b>Introduction.....</b>	<b>1</b>
About the ShareLink 250 W.....	1
Features .....	2

---

<b>Installation.....</b>	<b>3</b>
Rear Panel Features and Cabling.....	3
Front Panel Features and Cabling .....	5
Bottom Panel Features .....	5
Setting Up the Standby Screen .....	6
Using the Calibration Tool .....	7
Using the Screen Resize Tool.....	8
Using the Whiteboard Feature.....	9
Using the USB Player .....	10

---

<b>Operation Using a Computer .....</b>	<b>11</b>
Connecting a Computer to the ShareLink 250 W.....	11
Connecting through the ShareLink 250 W Internal WAP.....	11
Connecting through an External WAP .....	11
Connecting through a Network Hub, Switch, or Router.....	11
Setting Up the ShareLink 250 W Software.....	12
Running the ShareLink 250 W Lite Software .....	12
Downloading and Installing the ShareLink 250 W Pro Software.....	13
Using the ShareLink 250 W Software.....	15
Presenting the Computer Screen (Share my Screen Tab).....	15
Presenting a Media File (Share Media Tab) ....	16
Using the Software Menu.....	17
Sharing on Multiple Screens .....	18
Creating a USB Thumb-drive App .....	18
Creating a Room File .....	19

---

<b>Operation Using a Mobile Device.....</b>	<b>20</b>
Downloading MirrorOp for Extron ShareLink .....	20
Using MirrorOp for Extron ShareLink.....	20
Connecting to a Receiver.....	20
Main Menu Overview .....	22
Presenting Documents and Photos.....	23
Presenting Files from a Cloud Storage .....	26
Presenting Web Pages .....	30
Presenting the Device Camera.....	31
Presenting Device Screenshots.....	31
Making Annotations.....	32
Settings .....	32
Downloading MirrorOp Sender for Galaxy .....	33
Using MirrorOp Sender for Galaxy .....	33

---

<b>Using the Embedded Web Pages.....</b>	<b>34</b>
Opening the Embedded Web Pages.....	34
Watching a Presentation (WebShare).....	35
Moderating a Presentation.....	36
Moderating through the Moderator Control Web Page .....	36
Moderating through an Extron ShareLink Driver.....	37
Configuring ShareLink 250 W Settings.....	38
Device Setup .....	40
Network Setup .....	41
WiFi Setup.....	42
SNMP Setup .....	45
OSD Setup .....	46
WebShare Setup .....	47
Web Page Moderator Setup .....	48
Admin Password .....	48
Firmware Update .....	49
Reset to Default.....	50
Reboot System.....	50



---

**Reference Information ..... 51**

Mounting .....	51
Wall Mounting.....	51
Rack Mounting .....	52
Under-desk and Furniture Mounting.....	52
Downloading ShareLink 250 W Firmware .....	53
Firewall Traversal.....	54
Available Wi-Fi Channels.....	55
2.4 GHz Band — Channel Selection .....	55
5 GHz Band — Channel Selection .....	55

---

**Extron Warranty ..... 57**

# Introduction

This section covers the following:

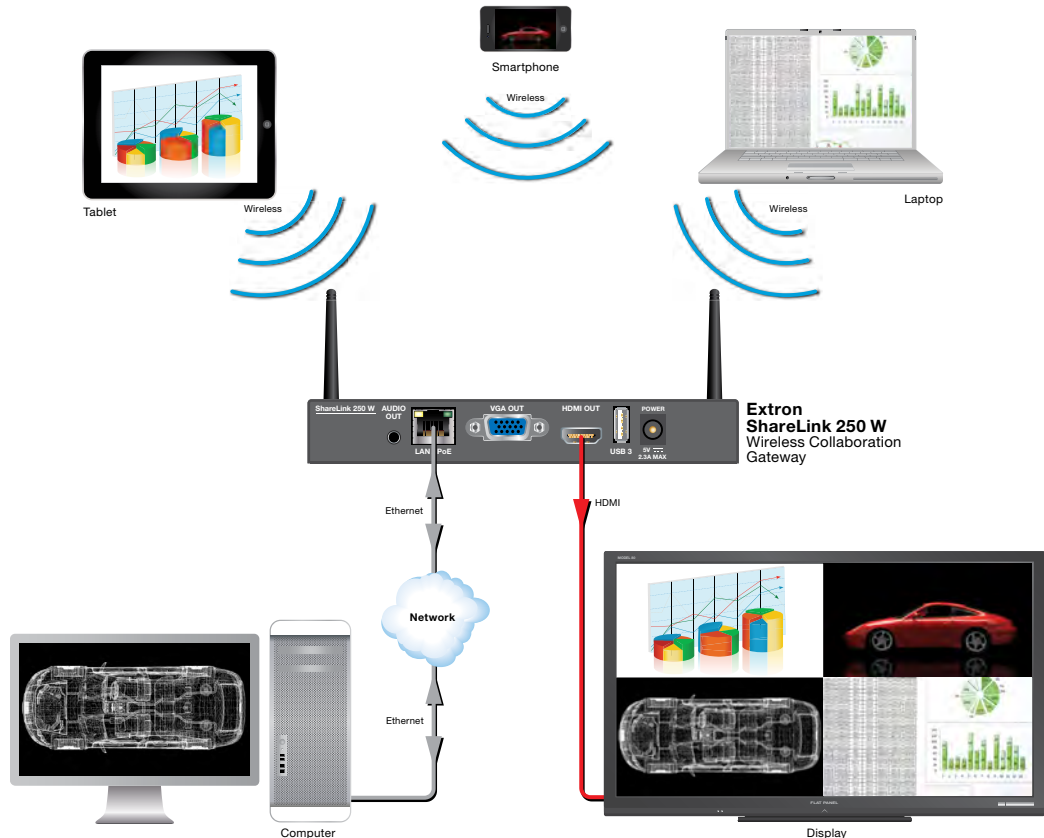
- [About the ShareLink 250 W](#)
- [Features](#)

## About the ShareLink 250 W

The Extron ShareLink 250 W Wireless Collaboration Gateway allows users to present wirelessly from their mobile device or computer onto a display device. The ShareLink 250 W is compatible with Windows® and OS X® computers as well as Android™ and Apple® smartphones and tablets.

The ShareLink 250 W model includes an integrated wireless access point (WAP). Users connect directly to the ShareLink 250 W through a Wi-Fi connection. A Gigabit Ethernet port provides a high-speed network connection. The ShareLink 250 W wireless model is ideal for creating a stand-alone wireless collaboration and presentation system or adding wireless capabilities to a more traditional wired solution.

This model can operate on the 5 GHz or 2.4 GHz wireless band (see [WiFi Setup](#) on page 42 for instructions on wireless band configuration).



**Figure 1. ShareLink 250 W Application Diagram**

## Features

- **Wirelessly share content from personal mobile devices** — Allows users to connect a wide variety of devices to the system wirelessly or through a wired LAN connection.
- **Wireless 5G support** — Configurable for transmission on the 5 GHz or 2.4 GHz wireless band.
- **Outputs** — HDMI connector, 15-pin HD connector, 3.5 mm stereo audio mini jack
- **Supports Microsoft® Windows and OS X® computers as well as Apple and Android smartphones and tablets**
- **Full screen or four-window display** — Full screen display of content from a single personal device or simultaneous display of multiple devices into four windows on a single display.
- **Dropbox®, Google Drive™, iCloud®, and OneDrive™ integration within the MirrorOp® for Extron ShareLink app** — Provides easy access to content stored in the cloud.
- **Content sharing from a computer to as many as four ShareLink 250 W units** — Allows a Windows or OS X computer to send content to multiple ShareLink 250 W units on the network, supporting up to four displays.
- **Full-motion video playback from laptops** — Enables a Windows or OS X computer to send full motion video with audio to the display for a smooth viewing experience.
- **Supports display of documents, graphics, images, and videos directly from a USB flash drive** — Enables content presentation without requiring a laptop or computer.
- **WebShare™ technology allows attendees to view slide images on personal devices via a Web browser** — ShareLink 250 W enables meeting content to display on each participant's mobile device, ensuring visibility regardless of sight lines.
- **Power over Ethernet, or PoE, eliminates the need for a local power supply** — Offers easy installation, reduced labor, and fewer devices to install. Data and power are delivered over the single cable.
- **Integrated wireless access point** — Offers a local connection point for attendees, enabling segmentation of guest and private networks.
- **USB ports for peripheral support** — Allows connection of a USB keyboard or mouse, and enables simple annotation capabilities with devices such as an interactive whiteboard.
- **HDMI and VGA video outputs** — Offers flexibility to work with digital and analog display devices or a system switcher to easily add wireless capabilities to existing video systems.
- **SNMP support for remote monitoring** — Supports network monitoring for the operational health of network-attached devices.

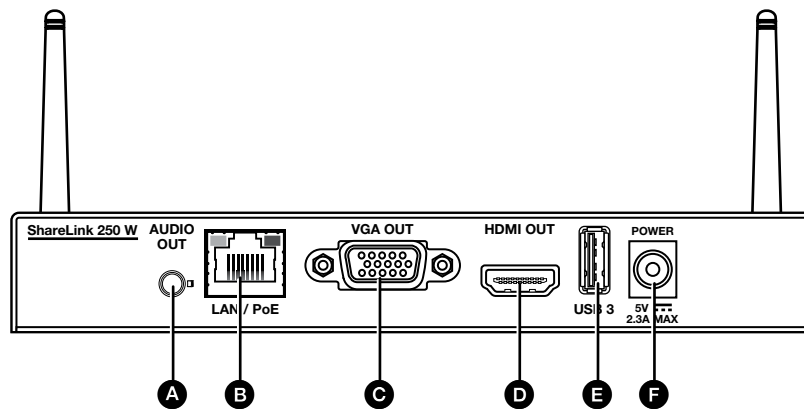
# Installation

This section covers the following:

- [Rear Panel Features and Cabling](#)
- [Front Panel Features and Cabling](#)
- [Bottom Panel Features](#)
- [Setting up the Standby Screen](#)

## Rear Panel Features and Cabling

The following section covers rear panel features and cabling procedures. If mounting is necessary before connecting cables, see [Mounting](#) on page 51.



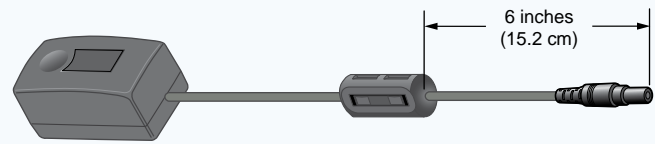
**Figure 2.** Rear Panel

- A Audio output** — (Optional) connect a 3.5 mm audio output cable between this female audio jack and the audio input of a display or audio amplifier.
- B RJ-45 connector** — Use an Ethernet cable to connect a network switch, hub, router, or PC to this female RJ-45 connector.

**NOTE:** When the ShareLink 250 W is connected to a wired or wireless network, by default it functions as a wireless access point, allowing access to the ShareLink 250 W from all network computers. This feature can be disabled in the WiFi Setup configuration settings (see [figure 41](#), **1**, on page 42).

- C VGA output** — (Optional) Connect a VGA display device or touchscreen into this female VGA connector.
- D HDMI output** — Connect an HDMI display device or touchscreen into this female HDMI connector.
- E USB port** — (Optional) Connect a USB flash drive to present documents, photos, videos, or audio files using the ShareLink USB player feature ([figure 4](#), **5** on page 6).
- F Power input** — Connect the included power supply to the power input (see the **NOTE** and **ATTENTION** on the next page for important information).

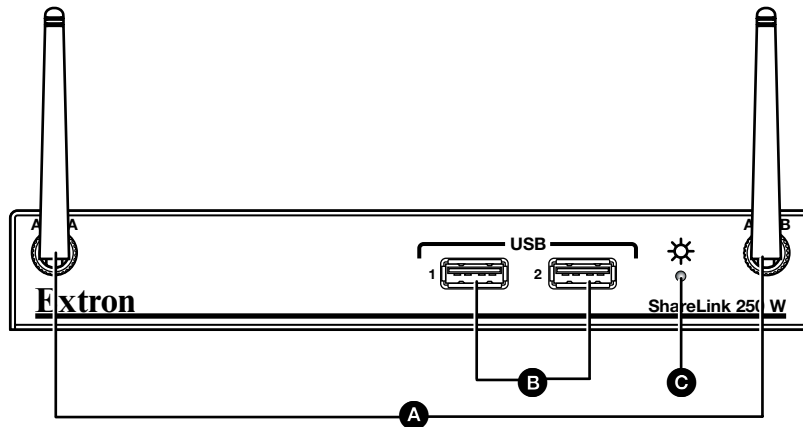
**NOTE:** Snap the included ferrite bead onto the power supply cable at a distance of 6 inches (15.2 cm) from the end of the DC connector.



**ATTENTION:**

- This product is intended to be supplied by a Listed Power Unit marked “Class 2” or “LPS,” rated 5 VDC, 2.6 A minimum. Always use a power supply supplied by or specified by Extron. Use of an unauthorized power supply voids all regulatory compliance certification and may cause damage to the supply and the end product.
- Ce produit est destiné à une utilisation avec une source d’alimentation listée UL avec l’appellation « Classe 2 » ou « LPS » et normée 5 Vcc, 2,6 A minimum. Utilisez toujours les sources d’alimentation recommandées par Extron. L’utilisation d’une source d’alimentation non autorisée annule toute conformité réglementaire et peut endommager la source d’alimentation ainsi que le produit final.
- Unless otherwise stated, the AC/DC adapters are not suitable for use in air handling spaces or in wall cavities.
- Sauf mention contraire, les adaptateurs AC/DC ne sont pas appropriés pour une utilisation dans les espaces d’aération ou dans les cavités murales.
- The installation must always be in accordance with the applicable provisions of National Electrical Code ANSI/NFPA 70, article 725 and the Canadian Electrical Code part 1, section 16. The power supply shall not be permanently fixed to a building structure or similar structure.
- Cette installation doit toujours être en accord avec les mesures qui s’applique au National Electrical Code ANSI/NFPA 70, article 725, et au Canadian Electrical Code, partie 1, section 16. La source d’alimentation ne devra pas être fixée de façon permanente à une structure de bâtiment ou à une structure similaire.

## Front Panel Features and Cabling



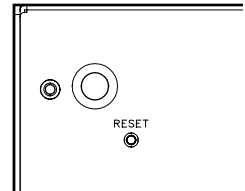
**Figure 3. Front Panel**

- A Wi-Fi antenna jacks** — Attach the included antennae to these receptacles.
- B USB ports** — Connect a USB keyboard, mouse, or touchscreen to these USB ports to set up and control the ShareLink 250 W, and to use the Whiteboard feature (see [figure 4](#), **4** on the next page).
- C Power LED** — Lights green when the unit is powered on.

## Bottom Panel Features

The bottom panel contains a **Reset** button for resetting the device, if necessary. To reset the ShareLink 250 W:

1. Disconnect power from the device.
2. Press the **Reset** button using a small tool (such as a paperclip).
3. While pressing the **Reset** button, apply power to the device and hold the **Reset** button down for at least 10 seconds. After 10 seconds, the reset process starts on the device.



## Setting Up the Standby Screen

Once the ShareLink 250 W is connected and powered on, the default standby screen (figure 4) appears on the display.



**Figure 4.** Standby Screen

- 1 Instructional screen** — Provides instructions for starting a presentation. The background image of the instructional screen can be customized (see [OSD Setup](#) on page 46).
- 2 Calibration tool icon**  — Double-click to open the Calibration tool (for touchscreens only). This feature allows you to calibrate a touchscreen for accuracy, if needed (see [Using the Calibration Tool](#) on the next page).
- 3 Screen Resize tool icon**  — Double-click to use the screen resize tool. This feature allows you to change the size of the screen presented on the display (see [Using the Screen Resize Tool](#) on page 8).
- 4 Whiteboard icon**  — Double-click to use the display as a whiteboard. This feature allows the presenter to draw on a blank screen using a mouse or touchscreen (see [Using the Whiteboard Feature](#) on page 9).
- 5 USB Player icon**  — Double-click to access the USB Player. This feature allows the presenter to access photos, videos, audio files, and documents directly from the connected USB flash drive (see [Using the USB Player](#) on page 10).
- 6 IP Address** — Use this IP address to identify and access the ShareLink 250 W during connection (see [Setting up the ShareLink 250 W Software](#) on page 12).
- 7 Hostname** — Use this Hostname to identify and access the ShareLink 250 W during connection through the ShareLink software. This hostname can be customized in the configuration pages (see [Network Setup](#), **1** on page 41).
- 8 WiFi** — Use this Wi-Fi name (SSID) to identify and access the ShareLink 250 W during connection.
- 9 Code** — Use this code to access the ShareLink 250 W device through the software (see [Connecting to the ShareLink 250 W Receiver](#) on page 14). The code can be customized or disabled (see [Device Setup](#) on page 40).

## Using the Calibration Tool

This feature allows you to calibrate a touchscreen for accuracy, if needed. To calibrate:

1. Ensure that the touchscreen is connected to the ShareLink 250 W as follows:
  - a. Connect the touchscreen to the HDMI or VGA port on the rear panel of the ShareLink (see **figure 2**, **C** and **D**, on page 3).
  - b. Connect the touchscreen to the USB port on the front panel of the ShareLink (see **figure 3**, **B** on page 5).
2. Press the calibration icon twice on the standby screen (see **figure 4**, **2**, on the previous page). The calibration screen appears:



**Figure 5. Calibration Screen**

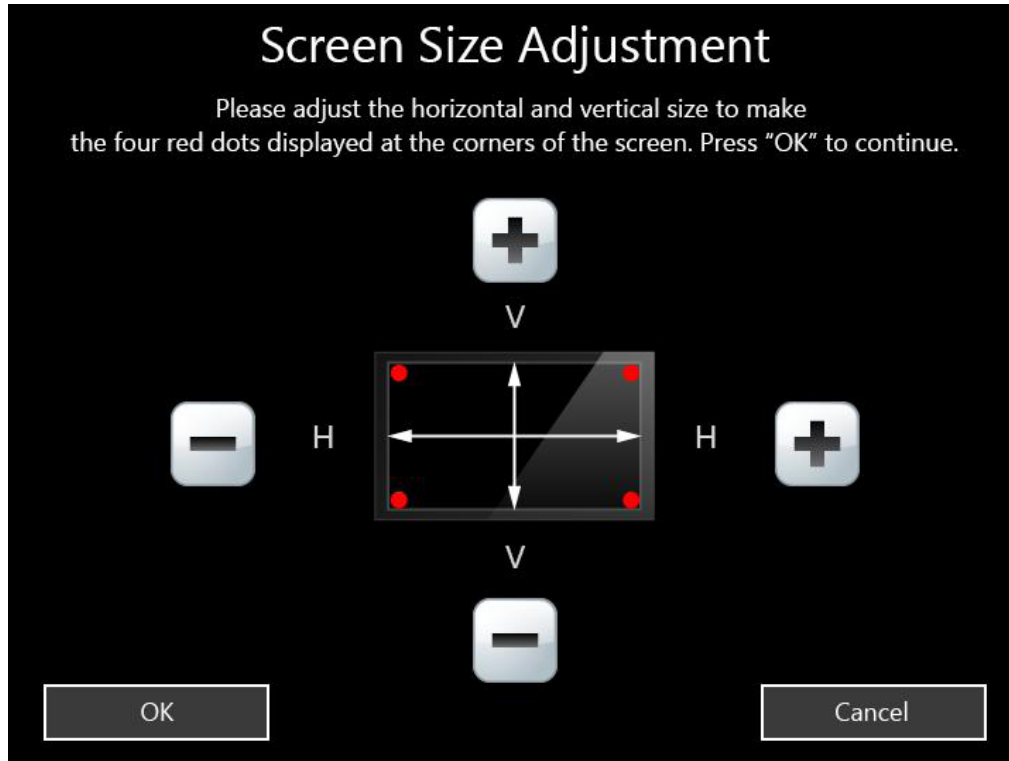
3. Press the four red dots that appear on the corners of the screen. Each dot turns green after it has been pressed. The **OK** button appears after all four dots are pressed.
4. Press the **OK** button to return to the standby screen.



## Using the Screen Resize Tool



This feature allows you to change the size of the screen presented on the display. To adjust the screen size, double-click or press the Screen Resize tool icon (see [figure 4, ③](#), on page 6).

The following screen appears:



**Figure 6. Screen Resize Tool**

To adjust the screen size:

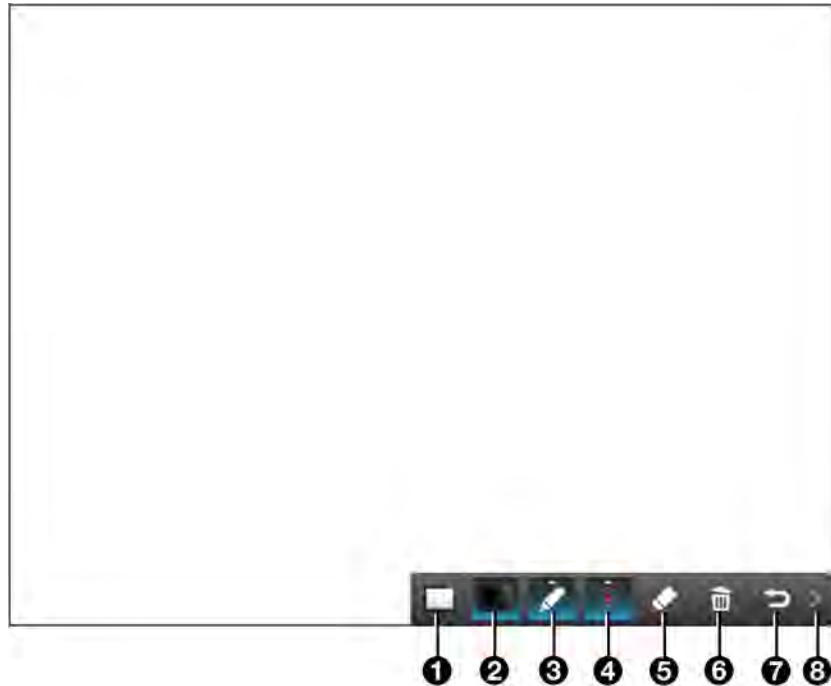
1. Click or press the  and  buttons to adjust the screen horizontally and vertically. The four red dots on the corners indicate the size of the screen.
2. Press the **OK** button to return to the standby screen.

**NOTE:** The standby screen is not resized. Only the **Whiteboard** screen and all other presentation screens are resized.

## Using the Whiteboard Feature

To use the Whiteboard feature, double-click or press the **Whiteboard** icon on the standby screen (**figure 4**, **4**, on page 6).

The **Whiteboard** screen appears:



**Figure 7. Whiteboard Screen**

- 1 Whiteboard** — draw on a white background
- 2 Blackboard**— draw on a black background
- 3 Pen mode** — there are two modes for using the pen (click this button to switch between modes):
  - Default mode: allows the user to draw without erasing previous strokes.
  - One-stroke mode: allows the user to draw only one stroke at a time (the previous annotation is cleared when a new stroke is made).
- 4 Pen color and size** — select pen color (red, green, or blue), and pen size
- 5 Eraser** — erase selected parts within drawing
- 6 Delete** — delete entire drawing on the screen
- 7 Return** — return to the standby screen
- 8 Minimize/Open** — minimize or open the menu

## Using the USB Player

This feature allows the presenter to display photos, videos, audio files, and documents from a USB flash drive connected to the rear panel USB port (see **figure 2, E** on page 3). To use the USB Player:

1. Ensure that a USB drive is connected to the USB port on the rear panel (see **figure 2, E**).

**NOTE:** The USB drive connected to this port must be FAT32 formatted and single partition. Also, external hard drives must use external power (hard drives cannot be powered from this USB port).

2. Click the USB Player icon on the standby screen (see **figure 4, 5** on page 6). The USB Player screen opens:



**Figure 8. USB Player Screen**

- ① **Home icon** (🏠) – return to standby screen
- ② **Photo** – open photo viewer
- ③ **Video** – open video player
- ④ **Music** – open music player
- ⑤ **Office Viewer** – open Office Viewer (to view Microsoft Office documents)
- ⑥ **Setup** – open Setup page

**NOTE:**

The following file formats are supported:

- **Image:** JPG, BMP, PNG, GIF
- **Video:** MP4, MPG, MPEG, AVI, MOV, MKV, WMV
- **Audio:** MP3, WAV, WMA, AAC
- **Document:** Microsoft Word (.doc, .docx), PowerPoint (.ppt, .pptx), Excel (.xls, .xlsx); PDF

The following codecs are supported:

- **Image:** JPG, BMP, PNG, GIF
- **Video:** MPEG-2, MPEG-4 (Microsoft MPEG-4 v1-3 is not supported), Motion JPEG, WMV9 (only WMV3/WVC1 is supported)
- **Audio:** LPCM, AAC, MP3, WMA

# Operation Using a Computer

Users can present from a Windows or Mac computer using the ShareLink 250 W software. This section covers the following:

- **Connecting a Computer to the ShareLink 250 W**
- **Setting Up the ShareLink 250 W Software**
- **Using the ShareLink 250 W Software**

## NOTES:

### Mac computer minimum system requirements:

- Dual Core, 1.4 GHz processor or better
- Mac OS X 10.7 - 10.10
- Graphics card with 64MB VRAM or better

### Windows computer minimum requirements:

- Dual Core, 1.8 GHz processor or better
- Microsoft Windows 7 or 8
- Graphics card with 64MB VRAM or better

## Connecting a Computer to the ShareLink 250 W

There are three ways to connect a computer to the ShareLink 250 W:

- Wirelessly, through the ShareLink 250 W internal wireless access point (WAP)
- Wirelessly, through an external WAP
- Wired through a network device

See instructions below for your preferred connection method.

### Connecting through the ShareLink 250 W Internal WAP

1. Ensure that the ShareLink 250 W is powered and that wireless network capability is enabled on your computer.
2. Open the wireless networks on your computer (see image at right) and connect to the ShareLink 250 W unit.

**NOTE:** The ShareLink Wi-Fi name (SSID) is shown on the standby screen (**figure 4, 8** on page 6).



### Connecting through an External WAP

1. Ensure that the external WAP and the ShareLink 250 W are wired to the same network.
2. Ensure that the ShareLink 250 W is powered on and that wireless network capability is enabled on your computer.
3. Open the wireless networks on your PC and connect to the external WAP.

### Connecting through a Network Hub, Switch, or Router

1. Ensure that your computer is connected to the network through a hub, switch, or router.
2. Connect the RJ-45 connector of the ShareLink 250 W to the network device using an RJ-45 cable.

## Setting Up the ShareLink 250 W Software

There are two versions of the ShareLink 250 W software:

- **Lite version:** No installation required. Users can run the Lite software from the embedded Web pages without having to install the software on the PC. Since installation is not required, users do not need admin rights to run the Lite software (see “Running the ShareLink 250 W Lite Software” below).
- **Pro version:** Installation required. The executable software file can be downloaded from the embedded Web pages or from the Extron website (see **Downloading and Installing the ShareLink 250 W Pro Software** on the next page).

To see a list of the different Lite and Pro software features, click the information (i) icon on the landing page (see figure 9). An information window opens as shown at right.

Lite Software vs. Pro Software		
	Lite Software	Pro Software
No Installation Required	✓	
Screen Sharing	✓	✓
Video Sharing		✓
Share on Multiple Screens	✓	✓
WebShare	✓	✓
Advanced Settings		✓

## Running the ShareLink 250 W Lite Software

1. Ensure that the computer is connected to the ShareLink 250 W device, either through an external WAP or through a physical network connection. The computer and the ShareLink 250 W must be on the same network.
2. Launch your Web browser and enter the IP address of the ShareLink in the browser.

**NOTE:** The IP address is shown on the standby screen (see **figure 4, 6**, page 6).

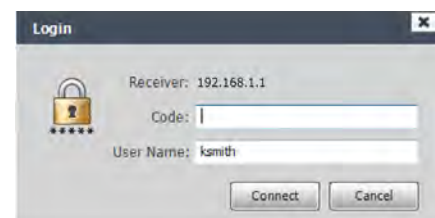
The ShareLink 250 W landing page opens as shown below:



**Figure 9. ShareLink 250 W Landing Page**

3. Click **Windows** (1) or **Mac** (3), depending on your operating system, to launch the software.
4. Follow the instructions on the Web browser to run the the executable ShareLink 250 W software file. When the Lite software opens, it automatically attempts to connect to your ShareLink receiver.
5. If the **Login** window opens (as shown at right), enter the login code into the **Code** field and click **Connect**.

**NOTE:** The login code is shown on the standby screen (see **figure 4, 9**, page 6).



When a connection is established, the software window opens. This window has two sections:

- **Share my Screen** tab (see **Presenting the Computer Screen** on page 15 for instructions).
- Software menu (see **Using the Software Menu** on page 17).

## Downloading and Installing the ShareLink 250 W Pro Software

The ShareLink 250 W software can be downloaded from the embedded Web pages or from the Extron website. Follow the instructions below for your preferred download method.

### Downloading the software from the embedded Web pages

1. Ensure that your computer is connected to the ShareLink 250 W device, either through Wi-Fi or through a physical network connection. The computer and the ShareLink 250 W must be on the same network.
2. Launch your internet browser and enter the IP address of the ShareLink 250 W into the browser.

**NOTE:** The IP address is shown on the standby screen (see **figure 4, 6** on page 6).

The ShareLink 250 W landing page appears on the browser (see **figure 9** on the previous page).

3. Click **Install Pro software for Windows** (see **figure 9, 2**) or **Install Pro software for Mac** (**figure 9, 4**), depending on your operating system, to launch the software installer on your computer.
4. Follow the instructions on the Web browser to run the the executable ShareLink 250 W Software installer file.
5. Follow the steps on the installation wizard to install the software.

### Downloading the software from the Extron website

1. Go to [www.extron.com](http://www.extron.com) and click the **Download** tab at the top of the page (see figure 10, **1**).



**Figure 10. Download Page on the Extron Website**

2. Click **Software** on the left menu (**2**).
3. Scroll down to the alphabetical menu and click the letter **S**.



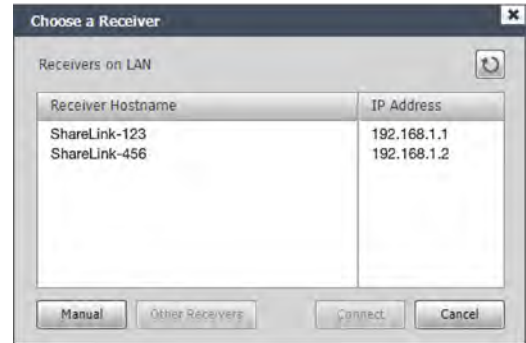
4. Scroll down to the software names and look for ShareLink 250 W. Click **Download** in the ShareLink 250 W section.
5. On the next screen (Download Center), enter the requested information and click the download button.
6. When download is complete, open the executable ShareLink 250 W Software installer file and follow the steps on the installation wizard to install the software.

## Connecting to the ShareLink 250 W receiver

Use the software to connect to the ShareLink 250 W receiver as follows:

1. Open the ShareLink 250 W software. The software searches for available receivers on your network and the **Choose a Receiver** dialog box opens as shown at right.

**NOTE:** The **Other Receivers** button allows Wi-Fi users to search and connect to ShareLink receivers on other Wi-Fi networks (see **Other Receivers** below for instructions).

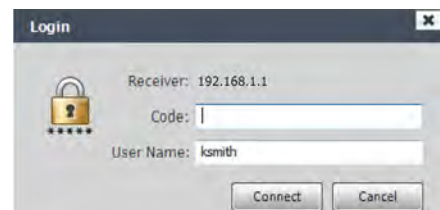


2. Select your ShareLink 250 W device from the **Receiver Hostname** section and click **Connect**.

**NOTE:** The receiver name is shown on the standby screen. If your ShareLink unit is not listed, click the refresh button. If the device still does not appear, click **Manual** and enter the receiver IP address manually.

3. If the login dialog box appears, enter the login code into the **Code** field and click **Connect**.

**NOTE:** The login code is shown on the standby screen (see **figure 4** on page 6).



**NOTE:** A room file can be created for the ShareLink 250 W software to connect automatically to a designated receiver (see **Creating a Room File** on page 19).

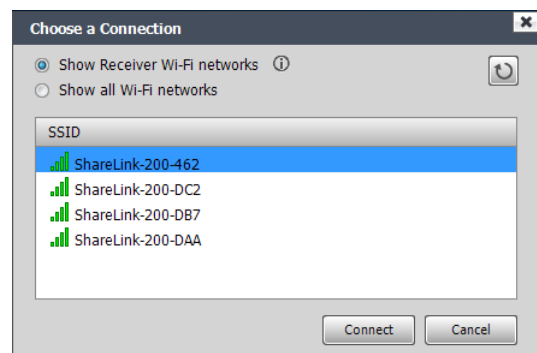
## Other receivers

The **Other Receivers** button allows Wi-Fi users to search and connect to ShareLink receivers on all available Wi-Fi networks. To do so:

1. Click **Other Receivers**. The **Choose a Connection** dialog box opens as shown below.

- Select **Show Receiver Wi-Fi networks** to see a list of the ShareLink receivers on all available Wi-Fi networks.

**NOTE:** This option filters by SSID name. It only lists receivers whose SSID starts with "ShareLink." If the SSID is changed and no longer starts with "ShareLink," the receiver is not shown.



- Select **Show all Wi-Fi networks** to see a list of the ShareLink receivers as well as a list of all available Wi-Fi networks.

**NOTE:** If you connect to a Wi-Fi network, and the Wi-Fi network is password-protected, you are asked to enter the network password.

2. Click on your ShareLink receiver or network, and click **Connect**.

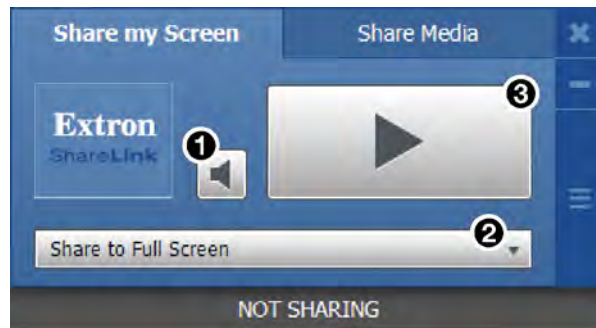
## Using the ShareLink 250 W Software

When connection is established, the control screen appears. This screen has three main sections:

- **Share my Screen** tab (see “Presenting the Computer Screen” below)
- **Share Media** tab (see **Presenting a Media File** on the next page)
- Software menu (see **Using the Software Menu** on page 17)

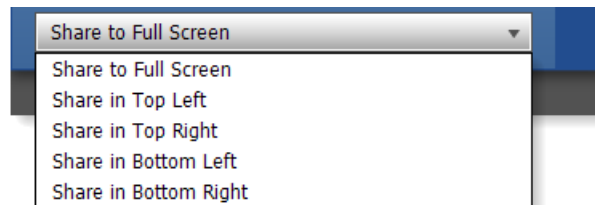
### Presenting the Computer Screen (Share my Screen Tab)

Use the **Share my Screen** tab to present your computer screen on the display device.



**Figure 11. Share my Screen Tab**

- ❶ **Mute button** — Click to mute or unmute the source device audio.
- ❷ **Drop-down list** — Click to see the presentation options shown in figure 12. One computer screen can be shared full screen on the main display (default option), or up to four screens can be shared simultaneously on separate quadrants (top left, top right, bottom left, or bottom right).



**Figure 12. Drop-Down List**

**NOTE:** When multiple screens are shared, audio is output from the first (top left) quadrant only.

- ❸ **Play button** — Click to display the screen as specified in the drop-down menu. The button becomes a Stop button, which can be clicked to stop displaying the screen.



## Presenting a Media File (Share Media Tab)

Use the **Share Media** tab to stream a media file from your computer onto the display device.

**NOTE:** This feature requires the source device and receiver to be on the same subnet. The file does not play if the source device and receiver are not on the same subnet.

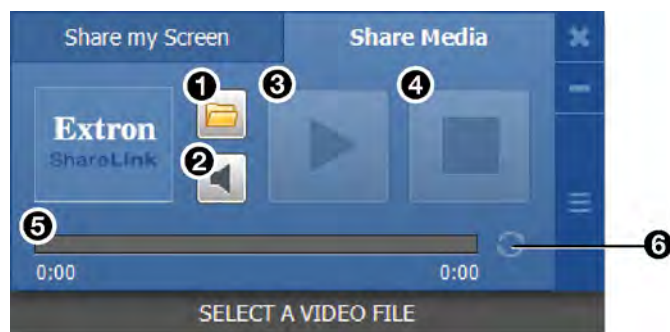
**NOTE:**

The following file formats are supported:

- **Image:** JPG, BMP, PNG, GIF
- **Video:** MP4, MPG, MPEG, AVI, MOV, MKV, WMV
- **Audio:** MP3, WAV, WMA, AAC

The following codecs are supported:

- **Image:** JPG, BMP, PNG, GIF
- **Video:** MPEG-2, MPEG-4 (Microsoft MPEG-4 v1-3 is not supported), Motion JPEG, WMV9 (only WMV3/WVC1 is supported)
- **Audio:** LPCM, AAC, MP3, WMA

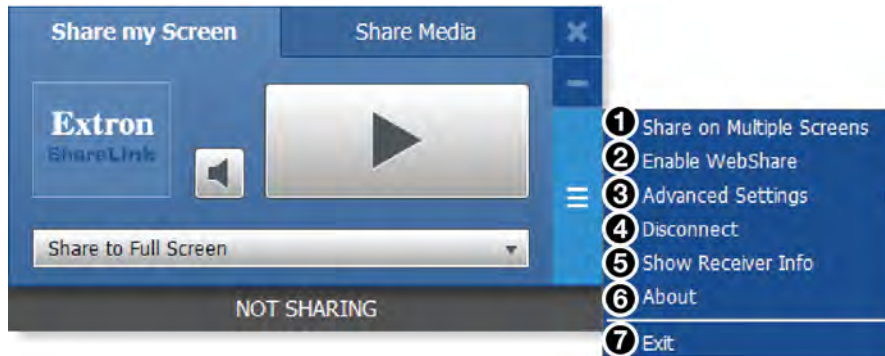


**Figure 13. Share a Video Tab**

- 1 **File folder icon** — Click to browse for and select a media file.
- 2 **Volume button** — Click to control the volume of the video or audio file.
- 3 **Play button** — Click to play the selected media file. This button is disabled until a media file is selected.
- 4 **Stop button** — Click to stop playing the file. This button is disabled until a file is selected.
- 5 **Progress bar** — Displays the progress of the video or audio playback. When a file is selected, an icon indicates the playback time on the progress bar. You can click and drag the icon on the progress bar to skip ahead or to go back to a specific point.
- 6 **Repeat icon** — Click to automatically replay the video or audio when it is finished.

## Using the Software Menu

Click the icon on the bottom right side of the control screen to open the software menu.



**Figure 14. ShareLink 250 W Software Menu**

This menu includes the following options:

- ❶ **Share on Multiple Screens** — Allows the computer screen or media file to be shared on up to four displays connected to other ShareLink receivers (see [Sharing on Multiple Screens](#) on the next page for instructions).
- ❷ **Enable WebShare** — Click to enable WebShare, which allows your computer screen to be shared to connected devices during a presentation (see [Watching a Presentation \(WebShare\)](#) on page 35 for instructions).
- ❸ **Advanced Settings** — Click to open a submenu with the following options:

- **Select Source Display** — Click **Primary Monitor** to present the main screen, or click **Secondary Monitor** to present a screen connected to the main monitor.



### NOTES:

- Not all operating systems support the extended screen function.
- If sharing the secondary monitor, select **Secondary Monitor** prior to sharing in order to keep the software window on the primary monitor.

- **Image Quality** — This option adjusts the image encoding level. **Best** provides better image quality and consumes more network bandwidth.



- **Aspect Ratio** — Choose **Full Screen** to display the image full screen. Choose **Source Aspect Ratio** to maintain the aspect ratio of the source image (for example, if the source image is 4:3, and the output resolution is 16:9, the image is displayed with black vertical bars on each side).



- **Enable Tooltips & OSD** — Tooltips are shown when the mouse cursor hovers over certain items on the computer screen. Enable this option to show tooltips on the display when sharing your computer screen.
- **Create USB Thumb-drive App** — This feature allows a user to load the ShareLink 250 W software into a USB drive, and to run the software directly from the drive (instead of having to install the software on a PC). See [Creating a USB Thumb-drive App](#) on the next page for instructions.
- **ShareLink 250 W Device Admin** — Click to go to the ShareLink 250 W admin (configuration) pages (see [Configuring ShareLink 250 W Settings](#) on page 38).

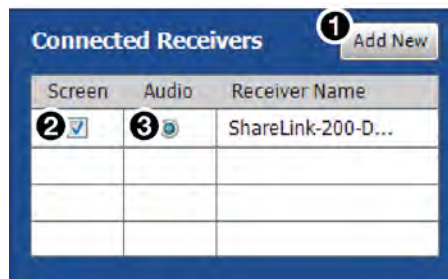
- ④ **Disconnect** — Click to disconnect from any connected receivers.
- ⑤ **Show Receiver Info** — Click this to show the receiver information (IP address, SSID, and login code) briefly on the screen during a presentation, if necessary. The receiver information overlays on top of the screen for 30 seconds, then disappears.
- ⑥ **About** — Click to see the ShareLink 250 W software version number.
- ⑦ **Exit** — Click to exit the software program.

## Sharing on Multiple Screens

This feature allows the computer screen or media file to be shared on up to four screens connected to other ShareLink receivers.

To use this feature:

1. Click **Share on Multiple Screens** on the software menu. The **Connected Receivers** dialog box opens:



**Figure 15. Connected Receivers Dialog Box**

2. Click **Add New** (1) to add a new receiver. Up to four receivers can be added.
3. Check the **Screen** (2) checkbox to share content to that receiver. Content is only shared to the selected receivers.
4. Click the **Audio** radio button (3) to share audio to a receiver. Audio can only be shared to one receiver.

## Creating a USB Thumb-drive App

This feature allows a user to load the ShareLink 250 W software into a USB drive, and to run the software directly from the drive (instead of having to install the software on a PC).

Follow these steps to load the software into, and to run the software from, a USB drive:

1. Click **Create USB Thumb-drive App** in the ShareLink 250 W software **Advanced Settings** menu. The **USB Auto Setup Wizard** window opens.
2. Follow the steps in the wizard screen to save the software to your USB drive. The software requires approximately 25 MB of space.
3. When software loading is complete, a folder named **ShareLink 250 W** is saved to the USB drive.
4. To run the software:
  - a. Plug in the USB drive to the PC that will be used for presentation.
  - b. Open the folder named **ShareLink 250 W** that was saved to the USB drive.
  - c. Open the **ShareLink250.exe** file in the folder to run the software.

## Creating a Room File

A room file can be created for the ShareLink 250 W software to connect automatically to a designated receiver. This file provides a shortcut to open the software and directly connect to the receiver.

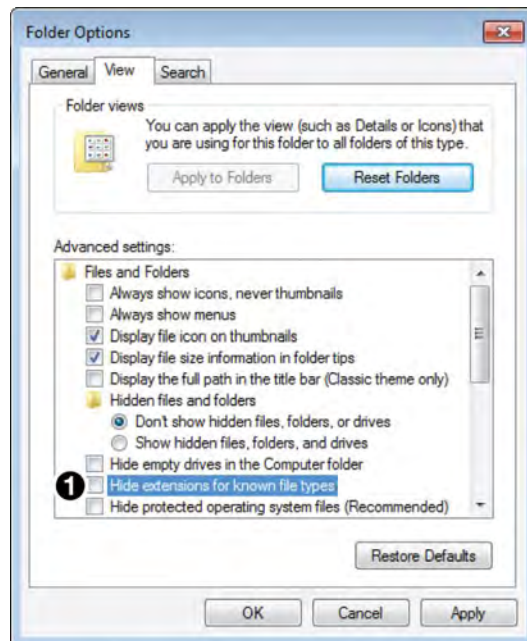
Follow these steps to create the room file:

1. Create and save a text (.txt) file, using a word processing program, and enter the information as it appears below (replace the information in italics with the ShareLink receiver IP address and login code):

```
<?xml version="1.0"?>
<Devices>
<Device>
<IP>192.168.168.171</IP>
<LoginCode>1234</LoginCode>
</Device>
</Devices>
```

**NOTE:** In order to use the room file, the login code must be static (not set to random). To set the login code, see **Device Setup**, ❶ on page 40.

2. Windows users:
  - a. Open **Control Panel > Appearance and Personalization > Folder Options**. The Folder Options dialog box opens (figure 16).
  - b. Click the **View** tab and make sure that **Hide extensions for known file types** option is unchecked as shown in figure 16, ❶.



**Figure 16. Folder Options Window**

3. Go to the text file that you created and change the extension from .txt to .link.
4. Double click or execute the file to open the ShareLink 250 W software. The software then connects to the designated receiver automatically.

# Operation Using a Mobile Device

Two mobile apps can be used with the ShareLink 250 W:

- **MirrorOp for Extron ShareLink** (for Android and Apple devices) allows you to present photos, documents, Web pages, device screenshots, and the device camera.
- **MirrorOp Sender for Galaxy** (compatible with Samsung Galaxy devices only) allows you to mirror your mobile device screen onto the display.

This section covers the following:

- [Downloading MirrorOp for Extron ShareLink](#)
- [Using MirrorOp for Extron ShareLink](#)
- [Downloading MirrorOp Sender for Galaxy](#)
- [Using MirrorOp Sender for Galaxy](#)

## Downloading MirrorOp for Extron ShareLink

This app is supported by Android and Apple mobile devices, including iPad and iPhone. Follow these steps to download the app:

1. Open the Google Play app store on your Android device, or the App Store on your Apple mobile device.
2. Search for **MirrorOp for Extron ShareLink**.
3. Install the app on your mobile device.

## Using MirrorOp for Extron ShareLink

### Connecting to a Receiver

Follow these steps to connect your mobile device to the ShareLink 250 W using the app:

1. Ensure that the ShareLink 250 W is powered and connected to the network.
2. Connect your mobile device to the ShareLink 250 W unit through Wi-Fi. You may connect through either of the following options:
  - a. **Connect to the ShareLink's built-in WAP:** Open the Wi-Fi networks list on your device and look for your ShareLink receiver SSID. The SSID is shown on the standby screen ([figure 4](#), page 6).
  - b. **Connect to an external WAP that is on the same network as the ShareLink.** Ensure that the external WAP and the ShareLink 250 W are wired to the same network. Open the Wi-Fi networks list and connect your device to the external WAP.

- Open MirrorOp and press the receiver icon (figure 17, ❶) on the top right to open the receiver selection window.



**Figure 17. MirrorOp Menu**

- Select your ShareLink 250 W receiver from the discovered receivers list. To refresh the list, drag down and release the receivers list.

**NOTE:** Press the star (figure 17, ❸) to save the receiver as a favorite. The favorite receivers appear at the top of the list next time the app is open.

If your receiver does not appear, you may search for the receiver as follows:

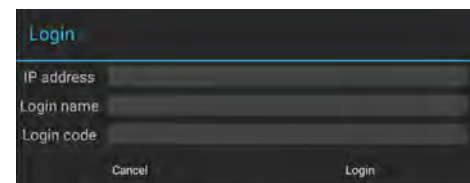
- If the ShareLink 250 W receiver is on the same network and subnet, you can search for it by entering the Wi-Fi name (SSID) or IP address in the search bar (❷).
- If the ShareLink 250 W receiver is on the same network but on a different subnet, press **Manual input** (❹). The following window appears:

**Apple devices:**



Enter the IP address and press **Connect**.

**Android devices:**



Enter the IP address and Login code; then, press **Login**. By default, the app uses the device name as the Login Name. You can enter a new Login Name if necessary.

**NOTE:** The receiver icon turns green (🟢) and the main menu appears when the device is connected to a receiver.

## Main Menu Overview

**NOTE:** The images in this section show the mobile app layout for tablets. The layout is arranged differently for smaller devices, such as phones.

The Main Menu on the left side of the screen contains the following options:



**Figure 18. MirrorOp Home Screen**

- 1 Settings** – see [Settings](#) on page 32
- 2 Menu** – tap to hide or unhide the main menu
- 3 Document** – see [Presenting Documents and Photos](#) on the next page
- 4 Photo** – see [Presenting Documents and Photos](#) on the next page
- 5 Cloud** – see [Presenting Files from a Cloud Storage](#) on page 26
- 6 Browser** – see [Presenting Web Pages](#) on page 30
- 7 Camera** – see [Presenting the Device Camera](#) on page 31
- 8 Shot & Show** – see [Presenting Device Screenshots](#) on page 31

**NOTE:** The Cloud (**5**) and Browser (**6**) features require internet access (see [Connecting to a Receiver](#), step **2b**, on page 20).

## Presenting Documents and Photos

### Import the document or photo to your device

**NOTE:** The following file types are supported:

- **Documents:** Microsoft Word (.doc, .docx), PowerPoint (.ppt, .pptx), Excel (.xls, .xlsx), and PDF
- **Photos:** JPEG and PNG

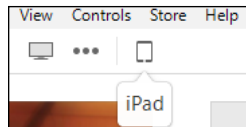
There are three ways to import a document or photo file to your mobile device. See the instructions below for your preferred method.

#### Option 1: Transfer the file from your computer to your device (Android devices)

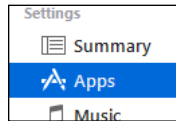
1. Connect the mobile device to your computer.
2. Locate the file in your computer and copy it to the mobile device storage.
3. **Present the Document or Photo** as shown on page 25.

#### Option 2: Transfer the file from your computer to your device using iTunes (iOS devices)

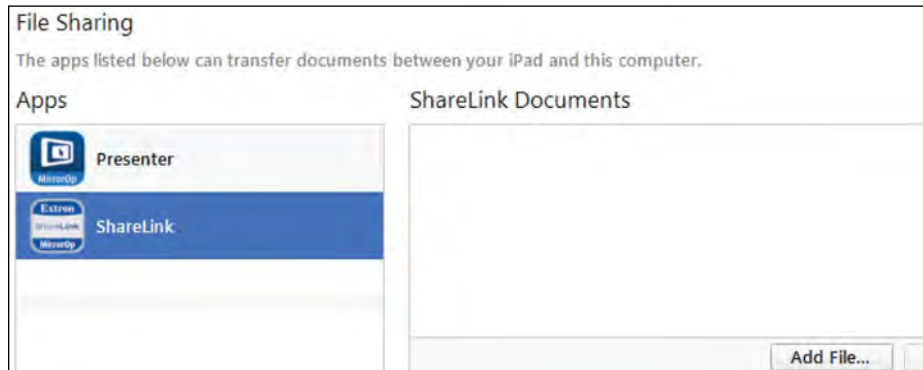
1. Connect the iPad or iPhone to your computer.
2. Open iTunes and click the iPhone or iPad icon:



3. Click **Apps** on the left hand Settings menu in iTunes:



4. On the Apps page, scroll down to the File Sharing section and click **ShareLink**:



5. Click **Add File**. Browse to and select the file you wish present. The file is listed in the ShareLink Documents panel and added to the **Document** section of the app.
6. Present the Document or Photo as shown on page 24.

#### Option 3: Import the document from an email attachment

1. On your mobile device, open the email containing the attached file that you wish to present.



2. Import the attachment as follows:

**For Android devices**, you can either:

- **save** the file to the device storage and proceed to the next section (**Present the Document or Photo** on the next page)
- or **open** the file directly from the email using the ShareLink app:



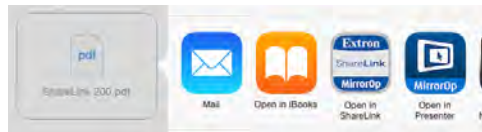
**NOTE:** Options may vary depending on the email app used.

Then, proceed to step 3 of the next section (**Present the Document or Photo**, on the next page).

**For iOS devices:**

**NOTE:** The following steps apply to the native email app in iOS devices. Results and options may vary depending on the email app used.

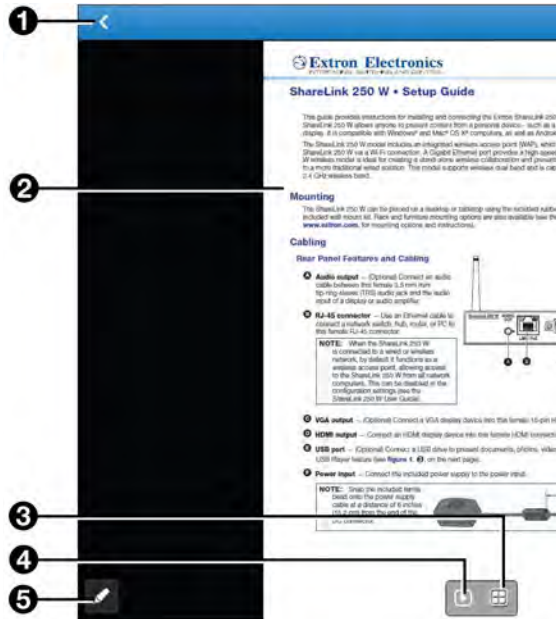
- a. In the email, locate the attachment icon and press **Tap to Download** (if the download does not start automatically).
- b. When download is complete, press and hold the attachment icon. A box opens, showing installed apps that can open the file:



- c. Select **Open in ShareLink**, and proceed to step 3 of the next section, (**Present the Document or Photo** on the next page).

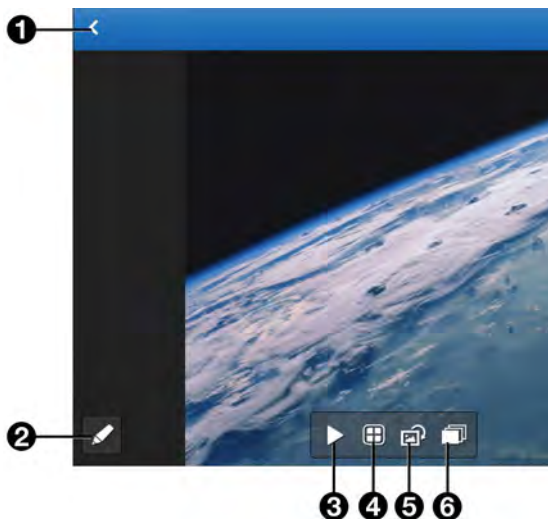
## Present the document or photo

1. Open MirrorOp and select **Document** or **Photo** on the main menu (see [figure 18](#), [3](#) or [4](#), on page 22), depending on your file type. All recognized document and photo files (and folders containing these files) are displayed.
2. Select the folder containing the file you wish to present, and select the desired file. The presentation screen appears as shown in [figure 19](#) (for documents) and [figure 20](#) (for photos).
3. Select the **Play** button ([4](#) on [figure 19](#), and [3](#) on [figure 20](#)) to begin presenting. The **Play** button becomes a **Pause** button, which can be pressed to stop the presentation.



**Figure 19. Document View Screen**

- 1 **Back** – Exit document and return to the previous screen.
- 2 **Document view screen** – This section is displayed during presentation.
- 3 **Quadrant view** – Choose whether to present the document full-screen (default) or on a quadrant (top left, top right, bottom left, or bottom right) for multiple user presentations.
- 4 **Play** – Start or stop presentation.
- 5 **Annotation tool** – Make annotations on the document during presentation (see [Making Annotations](#) on page 32).

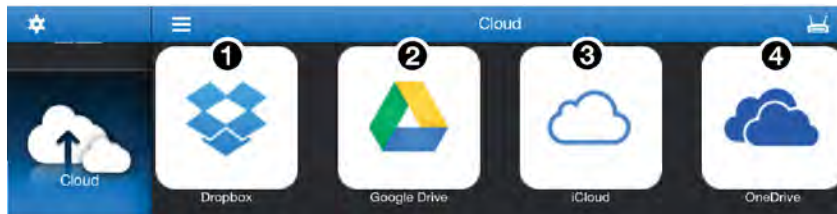


**Figure 20. Photo View Screen**

- 1 **Back** – Exit document and return to the previous screen.
- 2 **Annotation tool** – Make annotations on the image during presentation (see [Making Annotations](#) on page 32).
- 3 **Play** – Start or stop presentation.
- 4 **Quadrant view** – Choose whether to present the image full-screen (default) or on a quadrant (top left, top right, bottom left, or bottom right) for multiple user presentations.
- 5 **Rotate** – Rotate the image clockwise.
- 6 **Slideshow** – Start a slideshow of all the images in the current folder.

## Presenting Files from a Cloud Storage

Select **C**loud on the main menu. The following screen opens, showing the supported cloud storage services:

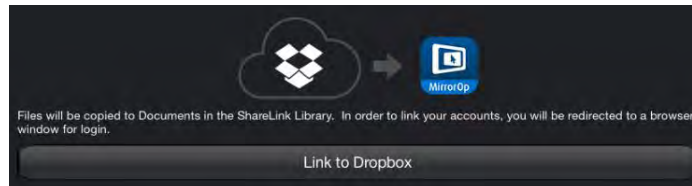


**Figure 21. Cloud Services**

- 1** **Dropbox** – See “Presenting Files from Dropbox,” below.
- 2** **Google Drive** – See [Presenting Files from Google Drive](#) on the next page.
- 3** **iCloud** – See [Presenting Files from iCloud \(iOS devices only\)](#) on page 28.
- 4** **OneDrive** – See [Presenting Files from OneDrive](#) on page 29.

### Presenting files from Dropbox

1. Select **Dropbox** on the **C**loud screen, and select **Link to Dropbox** in the following screen:



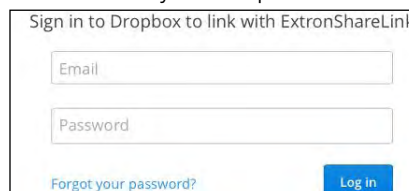
**Figure 22. Link to Dropbox**

- If you are already logged into a Dropbox account on your device, the following screen appears, asking for permission to access the files and folders in this Dropbox account.

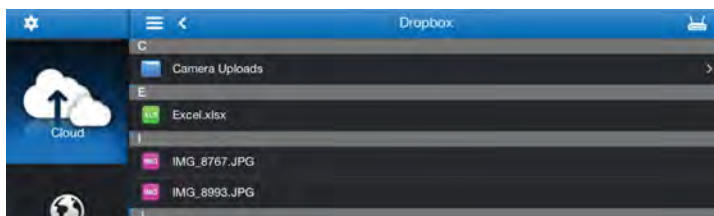


If this is the Dropbox account you wish to use, choose **Allow**. If not, select **Use a different account**.

- If you are not logged in to a Dropbox account, a login screen appears as shown below. Enter your Dropbox account login information.



- Once logged in, a list of folders and files in the Dropbox account appears (see figure 23).
2. Browse to and select the document or photo you wish to present.

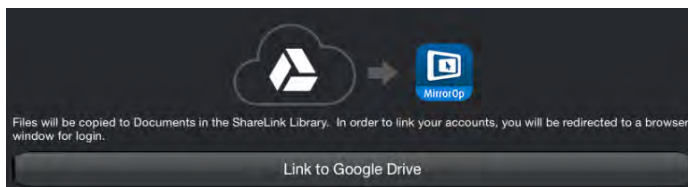


**Figure 23. Dropbox Files**

**NOTE: iOS devices only:** When you open a file from the Dropbox section, the file is automatically copied to the iPad or iPhone and is listed in the **Document** section of the app.

### Presenting Files from Google Drive

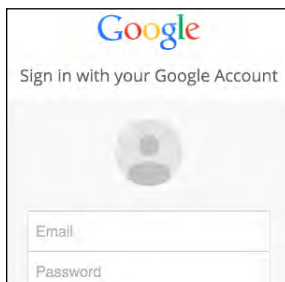
1. Select **Google Drive** on the Cloud screen, and select **Link to Google Drive** in the following screen:



**Figure 24. Link to Google Drive**

A login screen appears as shown below.

2. Enter your Google account login information.

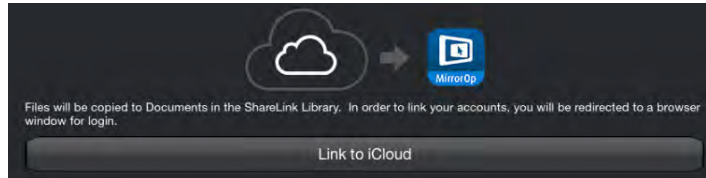


Once logged in, a list of folders and files in the Google Drive account appears.

3. Browse to and select the document or photo you wish to present.

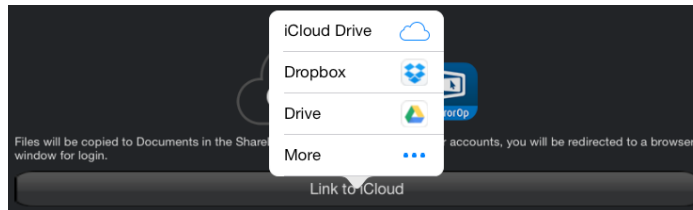
## Presenting Files from iCloud (iOS devices only)

1. Select **iCloud** on the Cloud screen, and select **Link to iCloud** in the following screen:



**Figure 25. Link to iCloud**

The following menu opens, showing a link to iCloud as well as shortcuts to other cloud drives (such as Dropbox and Google Drive) that are linked to the device:

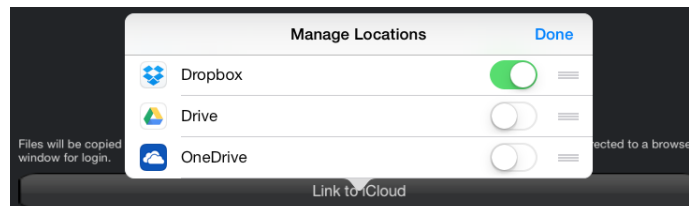


**Figure 26. Cloud Selection Screen**

**NOTE:** All cloud drives are automatically linked to iCloud. You can unlink specific cloud drives by going to the device settings.

If necessary, you can manage the cloud drive shortcuts that appear on this cloud selection screen as follows:

- a. Click **More** on the cloud selection screen (figure 26, above).
- b. The **Manage Locations** menu opens as shown below, listing all the cloud drives that are linked to iCloud:



**Figure 27. Manage Locations Menu**

On this screen, you can select which shortcuts to display on the cloud selection screen.

To enable a shortcut, press the round icon next to the cloud drive on the list. The icon turns green, indicating that the shortcut is enabled on the cloud selection screen.

2. On the cloud selection screen, select **iCloud** or any other cloud drive you wish to access. A list of folders and files in the cloud drive appears.

**NOTE:** If you are not logged into the cloud drive account, the app prompts you to enter your login information.

3. Browse to and select the document or photo you wish to present.

## Presenting files from OneDrive

1. Select **OneDrive** on the **Cloud** screen, and select **Link to OneDrive** in the following screen:



**Figure 28. Link to OneDrive**

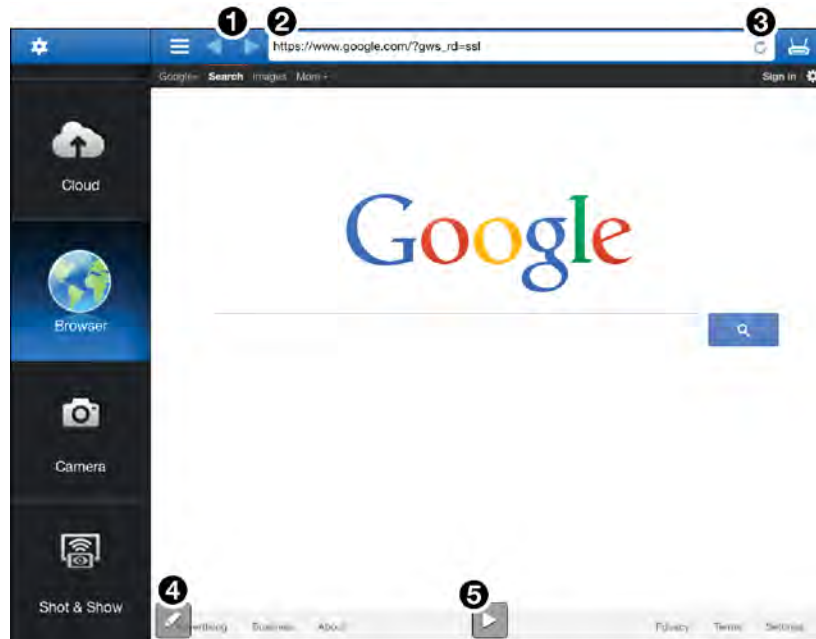
A login screen appears as shown below. Enter your Microsoft account login information.

Once logged in, a list of folders and files in the OneDrive account appears.

2. Browse to and select the document or photo you wish to present.

## Presenting Web Pages

1. Select **Browser** on the main menu. The MirrorOp built-in browser opens (see figure 29).
2. On the address bar (see figure 29, **2**), enter the Web address for the page you wish to present.
3. Press the **Play** (**5**) button to begin presenting the Web page. The **Play** button becomes a **Pause** button, which can be clicked to stop the presentation.



**Figure 29. MirrorOp Browser**

- 1 Navigation buttons** – Navigate between Web pages
- 2 Address Bar** – Enter the Web address
- 3 Refresh** – Refresh the Web page
- 4 Annotation tool** – Make annotations on the Web page during presentation (see [Making Annotations](#) on page 32 for instructions)
- 5 Play** – Start or stop presentation

## Presenting the Device Camera

1. Select **Camera** on the main menu. The camera view opens (see figure 30).
2. Press play (see figure 30, ④) to present the camera view on the display.

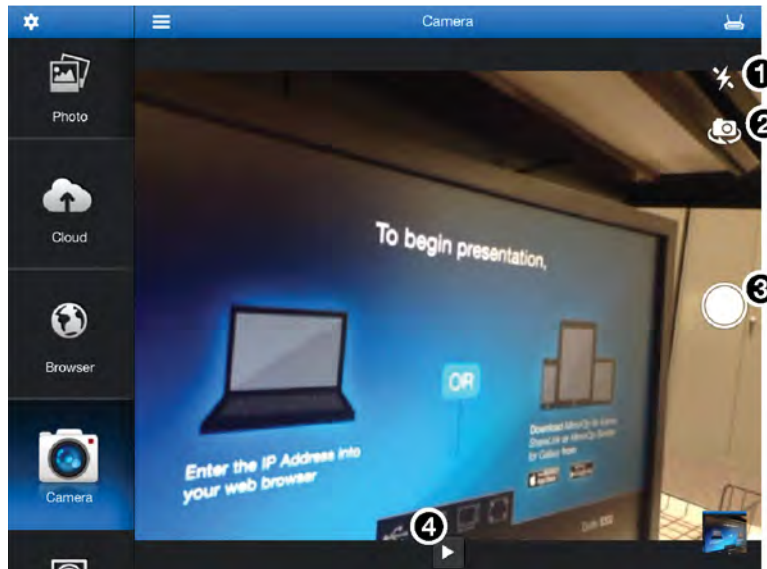


Figure 30. Camera View

- ① **Flash** – Turn camera flash on or off, if flash is available on the device.
- ② **Switch camera view** – Switch between front and rear camera.
- ③ **Take picture** – Take a picture using the camera. The picture can also be presented.
- ④ **Play** – Start or stop presentation.

## Presenting Device Screenshots

1. Choose **Shot & Show** on the main menu and press play (see figure 31 ①) in the **Shot & Show** instruction screen. The instruction screen appears on the display.

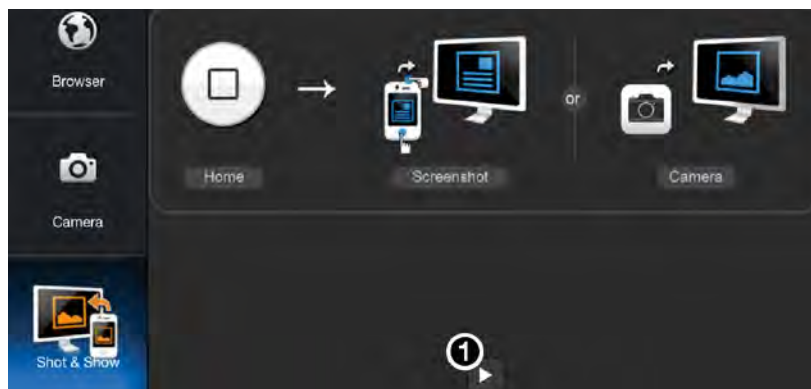


Figure 31. Shot & Show Instruction Screen

2. Press the **Home** button on your mobile device to go to the home screen, and navigate to the screen that is to be shared.
3. Take the screenshot by pressing the appropriate buttons on your mobile device. The screenshot is shared on the display automatically. You can also take a picture with the device camera, and the picture displays automatically.
4. To pause the presentation, return to the app and press the **Play/Pause** button (①).



## Making Annotations

The annotation tool allows the presenter to draw or highlight items on the screen. Click the **Annotation** tool icon to expand the tools menu shown below:

- ❶ **Pen**
- ❷ **Highlighter**

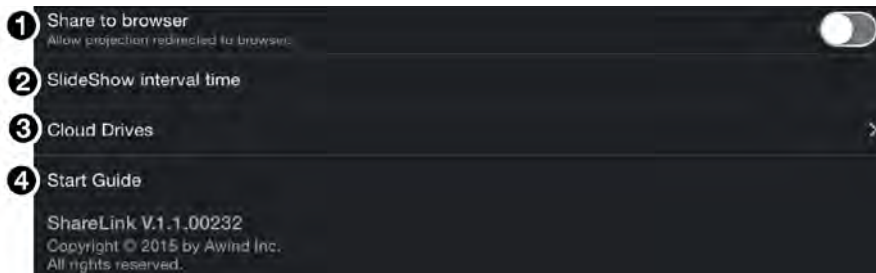
**NOTE: One stroke mode:** Tap the **Pen** or **Highlighter** icon to enable one-stroke mode. This allows you to draw one stroke at a time (the previous annotation is cleared when a new stroke is made).

- ❸ **Size** — Select pen or highlighter size (small, medium, or large).
- ❹ **Color** — Select pen or highlighter color.
- ❺ **Delete all** — Delete all annotations in the current image.
- ❻ **Exit annotation mode**
- ❼ **Hide annotations menu**
- ❽ **Save** — Save current image with annotations. The file is saved as an image file in the mobile device storage.
- ❾ **Eraser** — Erase selected portions of the drawing.




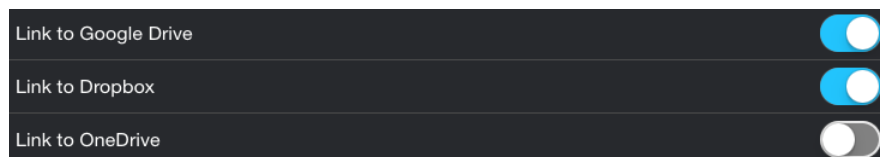
## Settings

Press the **Settings** button to access the following options:



**Figure 32. Settings**

- ❶ **Share to browser** — Enable the **Share to browser** feature by tapping the icon on the right. This feature allows the presentation to be viewed on individual user devices connected to the ShareLink 250 W (see [Watching a Presentation \(WebShare\)](#) on page 35).
- ❷ **SlideShow interval time** — Choose the interval time between each photo during a slideshow.
- ❸ **Cloud Drives** — Press to open a list of cloud services available on the device, as shown below. Press the round icon  to allow MirrorOp to link to the cloud service listed.



- ❹ **Start Guide** — Access the Start Guide that is shown at startup.

## Downloading MirrorOp Sender for Galaxy

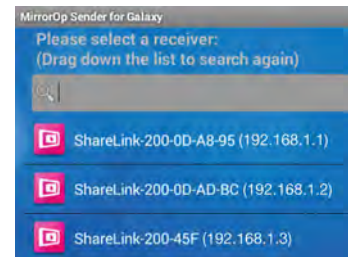
This app is supported by Samsung Galaxy devices. Follow these steps to download the app:

1. Open the Google Play app store on your Galaxy device.
2. Search for **MirrorOp Sender for Galaxy**.
3. Install the app on your mobile device.

## Using MirrorOp Sender for Galaxy

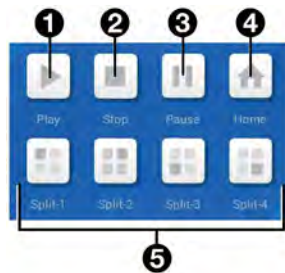
1. Ensure that the ShareLink 250 W is powered and connected to the network.
2. Connect your device to the ShareLink 250 W through Wi-Fi (see step 2 of **Connecting to a Receiver** on page 20).
3. Open the app. The discovered receivers list appears as shown at right.
4. Select your ShareLink 250 W receiver from the discovered receivers list.

**NOTE:** To refresh the list, drag down and release the list. You may also search for the receiver by entering the SSID in the search bar.



The login screen appears after a receiver is selected.

5. If the login code is activated, enter the login code shown on the standby screen (see **figure 4**, ⑨, page 6) and press **Connect**. After login, the main menu appears as shown below.



**Figure 33. MirrorOp Sender Menu**

- ① **Play** – Press to begin sharing your screen.
- ② **Stop** – Press to stop sharing your screen.
- ③ **Pause** – Press to pause or unpause screen sharing. This allows the presenter to navigate through the mobile device while the menu screen remains on the display device.
- ④ **Home** – Go to the mobile device home screen.
- ⑤ **Split icons** – For multiple user presentations, choose one of the split (quadrant) icons to share your screen on the top left, top right, bottom left, or bottom right of the display. This allows up to four users to present their screens on the display simultaneously.

# Using the Embedded Web Pages

The ShareLink 250 W embedded Web pages contain the following features:

- **WebShare:** allows users to view a presentation remotely on their mobile devices or computers.
- **Moderator control:** allows a designated moderator to play or stop user presentations, and to choose where to display the presentations on the main screen.
- **Admin mode:** allows a designated administrator to configure ShareLink 250 W settings.

This section covers the following:

- [Opening the Embedded Web Pages](#)
- [Watching a Presentation \(WebShare\)](#)
- [Moderating a Presentation](#)
- [Configuring ShareLink 250 W Settings](#)

## Opening the Embedded Web Pages

To access the embedded Web pages, enter the ShareLink IP address (shown on the standby screen) into the Web browser.

The landing page appears on the computer screen as shown here:



**Figure 34. ShareLink 250 W Landing Page**

- ❶ **Configure** — Click to access the Admin pages and configure presentation settings (see [Configuring ShareLink 250 W Settings](#) on page 38).
- ❷ **Windows** — Click to run the Lite version of the ShareLink 250 W software for Windows.
- ❸ **Install Pro Software for Windows**
- ❹ **Mac** — Click to run the Lite version of the ShareLink 250 W software for Mac.
- ❺ **Install Pro Software for Mac**
- ❻ **Watch Presentation** — Click to access the WebShare feature. See [Watching a Presentation](#) on the next page.
- ❼ **Moderate Presentation** — See [Moderating a Presentation](#) on page 36.

## Watching a Presentation (WebShare)

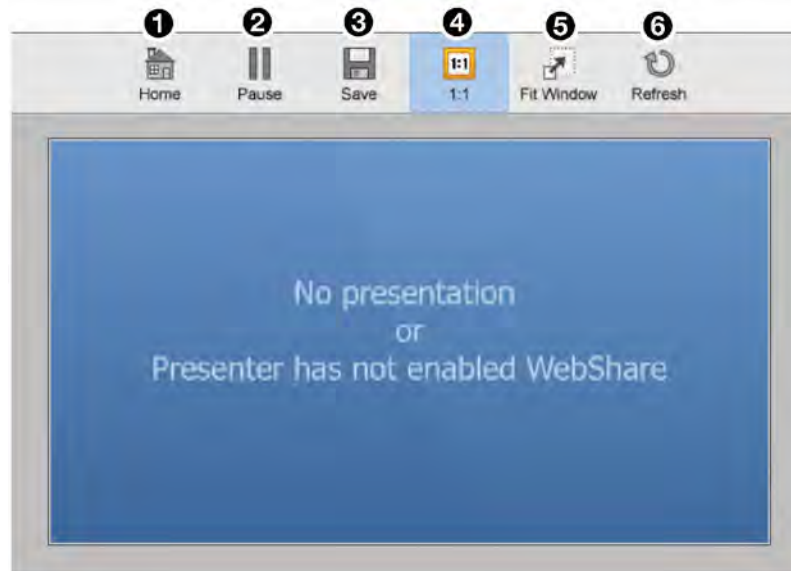
WebShare allows audience members to view a presentation on their computers or mobile devices using a Web browser. The presenter may broadcast the presentation so that the image shown on the display can be viewed remotely.

### NOTES:

- WebShare must be enabled on the client software or mobile app in order for the presentation to be viewed remotely by other users.
- Each user connected through WebShare adds to the wireless bandwidth of the ShareLink 250 W. It is recommended that the device be connected to an Ethernet network or bridged to a router for best performance.

Audience members must follow these steps to watch a presentation:

1. Open a Web browser on the mobile device or computer and connect to the IP address of the ShareLink 250 W.
2. On the landing page, click **Watch Presentation**. The presentation page (figure 35) opens in the Web browser.
3. Click the 1:1 button (4) to watch the presentation.



**Figure 35. Presentation Page**

- 1 **Home** — Click to go to the ShareLink 250 W landing page.
- 2 **Pause** — Click to pause the presentation.
- 3 **Save** — Click to save the slide being presented.
- 4 **1:1** — Click to watch the presentation.
- 5 **Fit Window** — Click to enlarge the presentation screen to the size of the browser window.
- 6 **Refresh** — Click to refresh the presentation, if necessary.

## Moderating a Presentation

Moderator control allows a single user to control the presentation of all connected users. There are two ways to moderate user presentations:

- Through the Moderator Control Web Page (see instructions below)
- Through an Extron ShareLink driver (see [Moderating through an Extron ShareLink Driver](#) on the next page)

### Moderating through the Moderator Control Web Page

1. Click **Moderate Presentation** on the landing page. The **Login** page opens:

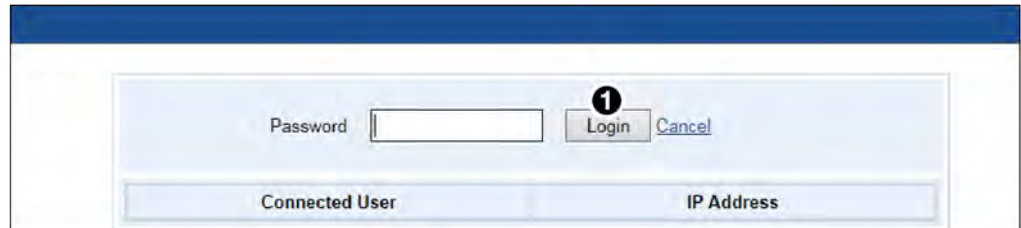


Figure 36. Login Page

2. Enter the password and click **Login** (see figure 36, ①). The default password is “moderate.” This password can be changed (see [Web Page Moderator Setup](#) on page 48). After login, the following page appears:

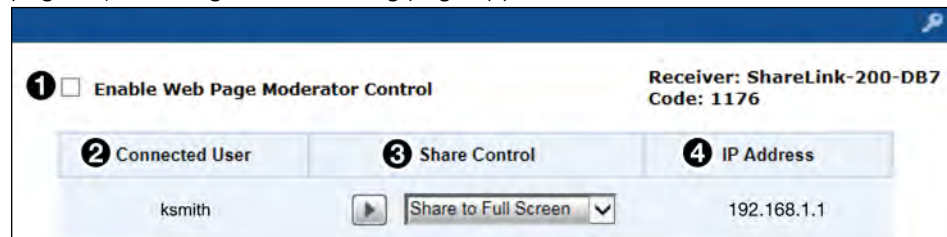


Figure 37. Moderator Page

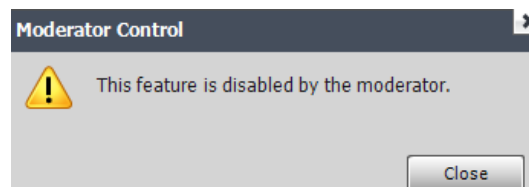
- ① **Enable Web Page Moderator Control**
- ② **Connected User column** (see the [next page](#))
- ③ **Share Control column** (see the [next page](#))
- ④ **IP Address column** (see the [next page](#))

- ① **Enable Web Page Moderator Control** — This option is unchecked by default, meaning that all connected users are free to start presentations. The moderator may also control presentations when this box is unchecked.

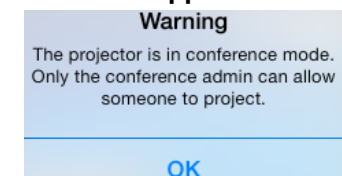
Check this box to enable moderator control, which allows **only** the moderator to control presentations from this Web page. When this option is enabled:

- Only the moderator can start user presentations. If a user tries to share a presentation when this feature is enabled, the following message appears:

#### ShareLink Software:



#### ShareLink app:



- The moderator can start or stop user presentations. However, individual users may choose to stop their presentations from their devices.

- ② **Connected User** — This column shows the user names of all users connected to the ShareLink 250 W.
- ③ **Share Control** — This column allows the moderator to do the following:
  - **Play or stop a user presentation:** Click play (▶) in the Share Control section next to the Connected User that you wish to present. The row becomes green and the play button becomes a stop button. Click the stop button to stop sharing content.
  - **Choose where on the screen to display the presentation** (full screen, top left, top right, bottom left, or bottom right): Click the drop-down menu and select where to display the presentation (**Share to Full Screen** is selected by default).
- ④ **IP Address** — This column shows the IP Address of each connected user device.

## Moderating through an Extron ShareLink Driver

You can moderate presentations remotely from an Extron touchpanel control system using an Extron ShareLink driver (see [www.extron.com](http://www.extron.com) for optional touchpanel control systems and to download the Extron ShareLink driver).

The driver allows the moderator to have full control of user presentations **and** to monitor activity on the moderator control Web page.

**NOTE:** Web page moderator control can only be enabled or disabled from the Web page, by checking or unchecking the **Enable Web Page Moderator Control** box (see [figure 37](#), ❶ on the previous page).

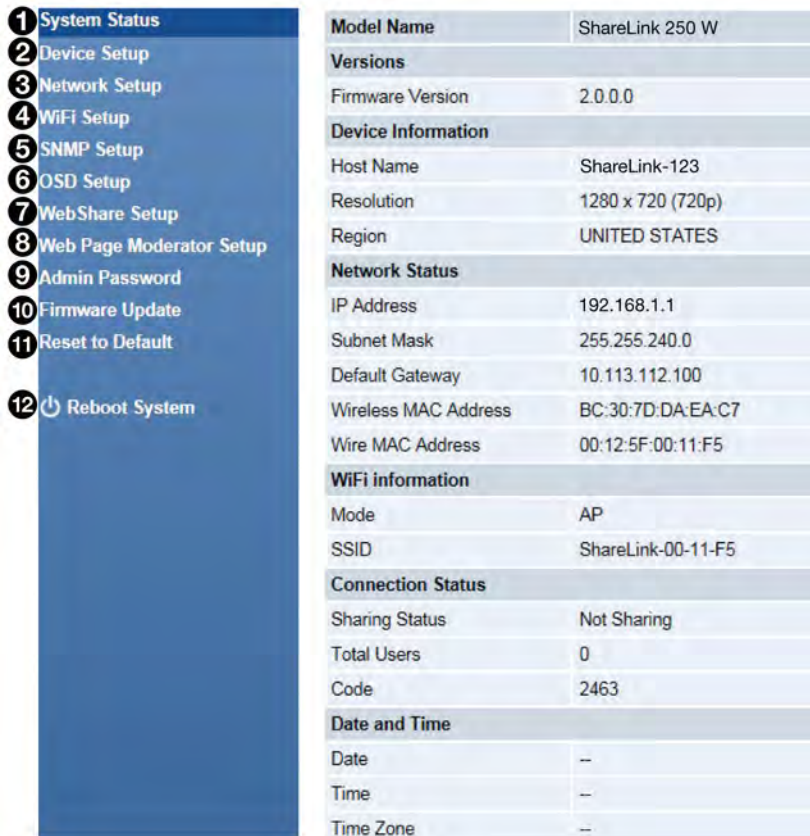
## Configuring ShareLink 250 W Settings

To access the ShareLink 250 W admin (configuration) pages:

1. Click the **Configure** button on the top right hand corner of the landing page (figure 34, ❶, page 34). The **Login** page opens.
2. Enter the password and click **Login**. The default password is “**configure.**”

**NOTE:** This password can be changed (see **Admin Password** on page 48).

After login, the following admin pages appear:



❶ System Status	Model Name	ShareLink 250 W
❷ Device Setup	Versions	
❸ Network Setup	Firmware Version	2.0.0.0
❹ WiFi Setup	Device Information	
❺ SNMP Setup	Host Name	ShareLink-123
❻ OSD Setup	Resolution	1280 x 720 (720p)
❼ WebShare Setup	Region	UNITED STATES
❽ Web Page Moderator Setup	Network Status	
❾ Admin Password	IP Address	192.168.1.1
❿ Firmware Update	Subnet Mask	255.255.240.0
⓫ Reset to Default	Default Gateway	10.113.112.100
⓬ Reboot System	Wireless MAC Address	BC:30:7D:DA:EA:C7
	Wire MAC Address	00:12:5F:00:11:F5
	WiFi information	
	Mode	AP
	SSID	ShareLink-00-11-F5
	Connection Status	
	Sharing Status	Not Sharing
	Total Users	0
	Code	2463
	Date and Time	
	Date	--
	Time	--
	Time Zone	--

**Figure 38. ShareLink 250 W Admin Pages**

- ❶ **System Status** — The System Status page appears by default. This page displays basic information about the ShareLink 250 W model, network status, connection status, and date and time.
- ❷ **Device Setup** — Use this page to adjust the ShareLink 250 W output resolution, login code, date and time, and to reboot settings (see **Device Setup** on the page 40).
- ❸ **Network Setup** — Use this page to adjust network settings for the ShareLink 250 W, such as host name, domain name, IP\_settings, DHCP settings, and GateKeeper (see **Network Setup** on page 41).
- ❹ **WiFi Setup** — Use this page to adjust Wi-Fi settings, including wireless LAN, AP and Client mode, access point, and Wi-Fi client settings (see **WiFi Setup** on page 42).
- ❺ **SNMP Setup** — Use this page to enable or disable SNMP service, and to configure settings for managing the ShareLink 250 W via SNMP (see **SNMP Setup** on page 45).
- ❻ **OSD Setup** — Use this page to upload a custom standby image or reset the stanby image to default, and to choose which device information to display on the standby screen (see **OSD Setup** on page 46).

- 7 **WebShare Setup** — Use this page to set the auto refresh interval and the Access Password Code for WebShare (see [WebShare Setup](#) on page 47).
- 8 **Web Page Moderator Setup** — Use this page to change the Moderator password and to enable or disable Moderator Mode (see [Web Page Moderator Setup](#) on page 48).
- 9 **Admin Password** — Use this page to change the Admin password (see [Admin Passwords](#) on page 48).
- 10 **Firmware Update** — Use this page to update the ShareLink 250 W firmware. (see [Firmware Update](#) on page 49).
- 11 **Reset to Default** — Use this page to reset the ShareLink 250 W to its factory default settings (see [Reset to Default](#) on page 50).
- 12 **Reboot System** — Use this page to reboot the ShareLink 250 W (see [Reboot System](#) on page 50).



## Device Setup

The screenshot shows the Device Setup Panel with the following settings:

- 1 Device Setup**
  - Resolution: 1280 x 720 (720p)
  - Code:  Random
  - SNTP/NTP Server Synchronization:  Disable
- 2 Date and Time Settings**
  - Server: [Empty field]
  - Last Sync Time: --
  - Time Zone: (GMT) -8:00 (Pacific Time)
  - Daylight Saving Time:  Enable
  - Date: --
  - Time: --
- 3 Terminal Refresh (Reboot)**
  - Time Set:  Auto
  - Time: 00 : 00 : 00

Figure 39. Device Setup Panel

### 1 Device Setup Panel

- **Resolution:** Change the output resolution (resolution is set to 720p by default). Click the drop-down menu to show other resolutions.
- **Code:** Customize the login code that is displayed on the standby screen at startup (see [figure 4](#), [9](#), page 6). Three options are available for the login code:
  - **Disable** – No login code is required to connect to the ShareLink 250 W.
  - **Random** (default) – A new random code is generated when the last user disconnects from the ShareLink 250 W. (For example: User 1 logs in with the current code, then user 2 logs in with the same code. When users 1 and 2 disconnect from the ShareLink, a new code is generated.)
  - **Use the following code:** enter a custom 4-digit login code.

### 2 Date and Time Settings Panel

- Choose **SNTP/NTP Server Synchronization** to specify the time server, or choose **Disable** to disable this feature.

**NOTE:** SNTP/NTP (Simple Network Time Protocol/Network Tie Protocol) is used for synchronizing the clocks of computer systems over networks.

If SNTP/NTP Server Synchronization is enabled:

- **Server:** Enter the NTP server address into this field.

**NOTES:**

- If the NTP server address is in the form of a URL, a DNS server address is **required** to sync to the NTP server (for example, enter “`pool.ntp.org`”).
- If the NTP server address is in the form of an IP address, a DNS server address is **not required** to sync to the NTP server.

- **Time Zone:** Select the appropriate time zone.

### 3 Terminal Refresh (Reboot) Panel

This feature refreshes the terminal and reboots the system. The terminal refreshes when a user is not connected and no user is sharing content.

- **Auto** (default) – Device automatically refreshes when a user is not connected and no user is sharing.
- **Time Set** – Schedule a specific time to refresh the terminal (specify that time in the **Time** field using the drop-down lists).

## Network Setup

The screenshot shows the Network Setup configuration page. On the left is a sidebar with menu items: System Status, Device Setup, Network Setup (highlighted), WiFi Setup, SNMP Setup, OSD Setup, WebShare Setup, Web Page Moderator Setup, Admin Password, Firmware Update, Reset to Default, and Reboot System. The main content area is divided into four numbered sections:

- 1 Host Name and Domain Name:** Host Name: ShareLink-123, Same as WiFi Network name (checked), Domain Name: [empty].
- 2 IP Setup:** Obtain an IP address automatically (selected), Use the following IP address (unselected). IP Address: 192.168.254.254, Subnet Mask: 255.255.255.0, Default Gateway: 192.168.254.254, DNS Server: 0.0.0.0.
- 3 DHCP Server Setup:** Auto (selected), Disable (unselected). Start IP: 192.168.254.11, End IP: 192.168.254.100, Subnet Mask: 255.255.255.0, Default Gateway: 192.168.254.254, DNS Server: 192.168.254.254.
- 4 GateKeeper:** All Pass (selected), All Block (unselected), Internet Only (unselected).

Buttons for 'Apply' and 'Cancel' are located at the bottom right of the configuration area.

Figure 40. Network Setup

### 1 Host Name and Domain Name Panel

- **Host Name:** Enter a host name for the ShareLink 250 W device or check **Same as WiFi Network name** to use the default SSID name.
- **Domain Name:** Enter the domain name for the DNS server.

### 2 IP Setup Panel

- **Obtain an IP address automatically** (default setting): select this option to obtain an IP address automatically from a DHCP server. The default settings are as follows:  
**IP Address:** 192.168.254.254      **Subnet Mask:** 255.255.255.0,  
**Default Gateway:** 192.168.254.254      **DNS Server:** 0.0.0.0
- **Use the following IP address:** Select this option to enter a static IP address. Enter the corresponding subnet mask, default gateway, and DNS server.

### 3 DHCP Server Setup Panel

- **Auto** (default setting): If a DHCP server is available on the network, the ShareLink 250 W uses an IP address assigned by the server. If a DHCP server is not available on the network, the ShareLink 250 W uses its internal DHCP server to assign IP addresses to network devices. The default settings are as follows:  
**Start IP:** 192.168.254.11      **End IP:** 192.168.254.100  
**Subnet Mask:** 255.255.255.0      **Default Gateway:** 192.168.254.254  
**DNS Server:** 192.168.254.254

**NOTE:** In Auto mode, you may use the default settings above or customize the settings, if needed.

- **Disable:** Disables the internal DHCP server.

- 4 GateKeeper Panel:** GateKeeper provides network security settings for the ShareLink 250 W, as well as basic data management between the wireless LAN and the ethernet LAN.

**NOTE:** Regardless of which GateKeeper setting is selected, users can connect to the ShareLink 250 W through its internal wireless access point.

- **All Pass:** Users connected to the wireless LAN can connect to the ShareLink 250 W and can access the wired (ethernet) LAN.
- **All Block:** Users connected to the wireless LAN can connect to the ShareLink 250 W, but cannot access the wired LAN. All data is blocked, including port 80, which is typically used for internet access.
- **Internet Only:** Users connected to the wireless LAN can connect to the ShareLink 250 W and can access port 80 (for internet access only). All other data is blocked.

## WiFi Setup

The screenshot shows the WiFi Setup Panel with the following settings:

- 1 Wireless LAN:**  Enable  Disable
- 2 Mode:**  AP  Client
- 3 WiFi signal intensity:**  Maximum  High  Medium  Low
- Access Point:**
  - SSID: ShareLink-123
  - SSID Broadcast:  Enable  Disable
  - Band:  2.4 GHz  5 GHz
  - 802.11 mode: 2.4G G only
  - Channel: Auto
  - Encryption: Disable
  - Key: [Redacted]  Hide characters
  - Channel Bandwidth:  20MHz  Auto

Figure 41. WiFi Setup Panel

**1 Wireless LAN Panel:**

Wireless LAN is enabled by default. Choose **Disable** to disable wireless LAN connection.

**2 Mode Panel**

There are three Wi-Fi modes for the ShareLink 250 W:

- AP (Access Point) mode (see **AP (Access Point) mode** on the next page)
- Client mode (see **Client mode** on page 44)

**3 WiFi signal intensity:**

Select Maximum, High, Medium, or Low

## AP (Access Point) mode

In AP mode, the ShareLink 250 W is configured as a wireless access point. If the ShareLink is wired to the network, wireless devices may access the network by connecting to the ShareLink through Wi-Fi.

When AP mode is selected, the **Access Point** panel appears with the following options:

Mode	<input checked="" type="radio"/> AP <input type="radio"/> Client
WiFi signal intensity	<input checked="" type="radio"/> Maximum <input type="radio"/> High <input type="radio"/> Medium <input type="radio"/> Low
1 SSID	ShareLink-123
2 SSID Broadcast	<input checked="" type="radio"/> Enable <input type="radio"/> Disable
3 Band	<input checked="" type="radio"/> 2.4 GHz <input type="radio"/> 5 GHz
4 802.11 mode	2.4G G only
5 Channel	Auto
6 Encryption	Disable
7 Key	<input type="text"/> <input checked="" type="checkbox"/> Hide characters
8 Channel Bandwidth	<input type="radio"/> 20MHz <input checked="" type="radio"/> Auto

Figure 42. Access Point Mode

- 1 SSID:** Displays the default SSID of the ShareLink 250 W unit. To change the SSID, type in the desired SSID and click **Apply**.
- 2 SSID Broadcast:** Makes the access point visible to wireless clients. SSID broadcast is enabled by default. Choose **Disable** to disable SSID broadcast.
- 3 Band:** Select the 2.4 GHz or 5 GHz wireless band.
- 4 802.11 mode:** Default mode is **2.4G G only** for the 2.4 GHz band and **5G A/N mix** for the 5 GHz band. Click the drop-down list to display other modes for the 802.11 standard and select the preferred mode for your wireless band:

2.4G B/G mixed	5G A only
2.4G B only	5G N only
2.4G G only	5G A/N mix
2.4G N only	
2.4G G/N mixed	
2.4G B/G/N mixed	

- 5 Channel:** See [Available Wi-Fi Channels](#) on page 55 for details and instructions.
- 6 Encryption:** Click the drop-down list to display these encryption protocol options:

Disable
WEP
WPA PSK
WPA2 PSK
WPA Enterprise
WPA2 Enterprise

- 7 Key:** After selecting an encryption protocol, enter the network security key.
- 8 Channel Bandwidth:** Set to **Auto** by default. Each channel has a bandwidth of 20 MHz or 40 MHz. In auto mode, the device automatically determines which bandwidth to use. Alternatively, you may select the 20 MHz option.

**NOTE:** The 40 MHz bandwidth increases data throughput, but also increases the potential for interference from adjacent channels.

## Client mode

In Client mode, the ShareLink 250 W scans for existing access points and connects to one as a client. In this mode, the ShareLink 250 W is no longer configured as an AP and does not appear as a WAP on user devices. In order to connect to the ShareLink 250 W, users must connect to the LAN network.

When Client mode is enabled, the Wi-Fi Client panel appears with the following options:

The screenshot shows the Wi-Fi Client configuration panel. At the top, the Mode is set to Client (radio button selected). Below that, WiFi signal intensity is set to Maximum (radio button selected). The main section is titled 'WiFi Client' and contains three numbered steps: 1. Connect to Existing AP: This section includes a 'Scan' button and a dropdown menu labeled 'Existing AP SSID' with the text 'Please select a WiFi Network:'. 2. Encryption: This section includes a dropdown menu set to 'Disable'. 3. Key: This section includes a text input field and a checked checkbox labeled 'Hide characters'. At the bottom right of the panel are 'Apply' and 'Cancel' buttons.

Figure 43. Client Mode

- 1 Connect to Existing AP:** Click **Scan** to search for available Wi-Fi networks. When scanning is complete, a drop-down menu with available Wi-Fi networks appears.

This close-up shows the 'Connect to Existing AP' section. It features a 'Scan' button and a dropdown menu labeled 'Existing AP SSID' with the text 'Please select a WiFi Network:'. The dropdown arrow is pointing down.

Select the desired Wi-Fi network from the drop-down menu.

- 2 Encryption:** If the access point that you are trying to connect to has encryption enabled, you must select the encryption type from the drop-down menu and enter the network security key in Key section (below).

- 3 Key:** After selecting an encryption protocol, enter the network security key.

## SNMP Setup

Simple Network Management Protocol (SNMP) facilitates the exchange of basic network management information to provide monitoring, control, and to collect error information.

The screenshot shows the SNMP Setup configuration page. On the left is a navigation menu with 'SNMP Setup' selected. The main area is divided into five numbered sections: 1. Enable/Disable (radio buttons), 2. SNMP V2 (Community: public, Write Community: private), 3. SNMP V3 (User Name: admin, Auth Password (MD5), Priv Password (DES)), 4. Port (161), and 5. Trap (IP: 0.0.0.0). Buttons for Apply and Cancel are at the bottom right.

Figure 44. SNMP Setup

- ❶ **Enable** or **Disable**: SNMP is enabled by default. To disable SNMP, choose **Disable**.
- ❷ **SNMP V2 Panel**: The SNMP **Community** and **Write Community** values act as passwords, granting public (read-only) and private (read-write) access to the network management system.
  - **Community**: Default value is set to “public.”
  - **Write Community**: Default value is set to “private.”
- ❸ **SNMP V3 Panel**
  - **User Name**: Configure the user name of the person in charge of managing the ShareLink 250 W through SNMP.
  - **Auth Password (MD5)**: Configure the Auth password.
  - **Priv Password (DES)**: Configure the Priv password.
- ❹ **Port**: See [Firewall Traversal](#) on page 54 for a list of ports and their functions.
- ❺ **Trap**: Configure the trap receiver IP.

## OSD Setup

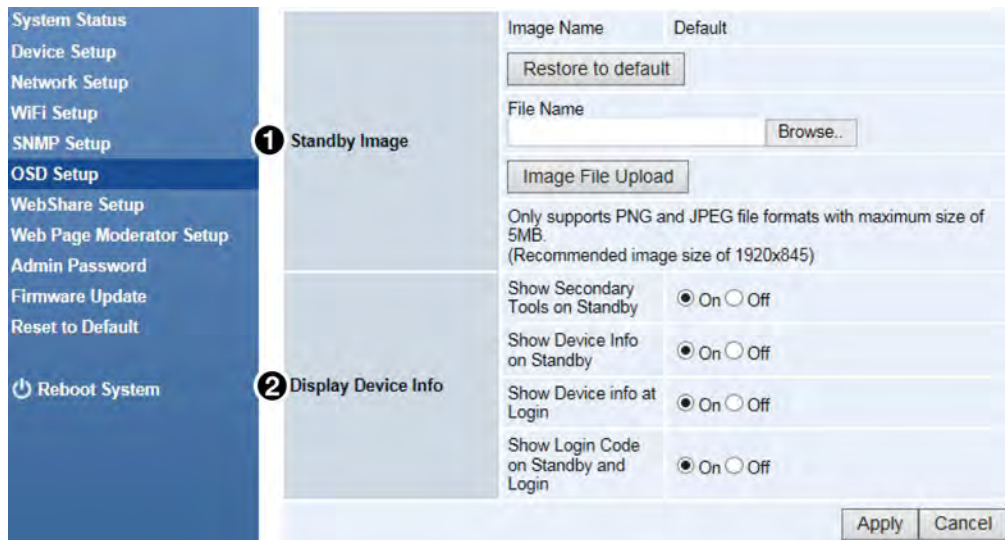


Figure 45. OSD Setup

### 1 Standby Image Panel

Use this section to change the background image of the standby screen (see [figure 4](#), page 6).

- **Restore to default:** Click to restore default standby screen image.
- **Browse:** Click to select the image file for the Standby Screen. Browse to the image file location, select the file, then click **Image File Upload**.

**NOTE:** The image file can be JPEG or PNG format with a maximum size of 5 MB and recommended resolution of 1920x845.

### 2 Display Device Info Panel

Use this section to choose which items to show on the standby or **Login** screen, including:

- **Show Secondary Tools on Standby:** When this option is set to **Off**, the four icons on the standby screen (USB Player, Whiteboard, Resize, and Calibration) are hidden.
- **Show Device Info on Standby:** When this option is set to **On**, the receiver IP address and SSID are shown on the bottom portion of the standby screen. When this option is set to **Off**, these items are hidden.
- **Show Device Info at Login:** When this option is set to **On**, the IP address, SSID, and login code are overlaid on top of the shared content for 30 seconds. Every time a new user connects to the ShareLink, the Device Info reappears for 30 seconds. Also, on the client software, the “Show Receiver Info” feature is enabled. (See [Using the Software Menu](#) on page 17. The **Show Receiver Info** option is in the **Advanced Settings Menu**.)

Select **Off** to disable this feature as well as the “Show Receiver Info” option on the client software.

- **Show Code on Standby and Login:** When this option is set to **Off**, the login code is hidden from the standby screen. The “Show Receiver Info” option remains enabled, allowing the IP address and SSID to be displayed.

## WebShare Setup

System Status  
Device Setup  
Network Setup  
WiFi Setup  
SNMP Setup  
OSD Setup  
**WebShare Setup**  
Web Page Moderator Setup  
Admin Password  
Firmware Update  
Reset to Default  
Reboot System

**1 Auto Refresh Interval (second)**

Manual Refresh

10 \*recommended maximum concurrent users. (10)

20 \*recommended maximum concurrent users. (15)

30 \*recommended maximum concurrent users. (20)

45 \*recommended maximum concurrent users. (25)

60 \*recommended maximum concurrent users. (30)

90 \*recommended maximum concurrent users. (35)

**2 Access Password Control**

Disable

Use the same password as "Code"

Use the following Code:  (0-9)

**Note**  
For optimal sharing performance, when there are more than 10 concurrent users, it is recommended to try one of the following:

- connect ShareLink to the company network through ethernet
- bridge ShareLink to a router

Apply Cancel

Figure 46. WebShare Setup

### **1 Auto Refresh Interval (second) Panel**

Use this section to configure the refresh interval time (the amount of time that elapses before the ShareLink 250 W refreshes).

- **Manual Refresh**
- **10 - 90** (seconds): Select the best option for the amount of users.

### **2 Access Password Control Panel**

Use this section to disable or configure the WebShare access password (this is the password required when connecting to the ShareLink 250 W through WebShare):

- **Disable:** Select to disable the password. This allows users to connect to the ShareLink 250 W through WebShare without a password.
- **Use the same password as "Code":** Select this option to make the WebShare access password the same as the Code on the standby screen.
- **Use the following Code:** Enter a custom code to use as the WebShare access password.



## Web Page Moderator Setup

System Status  
Device Setup  
Network Setup  
WiFi Setup  
SNMP Setup  
OSD Setup  
WebShare Setup  
**Web Page Moderator Setup**  
Admin Password  
Firmware Update  
Reset to Default  
Reboot System

**Web Page Moderator Password**  
Enter New Password **1**   
Confirm New Password **2**  **3** Apply  
**Web Page Moderator Access** **4**  Enable  Disable

**Figure 47. Web Page Moderator Setup**

The Web Page Moderator password is used to access the moderator page. Use this screen to change the moderator password as follows:

To change the moderator password:

1. Enter the new password in the **New Password** field (see figure 47, **1**).
2. Re-enter the password in the **Confirm New Password** field (**2**).
3. Click **Apply** (**3**) to activate the new moderator control password.

You may also enable or disable **Web Page Moderator Access** by clicking the **Enable** or **Disable** radio buttons (**4**).

## Admin Password

System Status  
Device Setup  
Network Setup  
WiFi Setup  
SNMP Setup  
OSD Setup  
WebShare Setup  
Web Page Moderator Setup  
**Admin Password**  
Firmware Update  
Reset to Default  
Reboot System

**Configure Password**  
Enter New Password   
Confirm New Password  Apply

**Figure 48. Admin Password**

The Admin password is used to access the Configuration pages. Use this screen to change the Admin password as follows:

1. Enter the new password in the **New Password** field.
2. Re-enter the password in the **Confirm New Password** field.
3. Click **Apply** to activate the new moderator control password.

## Firmware Update

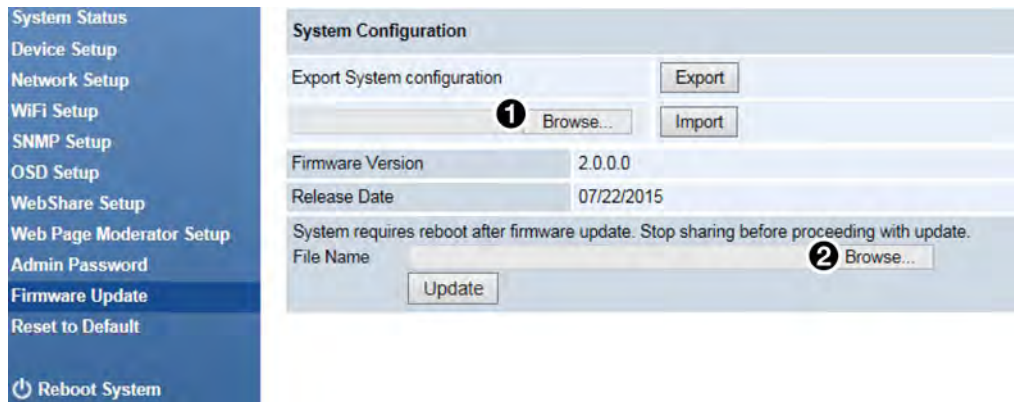


Figure 49. Firmware Update

### ❶ Export System Configuration

Use this section to export or import the system configuration file.

Export System configuration:

- **Export:** Click to export the system configuration to a configuration file.

**NOTE:** This option does not export the custom standby image (if one has been loaded on the standby screen).

- **Import:** Click to import the system configuration file to the ShareLink 250 W.

### ❷ Firmware Update

Use this section to update the ShareLink 250 W firmware. Follow these instructions to update the firmware:

1. Download latest firmware file from the Extron website (see [Downloading ShareLink 250 W Firmware](#) on page 53).
2. Click **Browse...** (❷) to browse to the firmware file location, and select the firmware file.
3. Click **Update** to start firmware update. A warning message and counter are shown on the screen. After a few minutes, “**Complete**” is shown on the screen.

## Reset to Default



**Figure 50. Reset to Default**

Use this screen to restore factory default settings by clicking **Apply** (see figure 50, **1**).

You can also restore factory default settings using the **Reset** button on the bottom of the ShareLink 250 W (see **Bottom Panel Features** on page 5).

## Reboot System



**Figure 51. Reboot System**

Use this screen to reboot the ShareLink 250 W by clicking **Reboot** (see figure 51, **1**).

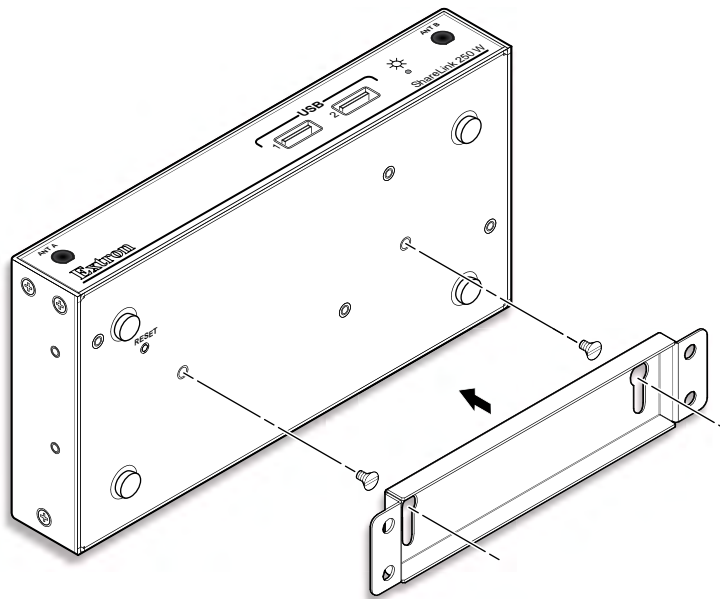
# Reference Information

## Mounting

### Wall Mounting

Follow these steps to mount the ShareLink 250 W on a wall using the included wall mount kit:

1. Secure the bracket to the wall using the four supplied bracket screws. Be sure to install the bracket with the large keyhole facing upward as shown below.
2. Tighten the two small mounting screws on the bottom panel of the ShareLink 250 W as shown below.
3. Insert the screwheads into the wall mount bracket. Ensure that the ShareLink 250 W receiver sits securely on the bracket.



**Figure 52.** ShareLink 250 W Wall Mount Kit

## Rack Mounting

### UL Guidelines for Rack Mounting

The following Underwriters Laboratories (UL) guidelines are relevant to the safe installation of these products in a rack:

- **Elevated operating ambient temperature** — If the unit is installed in a closed or multi-unit rack assembly, the operating ambient temperature of the rack environment may be greater than room ambient temperature. Therefore, install the equipment in an environment compatible with the maximum ambient temperature (TMA = +122 °F, +50 °C) specified by Extron.
- **Reduced air flow** — Install the equipment in the rack so that safe operation and adequate air flow is provided to the unit.
- **Mechanical loading** — Mount the equipment in the rack so that a hazardous condition is not achieved due to uneven mechanical loading.
- **Circuit overloading** — Connect the equipment to the supply circuit and consider the effect that circuit overloading might have on overcurrent protection and supply wiring. Consider the equipment nameplate ratings when addressing this concern.
- **Reliable earthing (grounding)** — Maintain reliable grounding of rack-mounted equipment. Pay particular attention to supply connections other than direct connections.

### Rack Mounting Procedure

The ShareLink 250 W can be mounted in a rack, using an optional Extron rack mounting kit (see [www.extron.com](http://www.extron.com) for part numbers). Follow the instructions provided with the kit.

## Under-desk and Furniture Mounting

The ShareLink 250 W can be mounted under a desk or podium (see figure 53), using an optional Extron mounting kit (see [www.extron.com](http://www.extron.com) for part numbers). Follow the instructions provided with the kit.

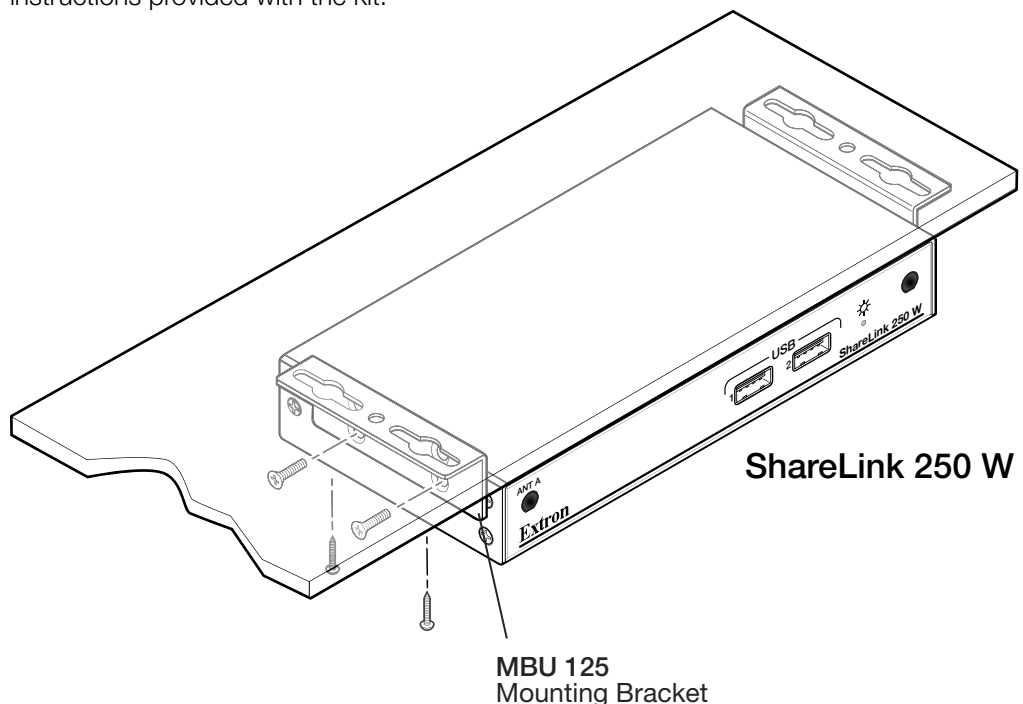
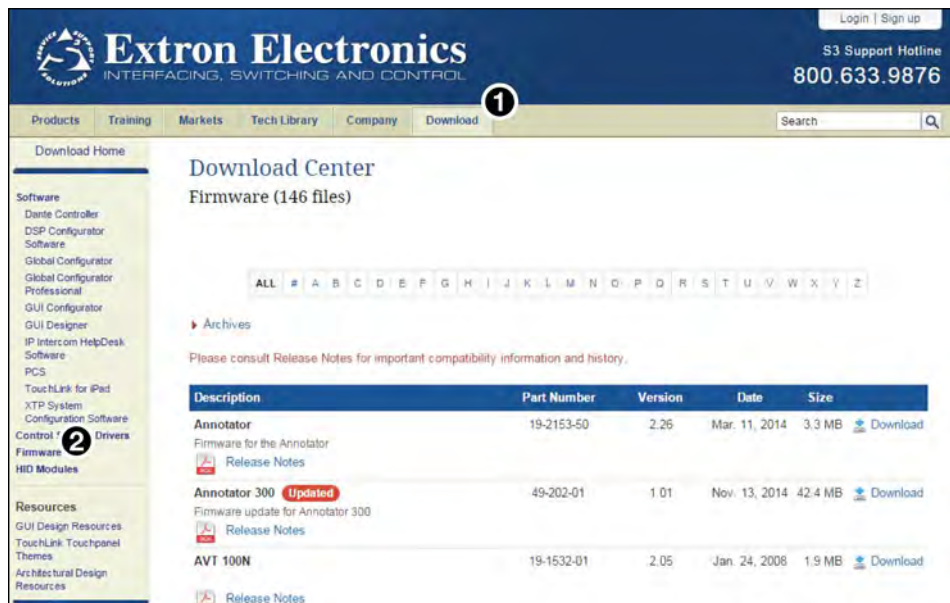


Figure 53. ShareLink 250 W with Optional MBU 125

## Downloading ShareLink 250 W Firmware



**Figure 54. Firmware Link on the Download Tab**

To download the latest firmware for the ShareLink 250 W:

1. Visit [www.extron.com](http://www.extron.com) and click the **Download** link (1) at the top of the page.
2. Click **Firmware** (2) on the left sidebar menu.
3. On the Download Center screen, click **S** in the alphabet menu and locate the section for the ShareLink 250 W firmware.
4. (Optional) click **Release Notes**. These notes show the issues that are addressed by the latest update. If these issues do not affect you, you may decide not to upgrade the firmware.
5. Click the **ShareLink 250 W Download** link.
6. On the next screen, enter the requested user information, then click **Download**.
7. Follow the instructions on the rest of the download screens to save the executable firmware file to your computer. Note the location to which the file was saved.
8. In Windows Explorer or another file browser, locate the downloaded executable file, and double-click to open it.
9. Follow the instructions on the Installation Wizard screens to install the new firmware. A Release Notes file and a set of instructions for updating the firmware are also loaded.

## Firewall Traversal

In order for the ShareLink 250 W gateway to function correctly with the ShareLink application, it is recommended that the following firewall rules be used to allow traffic to pass. The table below details the ports and their functions.

Port	Type	Direction	Function	Open	Notes
389 443 3268	TCP	Both	Command	Required	For best performance, it is recommended that ports 389, 443, and 3268 be open. At a minimum, one of the three needs to be open for the gateway to function properly. If one port is open and that port is used by another application, the ShareLink 250 W does not function properly.
445 515 8080	TCP	Both	Data	Required	This port is used to screen data.
1041	TCP	Outbound	Video	Required	This port is used for video data.
1047 1048 1049	UDP	Inbound	Discover	Optional	These ports are used for discovery of the gateway. If closed, the discovery process could be impacted.
1688	TCP	Both	DLNA	Required	This port is used for audio data.
2869 49152 49153	TCP	Both	DLNA	Required	These ports are used for streaming video data to the ShareLink 250 W.
1900 50000- 65000	UDP	Both	DLNA	Required	These ports are used for streaming video data to the ShareLink 250 W.
80	TCP	Both	Web services	Required	This port is used to access the embedded webpages.
42891 42892	TCP	Both	Update utility	Required	These ports are used for batch update of firmware.
1689	TCP	Both	Debug	Optional	This port is used for the debugging log.
19996	TCP	Both	Command	Required	This port is required for Moderator control.
31865	TCP	Both	Data	Optional	This port is used by Android mobile devices.
137	UDP	Both	NetBIOS	Optional	This port is used by NetBIOS for naming service.
161	UDP	Both	SNMP	Optional	This port is used for SNMP management.

## Available Wi-Fi Channels

This section provides instructions and information on selecting Wi-Fi channels for each wireless band, 2.4 GHz and 5 GHz (see below).

To access the Wi-Fi settings, go to the **WiFi Setup** section of the Configuration pages (see **WiFi Setup** on page 42).

### 2.4 GHz Band – Channel Selection

When the 2.4 GHz band is used (figure 55, ❶), Channel is set to **Auto** by default (❷). In Auto mode, the ShareLink 250 W selects the best channel to operate in (this is done at system startup).



Alternatively, you may select Wi-Fi channel 1 - 11 manually from the drop-down menu (❸).

### 5 GHz Band – Channel Selection

When the 5 GHz band is enabled (figure 56, ❶), channel 36 is selected by default (❷).



**Figure 56. WiFi Setup Panel (5 GHz band)**

You may select a different Wi-Fi channel from the drop-down menu (figure 56, ❸). The table on the next page lists the 5 GHz non-overlapping channels available in each region.



Channel	Region	
	US/Canada	EU
36	X	X
40	X	X
44	X	X
48	X	X
149	X	
153	X	
157	X	
161	X	
165	X	

# Extron Warranty

Extron Electronics warrants this product against defects in materials and workmanship for a period of three years from the date of purchase. In the event of malfunction during the warranty period attributable directly to faulty workmanship and/or materials, Extron Electronics will, at its option, repair or replace said products or components, to whatever extent it shall deem necessary to restore said product to proper operating condition, provided that it is returned within the warranty period, with proof of purchase and description of malfunction to:

**USA, Canada, South America,**

and Central America:  
Extron Electronics  
1230 South Lewis Street  
Anaheim, CA 92805  
U.S.A.

**Japan:**

Extron Electronics, Japan  
Kyodo Building, 16 Ichibancho  
Chiyoda-ku, Tokyo 102-0082  
Japan

**Europe and Africa:**

Extron Europe  
Hanzeboulevard 10  
3825 PH Amersfoort  
The Netherlands

**China:**

Extron China  
686 Ronghua Road  
Songjiang District  
Shanghai 201611  
China

**Asia:**

Extron Asia Pte Ltd  
135 Joo Seng Road, #04-01  
PM Industrial Bldg.  
Singapore 368363  
Singapore

**Middle East:**

Extron Middle East  
Dubai Airport Free Zone  
F13, PO Box 293666  
United Arab Emirates, Dubai

This Limited Warranty does not apply if the fault has been caused by misuse, improper handling care, electrical or mechanical abuse, abnormal operating conditions, or if modifications were made to the product that were not authorized by Extron.

**NOTE:** If a product is defective, please call Extron and ask for an Application Engineer to receive an RA (Return Authorization) number. This will begin the repair process.

**USA:** 714.491.1500 or 800.633.9876

**Europe:** 31.33.453.4040

**Asia:** 65.6383.4400

**Japan:** 81.3.3511.7655

Units must be returned insured, with shipping charges prepaid. If not insured, you assume the risk of loss or damage during shipment. Returned units must include the serial number and a description of the problem, as well as the name of the person to contact in case there are any questions.

Extron Electronics makes no further warranties either expressed or implied with respect to the product and its quality, performance, merchantability, or fitness for any particular use. In no event will Extron Electronics be liable for direct, indirect, or consequential damages resulting from any defect in this product even if Extron Electronics has been advised of such damage.

Please note that laws vary from state to state and country to country, and that some provisions of this warranty may not apply to you.

<b>Extron Headquarters</b> +1.800.633.9876 (Inside USA/Canada Only) Extron USA - West +1.714.491.1500 +1.714.491.1517 FAX	<b>Extron USA - East</b> Extron USA - East +1.919.850.1000 +1.919.850.1001 FAX	<b>Extron Europe</b> +800.3987.6673 (Inside Europe Only) +31.33.453.4040 +31.33.453.4050 FAX	<b>Extron Asia</b> +65.6383.4400 +65.6383.4664 FAX	<b>Extron Japan</b> +81.3.3511.7655 +81.3.3511.7656 FAX	<b>Extron China</b> +86.21.3760.1568 +86.21.3760.1566 FAX	<b>Extron Middle East</b> +971.4.299.1800 +971.4.299.1880 FAX	<b>Extron Korea</b> +82.2.3444.1571 +82.2.3444.1575 FAX	<b>Extron India</b> 1800.3070.3777 (Inside India Only) +91.80.3055.3777 +91.80.3055.3737 FAX
---	---	--	--	---	---	---	---	--