Thank you for purchasing the SmartView Visual Communication System. We are the largest Emergency Communication Manufacturer in North America and have been in business for over 35 years.

We take great pride in our products, service, and support. Our Emergency Products are of the highest quality. Our experienced customer support teams are available to remotely assist with site preparation, installation, and maintenance. It is our sincere hope that your experience with us has and will continue to surpass your expectations.

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Pre-Installation Requirements

1. Internet Connection:
   - Routed internet connection using DHCP
     (Network must use private IP address ranges 10.X.X.X or 192.X.X.X or 172.X.X.X)
   OR
   - Cellular modem with data (available from RATH®)
2. Laptop with a network connection for testing
3. Power Options (use only one option listed below):
   - 2100-SVE Ethernet Extenders (provided)
   - Power over Ethernet (PoE+)
   **Note:** Only apply one of the above options. The Controller Board cannot accept more than one power input.
4. SmartView Controller, SmartView Display, and SmartView Camera
5. YES and NO or DOOR OPEN and DOOR CLOSE buttons

Installation

Hardware Mounting
1. Mount the SmartView Controller in the elevator using the provided adapter plate or mounting kit.
2. Mount the Camera in the panel or ceiling of the elevator using the provided hardware. The Camera must be no more than 15 feet from the Controller.
3. Connect the Camera to the Controller using the provided USB cable.
4. Mount the SmartView Display in the elevator panel. The Display must be no more than 20 feet from the Controller.
   **Note:** Reference Appendix A for Display part numbers and window thickness.
5. Connect the Display to the Controller using the provided HDMI cable.
6. Connect the Display power output (J10) to the SmartView Display power input using the provided cable.
   **Note:** The Controller output power (J10) is only compatible with the SmartView Display.
7. Connect the button designated for “YES” to the Controller terminal labeled “YES”.
8. Connect the button designated for “NO” to the Controller terminal labeled “NO”.
   **Note:** Use 24AWG wire minimum and 18AWG wire maximum.

Powering Options
1. 2100-SVE Ethernet Extenders
   a. Reference diagram on page 5 as a guide.
   b. Place the main injector unit and UPS in the machine room or network room.
   c. Connect the provided Ethernet cable from a routed network switch to the PoE In port on the main injector.
   d. Plug the included power supply into the UPS.
   e. Use an existing single pair or run a single pair of wire from the main injector unit to the remote extender unit.
      **Note:** 18AWG wire is recommended.
   f. Using the provided RJ45 adapters, wire to pins 1 and 2 and connect the adapters to the LRP Out on the main injector and LRP IN on the remote extender.
   g. Connect the provided Ethernet cable from the PoE Out port on the remote extender to the Ethernet port on the Controller Board.
      **CAUTION:** DO NOT USE POE POWER AND INPUT POWER (J4) SIMULTANEOUSLY.
2. PoE Wiring (No Extenders)
   a. Run an Ethernet cable from the Controller Board in the elevator to a routed PoE+ network switch.
      **Note:** Use 24AWG wire minimum and 18AWG wire maximum.

CAUTION

ONLY USE ONE POWER SOURCE
DO NOT WIRE POE AND INPUT POWER (J4) SIMULTANEOUSLY
Operations and Testing

Compatible Internet Browsers: Google Chrome, Mozilla Firefox, Microsoft Edge, or Safari

Note: A laptop or computer with a network connection is required for testing.

1. Plug the provided flash drive into your laptop or computer.
2. Open the SmartView link located on the flash drive.
   Note: If you have lost the provided flash drive, contact RATH®.
3. Enter one of the IDs associated with your job.
   Note: A new tab will open automatically.
4. In the new tab you will see the camera feed from the ID.
5. Send a message to the Display by typing into the dialog box and press Enter.
   Note: YES and NO responses will be shown adjacent to the dialog box.
6. To test other IDs, close the tab or navigate back to the Rescue Services tab and enter the remaining IDs.

Troubleshooting

<table>
<thead>
<tr>
<th>Problem</th>
<th>Possible Cause &amp; Solutions</th>
</tr>
</thead>
<tbody>
<tr>
<td>The Display is blank:</td>
<td>• The display will only power when the system is accessed via the SmartView Software. Follow the steps in the Operations and Testing section to verify.</td>
</tr>
<tr>
<td></td>
<td>• Verify the SmartView is on a network with a router capable of handing out DHCP.</td>
</tr>
<tr>
<td>The Software says device is offline:</td>
<td>• Verify the Controller has a routed internet connection and a minimum of 5MB/S.</td>
</tr>
<tr>
<td></td>
<td>• Verify the Ethernet port on the Controller has an amber light and flashing green light.</td>
</tr>
<tr>
<td></td>
<td>• If necessary, connect a laptop to the Ethernet cable to verify.</td>
</tr>
<tr>
<td>Device is not connecting:</td>
<td>• In some cases, a firewall will block the SmartView device.</td>
</tr>
<tr>
<td></td>
<td>• Contact RATH® for the MAC address of your device.</td>
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<tr>
<td></td>
<td>• Allow the device through your firewall.</td>
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<tr>
<td>The software says invalid SmartView ID:</td>
<td>• Verify that the ID number was entered correctly into the software.</td>
</tr>
<tr>
<td>Finding device's IP address:</td>
<td>• Hold the Yes and No buttons simultaneously for 7 seconds.</td>
</tr>
<tr>
<td></td>
<td>• The display will show the devices IP address and server connection.</td>
</tr>
<tr>
<td>Flickering lights on Ethernet port:</td>
<td>• Check the power on the POE+ connection.</td>
</tr>
</tbody>
</table>
Wiring with Ethernet Extenders (2100-SVE) (Must be Supplied by RATH®)

**Notes:**
- 2-wire from main PoE Extender to remote PoE Extender
- CAT5E from communication source to main Ethernet Extender
- CAT5E from remote Ethernet Extender to SmartView Controller

**Machine Room**

```
CAT5E
2100-SVE
(PoE Extender Main)

RP7700104S
(Power Supply/UPS/Battery)

Outbound Communication Source

When powering via PoE battery backup can be done remotely.

Single Pair
Wire to pins 1 and 2 of the RJ45 connector
Extends power and communication up to 1,600 feet
```

**Elevator Car**

```
COP
SmartView Components

2100-SVE
(PoE Extender Remote)

CAT5E
```

**CAUTION**

ONLY USE ONE POWER SOURCE
DO NOT WIRE POE AND INPUT POWER (J4) SIMULTANEOUSLY
**Wiring Example (Preferred Option for Standard Travel Cable):**

- **Extender Power:** Supplies 1A to the SmartView Controller
- **Extender Wiring:**
  - Extends up to 1,640 feet over single pair of wiring between Extenders (requires single pair, 18-24ga, shielded or unshielded)
  - CAT5E with RJ45 connectors required from network switch and the SmartView Controller to each Extender
  - Main Unit (Injector) has LAN In (internet connection) and LRP Out (two wire connection)
  - Remote Unit (Extender) has LRP In (two wire connection from main unit) and PoE Out (Ethernet connection to SmartView Controller)

**Wiring with PoE+ Network Switch**

**CAUTION**

ONLY USE ONE POWER SOURCE
DO NOT WIRE POE AND INPUT POWER (1A) SIMULTANEOUSLY

**Minimum CAT5E Cable**
**In-Building Intercom Master Setup**

Click the SmartView icon to begin linking the Head-End Controller. For initial setup, the SmartView Head-End will need to be connected to the internet. Provide a 120v backed up power source or RATH® RP7700104S. Reference manual RP8500510 for SmartRescue phone wiring and manual RP8500PBXG for Command Center phone wiring.

**Visual Setup:**
1. Install the SmartView Controllers before setting up the Head-End (see instructions on page 3).
2. Power on the Head-End and wait for the software to load.
3. Click the SmartView icon to begin linking the Head-End Controllers.
4. On the Configuration Screen, enter each SmartView ID installed at your location.
5. Click Submit.
   - **Note:** If you see an error, re-check that a proper ID was entered.
6. The IDs will be displayed on the next page.
7. Once successfully linked, you will see a list of the devices with a view icon next to each.
   - **Note:** Wait at least 2 minutes to allow the SmartView devices to link before testing.
   - **Note:** To verify operation, click the view icon for one of the devices.

---

**LAN Setup**

To ensure operation if the external internet is compromised, verify the Head-End and Controllers wire back to the same network switch or series of network switches. See wiring example below.
Appendix A

**SmartView Controller Specifications:**
- **Power Requirements:** 12v or 24v or PoE or PoE+
- **Current Draw:**
  - 12v Active = 1A
  - 12v Idle = 0.5A
  - 24v Active = 0.5A
  - 24v Idle = 0.25A
- **Operating Temperature:** 32°F to 158°F (0°C to 70°C)
- **Dimensions:** 4” H x 7” W x 1.2” D

**SmartView Camera Specifications (Powered by Controller):**
- **Power Requirements:**
  - Active = 5v, 0.12A
  - Idle = 0v, 0A
- **Operating Temperature:** 32°F to 140°F (0°C to 60°C)

**SmartView Display Specifications (Powered by Controller):**
- **Power Requirements:**
  - Active = 5v, 0.59A
  - Idle = 0v, 0A
- **Operating Temperature:** -4°F to 158°F (-20°C to 70°C)
- **Screen Size:** 5 inches
- **Part Numbers:**
  - 2100-SVD (0.0625” window)
  - 2100-SVDA (0.125” window)
  - 2100-SVDB (0.109” window)
  - 2100-SVDC (0.078” window)
  - 2100-SVDE (0.118” window)
Appendix B

Example ID Table:

<table>
<thead>
<tr>
<th>SmartView ID</th>
<th>Location/Description</th>
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<tbody>
<tr>
<td>10020</td>
<td>Elevator 1</td>
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<tr>
<td>10021</td>
<td>Elevator 2</td>
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</tbody>
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ID Table:

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<th>Location/Description</th>
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