

# Installation Manual

The ASCO 5350 ATS Remote Annunciator is listed under the Underwriter’s Laboratories Standard UL-1008 for Automatic Transfer Switch accessories. This stand-alone device provides individual status monitoring and control of up to eight ASCO Automatic Transfer Switches (ATSs) over an ethernet network. Each ATS must have an ASCO 5150 Connectivity Module (CM) (Acc. 72E) connected to it. Daisy-chained ATSs that have ASCO 5110 Serial Modules (Acc. 72A) can share a single CM. The Catalog 5350 can communicate with these ATSs:

- 7000 & 4000 Series (Group 5 Controller)
- Series 300 (Group 1 Controller)
- Series 185 (Group 4 Controller)
- ASCO 940 (Group 7 Controller)

The ASCO 5350 complies with US UL requirements. It also has IEC Certification (CE Mark).

Product Functions and General Descriptions:

Separate light indicate switch status and position.

- ATS switch position
- ATS source availability
- ATS alarm condition
- ATS time delay active

Separate push buttons individually initiate transfer switch operation and testing.

- ATS transfer test (*Transfer*)/ bypass (cancel) time delay
- Silence alarm
- Lamp test
- Reset

The ATS Remote Annunciator can also be setup in multiple locations to monitor the same devices. This arrangement allows for redundant annunciation of business-critical ATSs.

**After the ATS Remote Annunciator is installed and configured refer to User’s Guide 381333-314.**

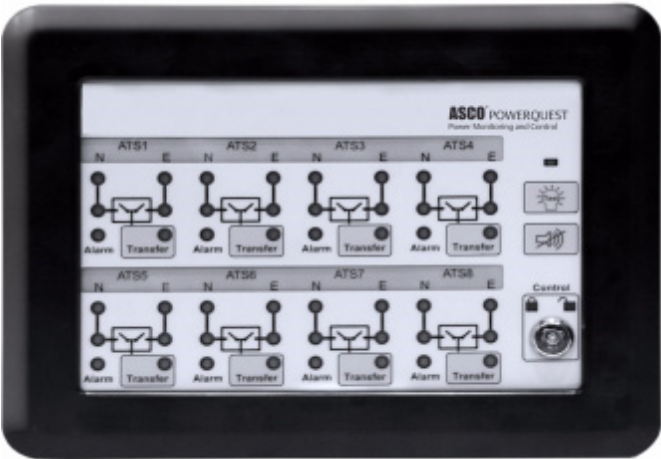
**DANGER**

DANGER is used in this manual to warn of a hazard situation which, if not avoided, will result in death or serious injury.

**WARNING**

WARNING is used in this manual to warn of a hazardous situation which, if not avoided, could result death or serious injury.

## ATS Remote Annunciator Catalog 5350



Rear view

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## Specifications

Power Requirements:	120-220 V ac nominal (90-264 V ac)
auxiliary	24 V dc nominal (9-36 V dc) can be a battery or UL rated Class 1 dc power supply
max. power	10 watts ac or 5 watts dc
Dimensions:	7.77" H x 9.95" L x 2.563" D (19.74 cm H x 25.27 cm L x 6.51 cm D)
Weight:	2.7 lb. (1.2 kg)
Ethernet Communication Cable Requirements:	Belden 1583A or equiv. UTP CAT 5e or CAT 6 with RJ45 connectors (untwisted pair or higher)
Ethernet Port Connectors:	Two built-in 10/100 Base T (RJ45) 10/100 Mbps
Configuration Parameters:	(The parameters required to make an Ethernet connection)
IP Address	169.254.1.200
Subnet Mask	255.255.0.0
Gateway	0.0.0.0
TCP Port No.	10001
	A label on the back shows the default settings.
Protocol Support:	ASCO I, II, and Modbus/TCP
Ambient Temperature:	
Operating	-4 to 158 deg F (-20 to 70 deg C) @ 5-85 % humidity
Storage	-40 to 185 deg F (-40 to 85 deg C)
Number of Channels	8
Internal Alarm Buzzer	
Alarm Relay Contact Ratings	
contact configuration	1 spst normally open
ac ratings	1 A @ 110/220 V ac 50/60 Hz

## 1 Factory Default Information

A label on the back to the ATS Remote Annunciator lists several important settings that you will need to do the configuration. **Write down this information below before installing it (and after changing these settings).**

IP Addr	_____
factory default:	<b>169.254.1.200</b>
Login	_____
factory default:	<b>admin and user</b>
	(see page 4 for Login names)
Password	_____
factory default:	<b>ASCO</b> (capital letters)
Configured IP Address	_____
factory default:	<b>169.254.1.200</b>
	(customer's IP address)

## 2 Custom ATS Labels

Custom ATS names (instead of numbers) can be added to the faceplate. See page 6 to enter and print customized names. To install the custom labels follow these steps:

1. Remove the bezel by using a blade screwdriver. Insert the screwdriver tip into the four slots between the bezel and faceplate. Flip the screwdriver to remove the bezel.
2. Slide out the existing ATS labels. Cut the new custom labels to fit and paste them onto the label holder. Then slide them back onto the faceplate.
3. Reinstall the bezel by carefully aligning it, then pressing it in firmly by hand until it snaps on (four places).

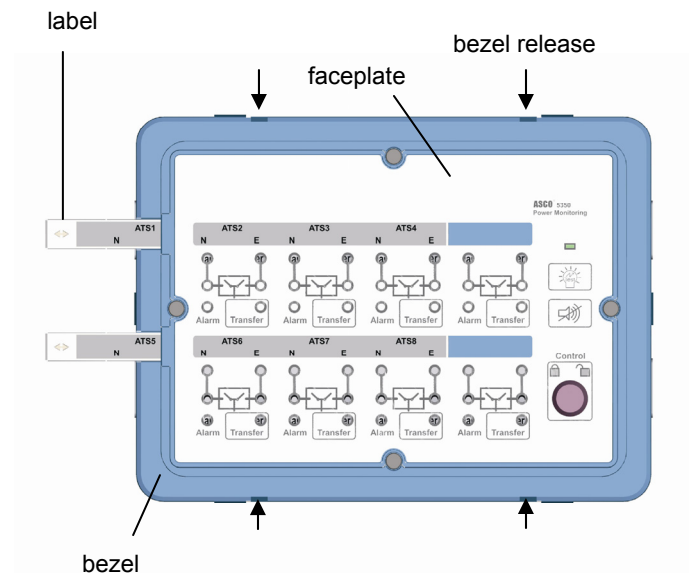


Figure 1: Custom ATS names (slide in labels)

# Installation

The ASCO 5350 ATS Remote Annunciator can be panel mounted or attached to an electrical or masonry gang box. Refer to the installation drawing 834970 and wiring diagram 834969 at the back of this manual.

## 1 Panel Mounting

Refer to installation drawing 834970 sheet 1. After wiring the ATS Remote Annunciator, attach it (without the back cover) directly to the panel cutout. A gasket in the slot in the bezel provides Ingress Protection (IP51). Four screw adjustable mounting tabs are provided on the sides. Before inserting it through the opening, turn the four mounting screws counter-clockwise (to turn the tabs flush against the sides). After it is installed, turn the screws clockwise to extend the tabs, then tighten the four screws clockwise so that the tabs secure it from the inside.

To release it, turn the four screws counter-clockwise until the tabs are loosened and then turn flush against the sides.

## 2 Gang Box / Masonry Wall Mounting

Refer to installation drawing 834970 sheet 2. Before inserting it through the opening, turn the four mounting screws counterclockwise (to turn the tabs flush against the sides). After it is installed, turn the screws clockwise to extend the tabs, then tighten the four screws clockwise so that the tabs secure it from the inside. Install the wide bezel to cover the steel plate.

To release it, turn the four screws counterclockwise until the tabs are loosened and then turn flush against the sides.

## 3 Flush Mounting

For flush mounting in 4-inch or deeper walls, mounting enclosure kit K871966-003 is required.

## 4 Power Wiring

A licensed electrician should install the ATS Remote Annunciator. All national and local codes must be followed.

Refer to wiring diagram 834969. The power terminals accept 30 to 12 AWG stranded flexible wire. If the power wiring is solid wire, pigtail it with stranded flexible wiring to the ATS Remote Annunciator. Use a 3 mm flat screwdriver to tighten the power terminals screws to 5 in.-lb. (0.5 Nm) tightening torque.



To avoid shock, burns, or death, deenergize all electrical sources before making connections.

## 5 Internal Buzzer and Alarm Relay

Refer to wiring diagram 834969. In addition to the internal alarm buzzer, a normally-open dry alarm contact is provided for an external buzzer circuit. An ac buzzer can be wired along with the main ac power supply. A dc buzzer requires a 24 V dc power supply and can be wired along with the communication wiring. See page 6 for configuration of buzzer operation.

## 6 Communication Wiring (Ethernet)

Refer to wiring diagram 834969. The communication wiring and ac power wiring must be isolated. Use Belden 1583A cable or equivalent UTP CAT 5e or CAT 6 with RJ-45 connectors (untwisted pair or higher). Connect the Ethernet Ports to the network.

### 6-1 Communication Architecture

These architectures are applicable for ASCO 5350:

Communication wiring for up to 8 ATSs for Single Location with individual Connectivity Modules for every ATS

Communication wiring for more than 8 ATSs for multiple locations with individual Connectivity Modules for every ATS

Communication wiring for up to 32 ATSs for multiple locations with single Connectivity Module for Group 5 Controller (4000 & 7000 Series)

Communication wiring for up to 32 ATSs for multiple locations with single Connectivity Module for Group 1 Controller (Series 300) & Group 5 Controller (4000 & 7000 Series)

Communication wiring for up to 32 ATSs for multiple locations with single Connectivity Module for Group 7 Controller (ASCO 940, 962)

#### NOTE

For best performance limit any RS-485 serial daisy-chain to eight ATSs. Each ATS Remote Annunciator is capable of handling a single serial communications string at a time, but is scalable by adding additional ATS Remote Annunciators.

# Functional Test

After installing the ATS Remote Annunciator communication must be established to configure it. A *Windows*-based laptop computer is needed. You must have access to the other end of the communication cable that is connected to the ATS Remote Annunciator. You also need to know the factory default settings on the label (see page 2).

## 1 Initial checks

After the ATS Remote Annunciator is mounted and wired (both power and communication) perform these tests:

1. Turn on the power to energize the ASCO 5350.
2. Verify that the power light is illuminated (upper right).
3. Turn the **Control** key switch to the right (unlocked).
4. Press the lamp test button (below the power light); all lights should illuminate.

## 2 Communication check

A laptop computer running *Windows Xp* and *Internet Explorer 5.0 +* will be used in these steps to configure the ATS Remote Annunciator. You will need to temporarily disconnect the other end of the communication cable from the ATS Remote Annunciator and connect it instead to the laptop computer.

1. Connect the Ethernet cable from the ATS Remote Annunciator to the laptop computer's Ethernet jack.
2. Start *Windows*, click the **Start** button, then **Control Panel**.
3. Double click the **Network Connections** icon.
4. Double click the **Local Area Connections** icon, then click **Properties**.
5. Select *Internet Protocol (TCP/IP)*, then click **Properties**.
6. Set the IP setting of the laptop computer (see Figure 2):  
 IP Address     169.254.1.100     (last digit must be different than ASCO 5350 Default IP)  
 Subnet Mask   255.255.0.0     (same as ASCO 5350)  
 Default Gateway   leave blank  
 (This is needed only if communicating to a different LAN.)
7. Click *OK* and click *Close*. Close the *Local Area Connection* window.
8. Once the TCP/IP setup is complete at the laptop computer, restart the computer (click **Start** button, then click **Restart**).
9. Restart *Windows*, then click the **Start** button. Select **All Programs > Accessories > Command Prompt**.
10. In the command prompt window type **ipconfig** and press **ENTER**. The settings are displayed.

11. In the command prompt window type **ping 169.254.1.200** and press **ENTER**.

You should see: *Reply from 169.254.1.200*

This reply confirms communication between the laptop computer and the ATS Remote Annunciator. Close the command prompt window. Proceed to the Configuration, *Login* screen on page 5.

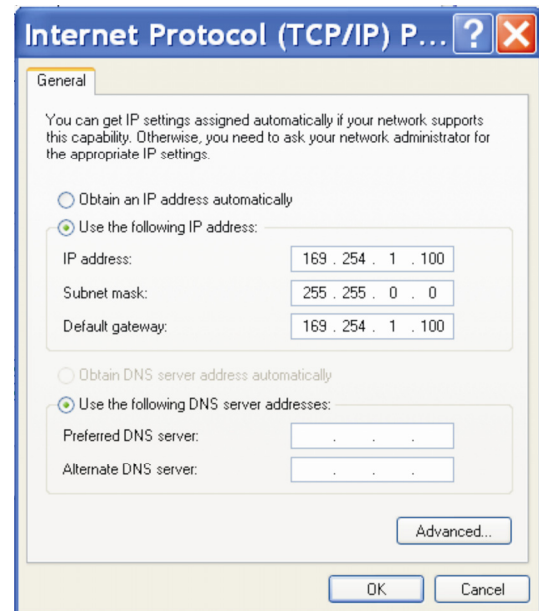


Figure 2: Internet protocol

### 2-1 Login Names

See page 5. Two predefined login names are provided:

**admin** for administrator (can change configuration and diagnostic functions).

**user** can only see diagnostic screens in the web interface. The user cannot change any configurations.

### 2-2 Change Password

See page 5. The default password is on the label ( ASCO ).

To change the password, click **Change Password**. The password can be up to 15 characters (do not use spaces). You can set only one password. Type in the *Old Password*, the *New Password*, and *ReType [new] Password*. Then press **OK** to save it. If you make a mistake click **Reset** and start over.

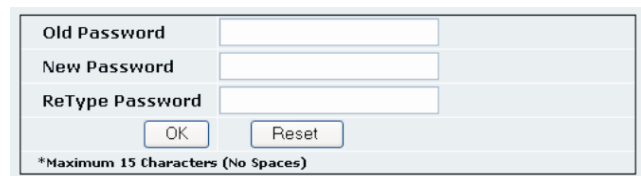


Figure 3: Change password screen

# ATS Remote Annunciator Configuration

The ATS Remote Annunciator must be configured. First log in. The ATS Remote Annunciator sends HTML files to the client computer. *Internet Explorer* interprets these HTML files, formats them, and displays the embedded web pages to the user.

## 1 Login Screen

To login follow these steps:

1. Be sure that the computer is still connected to the Ethernet switch (LAN).
2. Start the *Internet Explorer* browser on the computer.
3. In the address bar, type in the default address of the ATS Remote Annunciator, then press **Enter**:  
http://169.254.1.200
4. The ATS Remote Annunciator login page should appear. Enter the default Login ( admin ) and Password ( ASCO ) from the label (see page 2) and click **Login**. See Figure 4.

Figure 4: Login screen

## 2 Annunciator Configuration

5. On the left pane, under *Configurations*, click *Annunciator* to configure the ATS Remote Annunciator. See Figure 5.

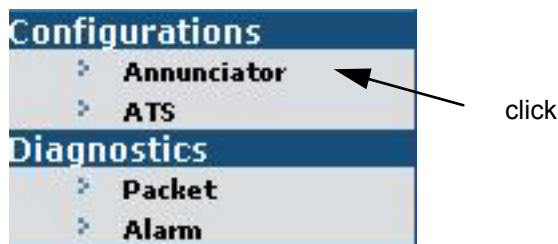


Figure 5: Configurations > Annunciator

6. The Configurations > Annunciator screen appears. See Figure 6. The configurations features are:

Annunciator name, software upgrade, IP address, subnet mask, gateway address, port, encryption, buzzer mode.

Figure 6: Configurations > Annunciator

### 2-1 Annunciator Name

Enter a name for the ATS Remote Annunciator.

Also write the name here \_\_\_\_\_.

### 2-2 Software Upgrade

Write the software version here \_\_\_\_\_.

The firmware in the ATS Remote Annunciator can be upgraded. Before upgrading, write down all configuration settings of the ATS Remote Annunciator. These settings may have to be made after the upgrade is completed.

1. Write down all configuration settings.
2. Click **Browse**, then click the file with **.spb** extension.
3. Click **Upgrade**. See Figure 7.

Figure 7: Firmware update screen

### NOTICE

Before updating the firmware, write down all configuration settings.



## 2-3 IP Address, Subnet Mask, Gateway

1. The default IP address parameter is: 169.254.1.200. If the ATS Remote Annunciator is on a LAN enter the appropriate IP address of the LAN. The default subnet mask parameter is: 255.255.0.0, and the gateway address is 0 0 0 0
2. Write the IP address here \_\_\_\_\_.
3. Write the Subnet Mask here \_\_\_\_\_.
4. Write the Gateway Address here \_\_\_\_\_.

## 2-4 Port

The TCP/IP port must match the port used in the Connectivity Module (manual 381333-238). The default port is 10001 for ASCO Bus; port 502 is typically used for Modbus. Write the port number here \_\_\_\_\_.

## 2-5 Encryption

Click **Enable** to turn on encryption, or click **Disable** to turn it off. The default configuration is **Disable** (off). The Connectivity Module must also have encryption selected.

Write which option is selected here \_\_\_\_\_.

This feature is only available with encrypted-enabled CMs. All other devices communicating with the CM must be able to read the encrypted data.

## 2-6 Audible Alarm (buzzer) Mode

Operation of the audible alarm and alarm relay (for external buzzer) can be configured. In the **Buzzer Mode** list, click **Disable** to turn it off (it will be inactive or silent even if an alarm occurs). Click **Periodic** or **Continuous** to turn on the audible alarm. The default setting is **Continuous**. See Figure 8. Write which option is selected here \_\_\_\_\_.

Buzzer Mode	Continuous
Buzzer On Time (mins)	Disable
Buzzer Off Time (mins)	Periodic
	Continuous

**Figure 8: Audible Alarm (buzzer) Mode**

The buzzer sounds in one-second pulses (not adjustable).

In the **Continuous** mode the pulsing buzzer sounds continuously (on-off cycles). In the **Periodic** mode the duration of the pulses and interval between pulses can be set as follows:

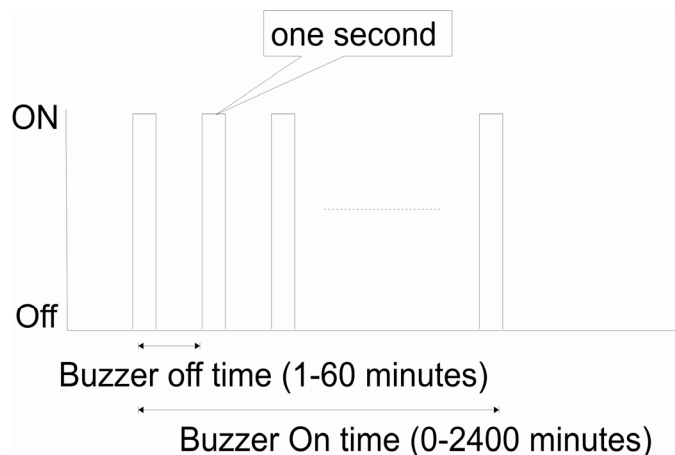
Duration (On Time)	0-2400 minutes
Interval (Off Time)	1-60 minutes

See Figure 9. Figure 10 shows the duration and interval settings.

## 2-7 Buzzer On Time (duration)

Buzzer Mode	Periodic
Buzzer On Time (mins)	2
Buzzer Off Time (mins)	2

**Figure 9: Audible Alarm (buzzer) ON - OFF Times**



**Figure 10: Buzzer interval & duration settings**

Buzzer total ON time: it is the total time in which the buzzer ON-OFF cycle will repeat in periodic mode from the time the buzzer alarm is initiated. This time period needs to be entered in the **Buzzer On** time text box. The acceptable range of Buzzer ON time is between 0 to 2400 minutes, fractional values are not acceptable. Buzzer silences only if alarm condition ceases or **Buzzer On** time elapses, whichever occurs early.

## 2-8 Buzzer Off Time (interval)

If the Buzzer on time is set to zero, the buzzer ON-OFF cycle repeats infinitely unless the alarm condition ceases or silence alarm key is pressed.

The period of each buzzer ON-OFF cycle: It is the period after which the Buzzer ON-OFF cycle repeats. This time period needs to be entered in the **Buzzer Off** time text box. The acceptable range of the period is between 1 to 60 minutes. Fractional values are not acceptable. ON time in each of these cycles is fixed at one second.

## 2-9 Click Update to Save Configurations !

**Be sure to click UPDATE to save the configuration settings and upload them to the ATS Remote Annunciator.**

# ATS Configuration

The ATS Remote Annunciator must be configured for all the ATSs that will be monitored and controlled. First log in. The ATS Remote Annunciator sends HTML files to the client computer. *Internet Explorer* interprets these HTML files, formats them, and displays the pages to the user.

## 1 Login Screen

To login follow these steps:

1. Be sure that the computer is still connected to the Ethernet switch (LAN).
2. Start the *Internet Explorer* browser on the computer.
3. In the address bar, type in the address of the ATS Remote Annunciator, then press **Enter**:  
`http://169.254.1.200`
4. The ATS Remote Annunciator login page should appear. Enter the default Login ( admin ) and Password ( ASCO ) from the label (see page 2) and click **Login**. See Figure 11.

Figure 11: Login screen

## 2 ATS Configuration

5. On the left pane, under *Configurations*, click *ATS* to configure the ATSs that will be monitored. See Figure 12.

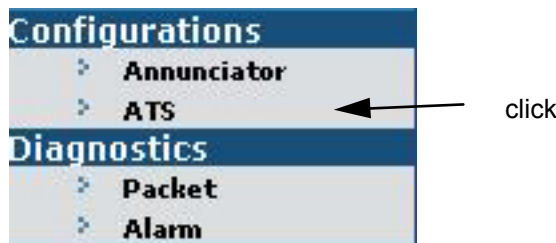


Figure 12: Configurations > ATS

6. The Configurations > ATS screen appears. See Figure 13. Select either **Single ATS** or **Multiple ATS** based upon the communication architecture of the ATSs and press the corresponding **Go** button under the selection:

**Single ATS connected to one Connectivity Module (CM)**  
- each ATS having its own Connectivity Module

**Multiple ATS connected to one Connectivity Module**  
- all ATSs connected through a single Connectivity Module.

Figure 13: Single or Multiple ATS configuration

### 2-1 Single ATS connected to one CM

You must know the IP address of the Connectivity Module (CM) that corresponds with the ATS (and Power Manager, if present) in the network. The ATS Remote Annunciator has an *auto discovery* feature for a scenario in which one ATS is connected to one CM. The user has to input the IP address details of the CM to which the ATS is connected. After performing the auto discovery, the information about the discovered ATSs is displayed on the web interface. See Figure 14.

ATS No	IP Address	ATSName	Discover
1	169.254.1.1	ATS1	<input checked="" type="checkbox"/>
2	169.254.1.2	ATS2	<input checked="" type="checkbox"/>
3	169.254.1.3	ATS3	<input checked="" type="checkbox"/>
4	169.254.1.4	ATS4	<input checked="" type="checkbox"/>
5	169.254.1.5	ATS5	<input checked="" type="checkbox"/>
6	169.254.1.6	ATS6	<input checked="" type="checkbox"/>
7	169.254.1.7	ATS7	<input checked="" type="checkbox"/>
8	169.254.1.8	ATS8	<input checked="" type="checkbox"/>

Figure 14: Single ATS screen

1. To perform the auto discovery of the ATSs, enter the IP address of the CM to which the ATS is connected, select the check boxes next to each ATS, then click **Automatic**. See Figures 15 and 16.

Figure 15: Auto Discover in Process



Figure 16: Auto Discover Completed

2. After auto discover is completed click **Show Results**. Many of the ATS configurations are automatically filled. Check the screen to be sure that all ATSs are found. If they are, proceed to step 5. See Figure 17 for an example.

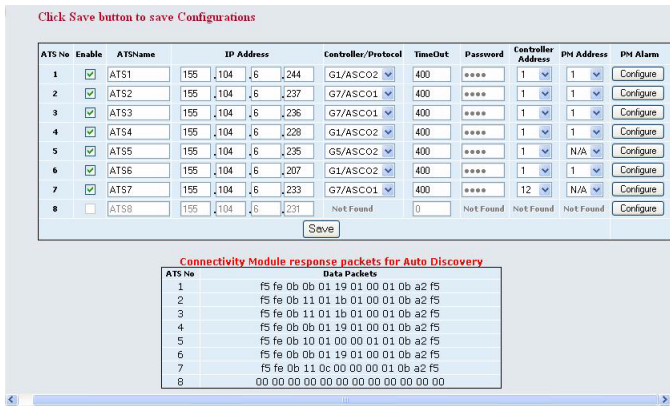
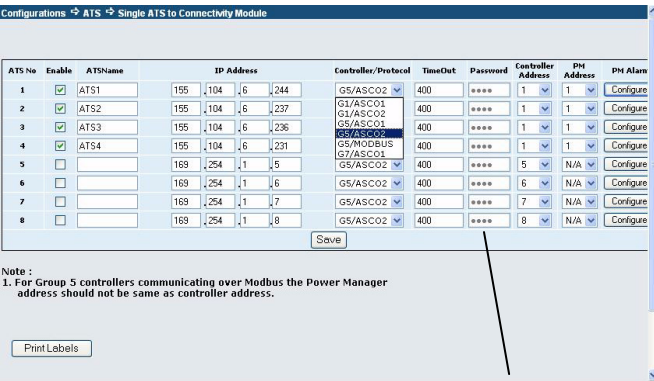


Figure 17: Auto Discover Results

3. To manually configure the ATSs click **Manual** on the Single ATS screen (Figure 14). See Figure 18.



For 7000, 4000 Series enter Group 5 Controller password

Figure 18: Manual Configuration

4. Click **Enable**, enter the *ATS Name*, and the *IP Address*. On the *Controller/ Protocol* list, *Controller Address*, and *PM Address*, select the appropriate settings. See Figures 19, 20, 21.

For 7000, 4000 Series ATSs select *G5/ASCO1* or *G5/ASCO2*. ASCO1 is for baud rate x9600 (ASCObus 1); ASCO2 is for baud rate 19.2K (ASCObus 2). For *Modbus*, see *Notes* below. All ATSs must use the same protocol. Refer to G5 User's Guide 381333-126.

For Series 300 ATSs select *G1/ASCO1* or *G1/ASCO2*. In the Group 1 Controller, visually determine the dash number on the microprocessor's label (dash number 9 and higher is ASCObus 2). All ATSs must use the same protocol. For ASCO 940 and 962 ATSs select *G7/ASCO1*.

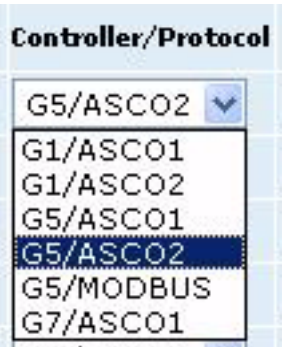


Figure 19: Controller/Protocol manual selection

Select the appropriate address that is set in the ATS controller (G1, G5, or G7).

Figure 20: Controller Address manual selection



If a Power Manager (PM) is used, the address must be the same as the address set in the corresponding ATS controller.

If *G5/Modbus* protocol is selected (Figure 19), the PM Address should not be the same as the address set in the Group 5 controller.

Figure 21: PM Address manual selection



**Modbus Notes:** The password entered (Figure 22) for each ATS must be the same as the password set in that ATS's Group 5 controller. The passwords can be all the same or there can be 8 different passwords depending upon the passwords set in the G5 controllers. Refer to User's Guide 381333-126.

If the Group 5 password is not entered on the Configuration screen (Figure 18), the ATS Remote Annunciator will only show the status of the ATS. It will not transfer the load. No warning or indication of the reason will be shown.



- When all ATS configurations are made, click **Save** to upload the configuration to the ATS Remote Annunciator. An *Uploaded Successfully* screen should appear. See Figure 22. The ATS Remote Annunciator should now be monitoring the ATSs (observe the status lights).

ATS No	Enable	ATSName	IP Address	Controller/Protocol	TimeOut	Password	Controller Address	PM Address	PM Alarm
1	<input checked="" type="checkbox"/>	ATS1	195.104.6.244	G1/ASCO2	400	****	1	1	Configure
2	<input checked="" type="checkbox"/>	ATS2	195.104.6.237	G7/ASCO1	400	****	1	1	Configure
3	<input checked="" type="checkbox"/>	ATS3	195.104.6.236	G7/ASCO1	400	****	1	1	Configure
4	<input checked="" type="checkbox"/>	ATS4	195.104.6.228	G1/ASCO2	400	****	1	1	Configure
5	<input checked="" type="checkbox"/>	ATS5	195.104.6.235	G5/ASCO2	400	****	1	N/A	Configure
6	<input checked="" type="checkbox"/>	ATS6	195.104.6.207	G1/ASCO2	400	****	1	1	Configure
7	<input checked="" type="checkbox"/>	ATS7	195.104.6.233	G7/ASCO1	400	****	12	N/A	Configure
8	<input type="checkbox"/>	ATS8	195.104.6.231	G5/ASCO2	400	****	8	N/A	Configure

Note:  
1. For Group 5 controllers communicating over Modbus the Power Manager address should not be same as controller address.

Print Labels

Figure 22: Updated Successfully screen

## 2-2 Multiple ATSs connected to one CM

In this mode, there is a single Connectivity Module for multiple ATSs (that are daisy chained together). Therefore the configuration is for one IP address (as assigned by the network architect or administrator). Refer to the Figure 23.

ATS IP-Address: 195.104.6.228  
Controller Type/Protocol: G5/ASCO2  
TimeOut: 400

ATS No	Enable	ATSName	Password	Controller Address	PM Address	PM Alarm
1	<input checked="" type="checkbox"/>	ATS1	****	1	N/A	Configure
2	<input checked="" type="checkbox"/>	ATS2	****	2	N/A	Configure
3	<input checked="" type="checkbox"/>	ATS3	****	3	N/A	Configure
4	<input checked="" type="checkbox"/>	ATS4	****	4	N/A	Configure
5	<input type="checkbox"/>		****	0	0	Configure
6	<input type="checkbox"/>		****	0	0	Configure
7	<input type="checkbox"/>		****	0	0	Configure
8	<input type="checkbox"/>		****	0	0	Configure

Save

Figure 23: Multiple ATSs connected to one CM

- Perform step 4 on page 8 (Figures 19, 20, 21). All ATSs must be of the same series (same controller).
- Click the **Save** button to save the configuration.

## 2-3 Configuring Power Manager Alarms

If a Power Manager (PM) is provided with an ATS, the PM's eight Status Inputs can be configured to signal an alarm at the ATS Remote Annunciator. At the PM, the Status Input must be set to ACTV (on). Refer to PM manual 381333-199.

- Be sure that a *PM Address* has been set (Figure 21). Then click the **Configure** button (Figure 23) next to *PM Address*.
- The first row (top) is for PM Status Input 1. Click *Enabled*.
- Next, enter a name in the *Digital Input* column, if desired.
- Repeat steps 2 and 3 for each PM Status Input that is ACTV (on). The second row is *Status Input 2*, etc. See Figure 24.
- Click the **Update** button to save these configurations.
- Click the **Save** button to save all configurations to the ATS Remote Annunciator. See Figure 22.

Enabled	Digital Input
<input checked="" type="checkbox"/>	Input 1
<input checked="" type="checkbox"/>	Input 2
<input type="checkbox"/>	
<input type="checkbox"/>	
<input type="checkbox"/>	
<input type="checkbox"/>	
<input type="checkbox"/>	
<input type="checkbox"/>	

Update

Figure 24: PM Status Input configuration

## 2-4 Print label

After the configurations are done and saved, you can print custom labels for the ATS Remote Annunciator (Figure 1 on page 2). A printer must be connected to the laptop computer that is used for setting the configurations. Click the **Print Labels** button at the bottom of the screen. See Figures 22 and 25.

ATS No	ATS Name	Normal Source Name	Emergency Source Name
1	ATS1	N	E
2	ATS2	N	E
3	ATS3	N	E
4	ATS4	N	E
5	ATS-5	N	E
6	ATS-6	N	E
7	ATS-7	N	E
8	ATS-8	N	E

PrintLabels

Figure 25: Print labels screen

# Diagnostics

Diagnostics can be used to check communication packets and to check for ATS alarms (to determine why the *Alarm* light is on).

If necessary, reconnect the laptop computer that was used to configure the ATS Remote Annunciator. Then log in as described on page 5.

## 1 Packets

On the left pane, under *Diagnostics*, click *Packet* to check send and receive packets from Connectivity Modules to the ATS Remote Annunciator. See Figure 26.

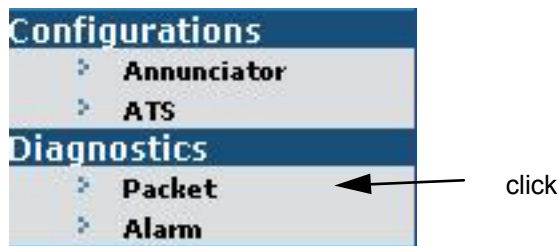


Figure 26: Diagnostics > Packet

The *Diagnostics > Packet* screen shows all ATSs (up to 8). It lists the *ATS No.*, *ATS Name*, *IP Address*, *DeviceType* (controller/protocol), *Packets Sent* (TX), *Packets Received* (RX), and *Packets Dropped*. The number of packets dropped indicates the communication quality (lower is better). To reset the counters, click the **Reset** button. See Figure 27.

ATS No	ATS Name	IP Address	DeviceType	PacketsTX	PacketsRX	Packets Dropped	Reset Counters
1	ATS1	192.168.174.242	G5/ASCO2	23589	23580	9	<input type="button" value="Reset"/>

Figure 27: Diagnostics > Packet screen

## 2 Alarm

On the left pane, under *Diagnostics*, click *Alarm* to see the status of all ATS alarms that are configured. See Figure 28.

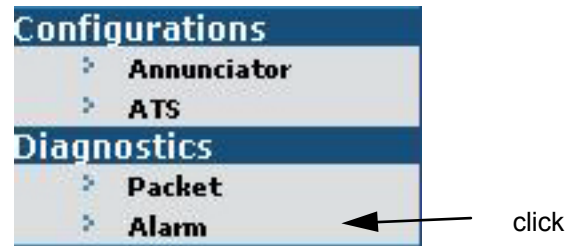


Figure 28: Diagnostics > Packet

The *Diagnostics > Alarm* screen shows if there any of these ATS alarms: *Communication Error*, *ATS Locked Out* (7ADTS, 4ADTS), *Failure to Synchronize* (7ACTS, 4ACTS), and *Extended Parallel* (7ACTS, 4ACTS). See Figure 29.

Based upon which alarm has occurred, specific action can be taken. See **Troubleshooting**.

Diagnostics > Alarm									
ATS No	ATS Name	IP Address	Controller Type/Protocol	Communication Error	ATS Locked Out	Fail To Synch	Extended Parallel	ATS-PM Alarm	
1	ATS1	155.104.6.207	G1/ASCO2	-	-	-	-	<input type="button" value="ON"/>	
2	ATS2	155.104.6.228	G1/ASCO2	-	-	-	-	<input type="button" value="ON"/>	
3	ATS3	155.104.6.214	G5/ASCO2	-	-	-	-	<input type="button" value="ON"/>	
4	ATS4	155.104.6.215	G1/ASCO2	-	-	-	-	<input type="button" value="ON"/>	

Figure 29: Diagnostics > Alarm screen

If a Power Manger (PM) has been configured for Status Input alarms, click the **ON** button to see their status. For each *Digital Input*, the *Alarm Enabled* will show *INAC* for not enabled or *ACTV* for enabled. *ACTV* means the ATS Remote Annunciator is configured to accept a PM input alarm. In the *Status* column, *OFF* means there is no alarm; *ON* means there is an alarm (status input). See Figure 30.

Digital Input	Alarm Enabled	Status
Input1	INAC	OFF
Input2	INAC	OFF
Input3	INAC	OFF
Input4	INAC	OFF
Input5	INAC	OFF
Input6	INAC	OFF
Input7	INAC	OFF
Input8	INAC	OFF

Figure 30: PM Status Input alarm status

If an audible alarm is sounding at the ATS Remote Annunciator, it can be silenced (see User's Guide 381333-314). But the alarm will not reset until it is corrected at the source (PM status input).

# Troubleshooting

Number	Symptom	Probable Cause	Recommended Action
1	Power ON light is off	The DC or AC power source is inadequate or off.	Restore the DC or AC power supply. Check the terminals, fuse, circuit breaker.
2	Lamp test button does not work. Alarm silence does not respond. There is no response on any key.	The <b>Control</b> switch is locked.	Insert <b>Control</b> key and turn it to unlock.
3	The power ON light is blinking.	The unit keeps on resetting due to watchdog-reset possibly due to corruption of software.	Refer to Installation Manual 381333-315. Try to reprogram the unit with the latest software.
			Contact ASCO Services for replacement. 800-800-ASCO or <a href="mailto:customercare@asco.com">customercare@asco.com</a>
4	<b>Transfer</b> button does not work (load transfer does not occur).	Button not held long enough.	Hold the button for at least 5 seconds until you hear a beep..
		ATS Annunciator could have changed to default settings.	Refer to Installation Manual 381333-315. Use the configuration details entered on page 2; reconfigure the ATS Annunciator.
		Password not set	The password must be configured. See Modbus Notes on page 8.
5	Buzzer is beeping continuously.	Communication with the Power Manager may have stopped.	Refer to Installation Manual 381333-315. Check the Ethernet connections: ATS Annunciator to the LAN and Power Manager to the LAN.
6	Communication alarm occurs but all configurations are correct.	Communication protocol may not be the same as that of the Power Manager (if present).	Refer to Installation Manual 381333-315. Verify that the protocol on both devices is the same.
7	A light does not come on when a corresponding button is pressed.	ATS Annunciator is not functioning properly.	Contact ASCO Services for replacement. 800-800-ASCO or <a href="mailto:customercare@asco.com">customercare@asco.com</a>
8	A light does not come on when the lamp test button is pressed.	ATS Annunciator is not functioning properly.	Contact ASCO Services for replacement. 800-800-ASCO or <a href="mailto:customercare@asco.com">customercare@asco.com</a>

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